SELF- ASSESSMENT REPORT
FOR
NATIONAL BOARD OF ACCREDITATION
(NBA)

Samarth Educational Trust
Arvind Gavali College of Engineering
At- Panmalewdi, Post- Varye, Tal-Dist. Satara-415015

e-SAR Department of Electrical Engineering

CRITERION 01	**Vision, Mission and Program Educational Objectives**	**60**

1. VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

1.1. State the Vision and Mission of the Department and Institute (5)

A. Availability of the Vision and Mission statements of the department

VISION of Institute

To be an institute of excellence, developing skilled engineers to serve the industry and society.

MISSION of Institute

M1: To provide quality education through effective teaching learning process.

M2: To develop professional skills and promote innovation among students by providing conducive atmosphere.

M3: To inculcate ethical values, respect for the environment & social responsibility.

VISION of Department

To be the center for developing professional and skilled electrical engineers, by providing quality education to solve industrial and social problems.

MISSION of Department

M1: To impart quality education in electrical engineering using an effective teaching learning process.

M2: To develop skills & attitude to achieve a successful career.

M3: To inspire students to become socially committed professionals with ethical values.

B. Appropriateness/ Relevance of the statements.
Institute

To be an Institute of excellence, developing skilled engineers to serve the industry and society.

- The institute focuses on development and shares its purpose with stakeholders. The aims and objectives are used to measure the Institute's success. Excellence in the engineering education system is for the benefit of society which addresses societal issues. The dedication is to have the necessary industry-focused skills to work as a professional engineer. Expert lecture series conducted are conducted by industry professionals and experts to bridge the gaps in the program.

To provide quality education through effective teaching learning process.

Through the use of ICT tools and project-based learning, we aim to provide high-quality education to the students. Through the use of innovative teaching methods, we have been able to create a variety of learning experiences through projects, interaction with the industry experts, real world and inquiry-based learning.

To develop professional skills & promote innovation among students by providing conductive

atmosphere.

The Institute inculcates technical skills and soft skills among the students by providing conducive atmosphere through project competitions, innovative ideas in "AVISHKAR", type of competitions patent filing, registration for NPTEL, conduction of soft skill sessions through experts, executing training and placement activities, internships etc.

To inculcate ethical values, respect for environment and social responsibility.

The Institute has organized the session on ethical values to inculcate ethics workplace such as obeying the Institute rules and regulations, effective communication, taking responsibility, professionalism, trust and mutual respect. The Institute has also organized and participated in environmental and social activities viz. tree plantation, cleanliness camp, geo-tagging, no vehicle day, blood donation, mask and tablet donation, dustbin distribution, vaccination camp, self-defense camp, yoga etc.

C. Consistency of the department statements with the institute statements

Vision

The departmental vision is consistent with the Institute's vision. The department has recognized the importance of professional engineers with a commitment to solve the problems related to the industry and also the society through innovative methodologies and industrial expertise.

Mission

M1 is consistent with the Institute's mission as advanced teaching and learning methodologies lead to the transmission of high academic excellence and quality education. Innovative teaching methods, such as ICT and project-based learning, real-world problem solving and inquiry-based learning have helped to develop the intellectual ability of the students.

M2 is consistent with the Institute's mission, as the Institute has created a conducive environment for the development of professional skills including technical and soft skills, innovations through emerging technologies.

M3 is consistent with the Institute's goal of developing a student community with high ethical standards through techno-social activities and creating awareness about the environment through a variety of activities.

Department

- To be the center for developing professional and skilled electrical engineers, by providing quality education to solve industrial and social problems.

  The department's main goal is to provide quality education by meeting industrial requirements through technical skill and identifying societal problems received from the industry and their solution through technical means. The department is looking to develop professional engineers who are ready for the industry.

- To impart quality education in electrical engineering using effective teaching learning process.

  The department has made significant efforts to improve the students' intellectual abilities through quality education by incorporating industrial expert sessions, industrial visits, internships, domain wise expertise, innovations through Avishkar, training and

placement activities through soft skills including aptitude test, group discussion, and so on.

- To develop skills and attitude to achieve a successful career.

  The department has held a number of expert sessions to increase technical proficiency. The students' industry-focused skills can be upgraded through internships and industrial visits. Aptitude sessions, group discussions, and other soft skill workshops have been held to encourage the students' overall growth.

- To inspire students for becoming socially committed professionals with ethical values.

  Students are being made aware of the societal and ethical needs in the field of electrical engineering. By balancing the requirements with the obligations of society, ethical ideas urge people to act morally. Ethics are instilled in the students through various group activities using the knowledge of Electrical Power System, Electrical Machine, etc. in society-based applications.

Consistency Matrix

	Institute	Department
Vision	To be an institute of excellence, developing skilled engineers to serve the industry and society.	To be the center for developing professional and skilled electrical engineers, by providing quality education to solve industrial and social problems.
Mission-1	To provide quality education through effective teaching learning process.	M1: To impart quality education in electrical engineering using an effective teaching learning process.
Mission -2	To develop professional skills and promote innovation among students by providing conducive atmosphere	To develop skills & attitude to achieve a successful career.
Mission-3	To inculcate ethical values, respect for the environment& social responsibility	To inspire students to become socially committed professionals with ethical values.

1.2. State the Program Educational Objectives (PEOs) (5)

The Program Educational Objectives of Electrical Engineering program is listed below:

PEO1: The graduates will be able to gain a good fundamental knowledge in science and engineering, to solve electrical engineering problems.

PEO2: The graduates will be able to demonstrate the professional skills to succeed in a competitive environment.

PEO3: The graduates will be able to build ethical values, sensitivity towards society and environment.

The program's educational objectives are designed to include five core values: professionalism, core competency, society and environment, industrial skills, and depth of knowledge. The contexts of PEOs are as given below.

PEO1: Describes the significance of mathematics in analyzing industry-related problems and solving them using various algorithms learned. It also emphasizes fundamental competencies and teamwork skills. PEO1 consists of four major components; core competency, individual, employability and team work.

PEO2: PEO2 emphasizes the graduate's ability to apply knowledge across multiple settings in the long run, as well as possess in-depth functional and disciplinary abilities to solve daily life problems in society, using modern engineering tools and emerging technologies. PEO2 is made possible by diverse professionalism, the environment and society, interpersonal skills, investigations, analysis and solutions.

PEO3: Exhibits the characteristics of a graduate interested in ethical profession for societal progress and environmental respect. The graduates use a variety of computing disciplines to create sustainable solutions in areas such as energy, agriculture, transportation forecasting etc. PEO3 consists of three major components: core competency, societal progress, and the environmental sustainability.

Stakeholder	Type	Purpose/relevance	Mode of Publication and dissemination
Management	Internal	Defining development plan and road map, providing physical, human and financial resources and formulation of policies.	1. Display boards at meeting / interaction locations for all the visiting and working stake holders. (Department entrance, HOD office, faculty rooms, laboratories, classrooms, department meeting room / library) 2. Department newsletter, course and laboratory manuals, faculty course file, information brochures, events and industrial visit reports, academic diary, internal test assessment book. 3. In digital form, the statements are published through Institute website, email, social media, screen saver, event presentations, CANVA platform. 4. The dissemination is observed through online/offline mode such as induction programs, counseling round, administrative and stake holders meeting.
Faculty and Support Staff	Internal	Implementer (Contributor) of policies, Key contributor in developing /implementing growth plan, responsible for producing competent graduates from the Institution	
Students	Internal	Responsible for creating reputation of the Institute.	
Employers	External	Employing graduates and making an assessment on their competency and employability	
Industry	External	Employer participates in curriculum development and industry – Institute activities.	
Alumni	External	Able to co-relate learning and professional practice, provides appropriate inputs to the department/program committee	
Funding Agencies	External	Provides financial assistance to the Institution and interacts with the Principal Investigator/Faculty of the department /program.	
Parents	External	Perception on the support provided by the department/ program for shaping up the career of their wards	

Regulatory/ Accrediting Authorities/Professional bodies	External	Prescribes norms and standards to ensure quality assurance and enhancement	
Society	External	Provides intangible outcome from the Institution's perspective	

1.3. Indicate where the Vision, Mission and PEOs are published and disseminated among Stakeholders (10)

1.3 A: Publication and dissemination of Vision, Mission and PEOs

The department makes a lot of effort to communicate its vision, mission and PEOs to all internal and external stakeholders through digital print, student progress records, vinyl records and through meetings, held both offline and online.

Table: 1.1 shows details of publication and dissemination of statements

Table 1.1: Stakeholders of the Program

Table 2: Vision, Mission & PEOs are Published & Disseminated

S. No.	**Mission and Vision are published at**	**Internal Stake Holders**	**External Stake Holders**
1	College Website: www.agce.edu.in (https://agce.edu.in/)	√	√
2	Institute Moodle : https://103.159.152.195/moodle/	√	
3	Curriculum Course File	√	
4	Academic Diary	√	
5	Internal Test and Assessment Book	√	

6	Department Notice Board	√	
7	Laboratories	√	
8	Staff Rooms	√	
9	Class Rooms	√	
10	Department Newsletter	√	√
11	Industry Institute Interaction Meets		√

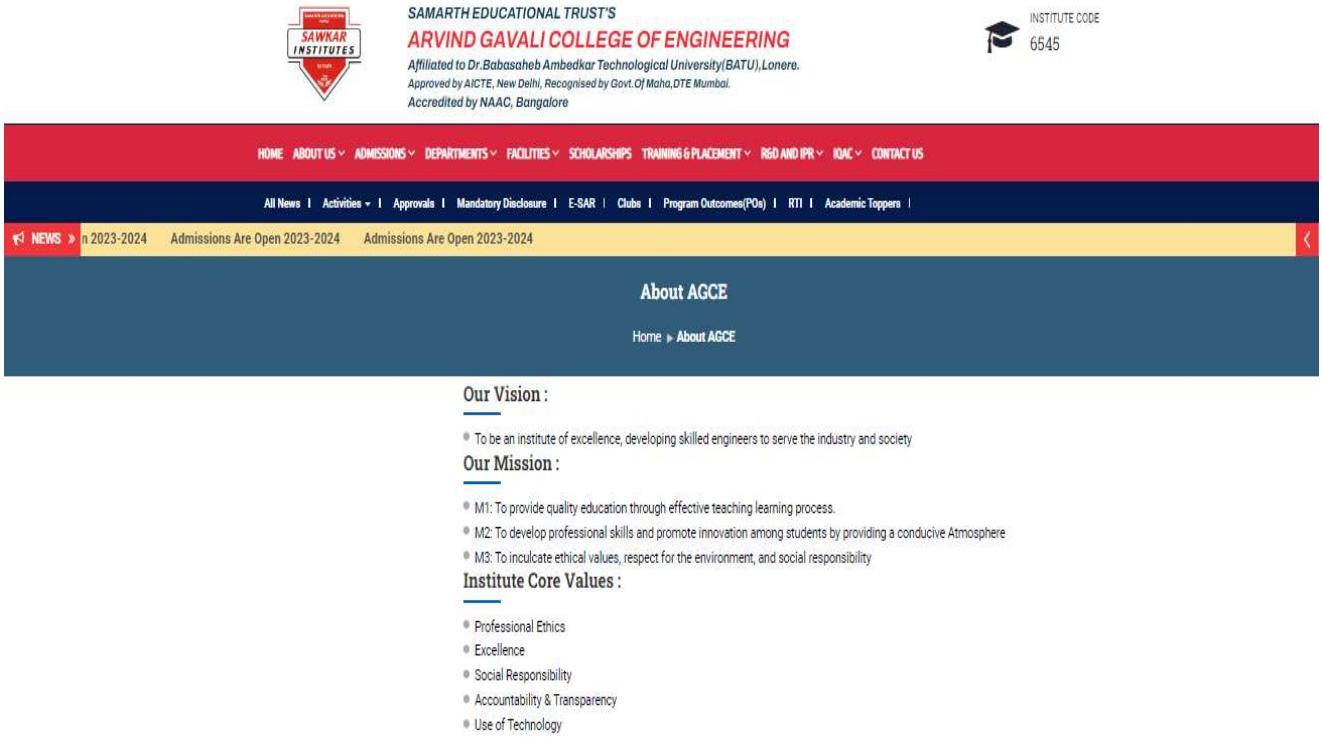

Fig. 1.3a: Screenshot of Vision, Mission of Institute disseminated on website

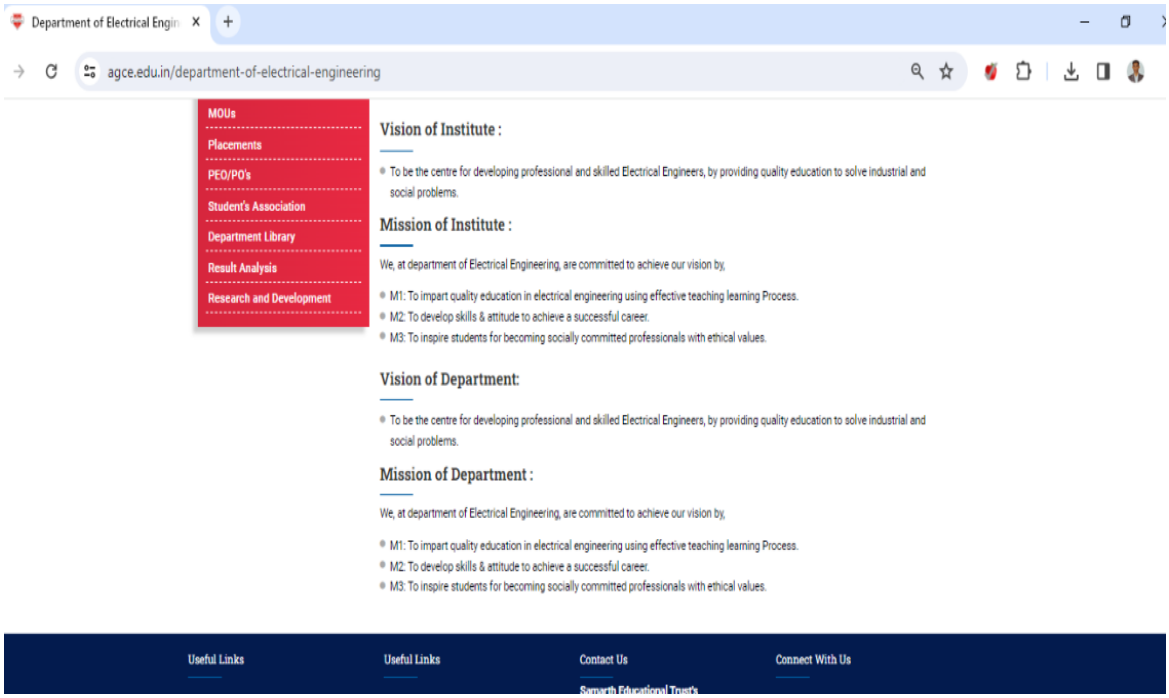

Fig. 1.3b: Screenshot of Vision, Mission of department disseminated on website

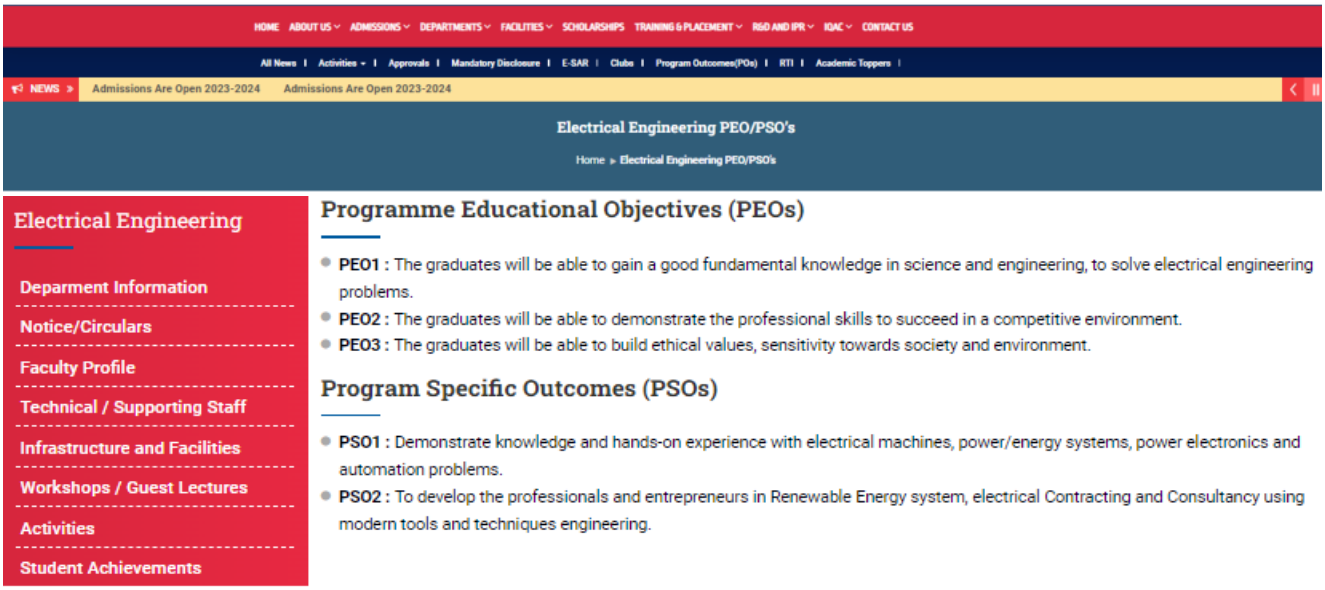

Fig. 1.3c: Screenshot of PEO, PSO of department disseminated on website

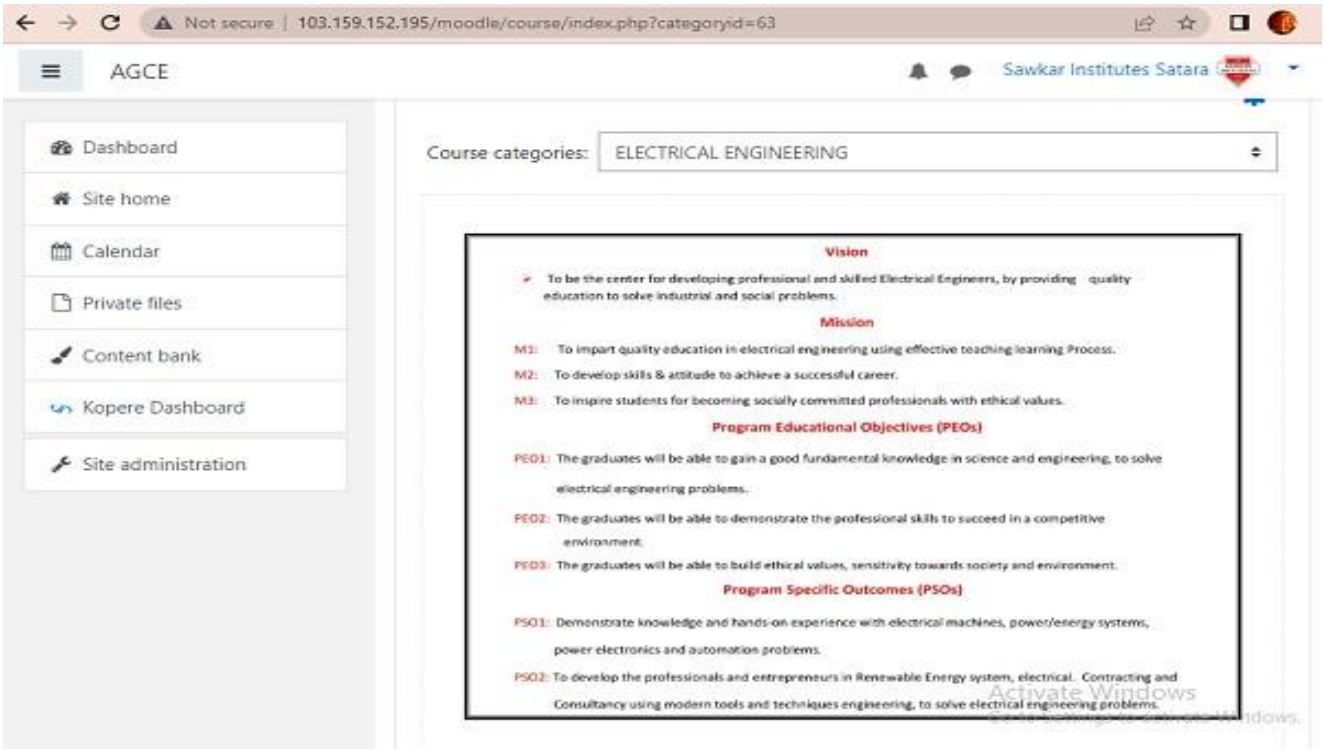

Fig. 1.3d: Screenshot of Vision, Mission, PEO and PSO disseminated on MOODLE

1.3 B: Process of Dissemination

- Through interactions with stakeholders, relating to the vision, mission aspects and PEOs in the development, implementation, and execution of academic programmes.
- During the **induction programme,** the vision, mission aspects, and PEOs serve as a road map for a successful career.
- During the **guidance and counseling rounds**, students are made aware of career options and higher educational opportunities that align with the vision, mission and PEOs.
- During **administrative meetings**, it is observed that academic policies, their execution and monitoring are consistent with the vision, mission elements and PEOs.

➢ The vision and mission are communicated through **presentations** by the Head of Department, Program Coordinator and Course Coordinators at the start of each term and during sessions, on a regular basis.

➢ The importance of vision and mission along with its relevance to the Program Outcomes is presented to the students **by the faculty members** during sessions.

- The Institute vision, mission and departmental vision, mission and program educational outcomes have been described in each and every event (technical and non-technical), **meetings with DAB and parents meet** etc.
- The Head of Department, in collaboration with the Program Coordinator, educates faculty members on the significance and relevance of vision and mission in relation to Program Educational Objectives and Program Outcomes.

1.3 C: Extent of Awareness of Vision, Mission and PEOs

- In meetings with internal & external stakeholders viz. the Departmental Advisory Board (DAB) meeting, Parents meeting, Employers meeting, Alumni meeting, Students meeting through GFM, Faculty meeting, Events Inauguration, etc., the Head of Department has stated the vision, mission and PEOs. Internal and external stakeholders have been informed about the significance of the vision and its accomplishments through the mission as well as the relevance of programme educational outcomes (PEOs) to understand the ongoing development of department- and outcome-based education.

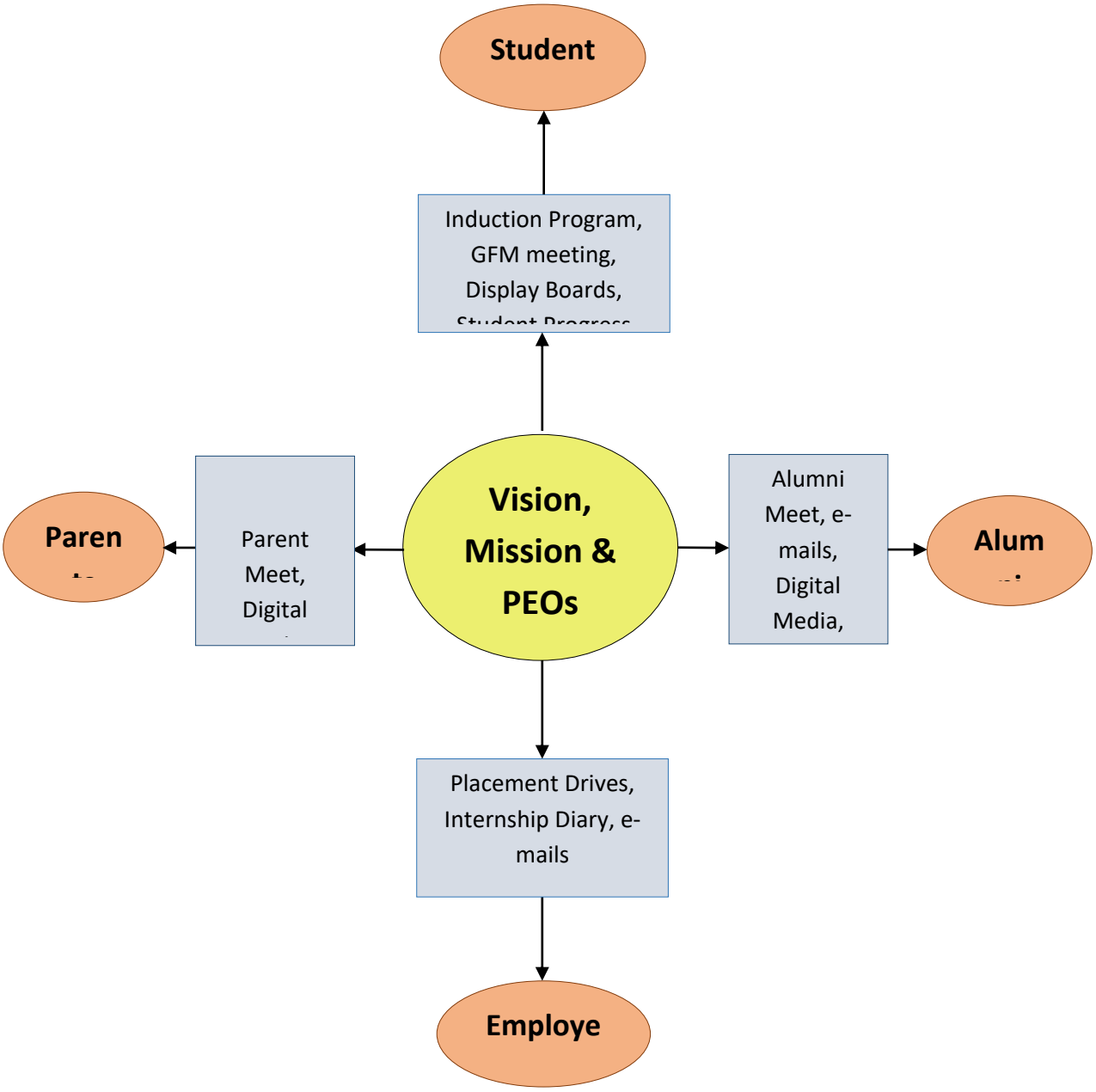

Fig.1.3 c Awareness of Vision, Mission & PEOs

1.4 State the process for defining the Vision and Mission of the Department and PEOs of the program (25)

- **Process of Defining the Vision and Mission of the Department**

- The department formulated its vision and mission statements through a consultative process by interacting with all the stakeholders of the department, taking into consideration the long and short-term goals of the department and the societal requirements as shown in the figure **1.4a** given below**.** The vision and mission statements of the department were formulated in the year 2020. The new Outcome Based Education (OBE) accreditation process has given an opportunity to review and modify the vision and mission statements of the department considering the Graduate Attributes. The Internal stakeholders involve students, staff members etc. whereas external stakeholders involve industries /employers, parents, alumni, professional bodies etc. The following steps were followed:
- **Step1:** Head of Department, along with the faculty members formulate and coordinate the vision and mission statement of the department, based on the continuous feedback from internal and external stakeholders in line with vision and mission of the Institute.
- **Step2:** The formulated statements of vision and mission are presented in the DAB meeting for their recommendations or suggestions. If any suggestions from DAB are received necessary modifications are incorporated and again forwarded to DAB. This process is continued till the final modifications from DAB are received.
- **Step3:** Recommended vision and mission statements from DAB are sent to the IQAC in coordination with the governing body. Once it is accepted by IQAC, the governing body approves it.
- **Step 4:** Finally, the vision and mission statements are published through digital and print media for the internal and external stakeholders.

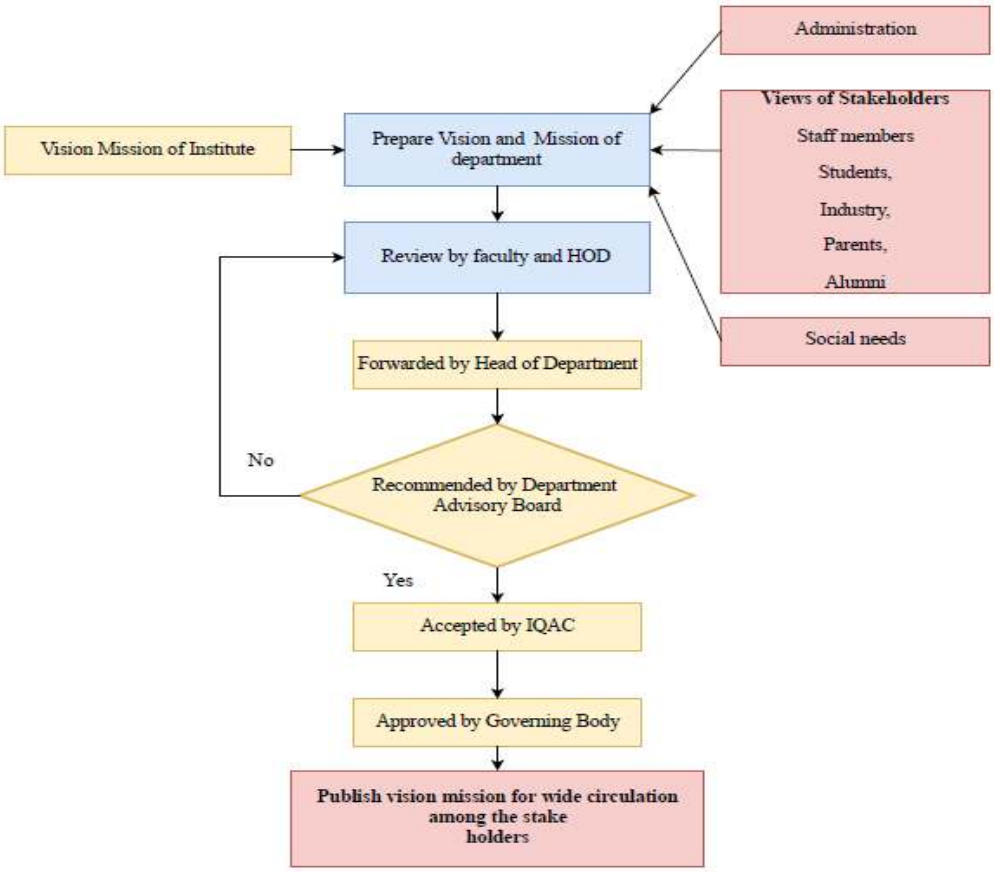

Figure 1.4 a: Process of defining the Vision and Mission of Department

- **Process of Defining the Program Educational Outcomes (PEOs) of the Program**

➢ The process of defining PEOs is in conjunction with vision, mission of program and inputs received from a committee comprising representatives of all internal and external stakeholders as shown in figure 1.4 b. The PEOs were defined through following steps.

➢ **Step 1:** PEOs were formulated by HoD in consultation staff members, students, alumni, and industrial experts, professional bodies and taking into consideration the data on current and future trends.

➢ **Step 2:** The formulated PEOs are forwarded to Departmental Advisory Board (DAB) for their recommendation or suggestions in the formulated PEOs. If any suggestions from DAB are received necessary modifications are incorporated and again forwarded to DAB. This process is continued till the final modifications from DAB are received.

➢ **Step 3:** Modified PEOs statements from DAB are sent to the IQAC in coordination with the governing body. Once it is accepted by IQAC, the governing body approves it.

➢ **Step 4:** Finally, the Program Educational Outcomes (PEOs) statements are published through digital and print media for the internal and external stakeholders.

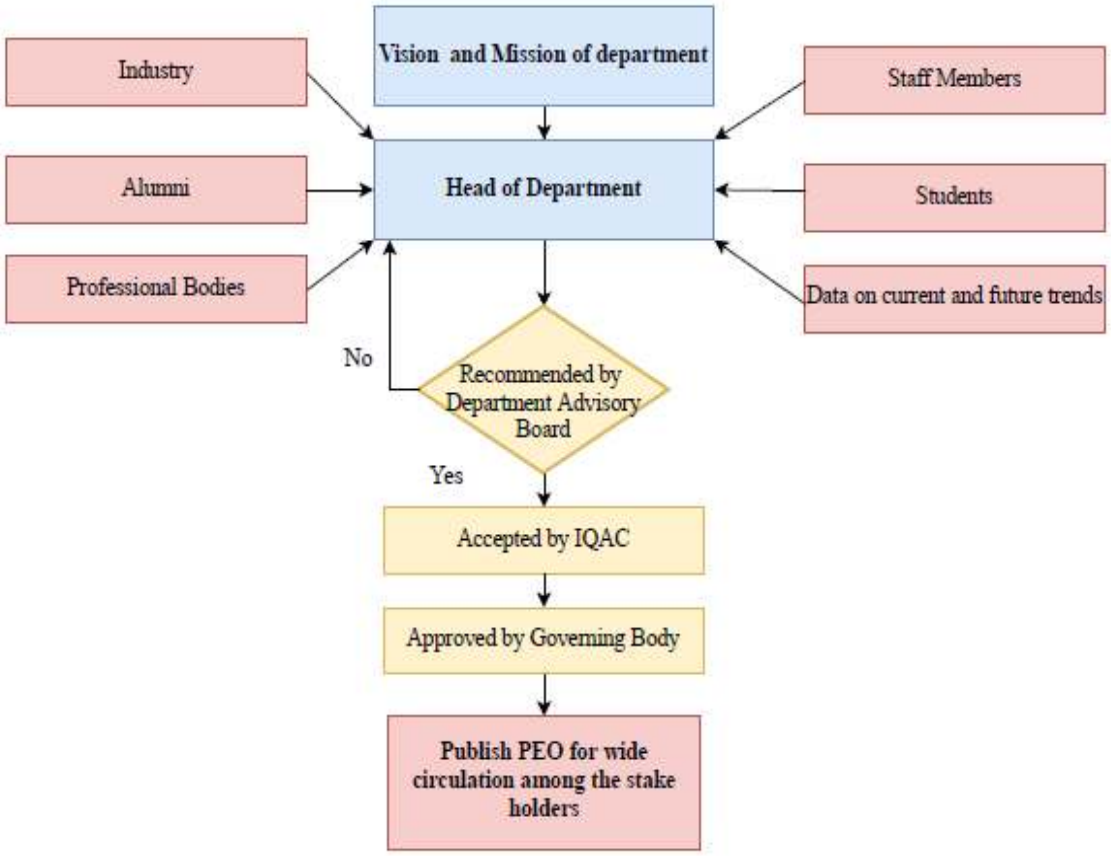

Figure 1.4 b: Process of defining PEOs of the program

The following documents are maintained at the department

1. Committee minutes of meeting
2. Stakeholder's feedback/form
3. Parents feedback
4. Alumni inputs
5. DAB: Minutes of meeting

1.5. Establish consistency of PEOs with Mission of the Department (15)
(*Generate a "Mission of the Department – PEOs matrix" with justification and rationale Of the mapping*)

PEO Statements	M1	M2	M3
Graduates will have expertise in problem analysis, problem solving, design, as well as the skills and knowledge required for a successful career in the field of Electrical Engineering.	3	3	1
Graduates will be capable of providing smart, sustainable solutions in Electrical Engineering by utilizing modern tools and technologies.	2	3	2
Graduates shall excel in a competitive environment by demonstrating leadership and life-long learning skills required for a successful professional career.	2	2	3

The Program Educational Objectives are consistent with the Mission statement of the department which is stated in following table 3.

PEO Statements	M1 M1: To impart quality education in electrical engineering using effective teaching learning process.	M2 M2: To develop skills & ability to achieve a successful career.	M3 M3: To inspire students for becoming socially committed professionals with ethical values.	Justification
PEO1: Graduates will have expertise in problem analysis, problem solving, design, as well as the skills and knowledge required for a successful career in the field of	3	3	1	**M1 highly** correlates with PEO1 as quality education is based on the fundamental concept and skills required for a successful career in the field of Electrical Engineering.

Electrical Engineering.				**M2 is highly** associated with PEO1 as it provides skill set and knowledge for success in the career.
				M3 slightly mapped with PEO1 as it covers technical skills and knowledge.
PEO2: Graduates will be capable of providing smart, sustainable solutions in Electrical Engineering by utilizing modern tools and technologies.	2	3	2	**M1 moderately** correlates with PEO2, for overall development of graduates and to strengthen their technical knowledge.
				M2 highly correlates with PEO2, as it deals with the advancement in skills among the students for their successful career.
				M3 moderately correlates with PEO2 as there is more significance on solving real time problem using technical and soft skills rather than imbibing ethical values, respect for the environment, and social responsibility among the students.

PEO3: Graduates shall excel in a competitive environment by demonstrating leadership and life-long learning skills required for a successful professional career.	2	2	3	**M**1 **moderately** correlate with PEO3 as it emphasizes on quality education however the PEO3 focuses on awareness ethical values, sensitivity towards society and environment.
				M2 **moderately** correlates with PEO3 as it highlights the development of professional skills among the students to serve the society.
				M3 highlymapped with PEO3 for establishing the society to meet social challenges.

1: **Slightly** related 2: **Moderately** related 3: **Highly** related

PEOs	Mission Component		
	M1 To impart quality education in electrical engineering using an effective teaching learning process.	M2 To develop skills & attitude to achieve a successful career.	M3 To inspire students to become socially committed professionals with ethical values.
PEO-1 The graduates will be able to gain a good fundamental knowledge in science and engineering, to solve electrical engineering problems.	3 PEO- Gain a fundamental knowledge M- An effective teaching learning process	3 PEO- To solve electrical engineering problems M- To develop skills & attitude	1 PEO- To solve industrial and societal problems M- To inspire students to become socially committed.
PEO-2 The graduates will be able to demonstrate the professional skills to succeed in a competitive environment.	2 PEO- To demonstrate the professional skills. M- To impart quality education.	3 PEO- To demonstrate the professional skills. M-.To nurture skills	2 PEO- To succeed in a competitive environment. M-To instil sensitivity towards society
PEO-3 The graduates will be able to build ethical values, sensitivity towards society and environment.	2 PEO- To build ethical values. M- Imparting quality education.	2 PEO- To develop awareness towards ethical issues. M- Succeed and progress in their skills & attitude to achieve a successful career	3 PEO- To build ethical values, sensitivity towards society and environment. M- To become ethically, socially committed professionals.

Level 3- Above 70%, **Level 2-** 50 To 70%, **Level 1-** 30 To 50%

PEOs	Mission Component
PEO-1 The graduates will be able to gain a good fundamental knowledge in science and engineering, to solve electrical engineering problems.	**M1 -** To impart quality education in electrical engineering using an effective teaching learning process.
	M2 - To develop skills & attitude to achieve a successful career.
	M3 - To inspire students to become socially committed professionals with ethical values.
PEO-2 The graduates will be able to demonstrate the professional skills to succeed in a competitive environment.	**M1 -** To impart quality education in electrical engineering using an effective teaching learning process.
	M2 - To develop skills & attitude to achieve a successful career.
	M3 - To inspire students to become socially committed professionals with ethical values.
PEO-3 The graduates will be able to build ethical values, sensitivity towards society and environment.	**M1 -** To impart quality education in electrical engineering using an effective teaching learning process.
	M2 - To develop skills & attitude to achieve a successful career.
	M3 - To inspire students to become socially committed professionals with ethical values.

CRITERION 02	Program Curriculum & Teaching Learning Process	120

2.1.1. State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

Arvind Gavali College of Engineering, Satara is affiliated with Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere Maharashtra. Electrical Engineering department follows the scheme and syllabus of DBATU University.The scheme follows the semester pattern and is divided into eight semesters for a four-year graduation program. The curriculum contains basic, social sciences, humanities, and professional and elective courses.

According to the university curriculum, each course is mapped with 12 Program Outcomes (POs) and 2 Program Specific Outcomes (PSOs), and the evaluation of each PO and PSO is done. The university's recommended courses adhere strictly to all PSOs and PO's. Faculty from the Electrical Program actively participate in developing and implementing University curricula. By setting up several skill-oriented certified add-on courses and industry-sponsored competitions for the student's overall development, academic flexibility is accomplished. To help students fulfill the demands and expectations of the industry, the program offers a variety of supplemental courses.

Table B 2.1.1a Mapping of Curriculum Components with PO/ PSOs

Sr. No.	Type of Courses Offered	Number of Subjects Mapped	Number of Credits allotted	Weightage in percentage
1	Basic Sciences Courses(BSC)	7	22	10
2	Engineering Sciences Courses (BSC)	9	15	12
3	Humanities and Social Science Including Management Courses (HSSMC)	5	5	7
4	Professional Core Course (PCC)	32	72	43

5	Professional Elective Course (PEC)	9	24	12
6	Open Elective Course (OEC	04	11	5
7	Mini Project /Major Projects	03	19	4
8	Seminar/ Internship	05	5	7
TOTAL		**74**	**173**	**100%**

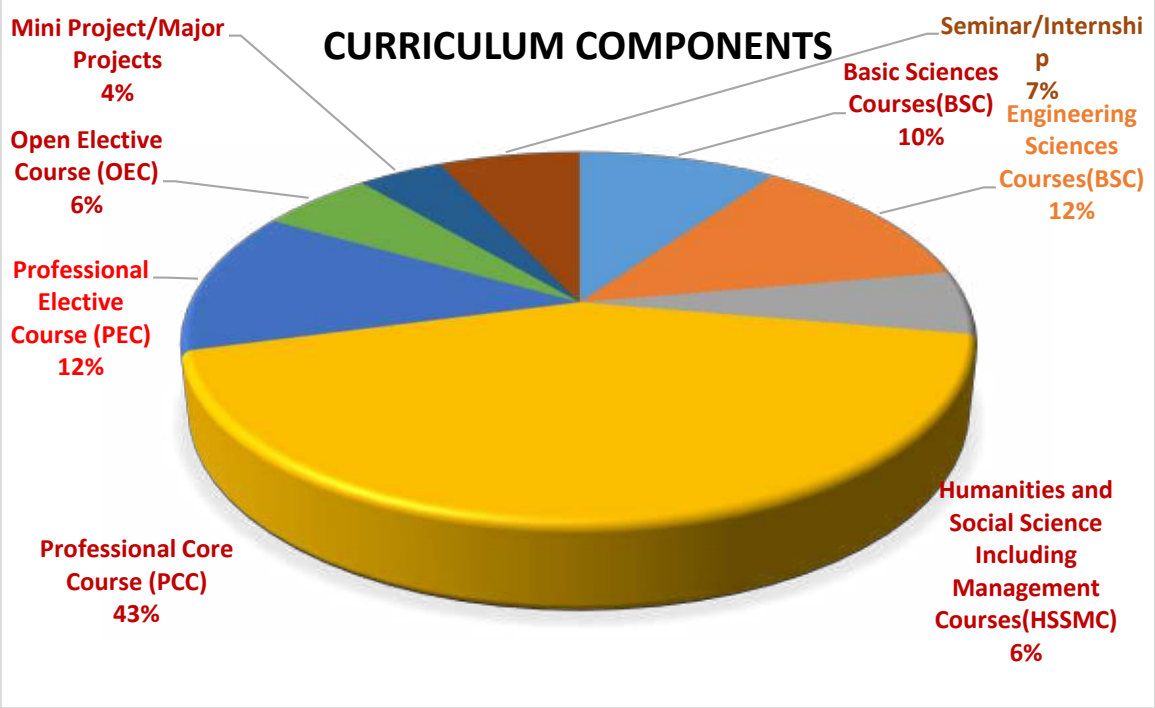

Fig B 2.1.1a Curriculum Components

The institution implements the overall curriculum break up as per DBATU which is for 8 semesters. The curriculum for the Bachelor of Engineering in Electrical Engineering is given in Table B 2.1.1b

Table B 2.1.1 b University Curriculum Structure

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Semester - I
Group A

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit
			L	T	P	CA	MSE	ESE	
1	**Mandatory**	**Induction Program**	**3 weeks duration in the beginning of the semester**						
2	BTBS101	Engineering Mathematics – I	3	1	-	20	20	60	4
3	BTBS102	Engineering Physics	3	1	-	20	20	60	4
4	BTES103	Engineering Graphics	2	-	-	20	20	60	2
5	BTHM104	Communication Skills	2	-	-	20	20	60	2
6	BTES105	Energy and Environment Engineering	2	-	-	20	20	60	2
7	BTES106	Basic Civil and Mechanical Engineering	2	-	-	50	-	-	Audit
8	BTBS107L	Engineering Physics Lab	-	-	2	60	-	40	1
9	BTBS108L	Engineering Graphics Lab	-	-	4	60	-	40	2
10	BTHM109L	Communication Skills Lab	-	-	2	60	-	40	1
		TOTAL	**14**	**2**	**8**	**330**	**100**	**420**	**18**

Semester - II
Group B

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit
			L	T	P	CA	MSE	ESE	
1	BTBS201	Engineering Mathematics – II	3	1	-	20	20	60	4
2	BTBS202	Engineering Chemistry	3	1	-	20	20	60	4
3	BTES203	Engineering Mechanics	2	1	-	20	20	60	3
4	BTES204	Computer Programming in C	2	-	-	20	20	60	2
5	BTES205	Workshop Practices	-	-	4	60	-	40	2
6	BTES206	Basic Electrical and Electronics Engineering	2	-	-	50	-	-	Audit
7	BTES207L	Computer Programming Lab	-	-	2	60	-	40	1
8	BTBS208L	Engineering Chemistry Lab	-	-	2	60	-	40	1
9	BTES209L	Engineering Mechanics Lab	-	-	2	60	-	40	1
10	BTES210P	Mini Project	-	-	2	60	-	40	1
11	BTES211P	Field Training / Internship / Industrial Training (minimum of 4 weeks which can be completed partially in First Semester and Second Semester or in at one time).	-	-	-	-	-	-	Credit to be evaluated in III Sem
		TOTAL	**12**	**3**	**12**	**430**	**80**	**440**	**19**

TEACHING & EVALUATION SCHEME ELECTRICAL ENGINEERING

III SEMESTER.									
S. No	Course Code	Course Title	Teaching Scheme			Evaluation Scheme			Credits
			L	T	P	MSE	CA	ESE	
1	BTBS301	Engineering Mathematics-III	3	1	0	20	20	60	4
2	BTEEC302	Network Analysis and Synthesis	2	1	0	20	20	60	3
3	BTEEC303	Fluid Mechanics and Thermal Engineering	2	1	0	20	20	60	3
4	BTEEC304	Measurement and Instrumentation	2	1	0	20	20	60	3
5	BTEEOEL 305	Elective –I (A) Electrical Engineering Materials (B) Applied Physics (C) Signals and Systems	3	0	0	20	20	60	3
6	BTMS306	Basic Human Rights	2	0	0	-	20	-	Audit
7	BTHS 307	Engineering Economics	2	0	0	20	20	60	2
8	BTEEL308	Network Analysis and Synthesis Lab	0	0	2	-	60	40	1
9	BTEEL309	Measurement and Instrumentation Lab	-	0	4	-	60	40	2
10	BTEEL310	Electrical workshop/ Mini project	-	-	2	-	60	40	1
		TOTAL	16	04	08	120	320	480	22
IV SEMESTER.									
1	BTEEC401	Electrical Machine-I	3	0	1	20	20	60	4
2	BTEEC402	Power System-I	2	0	1	20	20	60	3
3	BTEEC403	Electrical Installation and Estimation	2	0	1	20	20	60	3
4	BTEEC404	Numerical Methods and Programming	2	0	1	20	20	60	3
5	BTEEDEL 405	Elective –II (A) Solid State Devices (B) Analog and Digital electronics (C) Electromagnetic Theory	2	0	0	20	20	60	2
6	BTXX406	Product Design [Online course]	2	0	0	20	20	60	2
7	BTEEOEL 407	Elective –III (A) Industrial safety (B) Introduction to Non-Conventional energy sources (C) Software Techniques.	2	0	0	20	20	60	2
8	BTEEL408	Electrical Machine-I Lab	0	2	0	-	60	40	1
9	BTEEL409	Power System lab-I	0	2	0	-	60	40	1
10	BTEEL410	Numerical Methods and Programming Lab	-	2	-	-	60	40	1
11	BTEEL411	Elective-II Lab	0	2	0	-	60	40	1
	TOTAL		15	08	04	140	380	580	23

Teaching & Evaluation scheme of Third year B. Tech. Electrical Engineering / Electrical Engineering (Electronics and Power)/ Electrical & Electronics Engg / Electrical & Power Engg .

V Semester

Course Code	Course Name	Teaching Scheme			Evaluation Scheme				
		L	P	T	Int	MSE	ESE	Total	Credits
BTEEC501	Electrical Machine-II	3	0	1	20	20	60	100	4
BTEEC502	Power System-II	3	0	1	20	20	60	100	4
BTEEL503	Microprocessor and micro Controller	3	0	0	20	20	60	100	3
BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]	2	0	0	-	-	-	Audit course	0
BTEEE505	Elective-IV	3	0	0	20	20	60	100	**3**
BTEEOE506	Elective-V	3	0	0	20	20	60	100	**3**
BTEEL507	Electrical Machine-II Lab	0	4	0	**60**	-	**40**	100	**2**
BTEEL508	Power System-II Lab	0	2	0	**30**	-	**20**	50	**1**
BTEEL509	Microprocessor and micro Controller Lab	0	2	0	**30**	-	**20**	50	**1**
BTEEF510	Industrial Training	-	-	-	**50**	-	-	50	**1**
	Total	17	08	02	**270**	**100**	**380**	750	**22**

Elective- IV: 1.Illumination engineering 2. Advances in Renewable Energy Sources. 3. Testing and Maintenance of Electrical equipment.
Elective-V: 1.Electrical Mobility. 2 Power Plant Engineering. 3. Design and Analysis of Algorithms

VI semester

Course Code	Course Name	Teaching Scheme			Evaluation Scheme				
		L	P	T	Int	MSE	ESE	Total	Credits
BTEEC601	Control System	3	0	1	20	20	60	100	4
BTEEC602	Principles of Electrical Machine Design	3	0	0	20	20	60	100	3
BTEEC603	Power Electronics	3	0	1	20	20	60	100	4
BTEEE604	Elective-VI	3	0	0	20	20	60	100	3
BTEEC605	Elective-VII	3	0	0	20	20	60	100	**3**
BTEEOE606	Elective-VIII [MOOC/Swayam/NPTEL]	3	0	0	20	20	60	100	**3**
BTEEL607	Control System- Lab	0	2	0	30	-	20	50	**1**
BTEEL608	Principles of Electrical Machine Design Lab	0	2	0	30	-	20	50	**1**
BTEEL609	Power Electronics Lab	0	4	0	60	-	40	100	**2**
	Total	18	08	02	**240**	**120**	**440**	800	**24**

Elective-VI Industrial automation and Control 2. Design of Experiments 3. Artificial neural network.
Elective-VII 1. Switch Gear and Protection 2. Computer aided analysis and design 3. Mechatronics
Elective- VIII. 1. Rural Technology and Community Development. 2. Project Management 3. Knowledge Management

Dr. Babasaheb Ambedkar Technological University, Lonere.

B.Tech (Electrical Engineering / Electrical Engineering (Electronics and Power)/ Electrical & Electronics Engg / Electrical & Power Engineering)

Curriculum for Semester VII [Final Year]

Sr. No.	Course Code	Type of Course	Course Title	Hours per week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTEEC701	PCC1	Power System Operation & Control	3	0	0	20	20	60	100	3
2	BTEEC702	PCC2	High Voltage Engineering	3	0	0	20	20	60	100	3
3	BTEEC703	PCC3	Electrical Drives	3	0	0	20	20	60	100	3
4	BTEEE704	PEC1	Elective-IX	3	0	0	20	20	60	100	3
5	BTEEE705	PEC2	Elective-X	3	0	0	20	20	60	100	3
6	BTEEL706	Lab	Power System Operation & Control Lab	0	0	2	--	30	20	50	1
7	BTEEL707	Lab	High Voltage Engineering Lab	0	0	2	--	30	20	50	1
8	BTEEL708	Lab	Electrical Drives Lab	0	0	2	--	30	20	50	1
9	BTEES709	Seminar	Seminar	0	0	2	--	30	20	50	1
10	BTEEP710	Project	Project Part-I	0	0	6	--	30	20	50	3
11	BTEEF711	--	Field Training /Internship/Industrial Training III	--	--	--	--	--	50	50	1
			Total	**15**	**0**	**14**	**100**	**250**	**450**	**800**	**23**

Elective-IX	Elective-X
A) Special Purpose Electrical Machines	A) Digital Signal Processing
B) Electrical Traction and Utilization	B) Energy Audit and Conservation
C) Engineering System Design and Optimization	C) Electrical Power Quality
D) Financial Management	D) HVDC Transmission and FACTS

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Curriculum for Semester VIII [Final Year]

Sr. No.	Course Code	Course Title	Hours per week			Evaluation Scheme			Total Marks	Credits
			L	T	P	MSE	CA	ESE		
	1.Power Management Integrated Circuits 2.DC Power Transmission Systems 3.High Power Multilevel Converters 4.Fuzzy Sets, Logic and Systems & Applications 5.The Joy of Computing using Python 6.Introduction to Industry 4.0 and Industrial Internet of Things 7.Entrepreneurship Essentials **# Student to opt any two subjects from above list**		3	0	0	20*	20*	60*	100	3
			3	0	0	20*	20*	60*	100	3
6	BTEEP803	Project - II	0	0	30	--	100	150	250	15
		Total	**6**	**0**	**30**	**40**	**240**	**270**	**450**	**21**

** Six months of Internship in the industry*

**Students doing project at institute will have to appear for CA/MSE/ESE*

** Student doing project at Industry will give NPTEL examination / Examination conducted byuniversity i.e. CA/MSE/ESE*

 # These subjects are to be studied on self –study mode using SWAYAM/NPTEL/Any other source

 # Teacher who work as a facilitator for the course should be allotted 3 hrs/week load.

 # Project Load: 2hrs/week/project.

The department has a well-defined process in implementation to achieve the Program Outcomes (PO) and Program Specific Outcomes. If some components, to attain Cos/POs are not included in the curriculum provided by DBATU, then the department makes additional efforts to impart this knowledge.

Following processes are used to identify the extent of compliance for attaining the program outcomes and Program Specific Outcomes

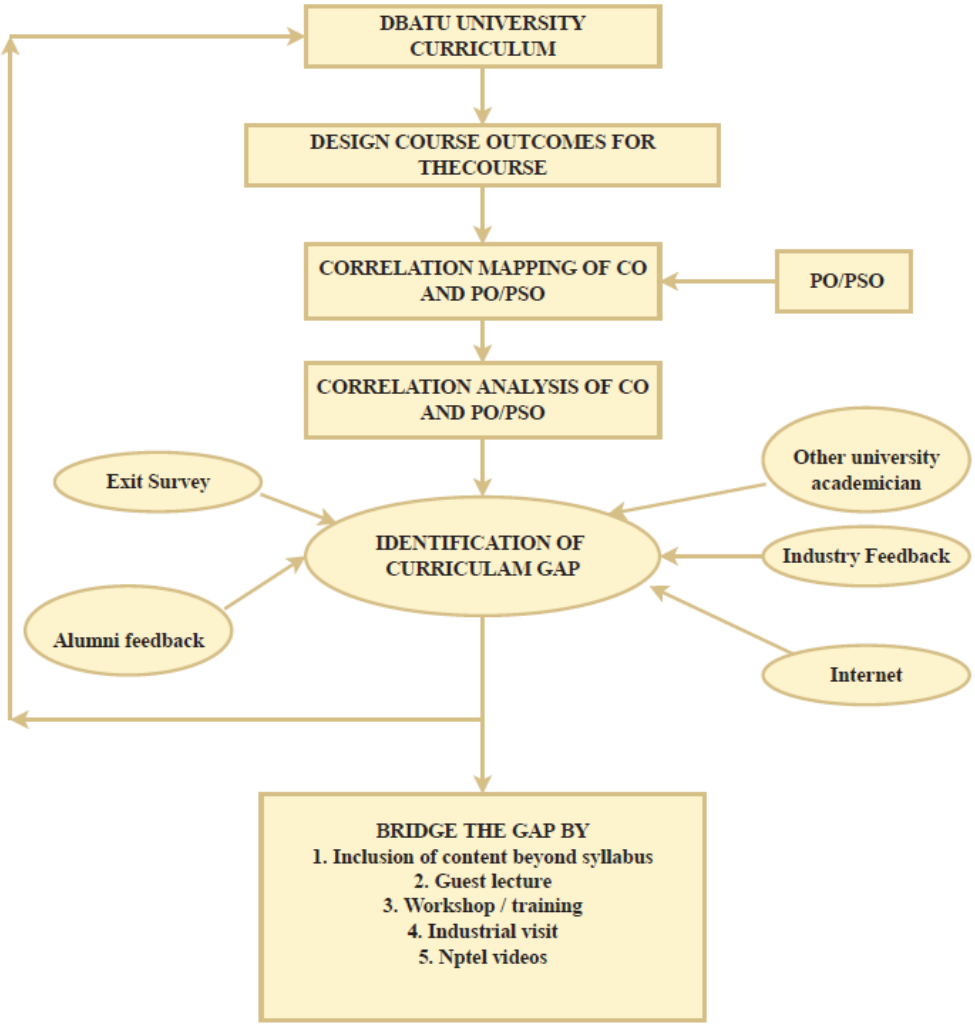


Figure B 2.1.1 b Process to Identify Curriculum Gaps

1. The University publishes the curriculum annually in June if changed or updated. The curriculum provides the syllabus of each course.
2. Faculty members update and design the course outcomes for the course allotted to them. The teaching plan with course objectives and course outcomes is prepared by the individual faculty member of the department

before the commencement of a semester. The plan is duly presented and confirmed in DAB. The plan ensures the coverage of the complete syllabus before the end of the semester

3. For each course, a course file is prepared by the concerned faculty member. The Co-relation matrix of CO with PO/ PSOs is also designed and analyzed by Academic Monitoring Committee.
4. The feedback from the alumni, industry experts, and academicians from other Universities and students is regularly taken. Gaps are identified based on the CO attainment of individual courses and feedback from different stakeholders.
5. The data collected is then presented in front of the Program Evaluation and Review Committee. The gaps are discussed in the AMC meeting. To bridge gaps, seminars, workshops, guest lectures, industrial visits, etc. are arranged by our department/ institute to provide knowledge beyond the syllabus. The following table shows the correlation matrix courses to program outcomes.

Table B.2.1.1.c Mapping of the courses to program outcomes

Subject Code	Name of Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO-1	PSO-2
BTBS101	Engineering Mathematics- I	Y	Y	Y	Y		Y					Y	Y		
BTBS102	Engineering Physics	Y	Y	Y	Y		Y	Y					Y	Y	
BTES103	Engineering Graphics	Y	Y	Y	Y	Y					Y		Y		
BTHM104	Communication Skills	Y				Y	Y		Y		Y		Y		
BTES105	Energy and Environment Engineering	Y	Y	Y	Y		Y	Y	Y		Y	Y		Y	
BTES106	Basic Civil and Mechanical Engineering	Y	Y	Y	Y		Y	Y			Y	Y			
BTBS107L	Engineering Physics Lab	Y	Y	Y	Y		Y	Y		Y			Y	Y	
BTES108L	Engineering Graphics Lab	Y	Y	Y	Y	Y				Y	Y		Y		
BTHM109L	Communication Skills Lab.					Y	Y		Y		Y		Y		
BTBS201	Engineering Mathematics-II	Y	Y	Y	Y		Y					Y	Y		
BTBS202	Engineering Chemistry	Y	Y				Y	Y		Y					
BTES203	Engineering Mechanics	Y	Y	Y			Y			Y					
BTES204	Computer Programming in C	Y	Y	Y						Y	Y				
BTES205	Workshop Practices	Y				Y				Y	Y			Y	
BTES206	Basic Electrical and Electronics Engineering	Y					Y	Y						Y	
BTES207L	Computer Programming Lab	Y	Y	Y						Y	Y				
BTBS208L	Engineering Chemistry Lab	Y	Y				Y	Y		Y					
BTES209L	Engineering Mechanics Lab	Y	Y	Y			Y	Y		Y	Y				
BTES210P	Mini Project	Y	Y			Y	Y	Y	Y	Y	Y			Y	Y

BTES211P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Subject Code	Name of Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO-1	PSO-2
BTBS301	Engineering Mathematics-III	Y	Y	Y	Y		Y					Y	Y		
BTEEC302	Network Analysis and Synthesis	Y	Y	Y		Y	Y			Y	Y		Y	Y	
BTEEC303	Fluid Mechanics and Thermal Engineering	Y	Y								Y				
BTEEC304	Measurement and Instrumentation	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
BTEEOEL 305A	Elective –I (A) Electrical Engineering Materials	Y	Y				Y				Y				
BTMS306	Basic Human Rights	Y	Y								Y		Y		
BTHS 307	Engineering Economics	Y	Y								Y		Y		
BTEEL308	Network Analysis and Synthesis Lab	Y	Y	Y		Y	Y			Y	Y		Y	Y	
BTEEL309	Measurement and Instrumentation Lab	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BTEEL310	Electrical workshop/ Mini project	Y	Y	Y		Y	Y	Y	Y	Y	Y		Y	Y	
BTEEC401	Electrical Machine-I	Y	Y	Y			Y			Y	Y	Y	Y	Y	
BTEEC402	Power System-I	Y	Y			Y	Y	Y		Y	Y	Y		Y	
BTEEC403	Electrical Installation and Estimation	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
BTEEC404	Numerical Methods and Programming	Y	Y	Y		Y				Y	Y				
BTEEDEL 405B	Elective –II (B) Analog and Digital electronics	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	

BTXX406	Product Design [Online course]	Y	Y			Y	Y			Y	Y				
BTEEOEL 407B	Elective –III (B) Introduction to Non- Conventional energy sources	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
BTEEL408	Electrical Machine-I Lab	Y	Y	Y			Y			Y	Y	Y	Y	Y	
BTEEL409	Power System lab-I	Y	Y			Y	Y			Y	Y			Y	Y
BTEEL410	Numerical Methods and Programming Lab	Y	Y			Y				Y					
BTEEL411B	Elective-II Lab (B) Analog and Digital Electronics	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	

Subject Code	Name of Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO-1	PSO-2
BTEEC501	Electrical Machine-II	Y	Y	Y						Y	Y		Y	Y	
BTEEC502	Power System-II	Y	Y			Y	Y	Y						Y	
BTEEL503	Microprocessor and micro Controller	Y	Y			Y							Y	Y	
BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]						Y		Y		Y				
BTEEE505	Elective-IV- Illumination engineering	Y	Y					Y						Y	
BTEEOE506	Elective-V- Power Plant Engineering	Y					Y							Y	
BTEEL507	Electrical Machine-II Lab	Y	Y	Y				Y		Y	Y		Y	Y	
BTEEL508	Power System-II Lab	Y	Y			Y	Y	Y						Y	
BTEEL509	Microprocessor and micro Controller Lab	Y	Y			Y							Y	Y	
BTEEF510	Industrial Training	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
BTEEC601	Control System	Y	Y			Y		Y			Y			Y	

BTEEC602	Principles of Electrical Machine Design	Y	Y	Y		Y					Y			Y	Y
BTEEC603	Power Electronics	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
BTEEE604	Elective-VI- Industrial automation and Control	Y	Y											Y	
BTEEC605	Elective-VII- Switch Gear and Protection	Y	Y				Y			Y	Y			Y	
BTEEOE606	Elective-VIII- Project Management [MOOC/Swayam/NPTEL]	Y	Y				Y				Y	Y			
BTEEL607	Control System- Lab	Y	Y			Y					Y				
BTEEL608	Principles of Electrical Machine Design Lab	Y	Y	Y		Y					Y			Y	Y
BTEEL609	Power Electronics Lab	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Subject Code	Name of Subject	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO-1	PSO-2
BTEEC701	Power System Operation & Control	Y	Y			Y	Y	Y			Y			Y	
BTEEC702	High Voltage Engineering	Y	Y				Y	Y			Y			Y	
BTEEC703	Electrical Drives	Y	Y				Y				Y		Y	Y	
BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	Y	Y				Y							Y	
BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	Y	Y				Y				Y			Y	
BTEEL706	Power System Operation & Control Lab	Y	Y			Y					Y			Y	
BTEEL707	High Voltage Engineering Lab	Y	Y				Y	Y			Y			Y	
BTEEL708	Electrical Drives Lab	Y	Y				Y				Y		Y	Y	
BTEES709	Seminar	Y	Y				Y		Y		Y			Y	

BTEEP710	Project Part-I	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	
BTEEF711	Field Training/Internship/Industrial Training III	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
BTEEPE801	High Power Multilevel Converters (Elective-I)	Y	Y	Y		Y					Y	Y	Y	Y	
BTEEP802	Entrepreneurship Essentials (Elective-II)	Y	Y				Y				Y				
BTEEP803	Project - II	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
	Total (74)	**72**	**68**	**37**	**16**	**37**	**52**	**29**	**20**	**36**	**56**	**23**	**36**	**49**	**11**
	Percentage	**97**	**92**	**50**	**22**	**50**	**70**	**39**	**27**	**49**	**76**	**31**	**49**	**66**	**15**
	Program Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2

Curricular Gaps

The following table list the identified gaps in the syllabus of DBATU for the attainment of Program Outcomes and Program Specific Outcomes as per the above mapping.

Table B 2.1.1.d Gaps in Program Outcomes of University Curriculum

Sr. No.	PO's	Description
1	PO4	Conduct investigations of complex problems
2	PO7	Environment and sustainability
3	PO8	Ethics
4	PO11	Project management and finance

Following are the year-wise curriculum gap identified.

CAY (2022-23):

Table B.2.1.1e: Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Measurement and Instrumentation (BTEEC 304)	High voltage and current measuring instrument systems	PO8, PO7, PSO1
2	Electrical Installation and Estimation (BTEEC403)	Layout design of substation	PO7, PO8, PSO2
3	Power System-I (BTEEC402)	Fault monitoring system	PO8, PO7, PSO1
4	Principles of Electrical Machine Design (BTEEC602)	Advanced Machine winding design process	PO4, PO8, PO11, PSO2
5	Industry Essential Skills	Industrial Culture	PO8, PSO2
6	Project Management (BTEEOE606)	Advanced Project Management Tools	PO11, PO8, PO4, PSO1, PSO2
7	Electrical Drives (BTEEC703)	Advanced control drives	PO4, PO7, PO8, PSO2
8	Power Electronics (BTEEC603)	Design, analysis and Interpretation of Inverters.	PO4, PO7, PO11

CAYm1 (2021-22):

Table B.2.1.1f: Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Power System (BTEEC402)	Fault Detection methods and Substation automation	PO5, PSO1
2	Introduction to Non-Conventional energy sources (BTEEOE407-B)	Solar Plant Automation	PO5, PSO1
3	Industry Automation	PLC	PO5, PSO1
4	Electrical Machines	Alternator Excitation system	PO5, PSO1
5	Industry Essential Skills	Industrial Culture	PO8, PSO2
6	Soft skill & Personality Development	Communication Skill, Presentation Skill	PO10, PO12 PSO1, PSO2
7	Entrepreneur Skills	Leadership Skill	PO9, PO11 PSO1, PSO2
8	Social Health & Safety Issues	Awareness about social health and safety measures	PO6, PO7, PSO2
9	Awareness of Higher Education	Various higher education opportunities	PO12, PSO1
10	Awareness of Education Support Scheme	Various higher education financial support schemes	PSO1

CAYm2 (2020-21)

Table B.2.1.1g: Identified Curricular Gaps

Sr. No	Relevant Course/Area	Curriculum Gap Identified	Relevance to PO & PSO
1	Industrial automation and Control (BTEEE604)	PLC & SCADA implementation for Automation	PO3, PO5, PSO1
2	Switch Gear and Protection (BTEEC605)	Advance relays for protection	PO2, PO3, PO5, PSO1
3	Power System-II (BTEEC502)	Transmission line faults and calculations	PO1, PO2, PO5, PSO1

2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs. (10)

CAY (2022-23):

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No. of Studens	Relevance to Pos, PSOs
1	Advanced machine design tools	Industrial visit	13-04-2023	AG Electro Services,Karad.	32	PO4, PO7, PO11, PO4,PO8, PSO2
2	Design, analysis and Interpretation of Inverters, High voltage and current measuring instrument systems,	Industrial visit	25-11-2022	HVDC Substation, Padghe	30	PO4, PO7, PO8,PO11, PSO1
3	Advanced Tools used for Project Management	Guest lecture on Management Studies	14-12-2022	Dr. Pranjali Ankule	34	PO2, PO3, PO4, PO8,PO11,PSO 1 & PSO2
4	Technical skills in line with the requirements of the industry	Industrial Tour	17-12-2022	IIT Bombay	5	PO1, PO2, PO3, PO4, PSO1
5	Skill Based Training Program	Skill Based Training Program	6-01-2023	Symboisis Skills and Professional University (SSPU)	10	PO1, PO2, PO3, PO4, PSO1
6	Skill Based Training Program	Corporate Grooming	21-02-2023 to	Mr. George	45	PO1, PO2, PO3, PO4, PSO1

			23-02-2023			
7	Softskill training in line with industry requirement	IT Career in digital marketing (AJDM)	10-03-2023	Mr. AjinkyaPawar (AJDM, India)	28	PO2, PO3, PO4, PSO1
8	Demonstration skill and Technical skill development	Project Exhibition	16/04/2023		34	PO1, PO2, PO3, PO4, PO7,PO8,PO11, PSO1
9	Investigation on complex problems	International Conference	13-05-2023 to 14-05-2023	Dr. Zehila Selamoglu	95	PO2, PO3, PO4,PO8 PSO1
10	Tecknical knowledge and industry exposure sharing	"Guest Lecture by Alumni"	19 -05-2023	Ms.Pranita Hanmant Chavan	42	PO1, PO2, PO5, PO12,PSO1
11	Modern tools used for design of Electrical installation	Two Days Workshop on "Autocad"	2-12-2023 to 3-12-2023	Mrs. Hake Shubhangi Vinod	42	PO5,PO8,PO12, PSO1,PSO2
12	IT Industry exposure and opportunities	"Guest Lecture by Alumni"	24 -04-2023	Ms. Archana Rao	38	PO6,PO7,PO10, PO8, PO4
13	Industry exposure and opportunities "	"Guest Lecture by Alumni"	02 -12-2022	Mr. Shubham Patil	37	PO6, PO3, PO5,
14	Soft skill & Personality Development	Brand Yourself	17-05-2022 to 19-05-2022	Mr. George	80	PO1, PO2, PO3,PO7, PO10, PSO1

15	Industry Readiness	Yuva 360 degree Internship	14-06-2022	Mrs. Patil	70	PO1,PO2, PO3, PO4,PO5,PO8,PO7,PSO1
16	Awareness of Higher Education	German Language Training Program	1/03/2022 30/6/2022	Ms. Sunita Shaligram	60	PO1, PO2, PO3,PO8,PO10, PSO1

CAY m1(2021-22):

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No. of Students	Relevance to Pos, PSOs
1	Technical skills in line with the requirements of the industry	Expert lecture on Electrical Traction & Utilization	28th January 2022	Mr. Patil D. A. Asst. Professor DKTE, Ichalkaranji	14	PO1, PO2, PO3, PO4, PSO1
2	Technical Skills in line with the requirements of the industry	Expert lecture on HVDC and FACTS	29th January 2022	Mr. Patil S.D. Asst. Professor ADCET, Ashta	15	PO2, PO3, PO4, PSO1 & PSO2
3	Technical Skills in line with the requirements of the industry	Expert lecture on Electrical Drives	2nd February 2022	Mr. Chavan P. L. Asst. Professor KIT, Kolhapur	10	PO1, PO2, PO3, PO4, PSO1
4	Technical Skills in line with the requirements of the industry	Expert lecture on High Voltage Engineering	4th February 2022	Mr.Zende R. M. Asst. Professor Zeal, Pune	08	PO1, PO2, PO3, PO4, PSO1

5	Technical Skills in line with the requirements of the industry	Expert lecture on Electrical Drives	2nd February 2022	Mr. Chavan P. L. Asst. Professor KIT, Kolhapur	10	PO1, PO2, PO3, PO4, PSO1
6	Technical Skills in line with the requirements of the industry	Expert lecture on Electrical Mobility	5th February 2022	Mr. Chavan Avinash S. Asst. Professor JSPM, Pune	13	PO2, PO3, PO4, PSO1
7	Technical Skills in line with the requirements of the industry	Expert lecture on Electrical Machine-I	30th January 2022	Mr. B.V. Sai Thrinath Asst. Professor, NIE, AP	27	PO1, PO2, PO3, PO4, PSO1
8	Technical Skills in line with the requirements of the industry	Webinar on Hybrid Electrical Vehicle Technology	20th December 2021	Mr. Ashwin Dhaigude, Product design/Testing at Toyota	40	PO2, PO3, PO4, PO5, PSO1
9	Technical Skills in line with the requirements of the industry	Interdisciplinary guest lecture on Converters used in Electric Vehicle	24th December 2021	Mr. Chavan Santosh, Asst. Prof.	20	PO2, PO3, PO4, PSO1

10	Technical Skills in line with the requirements of the industry	Alumni guest lecture on Pricol recruitment Process	11th April 2022	Mr. Dede Pradip, Quality Assurance Engineer	18	PO2, PO3, PO4, PSO1
11	Technical Skills in line with the requirements of the industry	Internal Hackathon of Smart India Hackathon 2022	28-29/042022	Dr. Mirajkar Gayatri		PO1, PO2, PO3, PO4, PSO1
12	Recent Trends & Industry Readiness	Industrial Visit	22th December 2021	Mr. Ramesh Babu, Electrical Engineer, Urmodi Power plant	42	PO1, PO2, PSO5, PSO12/PSO1 & PSO2
13	Industry Readiness	Industrial Visit	29th December 2021	Mr. Mane Prithviraj, & Mr. Khairmode Abhijeet, Plant In-charge	42	PO8, PO10, PO12, PSO2, PSO3
14	To Enhance communication skills	Soft skill program Conducted by Rubicon	16-22 /9/2022	Mr. G George	38	PO10
15	Dimensional Modeling	One-day Workshop on Business Intelligence	13/11/2021	Mr. Suyog Patil	37	PO6, PO3, PO5, PSO1

16	Usage of Modern Tools	Effective Use of ICT Tools (MOODLE), NPTEL COURSERA Certification	9-12-2021	Ms. S.Y. Mulla	43	PO2, PO3, PO4, PSO1
17	Soft skill & Personality Development	English Speaking Session	1-05-2022 to 30-06-2022	Mr. Kale Abhay.A. (A.G.C.E., Satara)	36	PO2, PO3, PO4, PO10, PSO1
18	Recent Trends & Industry Readiness	Campus To Corporate Activity	1-05-2022 to 30-06-2022	Ms. Bhilare Nikita .S. Mr. Kale Abhay.A	35	PO1, PO2, PO3, PO4, PSO1
19	Soft skill & Personality Development	Brand Yourself	17-05-2022 to 19-05-2022	Mr. George	33	PO1, PO2, PO3, PO4, PSO1
20	Industry Readiness	Yuva 360 degree Internship	14-06-2022	Mrs. Patil	32	PO2, PO3, PO4, PSO1
21	Awareness of Higher Education	German Language Training Program	1/03/2022 30/6/2022	Ms. Sunita Shaligram	33	PO1, PO2, PO3, PO4, PSO1

CAY m2 (2020-21):

Sr. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No. of Students	Relevance to Pos, PSOs
1	Industry Software Test Cases, Black Box Testing, Categories of Testing	A career in Software Testing: Prerequisite & Opportunities	9/5/2021	Mr. Sushant Sankpal Quality Kiosks Mumbai	20	PO2, PO3, PO4, PSO1
2	PLC application and Automation	Guest lecture on PLC key Products in Industrial Automation	2nd April 2021	Mrs. Yogita Katre, Industrial Automation Trainer	35	PO3, PO5, PSO1
3	Technical Skills in line with the requirements of the industry	Guest lecture on Expectations from the Young Professionals	16th April 2021	Mr. Sandeep Karkhanis & Mr. Shrikant Korade Industrial Automation Trainer	25	PO2, PO3, PO5, PSO1
4	Technical Skills in line with the requirements for Startup and innovation	Guest lecture on Industrial Talk on Carrier startup funding	17th April 2021	Mr. Rohit Sorate CEO Urban Mandai	32	PO2, PO3, PO5, PSO1

5	Technical Skills in line with the requirements of the industry	Expert lecture on Career Options and opportunities for Electronics Graduates	26th April 2021	Mr. Renjith CV Product Designer	30	PO2, PO3, PO5, PSO1
6	Entrepreneur Skills	Guidance session on Entrepreneur ship Development	25th April 2021	Mr. Mandar Kulkarni, Owner Ideal Gas Springs, Satara	15	PO9, PO10, PSO1
7	Technical Skills requirements	How to Crack Gate Examination	5-12-2020	Mr.Sumit Acharya (Gate Academy Pune)	42	PO2, PO3, PO5, PSO1
8	Technical Skills in line with the requirements of the industry	Online Alumni guest lecture on Industrial Skill requirements and Job opportunities	2 March 2021	Mr. Kale Kiran, Electrical Trainee Engineer	30	PO2, PO3, PO5, PSO1
9	Technical Skills in line with the requirements of the industry	Online Alumni guest lecture on Industrial Automation	6th November 2020	Mr. Mali Vijay, Quality Engineer Dhoot Transmission	22	PO2, PO3, PO5, PSO1

10	Technical Skills in line with the requirements of the industry	Online Alumni guest lecture on Power System	30th March 2021	Mr. Shivaji Shelake, Electrical Engineer, Suzlon Global	22	PO2, PO3, PO5, PSO1
11	Technical Skills in line with the requirements of the industry	Online Alumni guest lecture on Electrical Substation, Transmission & Distribution	23 April 2021	Mr. Patil Anil, Electrical Technician, MSEB Satara	22	PO2, PO3, PO5, PSO1
12	Technical Skills in line with the requirements of the industry	Online Alumni guest lecture on Industrial Requirements	6th May 2021	Mr. Potdar Utkarsh S., Electrical, Embedded Engineer	17	PO2, PO3, PO5, PSO1
13	Technical Skills in line with the requirements of the industry	Guest lecture on Career scope for Industrial Automation	2nd March 2021	Mrs. Nital Sarap(Industrial Automation Trainer	30	PO2, PO3, PO5, PSO1
14		Online webinar on Intellectual property rights	28-05-2021	Dr. B.K Sarkar	36	PO2, PO3, PO5, PSO1

2.2. Teaching - Learning Processes (100)

2.2.1. Describe Processes followed to improve the quality of Teaching & Learning (25)

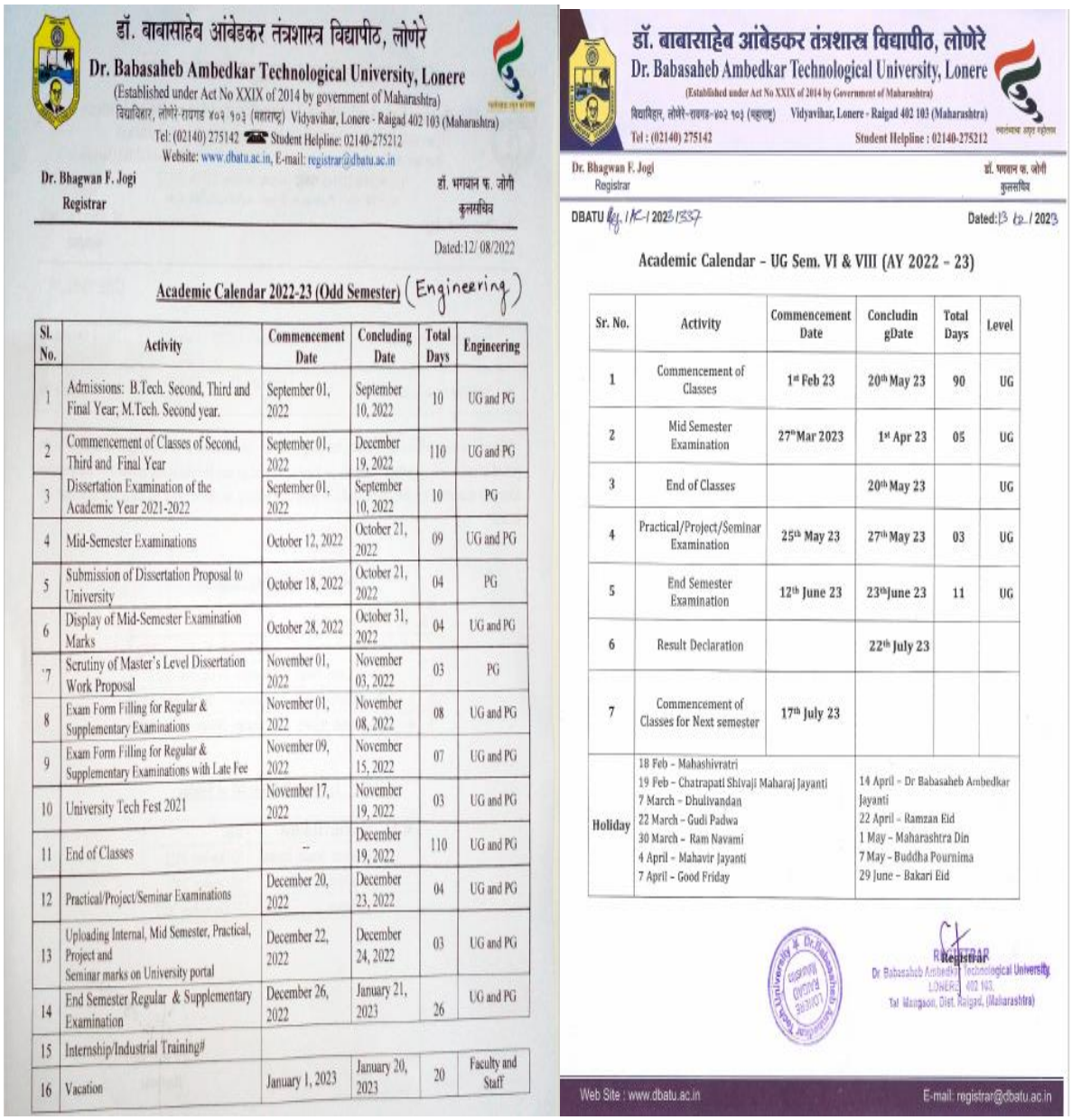
(Processes may include adherence to the academic calendar and improving instruction methods using pedagogical initiatives such as real-world examples, collaborative learning, quality of laboratory experience concerning conducting experiments, recording observations, analysis of data, etc. encouraging bright students, assisting weak students, etc. The implementation details and impact analysis need to be documented.

A. Adherence to Academic Calendar (03)

- The institute adheres to the academic calendar of DBATU, Lonere. The academic calendar constitutes the academic activities of the institute and the department.
- The institute prepares its academic calendar after the university academic calendar announcement at the beginning of each semester.
- In line with Institute academic calendar, the department prepares an annual activity calendar separately and shares it with the faculties and students
- All faculties and students follow the department activity calendar
- It includes the following details:

  i. Schedule of Guest lecturers, Industrial visits, Cultural Events, and Sports activities organized by the department.
  ii. Commencement of Semester
  iii. Exam form filling date
  iv. Internal Examination Schedule
  v. Tentative dates of commencement of University practical and theory end semester examinations.
  vi. Dates of public holidays

- Sample University, Institute, Department academic calendar is shown below



डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ, लोणेरे
Dr. Babasaheb Ambedkar Technological University, Lonere
(Established under Act No XXIX of 2014 by government of Maharashtra)
विद्याविहार, लोणेरे-रायगड ४०२ १०३ (महाराष्ट्र) Vidyavihar, Lonere - Raigad 402 103 (Maharashtra)
Tel: (02140) 275142 Student Helpline: 02140-275212
Website: www.dbatu.ac.in, E-mail: registrar@dbatu.ac.in

Dr. Bhagwan F. Jogi
Registrar

डॉ. भगवान फ. जोगी
कुलसचिव

Dated:12/ 08/2022

Academic Calendar 2022-23 (Odd Semester) (Engineering)

Sl. No.	Activity	Commencement Date	Concluding Date	Total Days	Engineering
1	Admissions: B.Tech. Second, Third and Final Year; M.Tech. Second year.	September 01, 2022	September 10, 2022	10	UG and PG
2	Commencement of Classes of Second, Third and Final Year	September 01, 2022	December 19, 2022	110	UG and PG
3	Dissertation Examination of the Academic Year 2021-2022	September 01, 2022	September 10, 2022	10	PG
4	Mid-Semester Examinations	October 12, 2022	October 21, 2022	09	UG and PG
5	Submission of Dissertation Proposal to University	October 18, 2022	October 21, 2022	04	PG
6	Display of Mid-Semester Examination Marks	October 28, 2022	October 31, 2022	04	UG and PG
7	Scrutiny of Master's Level Dissertation Work Proposal	November 01, 2022	November 03, 2022	03	PG
8	Exam Form Filling for Regular & Supplementary Examinations	November 01, 2022	November 08, 2022	08	UG and PG
9	Exam Form Filling for Regular & Supplementary Examinations with Late Fee	November 09, 2022	November 15, 2022	07	UG and PG
10	University Tech Fest 2021	November 17, 2022	November 19, 2022	03	UG and PG
11	End of Classes	--	December 19, 2022	110	UG and PG
12	Practical/Project/Seminar Examinations	December 20, 2022	December 23, 2022	04	UG and PG
13	Uploading Internal, Mid Semester, Practical, Project and Seminar marks on University portal	December 22, 2022	December 24, 2022	03	UG and PG
14	End Semester Regular & Supplementary Examination	December 26, 2022	January 21, 2023	26	UG and PG
15	Internship/Industrial Training#				
16	Vacation	January 1, 2023	January 20, 2023	20	Faculty and Staff

डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ, लोणेरे
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Dr. Bhagwan F. Jogi
Registrar

डॉ. भगवान फ. जोगी
कुलसचिव

DBATU/Reg./IC-I/2023/1337 Dated:13/02/2023

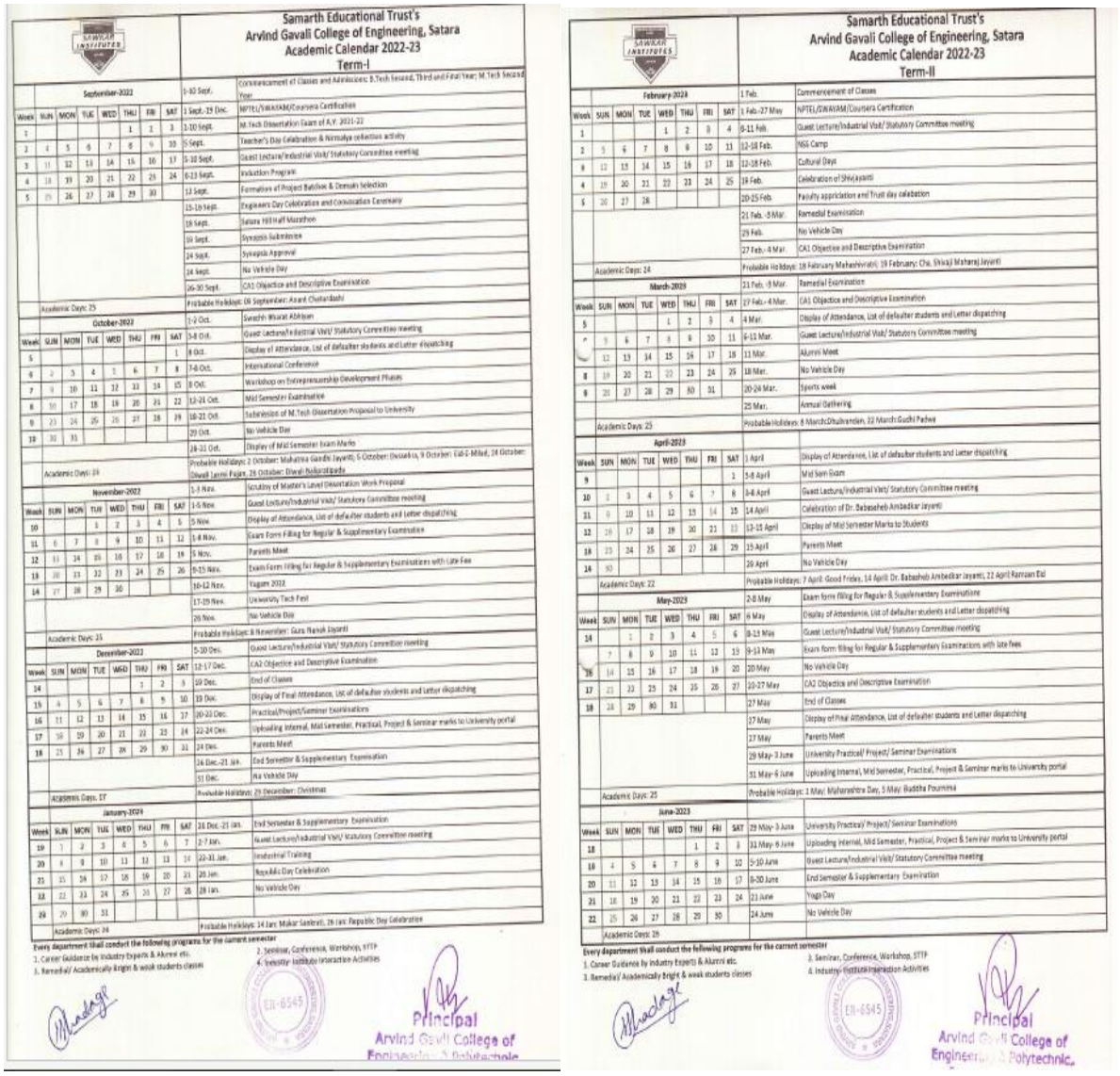
Academic Calendar - UG Sem. VI & VIII (AY 2022 - 23)

Sr. No.	Activity	Commencement Date	Concluding Date	Total Days	Level
1	Commencement of Classes	1st Feb 23	20th May 23	90	UG
2	Mid Semester Examination	27th Mar 2023	1st Apr 23	05	UG
3	End of Classes		20th May 23		UG
4	Practical/Project/Seminar Examination	25th May 23	27th May 23	03	UG
5	End Semester Examination	12th June 23	23rdJune 23	11	UG
6	Result Declaration		22th July 23		
7	Commencement of Classes for Next semester	17th July 23			
Holiday	18 Feb - Mahashivratri 19 Feb - Chatrapati Shivaji Maharaj Jayanti 7 March - Dhulivandan 22 March - Gudi Padwa 30 March - Ram Navami 4 April - Mahavir Jayanti 7 April - Good Friday		14 April - Dr Babasaheb Ambedkar Jayanti 22 April - Ramzan Eid 1 May - Maharashtra Din 7 May - Buddha Pournima 29 June - Bakari Eid		

Registrar
Dr. Babasaheb Ambedkar Technological University
LONERE- 402 103,
Tal Mangaon, Dist. Raigad, (Maharashtra)

Web Site : www.dbatu.ac.in E-mail: registrar@dbatu.ac.in

Fig. B.2.2.1a.: Academic calendar of the University 2022-23



Samarth Educational Trust's
Arvind Gavali College of Engineering, Satara
Academic Calendar 2022-23
Term-I

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
					1	2	3	1-10 Sept. Commencement of Classes and Admissions: B.Tech Second, Third and Final Year; M.Tech Second Year
2	4	5	6	7	8	9	10	1 Sept.-15 Dec. NPTEL/SWAYAM/Coursera Certification
3	11	12	13	14	15	16	17	1-10 Sept. M.Tech Dissertation Exam of A.Y. 2021-22
4	18	19	20	21	22	23	24	5 Sept. Teacher's Day Celebration & Nirmalya collection activity
5	25	26	27	28	29	30		5-10 Sept. Guest Lecture/Industrial Visit/ Statutory Committee meeting
								6-23 Sept. Induction Program
								12 Sept. Formation of Project Batches & Domain Selection
								15-16 Sept. Engineers Day Celebration and Convocation Ceremony
								18 Sept. Satara Hill Half Marathon
								19 Sept. Synopsis Submission
								24 Sept. Synopsis Approval
								24 Sept. No Vehicle Day
								26-30 Sept. CA1 Objective and Descriptive Examination

Academic Days: 25
Probable Holidays: 09 September: Anant Chaturdashi

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
5							1	1-2 Oct. Swachh Bharat Abhiyan
6	2	3	4	5	6	7	8	3-8 Oct. Guest Lecture/Industrial Visit/ Statutory Committee meeting
7	9	10	11	12	13	14	15	8 Oct. Display of Attendance, List of defaulter students and Letter dispatching
8	16	17	18	19	20	21	22	7-8 Oct. International Conference
9	23	24	25	26	27	28	29	8 Oct. Workshop on Entrepreneurship Development Phase6
10	30	31						12-21 Oct. Mid Semester Examination
								18-21 Oct. Submission of M.Tech Dissertation Proposal to University
								20 Oct. No Vehicle Day
								28-31 Oct. Display of Mid Semester Exam Marks

Academic Days: 24
Probable Holidays: 2 October: Mahatma Gandhi Jayanti; 5 October: Dussehra; 9 October: Eid-E-Milad; 24 October: Diwali Laxmi Pujan; 26 October: Diwali Balipratipada

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
10			1	2	3	4	5	1-3 Nov. Scrutiny of Master's Level Dissertation Work Proposal
11	6	7	8	9	10	11	12	1-5 Nov. Guest Lecture/Industrial Visit/ Statutory Committee meeting
12	13	14	15	16	17	18	19	5 Nov. Display of Attendance, List of defaulter students and Letter dispatching
13	20	21	22	23	24	25	26	1-4 Nov. Exam Form Filling for Regular & Supplementary Examination
14	27	28	29	30				5 Nov. Parents Meet
								9-15 Nov. Exam Form Filling for Regular & Supplementary Examinations with Late Fee
								10-12 Nov. Yugam 2022
								17-19 Nov. University Tech Fest
								26 Nov. No Vehicle Day

Academic Days: 25
Probable Holidays: 8 November: Guru Nanak Jayanti

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
14					1	2	3	5-10 Dec. Guest Lecture/Industrial Visit/ Statutory Committee meeting
15	4	5	6	7	8	9	10	12-17 Dec. CA2 Objective and Descriptive Examination
16	11	12	13	14	15	16	17	10 Dec. End of Classes
17	18	19	20	21	22	23	24	10 Dec. Display of Final Attendance, List of defaulter students and Letter dispatching
18	25	26	27	28	29	30	31	20-23 Dec. Practical/Project/Seminar Examinations
								22-24 Dec. Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal
								24 Dec. Parents Meet
								24 Dec.-21 Jan. End Semester & Supplementary Examination
								31 Dec. No Vehicle Day

Academic Days: 17
Probable Holidays: 25 December: Christmas

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
19	1	2	3	4	5	6	7	24 Dec.-21 Jan. End Semester & Supplementary Examination
20	8	9	10	11	12	13	14	2-7 Jan. Guest Lecture/Industrial Visit/ Statutory Committee meeting
21	15	16	17	18	19	20	21	22-31 Jan. Industrial Training
22	22	23	24	25	26	27	28	26 Jan. Republic Day Celebration
23	29	30	31					28 Jan. No Vehicle Day

Academic Days: 24
Probable Holidays: 14 Jan: Makar Sankrati; 26 Jan: Republic Day Celebration

Every department shall conduct the following programs for the current semester
1. Career Guidance by Industry Experts & Alumni etc.
2. Seminar, Conference, Workshop, STTP
3. Remedial/ Academically Bright & weak students classes
4. Industry- Institute Interaction Activities

Principal
Arvind Gavali College of Engineering & Polytechnic

Samarth Educational Trust's
Arvind Gavali College of Engineering, Satara
Academic Calendar 2022-23
Term-II

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
				1	2	3	4	1 Feb. Commencement of Classes
1								1 Feb.-27 May NPTEL/SWAYAM/Coursera Certification
2	5	6	7	8	9	10	11	6-11 Feb. Guest Lecture/Industrial Visit/ Statutory Committee meeting
3	12	13	14	15	16	17	18	12-18 Feb. NSS Camp
4	19	20	21	22	23	24	25	12-18 Feb. Cultural Days
5	26	27	28					19 Feb. Celebration of Shivajyanti
								20-25 Feb. Felicity appreciation and Trust day celebration
								21 Feb.-5 Mar. Remedial Examination
								25 Feb. No Vehicle Day
								27 Feb.-4 Mar. CA1 Objective and Descriptive Examination

Academic Days: 24
Probable Holidays: 18 February: Maheshvratri; 19 February: Chh. Shivaji Maharaj Jayanti

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
5				1	2	3	4	21 Feb.-5 Mar. Remedial Examination
6	5	6	7	8	9	10	11	27 Feb.-4 Mar. CA1 Objective and Descriptive Examination
7	12	13	14	15	16	17	18	4 Mar. Display of Attendance, List of defaulter students and Letter dispatching
8	19	20	21	22	23	24	25	6-11 Mar. Guest Lecture/Industrial Visit/ Statutory Committee meeting
9	26	27	28	29	30	31		11 Mar. Alumni Meet
								18 Mar. No Vehicle Day
								20-24 Mar. Sports week
								25 Mar. Annual Gathering

Academic Days: 25
Probable Holidays: 8 March:Dhulivandan, 22 March:Gudhi Padwa

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
							1	1 April Display of Attendance, List of defaulter students and Letter dispatching
9							8	5-8 April Mid Sem Exam
10	2	3	4	5	6	7	8	8-8 April Guest Lecture/Industrial Visit/ Statutory Committee meeting
11	9	10	11	12	13	14	15	14 April Celebration of Dr. Babasaheb Ambedkar Jayanti
12	16	17	18	19	20	21	22	12-15 April Display of Mid Semester Marks to Students
13	23	24	25	26	27	28	29	15 April Parents Meet
14	30							20 April No Vehicle Day

Academic Days: 22
Probable Holidays: 7 April: Good Friday; 14 April: Dr. Babasaheb Ambedkar Jayanti; 22 April Ramzan Eid

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
14		1	2	3	4	5	6	2-8 May Exam form filling for Regular & Supplementary Examinations
15	7	8	9	10	11	12	13	6 May Display of Attendance, List of defaulter students and Letter dispatching
16	14	15	16	17	18	19	20	9-13 May Guest Lecture/Industrial Visit/ Statutory Committee meeting
17	21	22	23	24	25	26	27	9-13 May Exam form filling for Regular & Supplementary Examinations with late Fees
18	28	29	30	31				20 May No Vehicle Day
								20-27 May CA2 Objective and Descriptive Examination
								27 May End of Classes
								27 May Display of Final Attendance, List of defaulter students and Letter dispatching
								27 May Parents Meet
								29 May-3 June University Practical/ Project/ Seminar Examinations
								31 May-6 June Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal

Academic Days: 25
Probable Holidays: 1 May: Maharashtra Day, 5 May: Buddha Pournima

Week	SUN	MON	TUE	WED	THU	FRI	SAT	
18					1	2	3	29 May- 3 June University Practical/ Project/ Seminar Examinations
19	4	5	6	7	8	9	10	31 May- 6 June Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal
20	11	12	13	14	15	16	17	5-10 June Guest Lecture/Industrial Visit/ Statutory Committee meeting
21	18	19	20	21	22	23	24	6-20 June End Semester & Supplementary Examination
22	25	26	27	28	29	30		21 June Yoga Day
								24 June No Vehicle Day

Academic Days: 25

Every department shall conduct the following programs for the current semester
1. Career Guidance by Industry Experts & Alumni etc.
2. Seminar, Conference, Workshop, STTP
3. Remedial/ Academically Bright & weak students classes
4. Industry- Institute Interaction Activities

Principal
Arvind Gavali College of Engineering & Polytechnic

Fig. B.2.2.1b: Institute Academic Calendar 2022-23

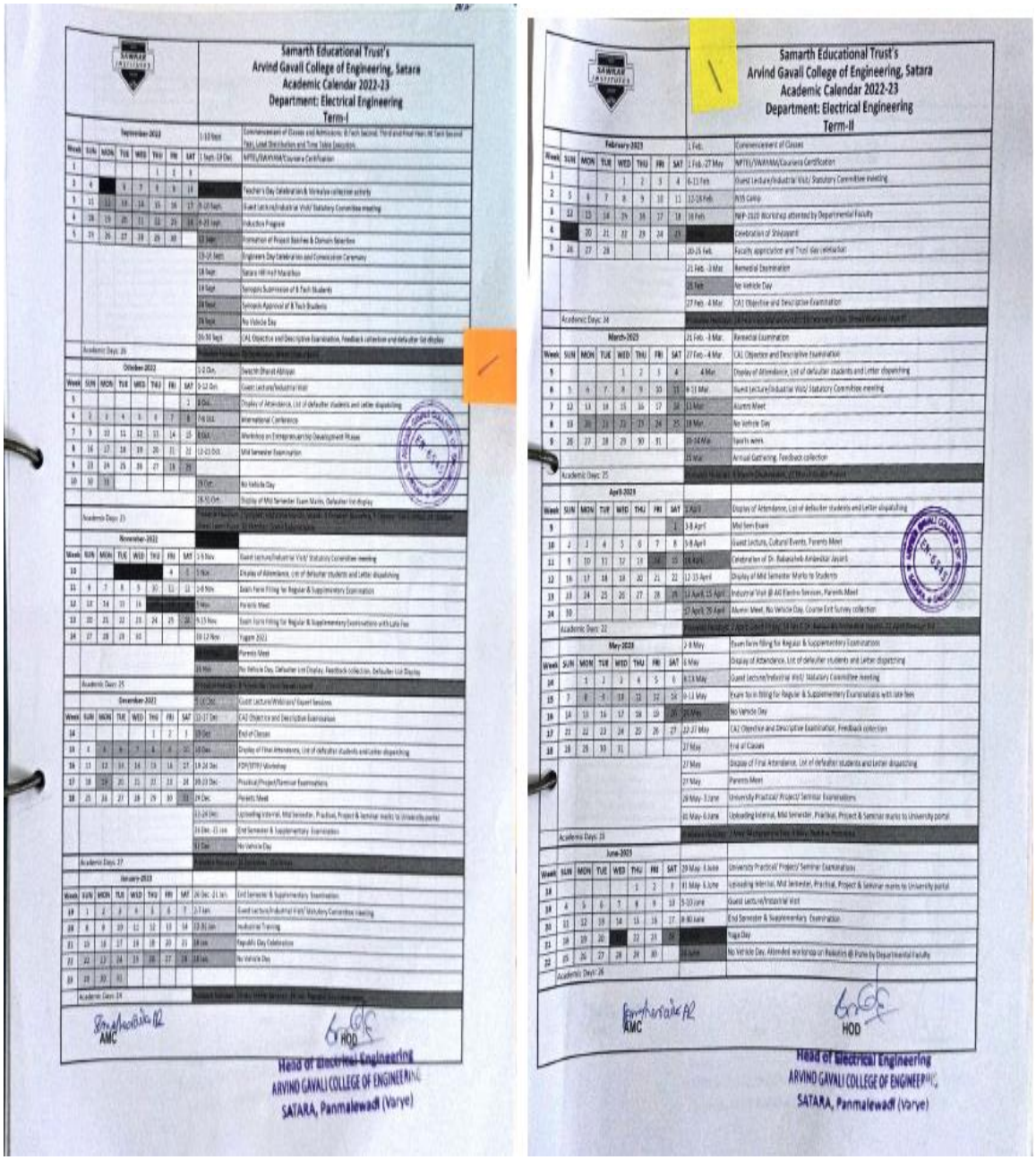


Fig. B.2.2.1c: Department Academic Calendar 2022-23

B. Use of various instructional methods and pedagogical initiatives (03)

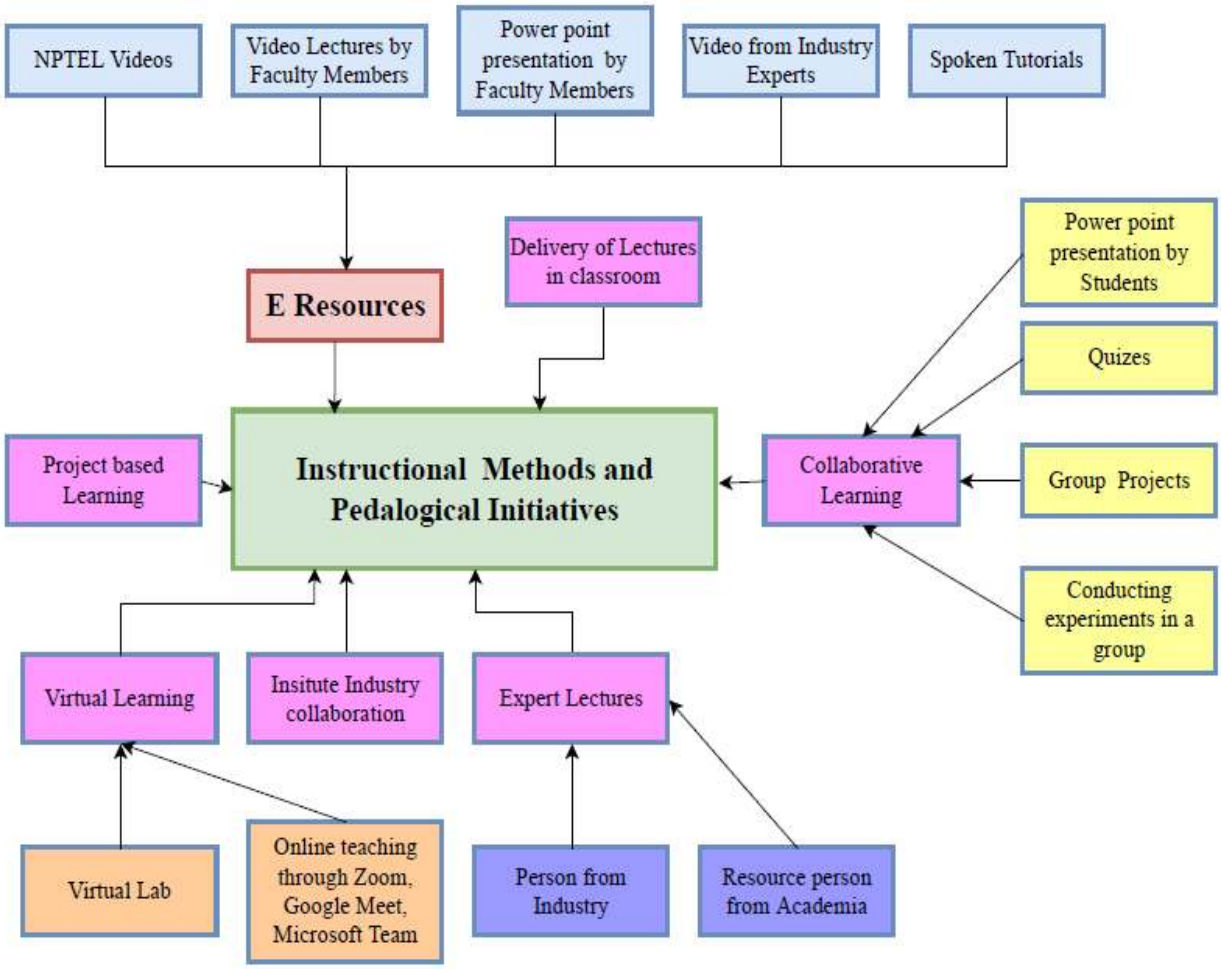


Fig. B.2.2.1d.: Instructional methods & pedagogy

Delivery

Teachers employ a variety of tools in the classroom, including intelligent interactive panels, whiteboards, projectors, and blackboards. During lectures, each student is permitted to ask any question about the subject. Faculty members answer questions from students that they are asked during lectures.

Use of e-resources:

For all courses, professors use PowerPoint presentations to help students understand the concept. Additionally, they use videos from many MOOC platforms, including those from the National Programme on Technology Enhanced Learning (NPTEL), MIT Open-Source Video, and videos from Industry Experts.

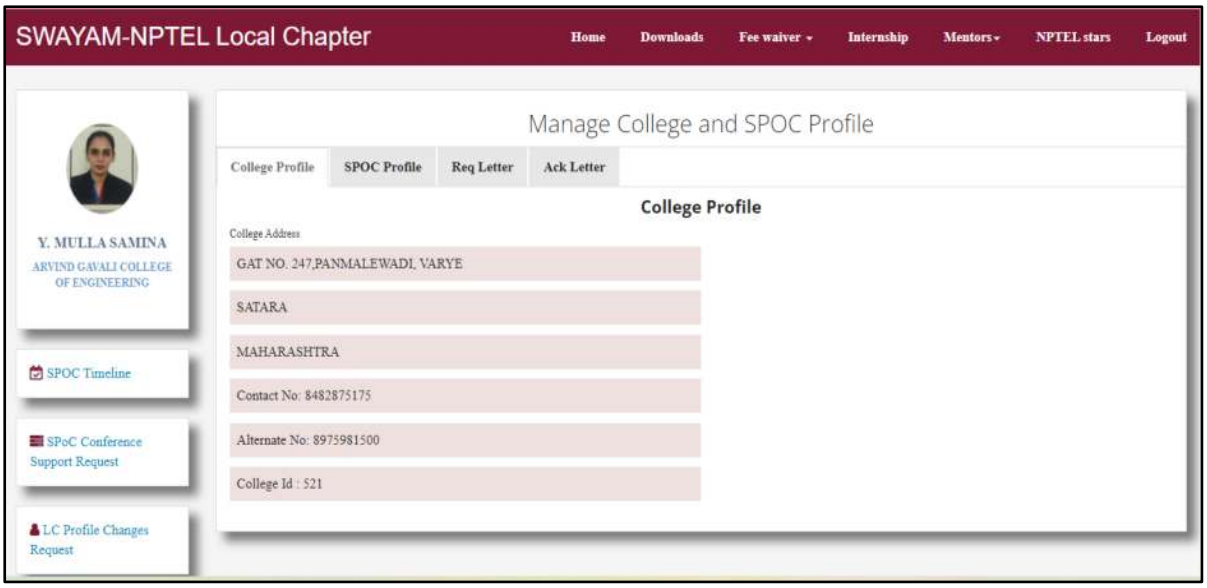


Fig. B.2.2.1e.: Swayam NPTEL Local Chapter

Collaborative Learning:

- Collaborative learning is the educational strategy that makes use of groups to improve learning by cooperating. Learners who are in groups of two or more collaborate to solve issues, finish tasks, or understand new ideas. It encourages hearing other people's points of view, listening to criticism and suggestions, and improving cooperation while also fostering public speaking and active listening abilities.
- The curriculum covers topics including seminars, mini projects, and major projects, where groups of three to five students are created and a mentor is assigned to oversee and guide the progress of the work.
- The approaches utilized for group learning are as follows:
  1. Small modules are divided into project work, and a subset of students work on various modules.
  2. In groups of 3-5 students, preparation activities for seminars and PowerPoint presentations were also carried out.
  3. In a group of 3-5 students, laboratory experiments are carried out for a subject like IoT.
  4. Moodle is a significant ICT project of the Electrical department that is helpful for group learning. Quiz, assignments, and resource sharing are among the many activities carried out online.

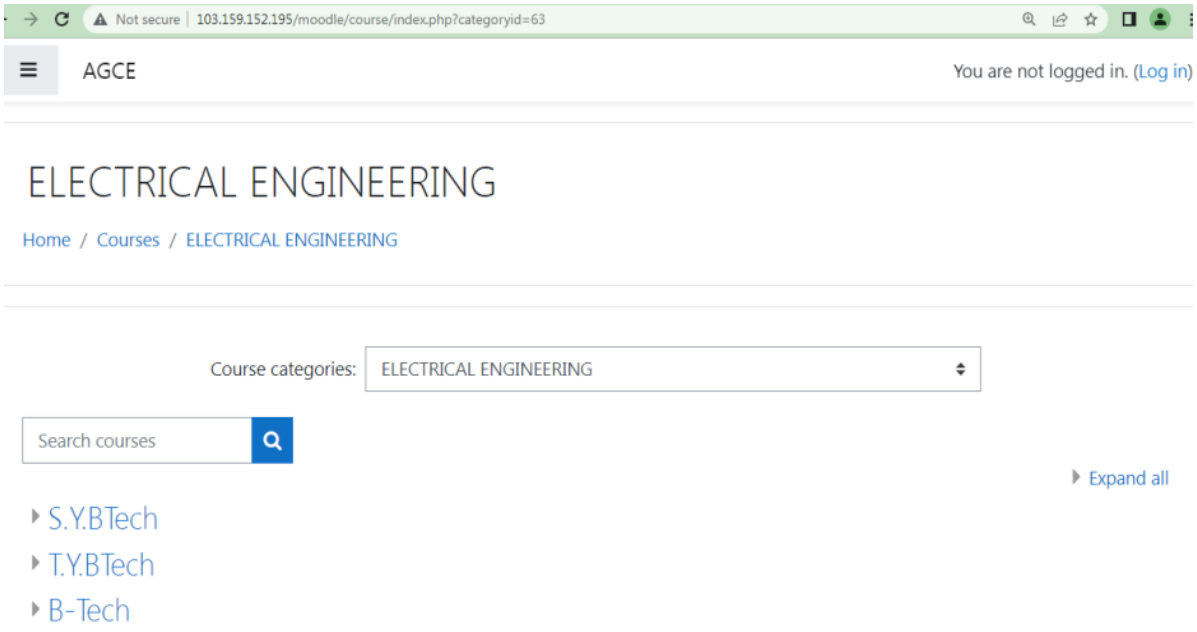


Fig. B.2.2.1f.: MOODLE Web

Project Based Learning:

- During the period of study, many real-time projects are given to the students on the latest technologies and they are guided by faculty members. In the seventh and eighth semesters, a final year project is developed by a group of students. For some academic courses, students have been encouraged to do some projects

Fig. B.2.2.1 g.: Project Demonstration

Expert Lectures:

- Experts from Industries and renowned academic institutions are regularly invited to deliver Guest/Expert Lectures for our students

Virtual Learning:

- Virtual laboratories: Faculty members use virtual laboratories of different IITs to conduct some experiments beyond the syllabus of the respective laboratories. Instruction manuals about the conduction of experiments are given in virtual labs, students follow these instruction materials to complete the experiments.
- Online teaching through MS Teams, Google Meet, and Zoom: Faculty members use software like MS team, Google meet, zoom, etc. to take lectures, tutorials, and laboratories online. Some faculty members also run their own created video lectures, NPTEL, and YouTube videos during online lectures using MS teams, Google meets, and zoom.

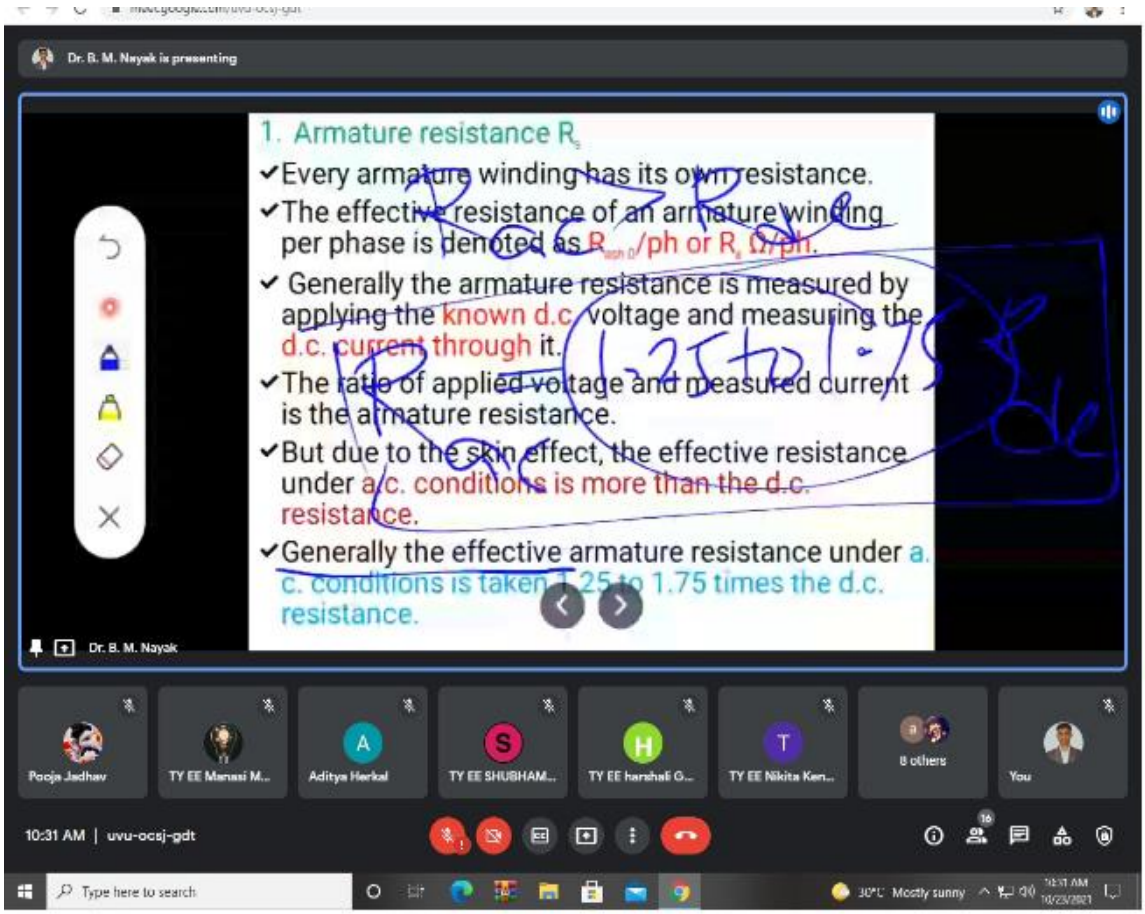


Fig. B.2.2.1 h: Online Learning on Google Meet

C. Methodologies to support weak students and encourage bright students (04)

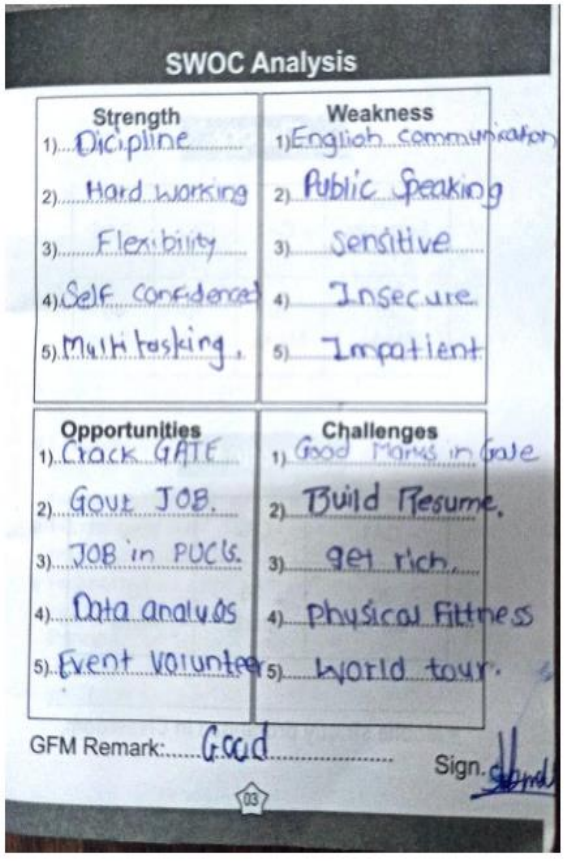
Departments have a proper mechanism to support the weak-performing student as well as encourage bright students. Identification of weak and bright students is carried out by considering their previous academic performance and feedback from Guardian Faculty members. For every batch of 20 students, one faculty is appointed as a guardian faculty member (GFM) who takes care of all these students as a guardian. This faculty member listens to all personal problems of student, council them, and help them to sort out their issues. Based on counseling department identifies areas of improvement and do the necessary plan which involves remedial classes, improvement test, and extra assignment, this enables the weak students to participate and perform better in understanding the concepts, internal assessment, and university exams.

PERSONAL DETAILS (2022-23)

Name of Student :- Desai Ganesh Jagannath
Address :- At Post Yeradwadi tal- Patan Dist- Satara 415205
Student Mobile No:- 7755903750
Parent Mobile No:- 9604845330
Parents Occupation Farmer
E-mail:- ganeshdesai2002102@gmail.com
Branch :- Electrical
Blood Group:- B+
Class :- TY BTECH
Roll No:- 20654512930O4
GFM Name :- Ashlesha Mali.
GFM Mob No:- 7083747002

Note:• Students having attendance more th
Institute Scholarship .
•Laptop / Tablets are allowed during practical for academic purpose.

01



SWOC Analysis

Strength	Weakness
1) Discipline	1) English communication
2) Hard working	2) Public Speaking
3) Flexibility	3) Sensitive
4) Self confidence	4) Insecure
5) Multi tasking.	5) Impatient

Opportunities	Challenges
1) Crack GATE	1) Good Marks in Gate
2) Govt JOB.	2) Build Resume.
3) JOB in PUCls.	3) get rich.
4) Data analysis	4) Physical Fitness
5) Event volunteer	5) World tour.

GFM Remark: Good Sign.

03

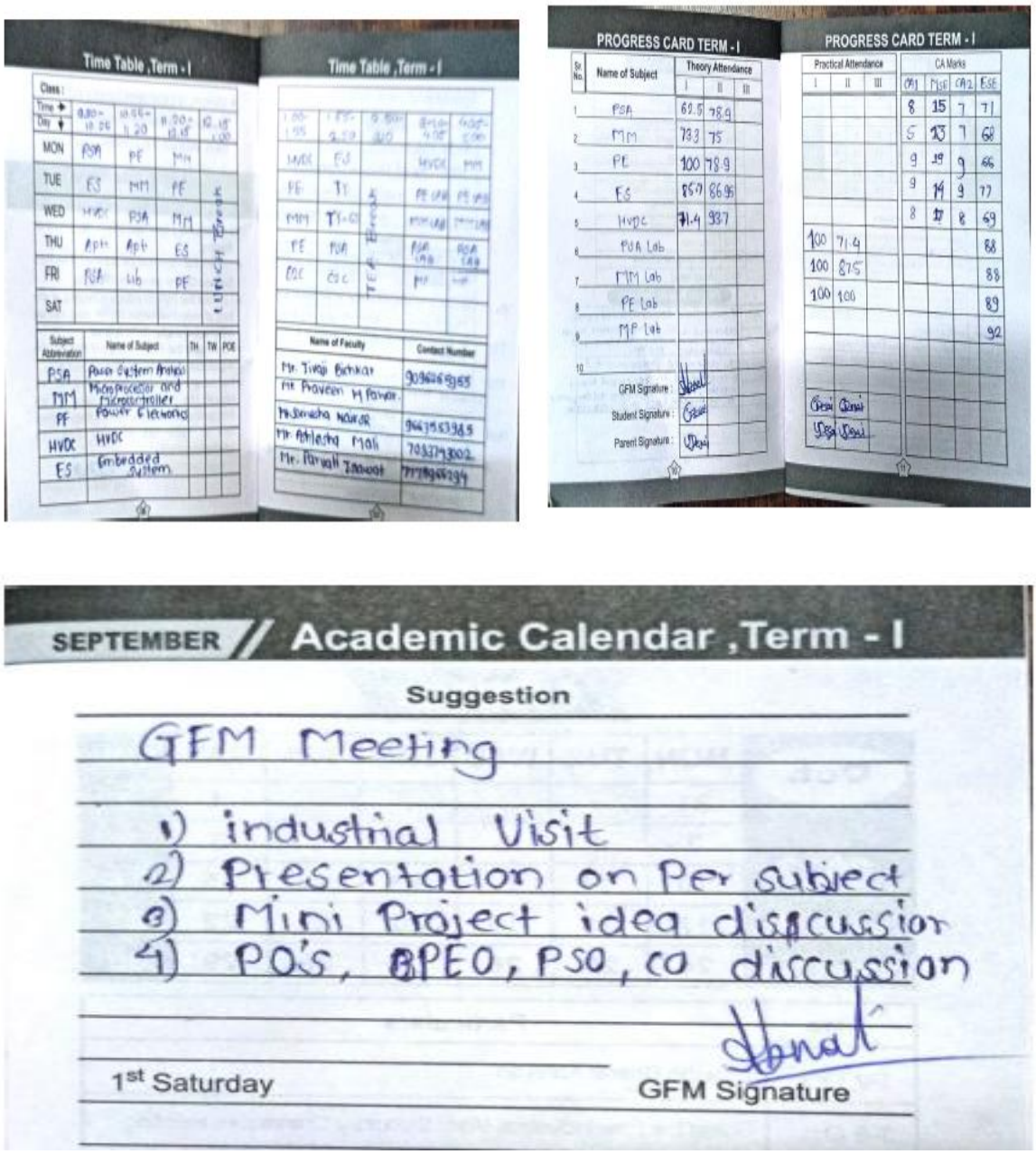
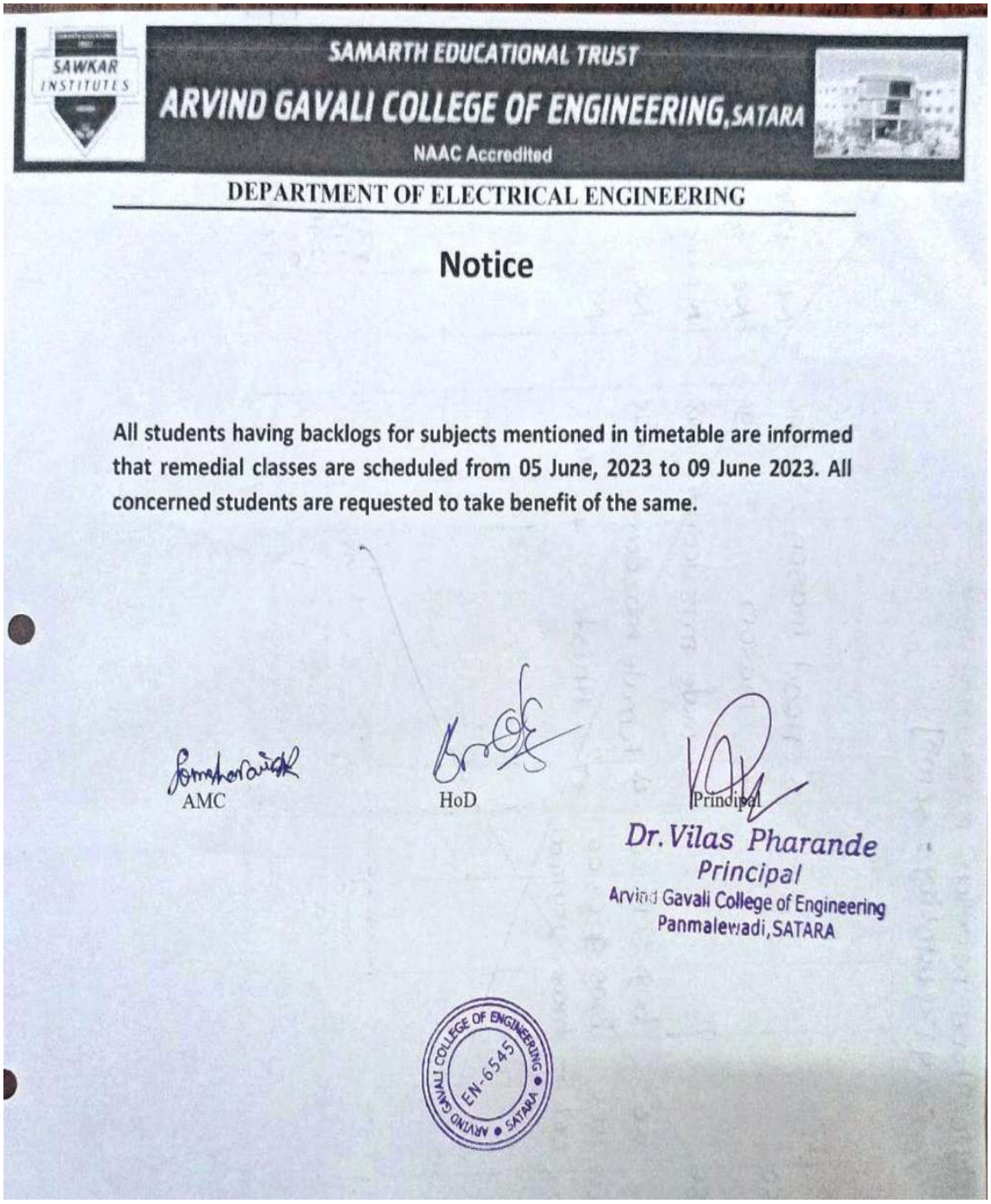


Fig. B.2.2.1 i: Student Progress Diary 2022-23



SAWKAR INSTITUTES

SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

NAAC Accredited

DEPARTMENT OF ELECTRICAL ENGINEERING

Notice

All students having backlogs for subjects mentioned in timetable are informed that remedial classes are scheduled from 05 June, 2023 to 09 June 2023. All concerned students are requested to take benefit of the same.

AMC

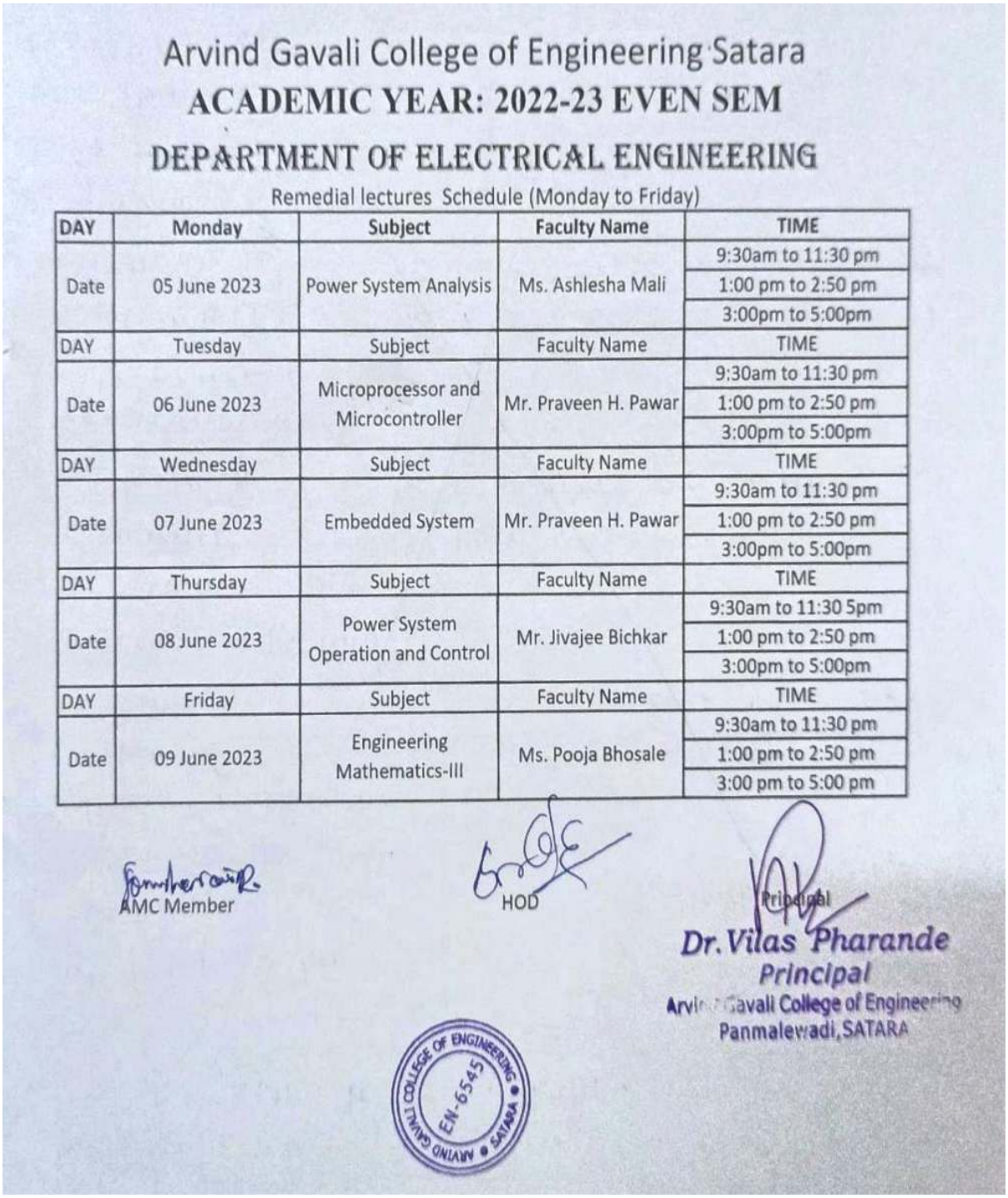
HoD

Principal

Dr. Vilas Pharande
Principal
Arvind Gavali College of Engineering
Panmalewadi, SATARA

ARVIND GAVALI COLLEGE OF ENGINEERING • SATARA • EN-6545

Fig. B.2.2.1 j: Notice of Remedial Classes



Arvind Gavali College of Engineering Satara

ACADEMIC YEAR: 2022-23 EVEN SEM

DEPARTMENT OF ELECTRICAL ENGINEERING

Remedial lectures Schedule (Monday to Friday)

DAY	Monday	Subject	Faculty Name	TIME
Date	05 June 2023	Power System Analysis	Ms. Ashlesha Mali	9:30am to 11:30 pm
				1:00 pm to 2:50 pm
				3:00pm to 5:00pm
DAY	Tuesday	Subject	Faculty Name	TIME
Date	06 June 2023	Microprocessor and Microcontroller	Mr. Praveen H. Pawar	9:30am to 11:30 pm
				1:00 pm to 2:50 pm
				3:00pm to 5:00pm
DAY	Wednesday	Subject	Faculty Name	TIME
Date	07 June 2023	Embedded System	Mr. Praveen H. Pawar	9:30am to 11:30 pm
				1:00 pm to 2:50 pm
				3:00pm to 5:00pm
DAY	Thursday	Subject	Faculty Name	TIME
Date	08 June 2023	Power System Operation and Control	Mr. Jivajee Bichkar	9:30am to 11:30 5pm
				1:00 pm to 2:50 pm
				3:00pm to 5:00pm
DAY	Friday	Subject	Faculty Name	TIME
Date	09 June 2023	Engineering Mathematics-III	Ms. Pooja Bhosale	9:30am to 11:30 pm
				1:00 pm to 2:50 pm
				3:00 pm to 5:00 pm

AMC Member

HOD

Principal

Dr. Vilas Pharande

Principal

Arvind Gavali College of Engineering

Panmalewadi, SATARA

ARVIND GAVALI COLLEGE OF ENGINEERING EN-6545 SATARA

Fig. B.2.2.1 k: Remedial Classes Time Table

Brighten students are encouraged to learn content beyond the syllabus through MOOC platforms NPTEL courses, Coursera also MIT Open-source online education. Institute has a separate NPTEL Local Chapter (LC-ID 521), through which various advanced courses in various sectors like project management, software engineering, etc. are made available to bight students.

This enables the bright students:

a) Update themselves with the latest tools and technologies

b) Demonstrate critical thinking and take up innovative projects

c) Taking up higher studies in the field of research and development enhances their skill and managerial quality to become successful entrepreneurs/employees.

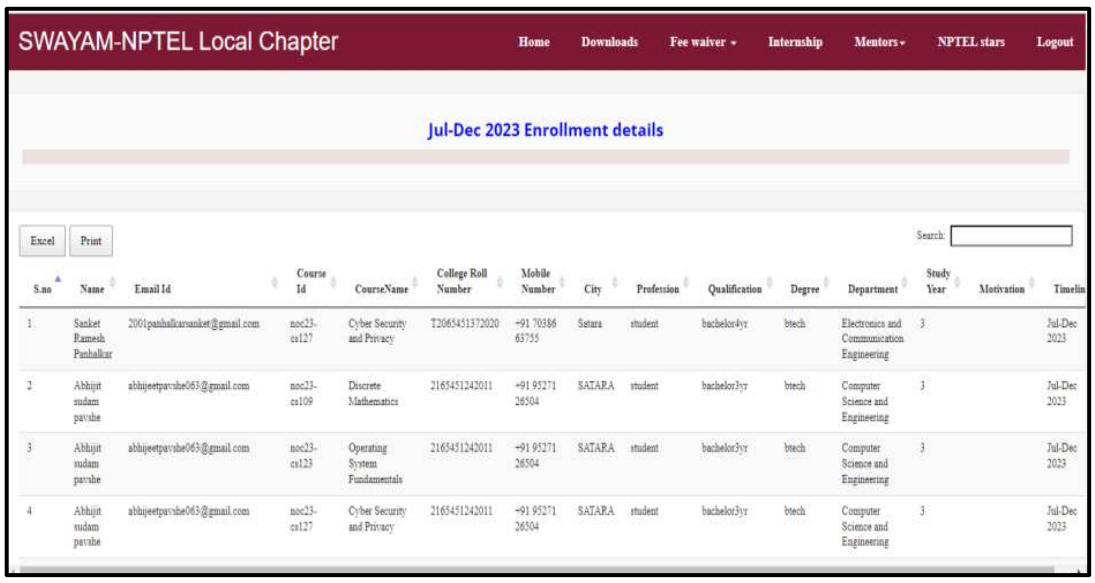


Fig. B.2.2.1 l: NPTEL Enrollment

Table 2.2.1a: NPTEL Courses Chosen by Students of TY B. Tech and Final Year B. Tech (Electrical) for 2022 – 23

Sr. No.	Timeline	Year	Courses Chosen by the Students
1	2022 – 2023 Odd Semester	TY B.Tech (Electrical)	1. Electric Vehicles - Part 1 2. Smart Grid: Basics to Advanced Technologies 3. Electrical Machines – II 4. Smart Grid: Basics to Advanced Technologies 5. Signals and Systems 6. Digital Protection of Power System
2	2022 – 2023 Odd Semester	Final Year B.Tech (Electrical)	1. Entrepreneurship Essentials 2. High Power Multilevel Converters- Analysis, design and operational issues

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VAISHNAVI RAJENDRA BHISE

for successfully completing the course

Smart Grid: Basics to Advanced Technologies

with a consolidated score of 42 %

Online Assignments	10.63/25	Proctored Exam	31.5/75

Total number of candidates certified in this course: 613

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Jan-Apr 2023
(12 week course)

Priti Maheshwari
Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

swayam

Roll No: NPTEL23EE60S64600297 To validate the certificate No. of credits recommended: 3 or 4

Fig. B.2.2.1 m: NPTEL Certificate


International Conference on Innovation and Recent Trends in Engineering and Science
(ICIRTES-2023)
10th and 11th June
SAWKAR INSTITUTES
Certification of Participation
This is to certify that
Mohite Manasi, Yadav Sanjay, Jadhav Akanksha, Lokare Saujanya
has successfully participated and presented the paper titled
Anudion Based Seven Stage Multilevel Inverter (Elc.)
Organized by
Arvind Gavali College of Engineering, Satara
In association with
Department of Medical Biolo... ...lty of Medicine, Nigde, Omer Halisdemir Univ... Nigde, Turkey
Dr. Zeliha Selamoglu, Convener, Omer Halisdemir, Turkey
Dr. Gayatri Mirajkar, Convener, Arvind Gavali College of Engineering India
Dr. Vilas Pharande, Principal, Arvind Gavali College of Engineering India
Hon. Nishant Gavali, Secretary, Samarth Educational Trust India
ISBN: 978-81-961931-0-2
ISBN: 978-81-961931-1-9

Fig. B.2.2.1 n: Conference Participation Certificate

epartment announces every year the "Best outgoing student" of the program. Selection is carried out based on one's continuous quality performance in all sorts of activities which include curricular, extracurricular, internships, competitions, innovative projects undertaken and completed, MOOC courses studied, and university marks, following table shows the last three years' best outgoing students.

Table B.2.2.1b: Best outgoing student

Sr. No.	Name of Student	Academic Year
1	Vaishnavi Rajendra Bhise	2022-23
2	Mohite Manasi Sharad	2022-23
3	Mahamulkar Prajakta Kalyan	2021-22
4	Bagal Poonam Anandrao	2020-21

D. Quality of classroom teaching (03)

- Teachers are properly assigned courses and practical sessions before the semester even begins, which enhances both the quality of the information students get and their performance.
- Before the start of the semester, every faculty member prepares lesson plans, session plans, and lecture notes. They then post the study materials on MOODLE.
- Faculty members use common textbooks to prepare their notes. When creating the session plan, chapters from these textbooks are emphasized so that students are compelled to consult them.
- To keep students' interest throughout lectures, professors employ brainteasers, quizzes, and engaging movies and Power Points linked to the subject.
- Various educational efforts and instructional techniques & tools are used to engage the student in learning

Fig. B.2.2.1 o.: Student's Learning on Intelligent Interactive Panel

E. Conduct of experiments:

All laboratories of the Electrical engineering department are equipped with enough Electricals with essential software.

1. Each student performs experiments on hardware machine and an individual Electrical.
2. All laboratory experiments have accompanying laboratory manuals.
3. Before the laboratory session, students are urged to read up on the theory underlying the experiments and the steps necessary to carry them out.
4. A concerned professor explains how the experiment was conducted.
5. It is suggested that students consult laboratory manuals for assistance.
6. A faculty member supervises and assists each student while they undertake experiments.
7. The laboratory performance record is to be submitted by the students for evaluation.
8. Internal marks are given according to the experiment's understanding, neatness, and timely journal submission.

Fig. B.2.2.1 p.: Laboratory Session

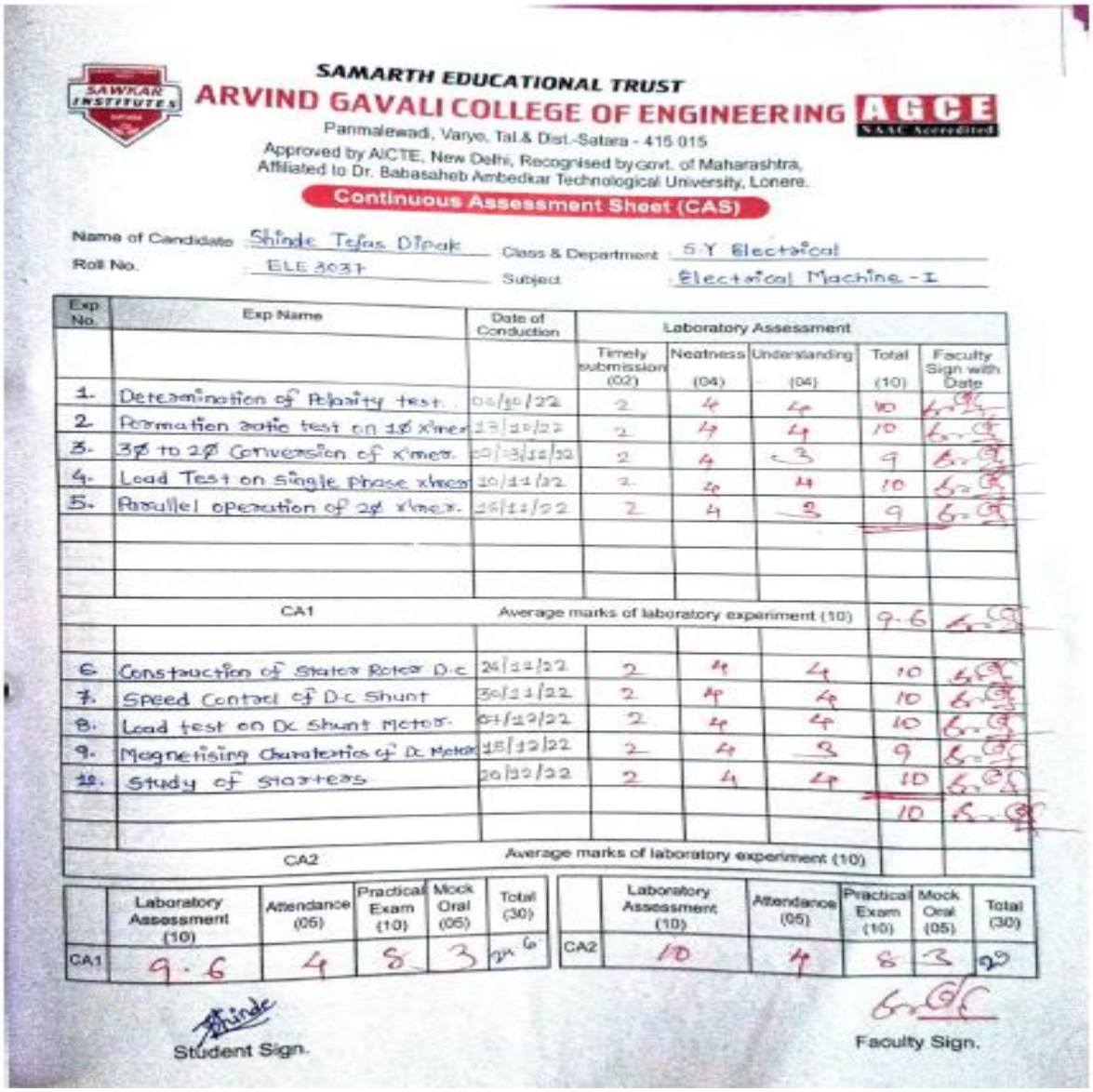
F. Continuous Assessment in the laboratory (03)

Laboratory Evaluation:

A continuous assessment system is implemented for the assessment of laboratory work. Assessment is carried out for each student experiment in the laboratory as per demonstrated by the course in charge. This assessment is done based on

1. Timely Submission
2. Neatness
3. Understanding

Following is a sample laboratory work assessment sheet.



SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING AGCE NAAC Accredited

Panmalewadi, Varye, Tal.& Dist.-Satara - 415 015

Approved by AICTE, New Delhi, Recognised by govt. of Maharashtra, Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere.

Continuous Assessment Sheet (CAS)

Name of Candidate: Shinde Tejas Dipak — Class & Department: S.Y Electrical

Roll No.: ELE 3031 — Subject: Electrical Machine - I

Exp No.	Exp Name	Date of Conduction	Laboratory Assessment				
			Timely submission (02)	Neatness (04)	Understanding (04)	Total (10)	Faculty Sign with Date
1.	Determination of Polarity test.	06/10/22	2	4	4	10	
2.	Formation ratio test on 1ϕ x'mer.	13/10/22	2	4	4	10	
3.	3ϕ to 2ϕ Conversion of x'mer.	20/10/22	2	4	3	9	
4.	Load Test on Single Phase x'mer.	20/11/22	2	4	4	10	
5.	Parallel operation of 2ϕ x'mer.	26/11/22	2	4	3	9	
	CA1	Average marks of laboratory experiment (10)				9.6	
6.	Construction of Stator Rotor D.c	24/12/22	2	4	4	10	
7.	Speed Contol of D.c Shunt	30/11/22	2	4	4	10	
8.	Load test on Dc Shunt Motor.	01/12/22	2	4	4	10	
9.	Magnetising Charateristics of Dc Motor	15/12/22	2	4	3	9	
10.	Study of Starters	20/12/22	2	4	4	10	
						10	
	CA2	Average marks of laboratory experiment (10)					

	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA1	9.6	4	8	3	29

	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA2	10	4	8	3	29

Student Sign. Faculty Sign.

Fig.2.2.1 q. Laboratory Evaluation Sheet

G. Student feedback on the teaching-learning process and actions are taken (06)

The department collects student feedback to identify areas for development. The Head of the Department (HoD) also examines feedback to evaluate faculty performance. Before course completion, a prescribed structure is used to collect student feedback on the course and the faculty member instructing it (attached below).

SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

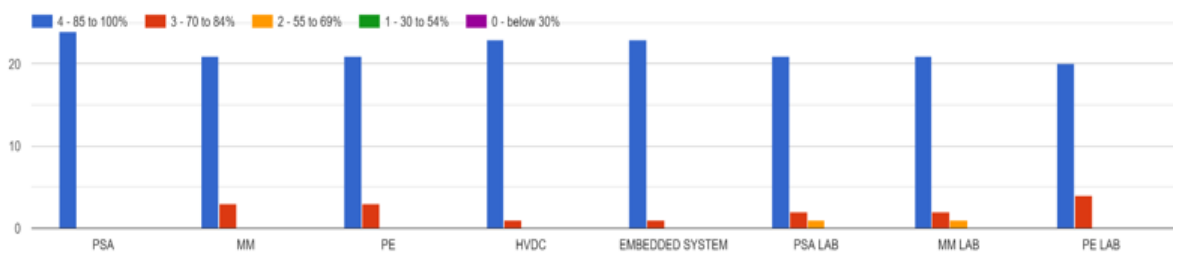
DEPARTMENT OF ELECTRICAL ENGINEERING

Third Year Student Feedback

Month : 01 September To 19 December 2022
Total Responses : 24
Total Class Strength : 33
Feedback Percentage : 72.72%

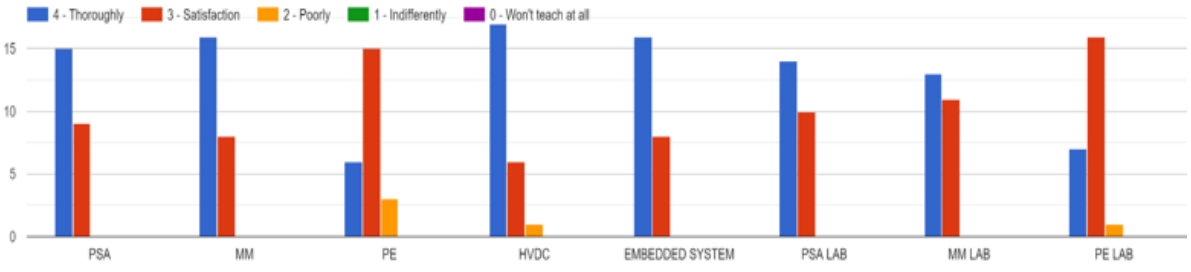
SL. NO.	SUBJECTS	Abr.	Name of Faculty	Abr.
01	Power System Analysis	PSA	Mr. Jivajee Bichkar	BJS
02	Microprocessor and Microcontroller	MM	Mr. Praveen H. Pawar	PHP
03	Power Electronics	PE	Mr. Somesha Naik S R	SRS
04	HVDC	HVDC	Ms. Ashlesha Mali	MAB
05	Embedded System	ES	Ms. Parvathi Islavath	PI

1. How much of the syllabus was covered in the class:



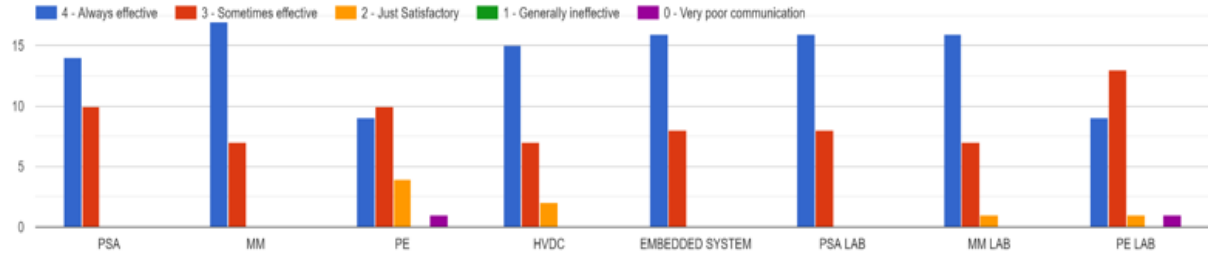
	PSA	MM	PE	HVDC	ES	%
85 -100 %	24	21	21	23	23	93%
70 - 84 %	0	3	3	1	1	7%
55 – 69 %	0	0	0	0	0	0%
30 – 54 %	0	0	0	0	0	0%
0- Below 30 %	0	0	0	0	0	0%

2. How well did the teachers prepare for the classes?



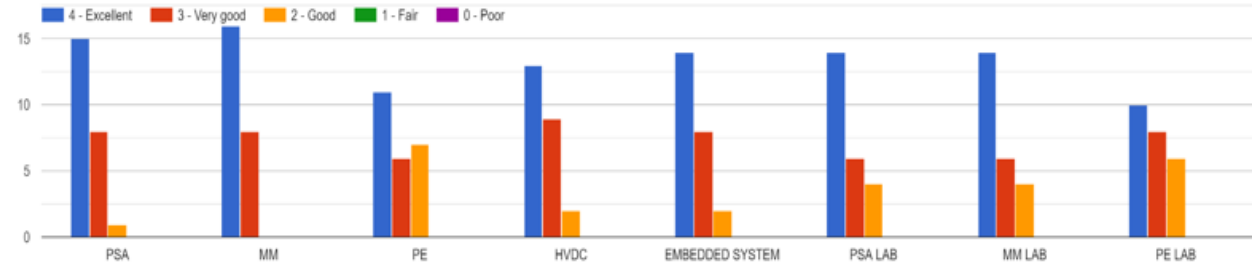
	PSA	MM	PE	HVDC	ES	%
Thoroughly	15	16	6	17	16	58%
Satisfaction	9	8	15	6	8	38%
Poorly	0	0	3	1	0	3%
Indifferently	0	0	0	0	0	0%
Wont Teach at all	0	0	0	0	0	0%

3. How well were the teachers able to communicate



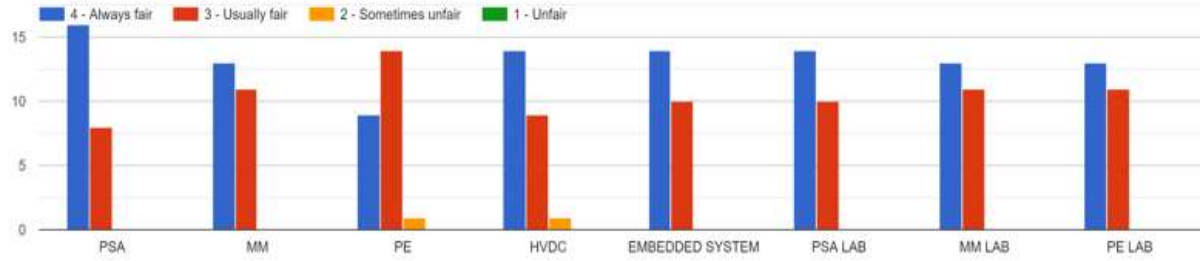
	PSA	MM	PE	HVDC	ES	%
Always Effective	14	17	9	15	16	59%
Sometime effective	10	7	10	7	8	35%
Just Satisfactory	0	0	4	2	0	5%
Generally Ineffective	0	0	0	0	0	0%
Very Poor Communication	0	0	1	0	0	1%

4. The teachers's approach to teaching can best be described as



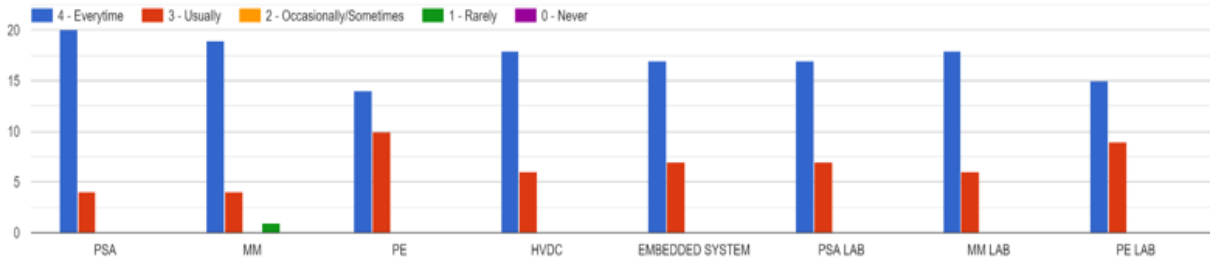
	PSA	MM	PE	HVDC	ES	%
Excellent	15	16	11	13	14	58%
Very Good	8	8	6	9	8	33%
Good	1	0	7	2	2	10%
Fair	0	0	0	0	0	0%
Poor	0	0	0	0	0	0%

5. Fairness of the internal evaluation process by the teachers



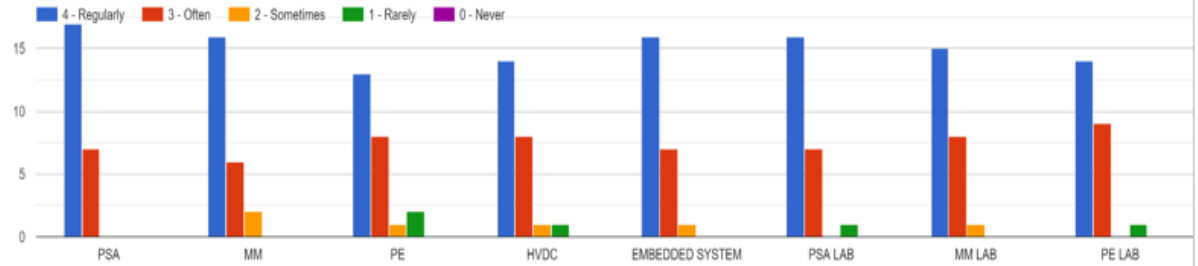
	PSA	MM	PE	HVDC	ES	%
Always fair	16	13	9	14	14	55%
Usually fair	8	11	14	9	10	43%
Sometimes unfair	0	0	1	1	0	2%
Unfair	0	0	0	0	0	0%
Poor	0	0	0	0	0	0%

6. Was your performance in assignments/extra practice test discussed with you?



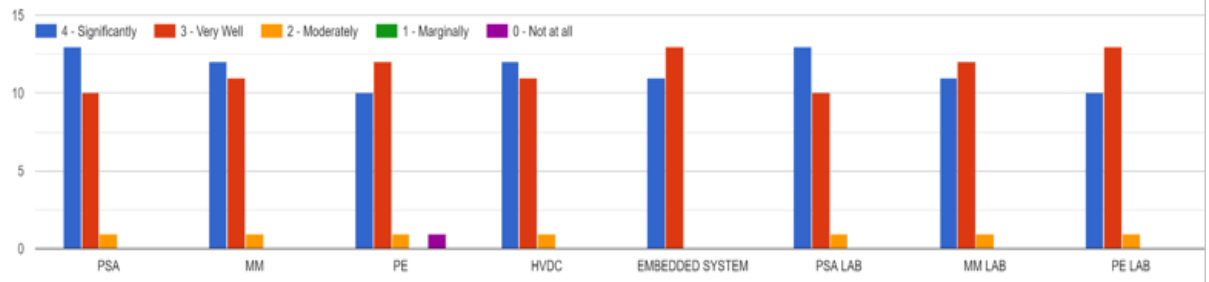
	PSA	MM	PE	HVDC	ES	%
Every time	20	10	19	18	17	70%
Usually	4	6	4	6	7	23%
Occasionally	0	0	0	0	0	0%
Rarely	0	0	1	0	0	1%
Never	0	0	0	0	0	0%

7. The faculty takes active interest in promoting internship, student exchange, field visit opportunities for students. *



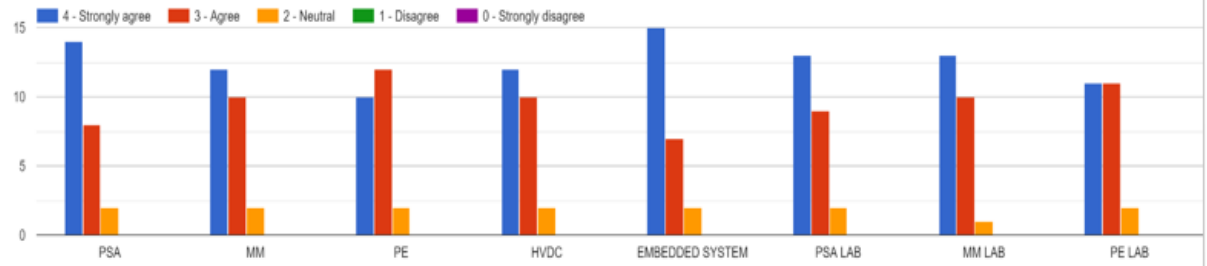
	PSA	MM	PE	HVDC	ES	%
Regularly	17	16	13	14	16	63%
Often	7	6	8	8	7	30%
Sometimes	0	2	1	1	1	4%
Rarely	0	0	2	1	0	3%
Never	0	0	0	0	0	0%

8. The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.



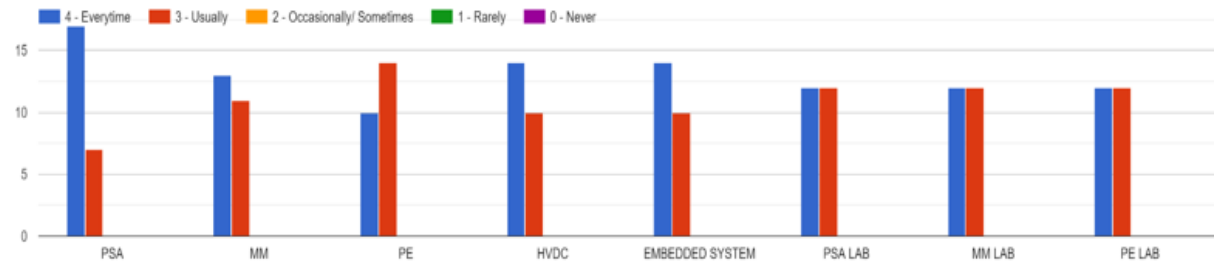
	PSA	MM	PE	HVDC	ES	%
Significantly	13	12	10	12	11	48%
Very Well	10	11	12	11	13	48%
Moderately	1	1	1	1	0	3%
Marginally	0	0	0	0	0	0%
Not at All	0	0	1	0	0	1%

9. The institute provides multiple opportunities to learn and grow



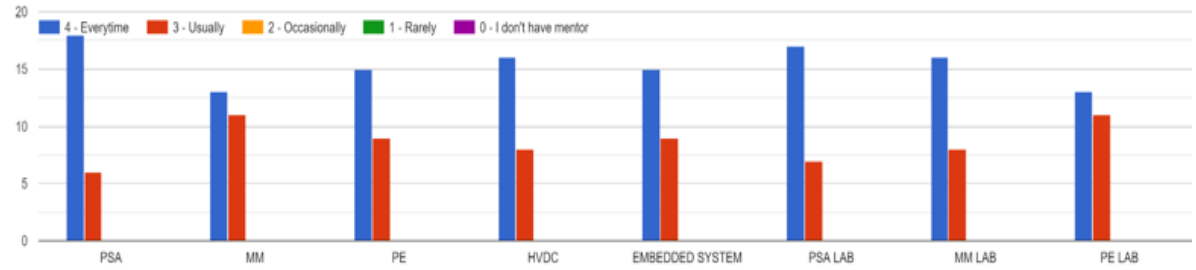
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	14	12	10	12	15	53%
Agree	8	10	12	10	7	39%
Neutral	2	2	2	2	2	8%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

10. Teachers inform you about your expected competencies, course outcomes, and program outcomes



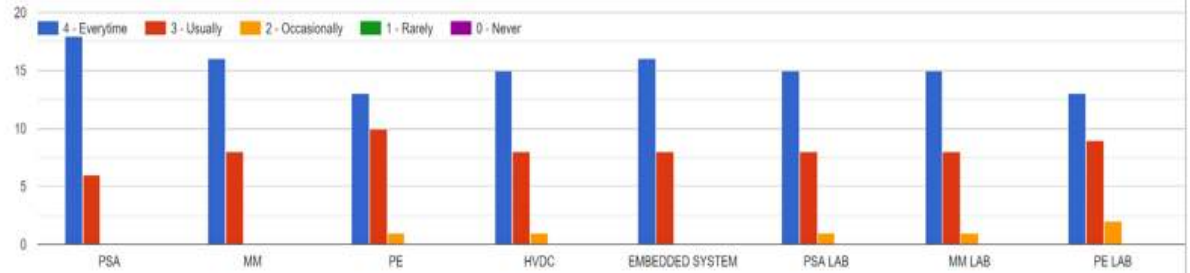
	PSA	MM	PE	HVDC	ES	%
Every time	17	13	10	14	14	57%
Usually	7	11	14	10	10	43%
Occasionally	0	0	0	0	0	0%
Rarely	0	0	0	0	0	0%
Never	0	0	0	0	0	0%

11. Your mentor does a necessary follow-up with as assigned task to you



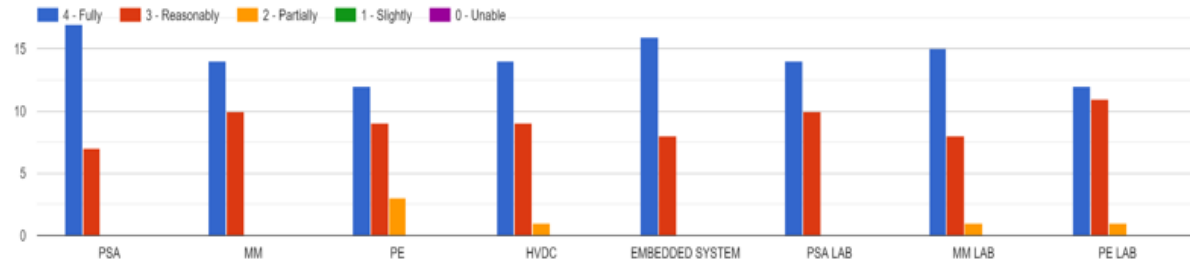
	PSA	MM	PE	HVDC	ES	%
Every time	18	13	15	16	15	64%
Usually	6	11	9	8	9	36%
Occasionally	0	0	1	0	0	1%
Rarely	0	0	0	0	0	0%
I don't have mentor	0	0	0	0	0	0%

12. The teacher illustrates the concepts through examples and applications



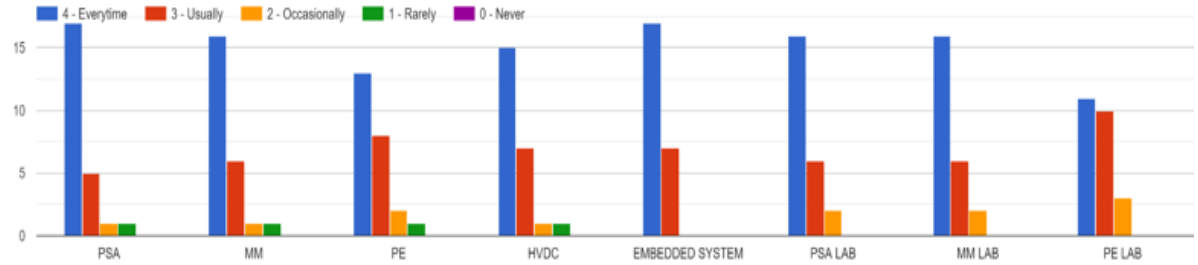
	PSA	MM	PE	HVDC	ES	%
Every time	18	16	13	15	16	65%
Usually	6	8	10	8	8	33%
Occasionally	0	0	1	1	0	2%
Rarely	0	0	0	0	0	0%
Never	0	0	0	0	0	0%

13. The teacher identifies your strengths and encourage you with providing right level of challenges



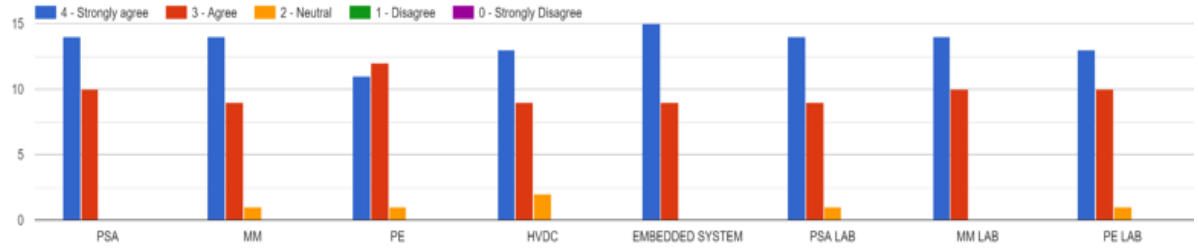
	PSA	MM	PE	HVDC	ES	%
Fully	17	14	12	14	16	61%
Reasonably	7	10	9	9	8	36%
Partially	0	0	3	1	0	3%
Slightly	0	0	0	0	0	0%
Unable	0	0	0	0	0	0%

14. Teachers are able to identify your weaknesses and help you to overcome them



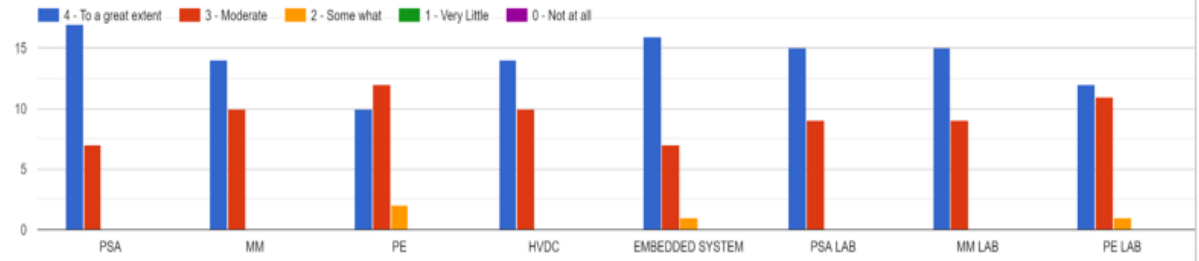
	PSA	MM	PE	HVDC	ES	%
Every time	17	16	13	15	17	65%
Usually	5	6	8	7	7	28%
Occasionally	1	1	2	1	0	4%
Rarely	1	1	1	1	0	3%
Never	0	0	0	0	0	0%

15. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.



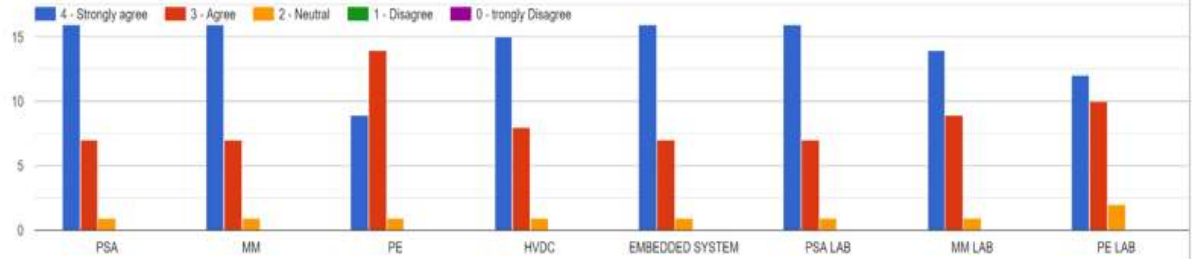
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	14	14	11	13	15	56%
Agree	10	9	12	9	9	41%
Neutral	0	1	1	2	0	3%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

16. The institute/ teachers use student-centric methods, such as experiential learning, participative learning and problem-solving methodologies for enhancing learning experiences



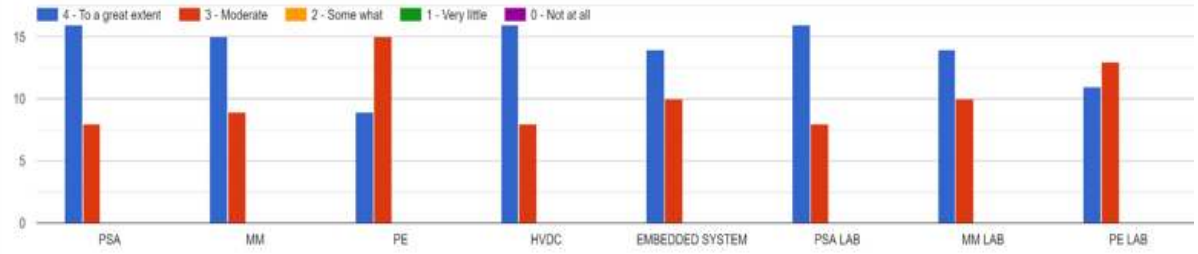
	PSA	MM	PE	HVDC	ES	%
To a great extent	17	14	10	14	16	59%
Moderate	7	10	12	10	7	38%
Some What	0	0	2	0	1	3%
Very Little	0	0	0	0	0	0%
Not at all	0	0	0	0	0	0%

17. Teachers encourage you to participate in extracurricular activities.



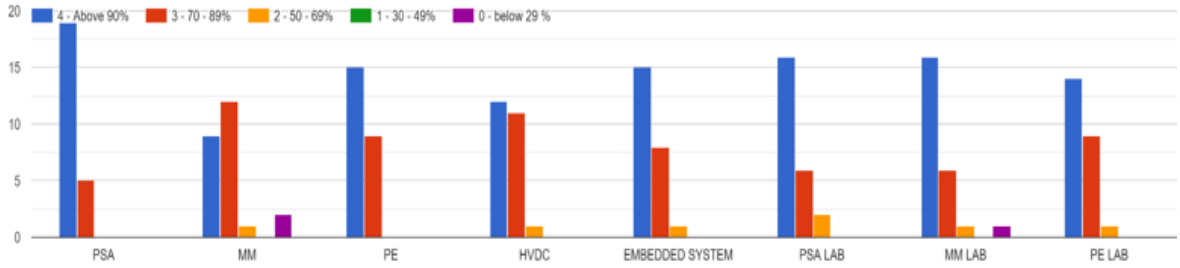
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	16	16	9	15	16	60%
Agree	7	7	14	8	7	36%
Neutral	1	1	1	1	1	4%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

18. Efforts are made by teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work



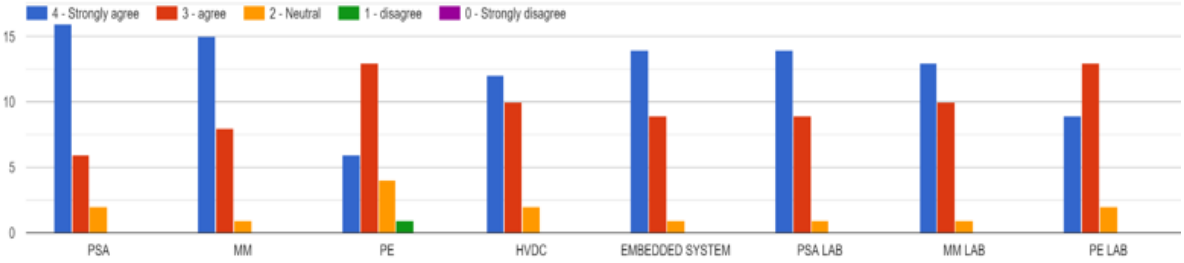
	PSA	MM	PE	HVDC	ES	%
To a great extent	16	15	9	16	14	58%
Moderate	8	9	15	8	10	42%
Some What	0	0	0	0	0	0%
Very Little	0	0	0	0	0	0%
Not at all	0	0	0	0	0	0%

19. What percentage of teachers use ICT tools such as LCD projector, Multimedia , etc while teaching



	PSA	MM	PE	HVDC	ES	%
Above 90%	19	9	15	12	15	58%
70-89%	5	12	9	11	8	38%
50-69 %	0	1	0	1	1	3%
30-49 %	0	0	0	0	0	0%
0-below 29%	0	2	0	0	0	2%

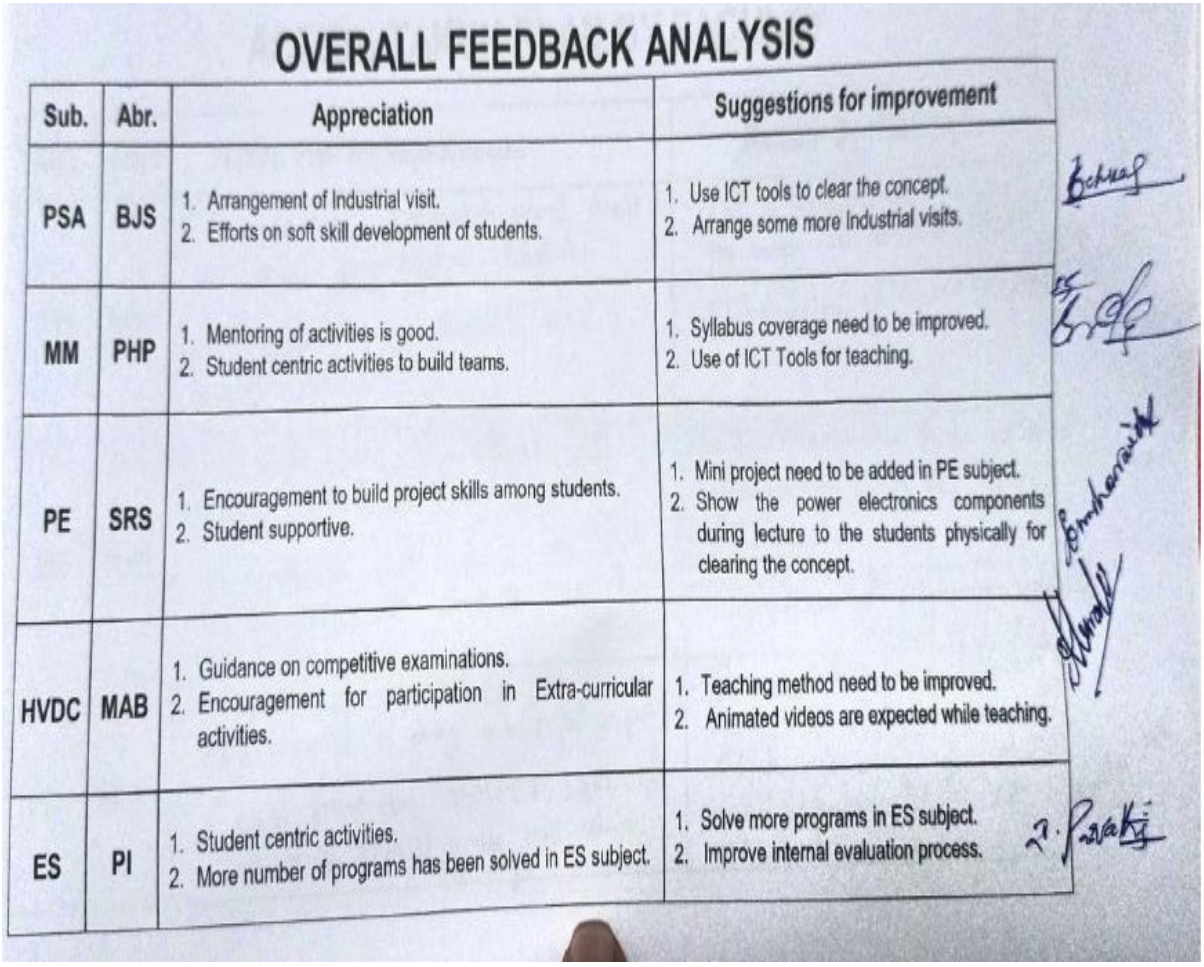
20. The overall quality of teaching-learning process in your institute is very good



	PSA	MM	PE	HVDC	ES	%
Strongly Agree	16	15	6	12	14	53%
Agree	6	8	13	10	9	38%
Neutral	2	1	4	2	1	8%
Disagree	0	0	1	0	0	1%
Strongly Disagree	0	0	0	0	0	0%

21. Give 3 observations/ suggestions to improve the overall teaching-learning experience of respective teachers.

1. Drinking water is not coming regularly.
2. Provide 2014 version/Higher version MATLAB software.
3. Microcontroller and Microprocessor Lab kits are not working properly.
4. Computer lab should be upgraded with advanced PCs.



OVERALL FEEDBACK ANALYSIS

Sub.	Abr.	Appreciation	Suggestions for improvement
PSA	BJS	1. Arrangement of Industrial visit. 2. Efforts on soft skill development of students.	1. Use ICT tools to clear the concept. 2. Arrange some more Industrial visits.
MM	PHP	1. Mentoring of activities is good. 2. Student centric activities to build teams.	1. Syllabus coverage need to be improved. 2. Use of ICT Tools for teaching.
PE	SRS	1. Encouragement to build project skills among students. 2. Student supportive.	1. Mini project need to be added in PE subject. 2. Show the power electronics components during lecture to the students physically for clearing the concept.
HVDC	MAB	1. Guidance on competitive examinations. 2. Encouragement for participation in Extra-curricular activities.	1. Teaching method need to be improved. 2. Animated videos are expected while teaching.
ES	PI	1. Student centric activities. 2. More number of programs has been solved in ES subject.	1. Solve more programs in ES subject. 2. Improve internal evaluation process.

Fig.2.2.1 r. Feedback Analysis

3/6/23, 5:11 PM TY B.Tech December - 2022 Theory Feedback Department of Electrical Engineering AGCE, Satara

TY B.Tech December - 2022 Theory Feedback Department of Electrical Engineering AGCE, Satara

Email *

viveknikam4324@gmail.com

1. How much of the syllabus was covered in the class: *

	4 - 85 to 100%	3 - 70 to 84%	2 - 55 to 69%	1 - 30 to 54%	0 - below 30%
PSA	◉	○	○	○	○

Fig.2.2.1 s. Online Feedback Form

ACTION TAKEN PLAN BY FACULTY

Sub.	Abr.	Action Plan for Improvement	Remark By HOD/AMC
HVDC	MAB	1) I could learn the advanced teaching method by watching NPTEL lectures. 2) I could show animated videos to clear HVDC-Subject.	• Given the instruction to subject incharge and action is initiated to teach better.
ES	PI	1) I could solve more number of microcontroller programs to make the students perfect. 2) I could improve the evaluation process by giving assignment	Number programs and no. of examples were explored to create the interest to students.
ADDITIONAL		(1) computer Lab is upgraded with advanced [windows -10, 64-bit] PCs. (2) Matlab 2014a software has been installed in 108 lab	• Power system Simulation/ Computer lab is updated with new features.

AMC

HOD Electrical Engineering
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA, Panmalewadi (Varye)

PRINCIPAL
Dr. Vilas Pharande

EN-6545

Fig.2.2.1 t. Feedback Analysis and Action Taken

2.2.2. Quality of Internal Semester Question papers, Assignments, and Evaluation (20)

(Mention the initiatives, implementation details, and analysis of learning levels related to quality of semester question papers, assignments, and evaluation)

A. Process for internal semester question paper setting and evaluation and effective process implementation (05)

Electrical Engineering department follows the evaluation of the scheme of DBATU, Lonere.

- Internal and external exams are the main medium for PO attainment. Three tests continuous assessment test 1, continuous assessment test 2, and mid-semester examination are conducted during the semester as per the Institute Academic Calendar.
- The students are informed of the evaluation process during their orientation program itself.
- The institute forms an Academic and Examination committee for question paper quality checking, evaluation, and effective process implementation.
- Three sets of question papers for each course are prepared by the faculty members and submitted to the Academic Monitoring Committee. The committee member selects one copy based on the quality of questions and relevance to COs.
- After approval from the committee, the final paper is printed, one hour before the scheduled class test to maintain confidentiality.
- The examination department schedules the examination timetable, test invigilation allotment, and room allotment and coordinates in smooth execution of the examination. The examination timetable and seating arrangement documents are displayed on the notice board and posted on the what-app group of students.
- The questions for theory examination are aligned with bloom's taxonomy. COs and bloom's level are incorporated by the course coordinators and verified by the Academic Monitoring Committee. The duration of the test is 1 hr.
- The minimum 20% syllabus is covered before the continuous assessment test-I, the minimum50% syllabus am covered before the mid-semester examination, and the 100%syllabus is covered before the continuous assessment test-II by the course coordinator.

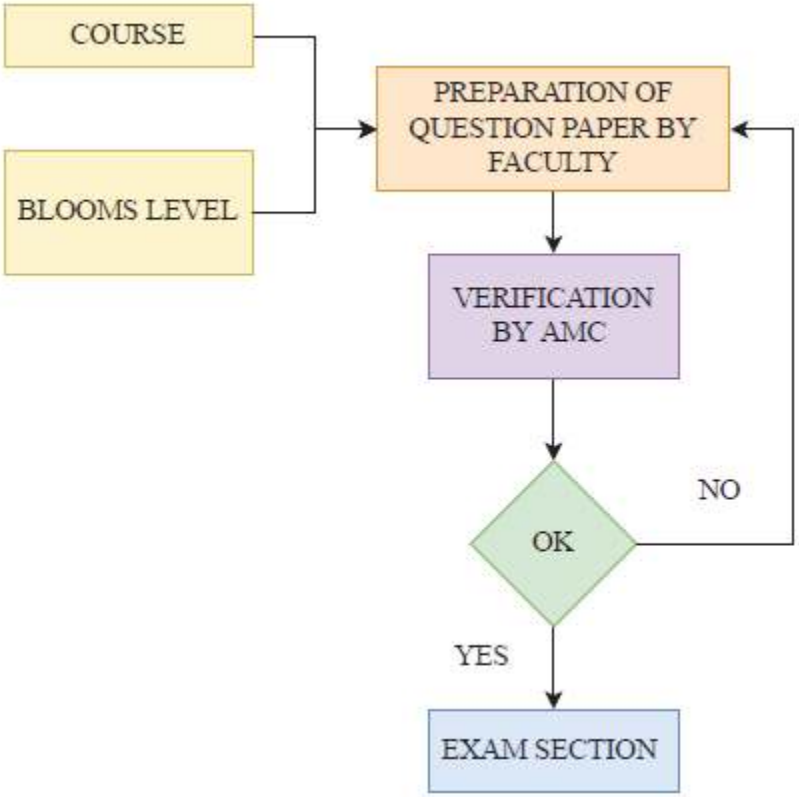


Fig B.2.2.2.a: Internal Question Paper Setting and Evaluation Process

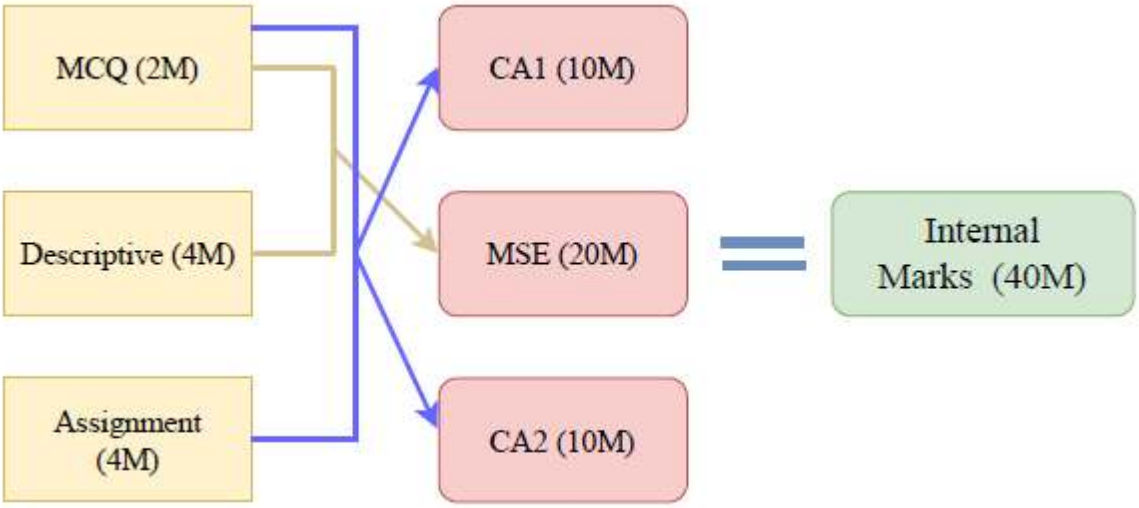


Fig B.2.2. 2. b: Internal Examination Question Paper Pattern

Evaluation:

a) The faculty member evaluates the test books as per the scheme of evaluation.

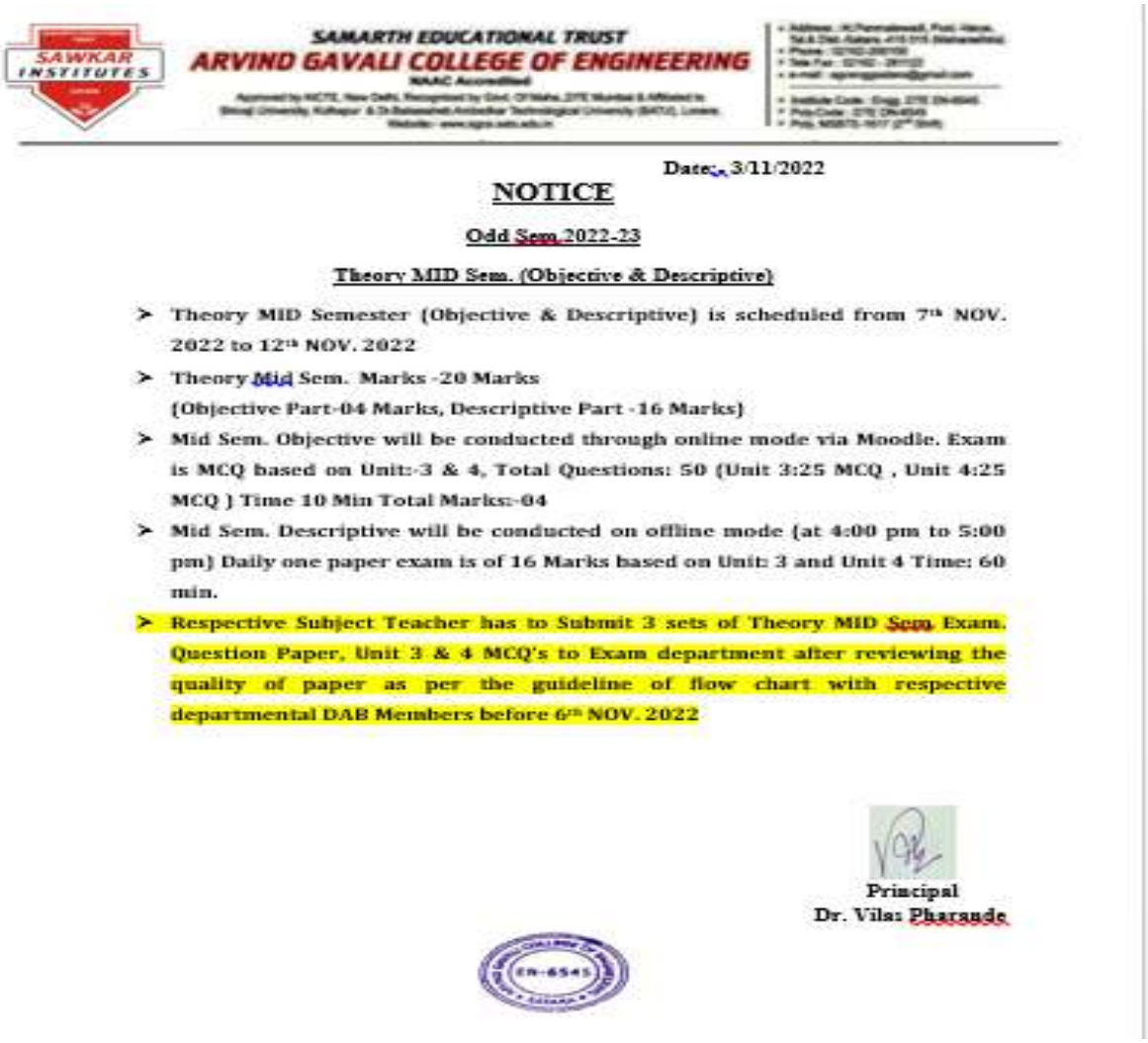
b) The standard question paper solution is discussed with the students in a classroom.

c) For any genuine reason if a student was unable to perform well in the given three internal assessment tests or students are interested in class improvement, a remedial test facility is available for him/her.

d) The best of the two test marks obtained is chosen for the internal assessment marks.

e) Assignments are used to learn, practice, and demonstrate the learning goals only. As actual evaluation is based purely on an internal assessment test.

Figures B.2.2.2.e shows the sample question papers.



SAMARTH EDUCATIONAL TRUST
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NAAC Accredited

Date:- 3/11/2022

NOTICE

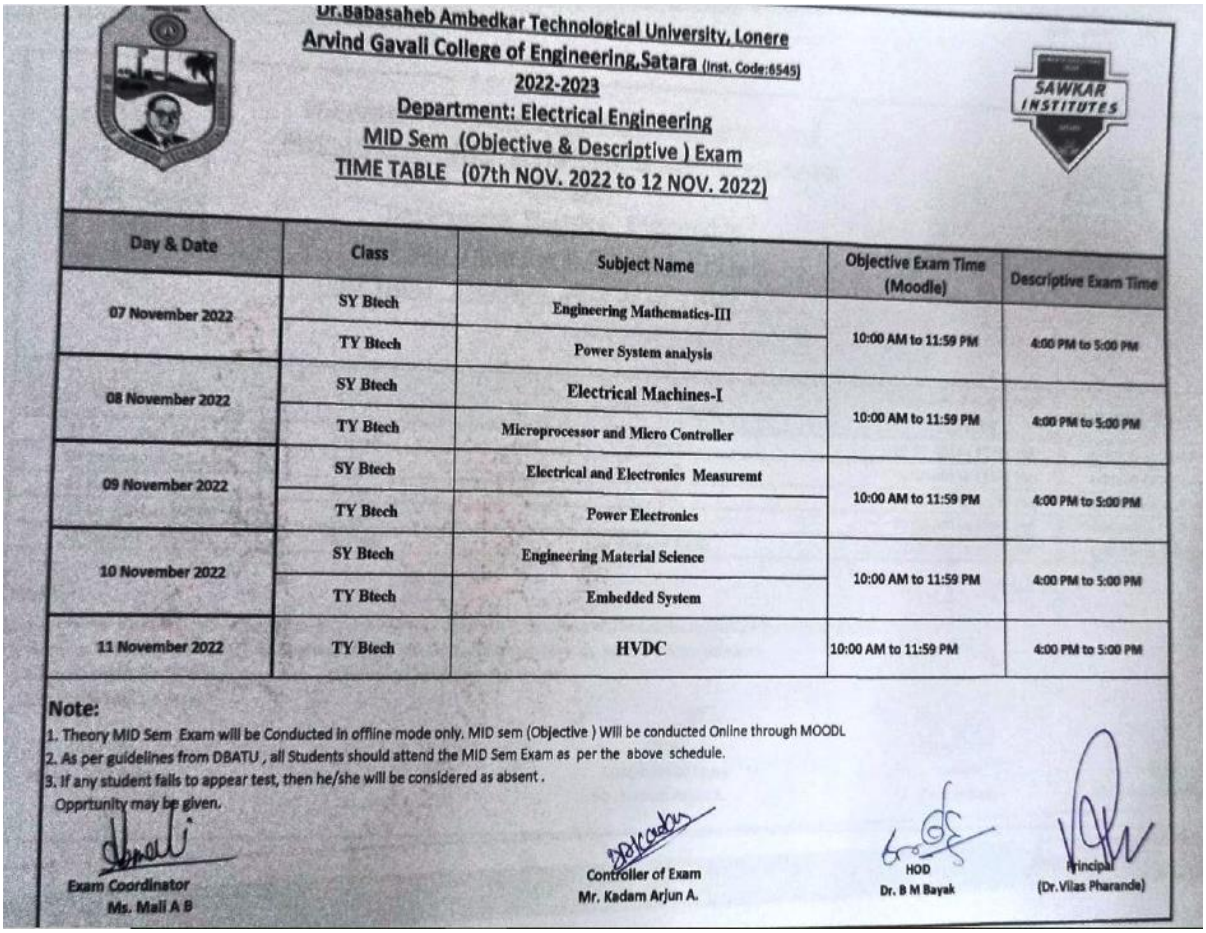
Odd Sem 2022-23

Theory MID Sem. (Objective & Descriptive)

- Theory MID Semester (Objective & Descriptive) is scheduled from 7th NOV. 2022 to 12th NOV. 2022
- Theory Mid Sem. Marks -20 Marks
  (Objective Part-04 Marks, Descriptive Part -16 Marks)
- Mid Sem. Objective will be conducted through online mode via Moodle. Exam is MCQ based on Unit:-3 & 4, Total Questions: 50 (Unit 3:25 MCQ , Unit 4:25 MCQ) Time 10 Min Total Marks:-04
- Mid Sem. Descriptive will be conducted on offline mode (at 4:00 pm to 5:00 pm) Daily one paper exam is of 16 Marks based on Unit: 3 and Unit 4 Time: 60 min.
- Respective Subject Teacher has to Submit 3 sets of Theory MID Sem. Exam. Question Paper, Unit 3 & 4 MCQ's to Exam department after reviewing the quality of paper as per the guideline of flow chart with respective departmental DAB Members before 6th NOV. 2022

Principal
Dr. Vilas Pharande

Fig B.2.2.2. c: Examination Notice



Dr.Babasaheb Ambedkar Technological University, Lonere
Arvind Gavali College of Engineering,Satara (Inst. Code:6545)
2022-2023
Department: Electrical Engineering
MID Sem (Objective & Descriptive) Exam
TIME TABLE (07th NOV. 2022 to 12 NOV. 2022)

SAWKAR INSTITUTES

Day & Date	Class	Subject Name	Objective Exam Time (Moodle)	Descriptive Exam Time
07 November 2022	SY Btech	Engineering Mathematics-III	10:00 AM to 11:59 PM	4:00 PM to 5:00 PM
	TY Btech	Power System analysis		
08 November 2022	SY Btech	Electrical Machines-I	10:00 AM to 11:59 PM	4:00 PM to 5:00 PM
	TY Btech	Microprocessor and Micro Controller		
09 November 2022	SY Btech	Electrical and Electronics Measuremt	10:00 AM to 11:59 PM	4:00 PM to 5:00 PM
	TY Btech	Power Electronics		
10 November 2022	SY Btech	Engineering Material Science	10:00 AM to 11:59 PM	4:00 PM to 5:00 PM
	TY Btech	Embedded System		
11 November 2022	TY Btech	HVDC	10:00 AM to 11:59 PM	4:00 PM to 5:00 PM

Note:
1. Theory MID Sem Exam will be Conducted in offline mode only. MID sem (Objective) Will be conducted Online through MOODL
2. As per guidelines from DBATU , all Students should attend the MID Sem Exam as per the above schedule.
3. If any student fails to appear test, then he/she will be considered as absent .
Opprtunity may be given.

Exam Coordinator
Ms. Mali A B

Controller of Exam
Mr. Kadam Arjun A.

HOD
Dr. B M Bayak

Principal
(Dr.Vilas Pharande)

Fig. B.2.2.2.d: Examination Time Table

	DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE **Arvind Gavali College Of Engineering,Satara** **Even Sem 2022-23** **CA-1 Examination (Descriptive) – March 2023** **Course: B.Tech in Electrical Engineering** **Sem: VI** **Subject Name: Flexible AC Transmission System** **Subject Code: BTEEPE604A** **Max Marks: 12** **Date:- 24/03/2023** **Duration:- 30 Min.**		**SET-1**
	Instructions to the Students: 1. **All** Questions are **compulsory** 2. Assume suitable data if **necessary** 3. Figures to the **right** indicate **full** marks 4. Use of Programmable Calculator is **Not** Allowed		
		(Level/CO)	Marks
Q.1	**CA-1 Exam (Objective Part) completed of 2 marks**		**2 Marks**
Q.2	**Solve Any one of the following.**		**6 Marks**
(A)	With a relevant single line diagram explain the flow of power both in parallel path and meshed network.	**Level-2/CO 1**	
(B)	With a relevant schematic diagram discuss the HVDC transmission system.	**Level-2/CO 1**	
Q. 3	**Solve Any one of the following.**		**6 Marks**
(A)	With a relevant circuit diagram and switching sequence demonstrate the six pulse converter.	**Level-3/CO 2**	
(B)	With a relevant control characteristic curve demonstrate the basic control characteristics of converter.	**Level-3/CO 2**	

Fig B.2.2.2.e: CA-1 Question Paper

B. The process to ensure questions from outcomes/learning level perspective (05)

- Using Bloom's taxonomy internal exam questions papers are set.
- The questions in the internal test are based on the course outcomes to find attainment.
- The course coordinator ensures that the learning objectives and potential results.
- Each internal theory test, whether it be online or offline, is administered as a means of evaluation.
- The questions are formed with the COs and Bloom’s level.

C. Evidence of CO coverage in-class test/mid-term tests (05)

- The institute has defined the following tools for the attainment of the course outcomes.
- The theory courses are assessed with the following tools for the attainment of course outcomes.
- The internal assessment tools of the program are as follows.

	DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Arvind Gavali College of Engineering, Satara **Mid Semester Examination (Descriptive) – April- 2023** **Course: B. Tech in Electrical Engineering** **Sem: VI** **Subject Name: Flexible AC Transmission System** **Subject Code: BTEEPE604A** **Max Marks: 20** **Date:-27/04/2023** **Duration:- 60 Min.**		**Set-1**
	Instructions to the Students: 1. **All** Questions are **compulsory** 2. Assume suitable data if **necessary** 3. Figures to the **right** indicate **full** marks 4. Use of Programmable Calculator is **Not** Allowed		
Q. 1	**Objective Questions (Solved on Moodle)** **(Unit:-3, 25 Question, and Unit: 4, 25 Question)**	(Level/CO)	**4 Marks**
Q.2	**Solve any two of the following Questions.**		**4 X 2**
(A)	With a relevant single line diagram and characteristic curves demonstrate the mid-point voltage regulation in shunt compensation.	**CO-2**	
(B)	With a relevant single line diagram and characteristic curves demonstrate the voltage stability and transient stability in shunt compensation.	**CO-2**	
(C)	With a relevant single line diagram and characteristic curves demonstrate the Thyristor controlled and Thyristor switched reactor.	**CO-3**	
Q. 3	**Solve Any One of the following.**		**8X1**
(A)	With a relevant single line diagram and V-I curves explain and analyze the working of TSSC.	**CO-3**	
(B)	With a relevant single line diagram and V-I curves explain and analyze the working of TCSC.	**CO-3**	

Fig B.2.2.2.f: MID Sem Question Paper

Internal assessment tools (Direct) are:

Table 2.2.2a Direct Internal Assessment Tools

Course Outcome	Internal Assessment Tools
CO 1	CA1, MSE, ESE
CO 2	CA1,MSE, ESE
CO 3	CA2,MSE ,ESE
CO 4	CA2, ESE

D. Quality of Assignments and its relevance to Cos (05)

- Faculty members prepare COs for the allocated subjects. They then prepare assignments according to these COs using Bloom's Taxonomy levels. Academic monitoring member verifies checks mapping of assignments with the defined COs.
- The faculty prepares a total of five-six assignments by considering coverage of all course outcomes. Certain time duration is given to the students to submit the assignment. The assignments submitted by the students are evaluated by the faculty members. Marks are given as per student's performance and a record is maintained in the course files.

Dr. Babasaheb Ambedkar Technological University, Lonere
Arvind Gavali College of Engineering,Satara
(Inst. Code: 6545)
Even Sem (2022-23)
Department: Electrical Engineering
Class: TY B.Tech
Subject: Flexible AC Transmission System (BTEEPE604A)

Assignment No: 1

Published Date: 20/03/2023
Submission Date: 24/03/2023

Q.1)	With a relevant single line diagram discuss the three types of HVDC links.	CO-1	[6 Marks]

Name & Sign of Faculty
Prof. Somesha Naik S R
Assistant Professor,
Electrical Engineering

Dr. Babasaheb Ambedkar Technological University, Lonere
Arvind Gavali College of Engineering,Satara
(Inst. Code: 6545)
Even Sem (2022-23)
Department: Electrical Engineering
Class: TY B.Tech
Subject: Flexible AC Transmission System (BTEEPE604A)

Assignment No: 2

Published Date: 20/03/2023
Submission Date: 24/03/2023

Q.1)	With a relevant single line diagram Demonstrate the combined shunt and series connected FACTS controllers.	CO-2	[6 Marks]

Name & Sign of Faculty
Prof. Somesha Naik S R
Assistant Professor,
Electrical Engineering

Fig B.2.2.2.g Assignment with CO relevance

Dr.Babasaheb Ambedkar Technological university,Lonere

Samarth Educational Trust's

Arvind Gavali College of Engineering Satara

Result Analysis CA1 Exam 2022-23

Class:- TY Sem: V Subject: Power Electronics (BTEEC 503) Department :- Electrical Engineering

Sr. No	PRN No.	Name of Student	Objective		Descriptive				Assignment		CA-1 TOTAL	
			Total out of 1	Total out of 1	Q.1 (A) – 06 Marks	Q.1 (B)– 06 Marks	Q.2 (A)– 06 Marks	Q.2 (B)– 06 Marks	Assignment No 1 (12 Marks	Assignment No 2 (12 Marks	CA-1 TOTAL (38 MARKS)	CA-1 TOTAL (10 MARKS)
		Maximum marks	1	1	6	6	6	6	12	12	38	10
			CO-1	CO-2	CO-1	CO-1	CO-2	CO-2	CO-1	CO-2		
1	"2165451293001"	CHAVAN ADITYA MADAN	1.0	1.0	6		5		12	12	37	10
2	"2165451293002"	DESHMUKH ANKITA ANIL	1.0	1.0		6		5	11	11	35	9
3	"2165451293003"	SHIRKE DEEP NANDKUMAR	1.0	1.0	3		5		12	12	34	9
4	"2165451293004"	DESAI GANESH JAGANNATH				6		5	10	10	31	8
5	"2165451293005"	WADKAR KARTIK AJIT	0.0	1.0	3		5		12	12	33	9
6	"2165451293006"	RAUT MAHESH HANMANT	0.0	0.0	4		4		11	10	29	8
7	"2165451293007"	PAWAR MAYURI VILAS	0.0	1.0	5		6		11	11	34	9
8	"2165451293008"	KASURDE OMKAR SANDEEP			4		3		11	11	29	8
9	"2165451293009"	KADAM ROHIT RAVINDRA			4		5		12	12	33	9
10	"2165451293010"	KADAM ROHIT VISHWAS	1.0	1.0	4			4	11	11	32	8
11	"2165451293011"	KATKAR RUTUJA BABASO	0.0	1.0	4			4	12	12	33	9
12	"2165451293012"	BABAR SAURABH SURYAKANT			5			4	12	12	33	9
13	"2165451293013"	CHAVAN SHRAVANI PRADIP	1.0	0.0	4			3	8	8	24	6
14	"2165451293015"	KUMBHAR SHWETA SAYAJI	1.0	1.0	2			2	10	11	27	7
15	"2165451293016"	PAWAR SNEHAL SUNIL	1.0	1.0	3			3	8	8	24	6
16	"2165451293017"	SHILEWANT TEJAS VITTHAL	0.0	1.0	5			2	8	8	24	6
17	"2165451293018"	INDALKAR TEJAS CHANDRAKANT	1.0	1.0	4		2		11	11	30	8
18	"2165451293019"	BHISE VAISHNAVI RAJENDRA	1.0	1.0	1				9	9	21	6
19	"2165451293020"	KUMBHAR VARSHA JOTIRAM	1.0	0.0	3		3		12	12	31	8
20	"2165451293021"	NIKAM VIVEK SANTOSH	1.0	1.0	5		5		8	8	28	7
21	"2165451293022"	BODAKE YASHRAJ KESHAV	1.0	1.0	4		1		8	8	23	6
22	"2165451293501"	NIKAM ADITYA PARAG			3		3		10	10	26	7

Fig B.2.2.2.h Assignment Evaluation Record

2.2.3. Quality of student projects (25)

(Quality of the project is measured in terms of consideration to factors including, but not limited to, environment, safety, ethics, cost, type (application, product, research, review, etc.), and standards. Processes related to project identification, allotment, continuous monitoring, and evaluation including demonstration of working prototypes and enhancing the relevance of projects. Mention Implementation details including details of Pos and PSOs addressed through the projects with justification)

A. Identification of projects and allocation methodology to Faculty Members (03)

Students carry out a mini project in the fourth semester and a major project in the seventh and eighth semesters. Department follows standard procedures to ensure the quality of the project. The student selects a project domain in line with their interest. Students are encouraged to do a real-time project. Department and R& D head guides, the student to select domain by sharing with them various project domains like (not limited to)

a) Power System

b) Internet of Things

c) Automation

d) Power Electronics & Drives

e) Renewable Energy sources

f) Power Electronics

Project groups are formed by the student themselves accordingly to their area of interest, if they are not able to form a group then the project coordinator helps them to form a group.

A. Project Identification & guide allocation methodology (03)

The project coordinator and project assessment committee (PAC) ensure the quality of students' projects. The PAC follows the guidelines set by the department in the following manner:

1. The R & D committee displays a list of faculty members along with their areas of expertise on the notice board.
2. A list of previous year's projects is displayed on the notice board and also available in the departmental library, which ensures no repetition of project work.
3. Students select the suitable area, form their group of a minimum of three and a maximum of five, and contact the concerned faculty member.

4. If any group is failing to submit the guide name then the project coordinator will assign the guide to the group.
5. Students can identify a problem statement for the project. If they are not able to find the problem statement, then the supervisor will give a problem statement to the students for the execution of problem solutions through the project work.
6. Committee finally allows the projects by considering various parameters like relevance to POs, originality, feasibility, the technology used, patentability, and resource required.
7. The guide monitors the progress of the project work regularly and keeps a track record. In case, the performance of the student's group is not satisfactory, the matter is reported to PAC for required action.
8. The guide ensures documentation with the university format for submission of the project report.

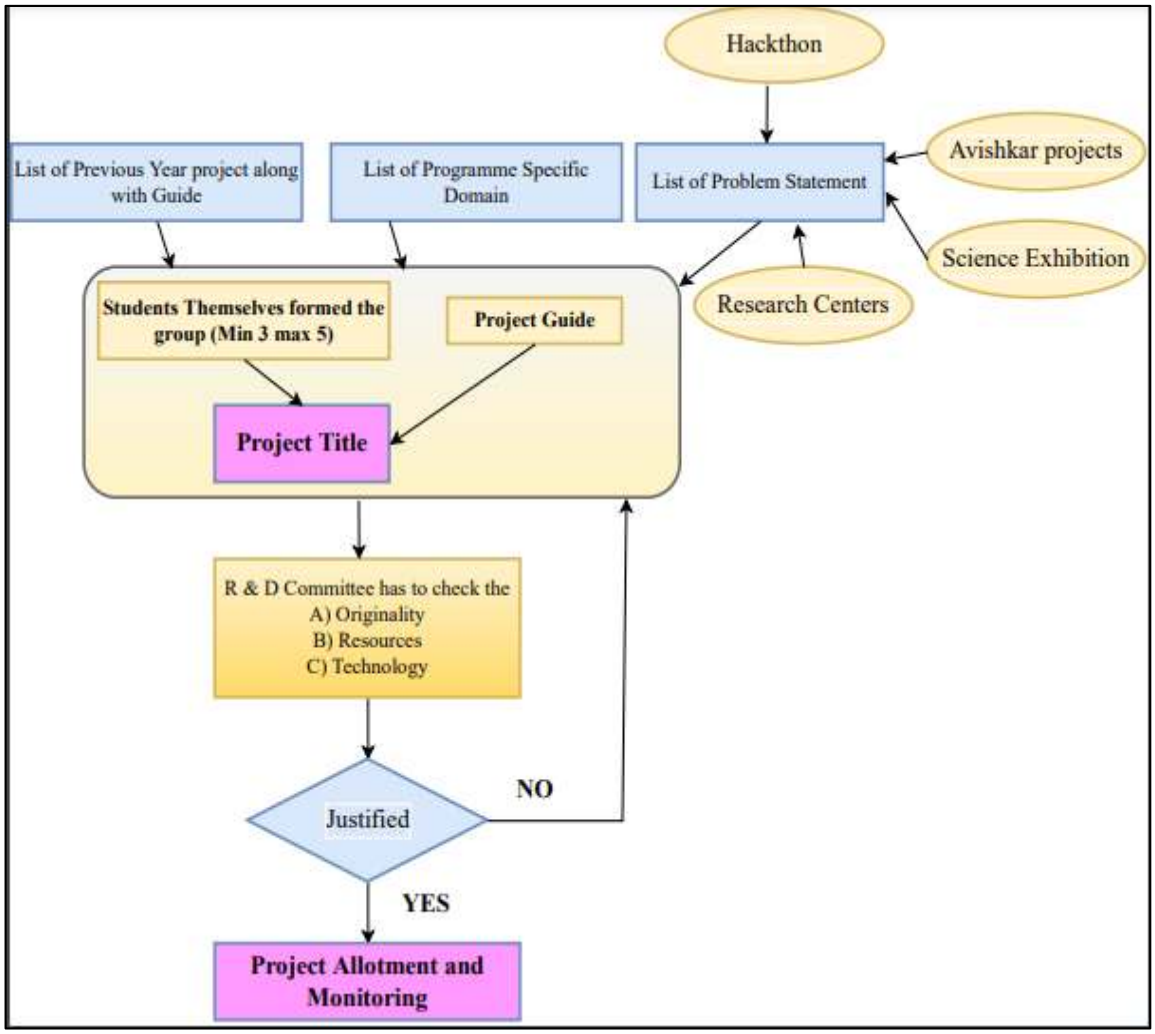
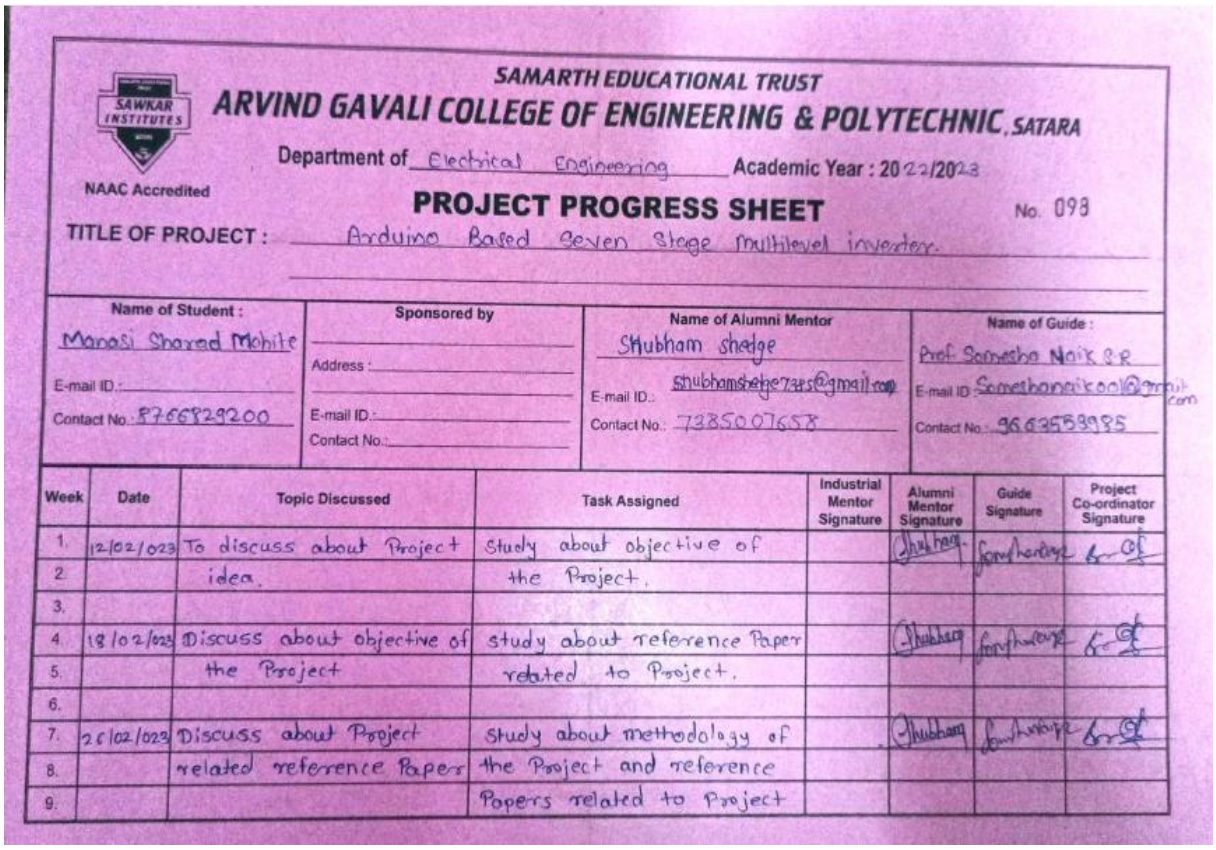


Fig B.2.2.3.a: Project Identification & allocation method



SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING & POLYTECHNIC, SATARA

SAWKAR INSTITUTES

NAAC Accredited

Department of Electrical Engineering Academic Year : 2022/2023

PROJECT PROGRESS SHEET No. 098

TITLE OF PROJECT : Arduino Based Seven Stage multilevel inverter.

Name of Student :	Sponsored by	Name of Alumni Mentor	Name of Guide :
Manasi Sharad Mohite	Address :	Shubham shedge	Prof. Somesha Naik S.R
E-mail ID :	E-mail ID :	E-mail ID : shubhamshedge7275@gmail.com	E-mail ID : Someshanaik001@gmail.com
Contact No. : 8766829200	Contact No. :	Contact No. : 7385007658	Contact No. : 9663559985

Week	Date	Topic Discussed	Task Assigned	Industrial Mentor Signature	Alumni Mentor Signature	Guide Signature	Project Co-ordinator Signature
1.	12/02/023	To discuss about Project	Study about objective of		Shubham	Somesha	
2.		idea.	the Project.				
3.							
4.	18/02/023	Discuss about objective of	study about reference Paper		Shubham	Somesha	
5.		the Project	related to Project.				
6.							
7.	26/02/023	Discuss about Project	study about methodology of		Shubham	Somesha	
8.		related reference Papers	the Project and reference				
9.			Papers related to Project				

Week	Date	Topic Discussed	Task Assigned	Industry Mentor Signature	Alumni Mentor Signature	Guide Signature	Project Co-ordinator Signature
10	5/03/023	To discuss about Project	study about circuit diagram		Shubham	Somesha	
11		methodology	of the Project.				
12							
13	12/03/023	Discuss about circuit diagram	study about component of the		Shubham	Somesha	
14		of Project	project				
15							
16	19/03/023	Discuss about specification	study about algorithm for		Shubham	Somesha	
17		and working of component	switching of switches.				
18							
19	26/03/023	Discuss Algorithm for working	Study about Program for		Shubham	Somesha	
20		of switches	switching of switches				
21							
22	9/4/023	Discuss Program for	Burning of Program for		Shubham	Somesha	
23		switching of switches	Project				
24							
25	9/4/023	Discuss switching states	Study about switching circuit		Shubham	Somesha	
26		for operating circuit	and reference Paper, result				
27							
28	13/4/023	Discuss result and update	Study for making conference		Shubham	Somesha	
29		correction in Project	Paper.				
30							

Student Signature : HOD Signature Dr. Vilas Pharande External Examiners

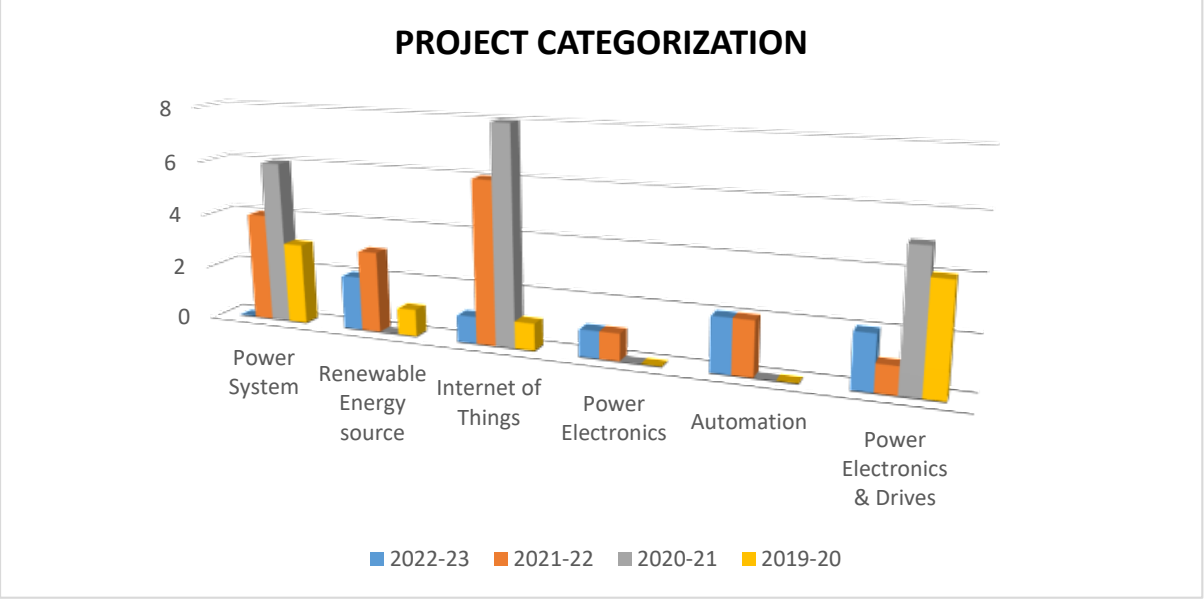
Fig B.2.2.3.b: Project Progress Sheet

B. Types and relevance of projects and their contribution towards the attainment of POs and PSO (05)

Power System, Automation, Internet of Things, Power Electronics & Drives, Renewable Energy sources and Power Electronics are the major domain of project development in the Electrical engineering department.

Table 2.2.3.a Project Categories

Project Domain	**No. of Project in each domain**			
	2022-23	**2021-22**	**2020-21**	**2019-20**
Power System	00	04	06	03
Renewable Energy source	02	03	00	01
Internet of Things	01	06	08	01
Power Electronics	01	01	00	00
Automation	02	02	00	00
Power Electronics & Drives	02	01	05	04
TOTAL	**08**	**17**	**19**	**09**



To ensure the relevance of projects, the need for the development of the project in the current technological context should be verified by the team consisting of the project guide and project assessment committee members, and also the projects are mapped to POs and PSOs.

Course Outcomes:

1. Improve professional competency and research aptitude in the relevant area.
2. Develop work practices in students to apply theoretical and practical tools/techniques to solve real-life problems related to industry and current research.
3. Clearly understand the value of achieving perfection in project implementation and completion.
4. Learn to accept challenges and work in a team to solve problems with a multidisciplinary approach.
5. Enable the student to implement the project planning in their industrial In plant training work
6. Demonstrate professionalism with ethics, present effective communication skills, and relate engineering issues to the broader social context of

Table 2.2.3.b Project CO-PO Mapping

CO - PO Mapping Of Project

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1	2	3	2	3	2	2	2	3	3	2	2	2
CO 2			2	2	3				2		2	
CO 3		2	3					2	3		2	3
CO 4		2	2						2	3	3	2
CO 5	2	3	2	3	2	3	2	3	2	2	3	2
CO 6									3	2		3
Strength of Correlation: High – 3, Medium – 2, Low – 1												

The procedure of CO Attainment

1. All the performance indicator parameters/ Rubrics are mapped with course outcomes.
2. The percentage of marks in each CO for every student is calculated.
3. The percentage of students securing more than a threshold percentage (increase every year for continuous improvement of performance) in internal and external evaluation is calculated which shows a certain level of CO achievement

CAY (2022-23):

Table B.2.2.3c Mapping of Projects (PR1-PR8) with PO and PSO

Group No	Project Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
PR1	Voice Controlled Robotic Vehicle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR2	Self-Balancing Robot	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
PR3	Battery Swapping System For Electrical Vehicle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR4	Arduino Based Five Level Multi Level Inverter With Resistive Load	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR5	Iot BASED SOLAR POWER PLANT AUTOMATION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR6	Solar Operated Mobile Pestiside And Fertilizer Sprayer	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR7	Aumatic Drip Irrigation System Using Microcontroller	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR8	Triac Based Wireless Single Phase Induction Motor Speed Controller Using Microcontroller	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

CAYm1 (2021-22) :

Table B.2.2.3d Mapping of Projects (PR1-PR17) with PO and PSO

Group NO	Project Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO 9	PO 10	PO 11	P 12	PSO1	PSO2
PR1	Enhancement to DP Transformer Theft Monitoring System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR2	Child Safety Wearable Device	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR3	Designing and Analysis of AC Power Control by Programmable Interface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR4	Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Using VFD Controller	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR5	IOT based Solar Monitoring and Control	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
PR6	Wireless robotic vehicle to supply food and medicines to covid-19 patients.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR7	AI - Based Touchless Attendance System for School, Colleges after COVID-19 Situation with Temperature, Oxygen Level, Face Mask Detection	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR8	To Design and Develop Prototype for Industrial Cobot	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR9	Ultra Fast Circuit Breaker Using Arduino for Overload Protection	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR10	Design and Implementation of Manual rotation of Solar Plate for Maximum Energy Output	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR11	Solar Tracking System Using Arduino	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
PR12	E - Lite Bicycle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR13	Automatic Car Parking Using Arduino System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR14	IOT Based Smart Public Ration Distribution System	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
PR15	Robot for Waste and Garbage Collection in Water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR16	Design and Implementation of Manual rotation of Solar Plate for Maximum Energy Output	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y
PR17	Analysis and Implementation of Solar Tracking System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

CAYm2 (2020-21):

Table B.2.2.3e Mapping of Projects (PR1-PR19) with PO and PSO

Grp No	Project Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
PR1	Underground Cable Fault Detection Using IOT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR2	IoT-Based Smart Energy Management System of Electrical Vehicle Charging Station	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR3	Reverse rotation controller for rotating equipment	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR4	IoT-Based induction motor monitoring system	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR5	Automatic Power factor controller	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR6	Iot Based Smart Energy Meter Monitoring and Billing System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR7	IoT-Based Military Surveillance Robot	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR8	IoT-Based Work Data Recorder for Big Vehicles	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR9	4KW Solar Control Panel Designing and Mounting	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR10	ON-Grid 4KW Solar Lighting Power Plant Installation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR11	Induction Motor Rotation in Bidirectional through a Remote Control Device	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR12	Power Distribution Station Monitoring System Using IoT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR13	IoT-Based Water Distribution Monitoring System in Apartments	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR14	Li-fi Data Transmission System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR15	Track Charging System for Electric Vehicle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR16	4KW Solar Control Panel Designing and Mounting	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR17	Industrial Automation Using WiFi (Earlier Industrial Automation Using IoT)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR18	Priority-wise Power Distribution and Safety Controller Monitoring System Using IoT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PR19	Energy Regenerative Braking of BLDC Motor by Using Super Capacitor in EV Application	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

B. Process for project work monitoring and evaluation (05)

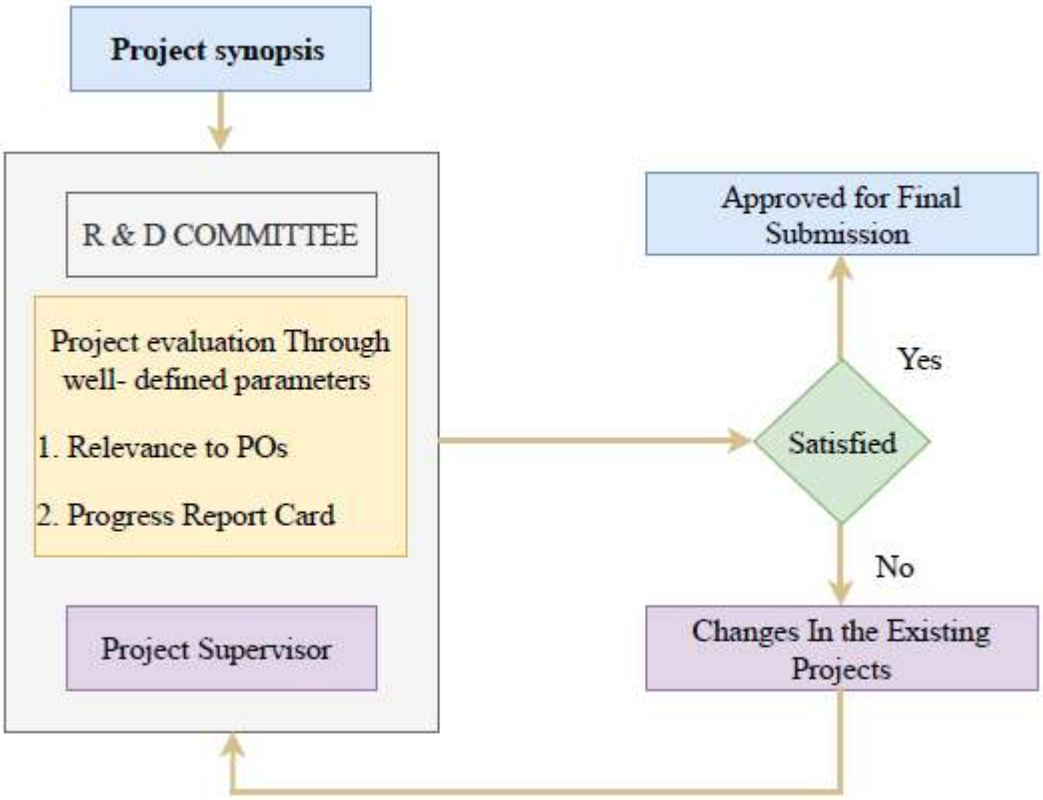


Fig B.2.2.3.c: Project Assessment Mechanism

Procedure for monitoring& evaluation:

a. Students have to submit the synopsis of the project work to the coordinators for feasibility checking.
b. The project work coordinators and the RR committee will scrutinize the synopsis and give suggestions for improvements in strengthening the synopsis.
c. In case, the group of students taking projects from the Public/Private sectors needs to take approval from the HOD and a Letter of Reference sent to the concerned sector. A faculty member of the department functions as an Internal Guide to such students and the scientist/researcher in the concerned sector functions as an External Guide.
d. Every week, the students should meet their concern guide and update their project work progress. The students/batch must give a presentation on the project in front of the project work review committee (RR Committee) as scheduled in Phase-1 & Phase-2.
e. Finally, the RR committee evaluates the projects for respective domains.

Evaluation by project assessment committee:

Phase 1:

Table B.2.2.3 g: Project Evaluation Scheme

Sr. No	Performance Indicators/Rubrics	CO Mapping
1	Identification of Problem	CO1
2	Literature Review/ Feasibility of Project	CO2
3	Industry Sponsored/Research/Peer Review Paper Based	CO6
4	Synopsis	CO1,CO2,CO6
5	Objectives and Methodology of the Proposed Work	CO1,CO2
6	Planning of the Project Work and Team Structure	CO4
7	Presentation	CO6
8	Technical Knowledge and Awareness Related to the Project	CO1,CO2
9	Effectiveness of Communication	CO6
10	Working Within a Team	CO4

All the above-mentioned performance indicators are evaluated on a scale of 1-5.

Excellent: 5

Very Good: 4

Good: 3

Satisfactory: 2

Not Satisfactory: 1

Phase 2:

Table B.2.2.3 h: Project Evaluation Scheme

Sr. No	Performance Indicators/Rubrics	CO Mapping
1	Design Methodology	CO1,CO2
2	Experimental Setup/Laboratory Tests/Validation	CO2
3	Prototype Demonstration and Presentation	CO2
4	Incorporation of Suggestions	CO3
5	Project Budget and Finance	CO5
6	Final Project Demonstration	CO4
7	Effectiveness of Communication	CO6
8	Impact on Environment and Sustainability	CO6
9	Project Report	CO6
10	Results	CO6
11	Conclusion and Discussions	CO3
12	Modern Tool Usage	CO2
13	Participation in Competition	CO4
14	Self-Motivation and Determination	CO6
15	Working Within a Team	CO4
16	Impact of Project on Society	CO6
17	Regularity	CO6
18	Applied Ethical Principles	CO6
19	Future Scope	CO1
20	References	CO1,CO2,CO3

All the above-mentioned performance indicators are evaluated on a scale of 1-5.

Excellent: 5

Very Good: 4

Good: 3

Satisfactory: 2

Not Satisfactory: 1

Project Work Evaluation:

a) **Internal Evaluation:** The project work and the report will be evaluated by the internal committee at Phase-1, Phase-2

b) **External Evaluation:** The project work and the report will be evaluated by internal and external examiners appointed by the University.

c) The examiners will take a presentation and demonstration followed by Viva-Voce on the project work carried out by students. The students need to defend their project work. Based on the presentation and Viva-Voce, the marks will be awarded to the students, which will be sent to the university

Samarth Educational Trust
Arvind Gavali College of Engineeering
Project Phase I Internal Evaluation Sheet
Electrical Engineering
Academic Year 2022-2023

			1			2			3		
Domain	Name	Title of the Project	Applied Engineering Knowledge (5)			Problem Analysis (5)			Effectiveness of Communication (5)		
			Guide (5)	HOD (5)	Reviewer (5)	Guide (5)	HOD (5)	Reviewer (5)	Guide (5)	HOD (5)	Reviewe (5)
Electrical Vehicle	Ghate Harshali Vijay	Voice Control Robotic Vehicle	3	4	5	4	3	3	4	3	
	Galave Goraksh Shivaji		4	4	4	4	3	3	5	3	
	Jadhav Pratiksha Shashikant		4	4	3	3	5	4	5	4	
	Jadhav Pooja Jaysing		5	4	4	4	5	4	4	4	
Robot	INDULKAR KAILAS VIJAY	SELF BALANCING ROBOT	4	4	3	4	4	5	4	4	5
	MEMANE TUSHAR DATTATRA		4	4	4	4	4	3	4	4	4
	TIRMARE PRASAD RAJESH		4	4	5	4	4	4	5	4	4
	JADHAV AMRUT SUHAS		4	4	4	4	4	4	4	5	4

Fig B.2.2.3.d Project Evaluation Record

The process to assess individual and team performance (05)

Project assessment is the process of evaluating the performance of the individual and an entire team. Performance evaluation is done to get a clear idea of how well the individual and team's skills are working together, motivating them and providing a suggestion for improving individual and team performance.

The assessment evaluation can be done by using assessment methods like individual and team performance questionnaires and presented in front of the RR committee. Students need to score more than 60% for continuing content work otherwise consult with a guide. After reworking again need to present in front of the RR committee and will start to do further work. The process to assess individual and team performance is shown in Fig. 2.2.3e.

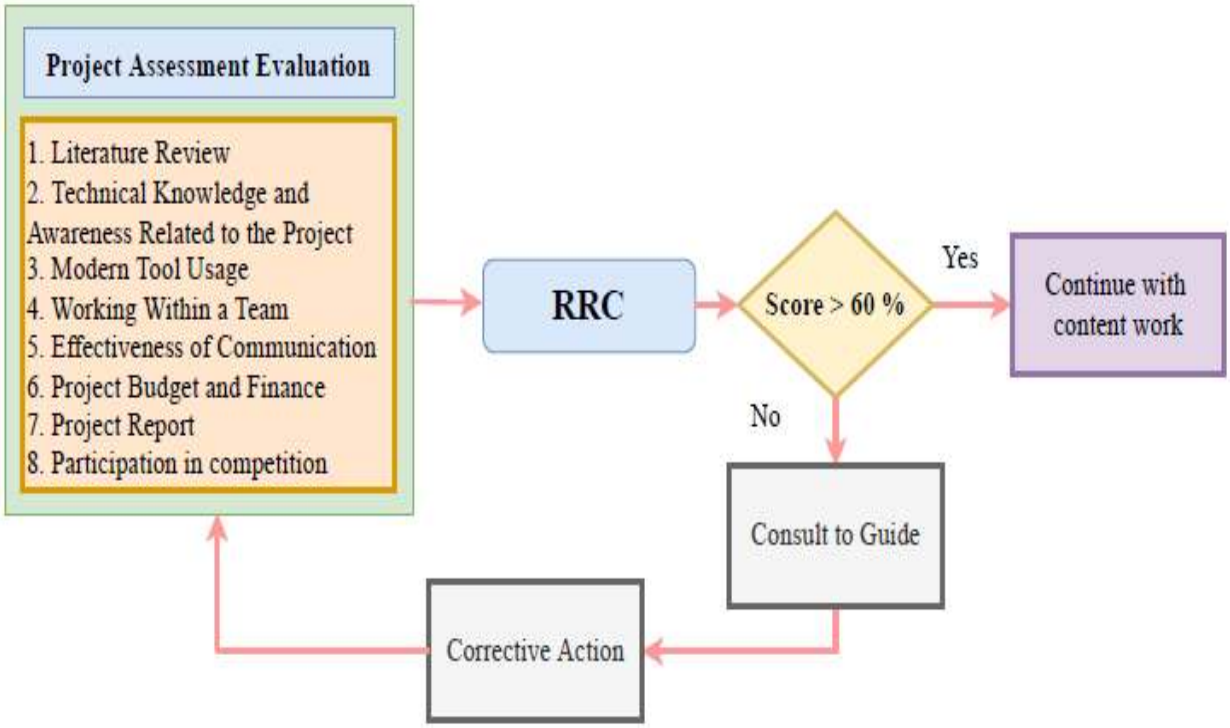


Figure B.2.2.3.e: Student Performance Evaluation Mechanism

E. Quality of completed projects/working prototypes (05)

A committee of R&D head, Head of the Department, and Supervisor assess the quality of projects and select the best project each year based on the following parameters.

Table B.2.2.3 i: Best Project Evaluation Scheme

Sr. No	Performance Indicator	Marks
1	Problem Statement & Solution to Societal /Industry Problem	10 M
2	Design/Modern tool/Technology Usage	10M
3	% CO Attainment	10M
4	Question and Answer	10M

CAY (2022-23):

Table B.2.2.3 j. Three Best Project

Group No	Name of Student	Name of Guide	Title of Project
PRGROUP-04	Mohite Manasi Sharad Lokare Saujanya Suresh Jadhav Akanksha Shashikant Yadav Sanjay Ganesh	Prof. Somesha Naik S R	Aurdino based Seven Stage Multi level Inverter
PRGROUP-07	Vaishnavi Mahadik Praveen Suravashi Ashok S. Patil Rajeshwari Sonawane	Dr. Nayak B. M.	Automatic Drip Irrigation System using Microcontroller and Electrical devices
	Patil Harshal Prashant		

PRGROUP-06	Tarade Shweta Tukaram Herkal Aditya Rajendra Ankita Sanjay Jadhav	Prof. Somesha Naik S R	Solar Operated Mobile Pesticide and Fertilizer Sprayer

CAY m1 (2021-22):

Table B.2.2.3 k. Three Best Project

Group No	Name of Student	Name of Guide	Title of Project
PRGROUP-01	Rao Archana Bhoite Nilam Thorat Shraddha Monde Komal	Dr. Mirajkar G. S.	Enhancement to DP Transformer Theft Monitoring System
PRGROUP-04	Shingate Shital Pawar Mayuri Jadhav Asavari Devkar Komal	Dr. Nayak B. M.	Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Using VFD Controller
PRGROUP-15	Shivanjali Jadhav Kavita Shinde Divya Velapure Pratiksha Bhosale	Prof. Chavan S. G.	Robot for Waste and Garbage Collection in Water

CAY m2 (2020-21):

Table B.2.2.3 l: Three Best Project

Group No	Name of Student	Name of Guide	Title of Project
PRGROUP-3	Dede Pradip Ankush	Prof. Nayak B. M.	Reverse rotation controller for rotating equipment
	Tikudave Akshay Dhondiram		
	Lokhande Akshay Hanmant		
	Garud Ashish Adhikro		
PRGROUP-6	Pawar Sanchita Nanaso	Dr. Mirajkar G S	Iot Based Smart Energy Meter Monitoring and Billing System
	Pooja Sanjay Chavan		
	Bagal Poonam Anadarao		
	Lawand Amruta Shivaji		
PRGROUP-10	Karande Piyush Naresh	Prof. Eva Gupta	ON-Grid 4KW Solar Lighting Power Plant Installation
	Kakade Rushiraj Rajiv		
	Masal Shankar Maruti		
	Pawar Sushant Vinayak		
	Gujar Tejas Sharad		

Figure B.2.2.3.f : Intra-College Project Competition

Figure B.2.2.3.g: Project assessment by Industry Experts

Figure B.2.2.3.h: Photo of Best Project (Aurdino based Seven Stage Multi level Inverter)

Figure B.2.2.3.i: To Design and Develop Prototype of Industrial Cobot

F. Evidence of papers published/Awards received by projects etc. (02)

Table B.2.2.3 n. Awards in Project Competition

Sr. No.	academic year	Name of the Competition	The number of students who participated
1	2022-23	National Level project competation "Techno-Sci 2k23" held at Marathwada Mitramandal's Institute of Technology, Lohgaon, Pune	02
2		National Level project competition "DNYANAVISHKAR 2k23" held at DNYANSHREE INSTITUTE OF ENGINEERING & TECHNOLOGY, Sajjangad Road, Satara	04
3		National Level project competition "CRETECHNOVA 2k23" held at SVPMs College of Engineering, Malegaon.	01
4	2021-22	Monitoring and controlling of Solar power plant Based on IoT. IJARSCT Volume 2, Issue 2 July 2022.	04
5		Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Consumption using VFD Controller. IJARSCT Volume 2, Issue 2 July 2022.	04
6		Internal Hackthon of Smart India Hackthon 2022) 28/04/2022	04
7		National level project Copitation-BVPROTECH 2022 at Bhartividyapeet Deemed be University College of Pune	02
8		National Level project compitation "KJSIEIT ENTECH 2K22" KJ Somayya Institute of Engineering and Information Technology	01
9		Quantitative Aptitude at Bharat Ratna Indiragandhi College of Engineering, Solapur	01
10	2019-20	AVISHKAR 2019-2020 Zonal Level Competition by Shivaji University, Kolhapur	04
11		23rd Maharastra Sate Interuniversity Sports Meet 2019-20, DBATU Lonere	01

International Conference on Innovation and Recent Trends in Engineering and Science
(ICIRTES-2023)
10th and 11th June

SAWKAR INSTITUTES

Certification of Participation

This is to certify that

Mohite Manasi, Yadav Sanjay, Jadhav Akanksha, Lokare Sanjana

has successfully participated and presented the paper titled

Anudion Based Seven Stage Multilevel Inverter (Ele.)

Organized by

Arvind Gavali College of Engineering, Satara

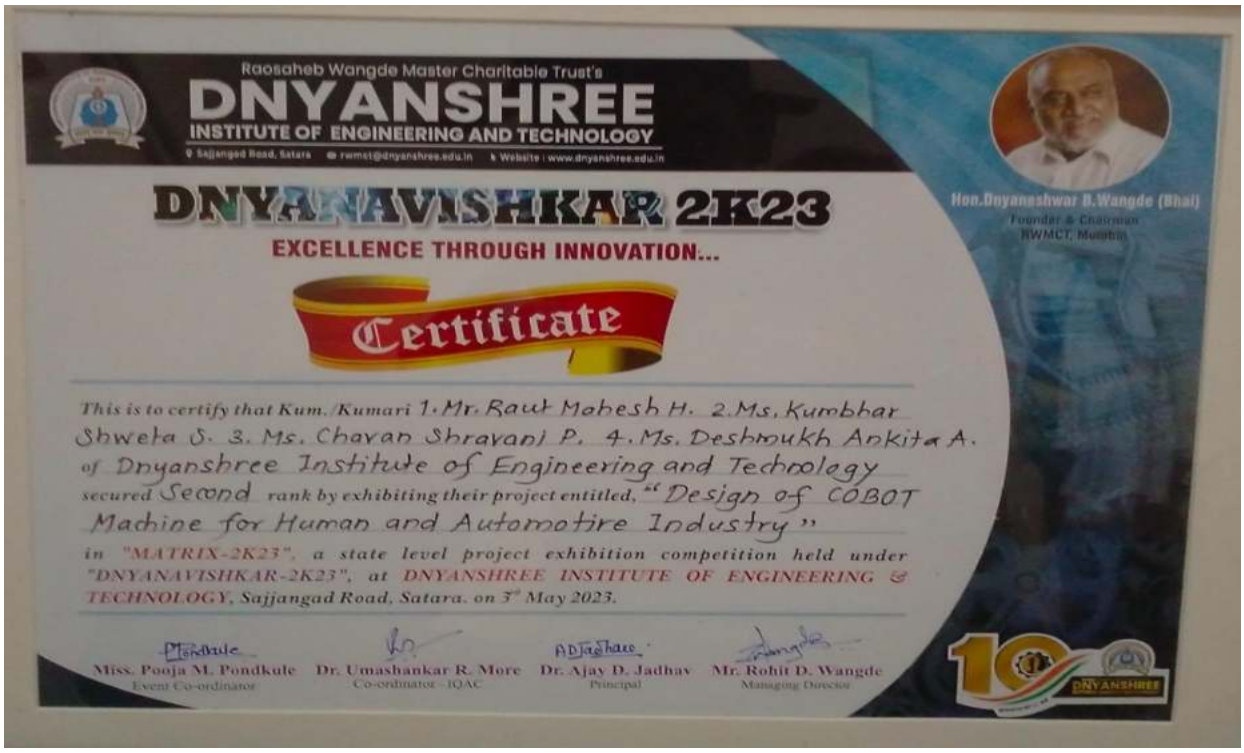
In association with

Department of Medical Biology, Faculty of Medicine, Nigde, Omer Halisdemir University, Nigde, Turkey

Dr. Zeliha Selamoglu, Convener, Omer Halisdemir, Turkey
Dr. Gayatri Mirajkar, Convener, Arvind Gavali College of Engineering India
Dr. Vilas Pharande, Principal, Arvind Gavali College of Engineering India
Hon. Nishant Gavali, Secretary, Samarth Educational Trust India

ISBN: 978-81-961931-0-2
ISBN: 978-81-961931-1-9

Figure B.2.2.3.j: Conference Paper Publication Certificate



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DNYANAVISHKAR 2K23
EXCELLENCE THROUGH INNOVATION...

Hon.Dnyaneshwar B.Wangde (Bhai)
Founder & Chairman
RWMCT, Mumbai

Certificate

This is to certify that Kum./Kumari 1. Mr. Raut Mahesh H. 2. Ms. Kumbhar Shweta S. 3. Ms. Chavan Shravani P. 4. Ms. Deshmukh Ankita A. of Dnyanshree Institute of Engineering and Technology secured Second rank by exhibiting their project entitled, "Design of COBOT Machine for Human and Automotive Industry" in "MATRIX-2K23", a state level project exhibition competition held under "DNYANAVISHKAR-2K23", at DNYANSHREE INSTITUTE OF ENGINEERING & TECHNOLOGY, Sajjangad Road, Satara, on 3rd May 2023.

Miss. Pooja M. Pondkule, Event Co-ordinator
Dr. Umashankar R. More, Co-ordinator - IQAC
Dr. Ajay D. Jadhav, Principal
Mr. Rohit D. Wangde, Managing Director

Figure B.2.2.3.k: National Level Project Competition Participation & Prize

Figure B.2.2.3.l: National Level Project Competition Participation & Prize

2.2.4. Initiatives related to industry interaction (15)

(Give details of the industry involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts, etc. Mention the initiatives, implementation details, and impact analysis)

The department of Electrical Engineering has made efforts in the direction of making students ready for the industry by enhancing their skill sets through training on recent tools and technologies. The said efforts are made through the following activities in collaboration with the industry.

B. Industry involvement in program design and partial delivery of any regular courses for students(05)

a. Industrial Visits:

Industrial visits for the engineering students are an essential activity as per their curriculum to get a proper insight into how the real working environment of a company and its functionality at different levels. To go beyond academics, these visits are arranged to develop the insights of the students – attaining practical knowledge and their theoretical applications thereof

Objectives of Industrial Visits:

1. An opportunity to get exposure to real workstations, machines, and systems.
2. Acquaint students with interesting facts and new technologies.
3. Expert briefing about the functioning of machines and systems.
4. Increase practical awareness of various industrial sectors.
5. Opportunity to have a face-to-face session with technical or administrative experts of the organization to ask questions and clarify doubts. Understand the end-to-end process at all levels.
6. Opportunity to understand policies and practices of Industry in terms of production, quality, and service management.
7. Keeping these objectives at hand, the department organizes industrial visits which are within the framework of the curriculum.

Table B. 2.2.4 a. Industrial Visit

S.No	Academic Year	Batch	Name of Company Visited	Date of Visit	No. of Students
1	2022-23	2020-21	HVDC Substaion,Padghe	25th Nov 2022	30
2	2022-23	2020-21	AG Electro Services, Karad.	13th Apr 2023	32
3	2021-22	2018-19	Urmodi Hydro Power plant, Parli Satara	22th Dec 2021	42
4	2021-22	2018-19	132/33KV Substation Ambheri & Morries Energy Ltd., Aundh	9th Dec 2021	42

After each industry visit, the department takes students' feedback. Feedback is considered to do further improvement for the same. The format of feedback is shown below in Figure B.2.2.4a

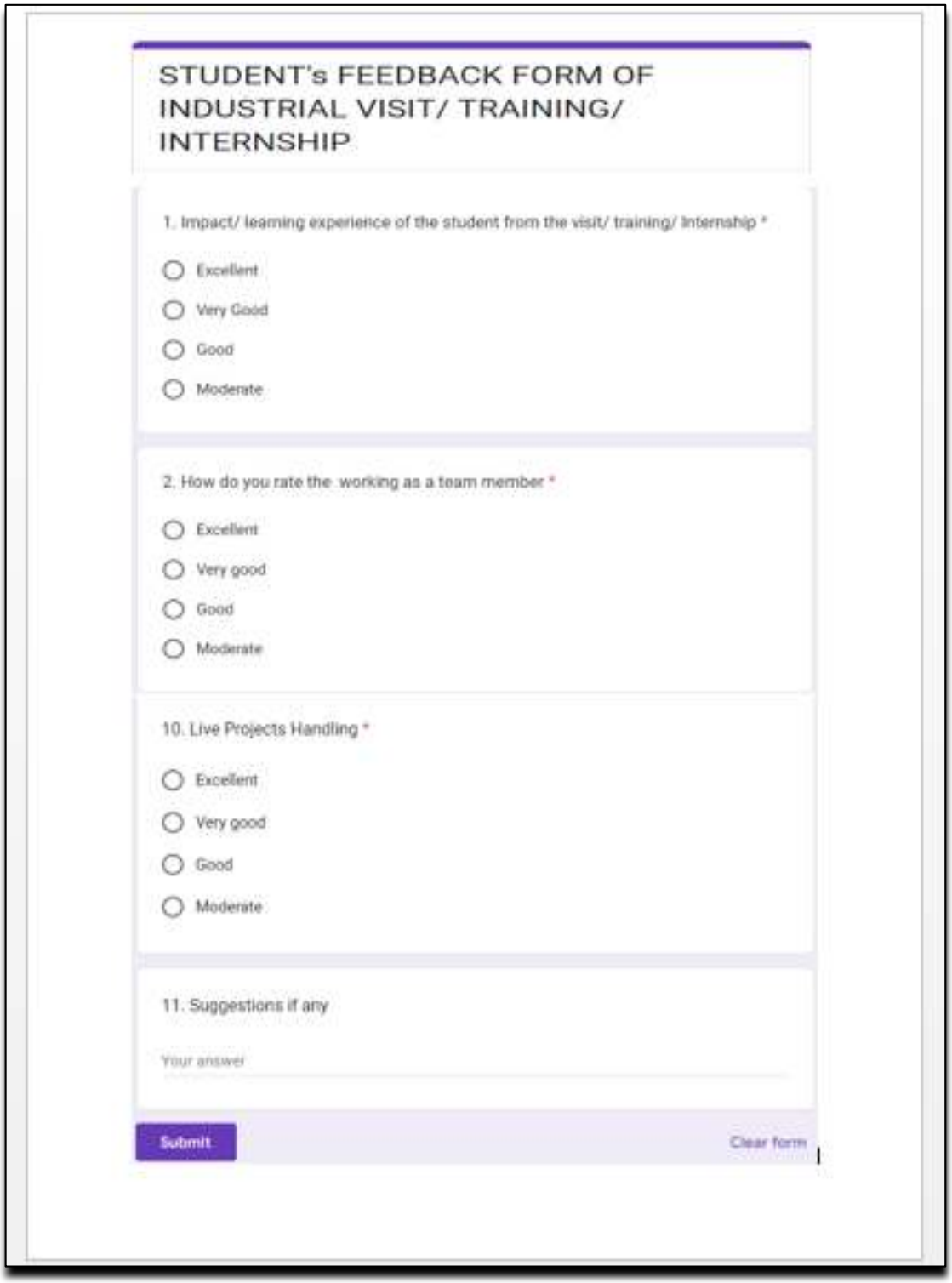


Figure 2.2.4 a: Format of student feedback on industrial visit

b. Invited Industrial Talks- Resource person from industries in the specific domain of Electrical Engineering.

Figure 2.2.4 b: Industrial Talk Session

c. **Student Development Programs**- in collaboration with the industry for skill/curriculum development.

Figure 2.2.4 c: Student Development Session

d. **Industry experts were invited as judges for the project Exhibition.**

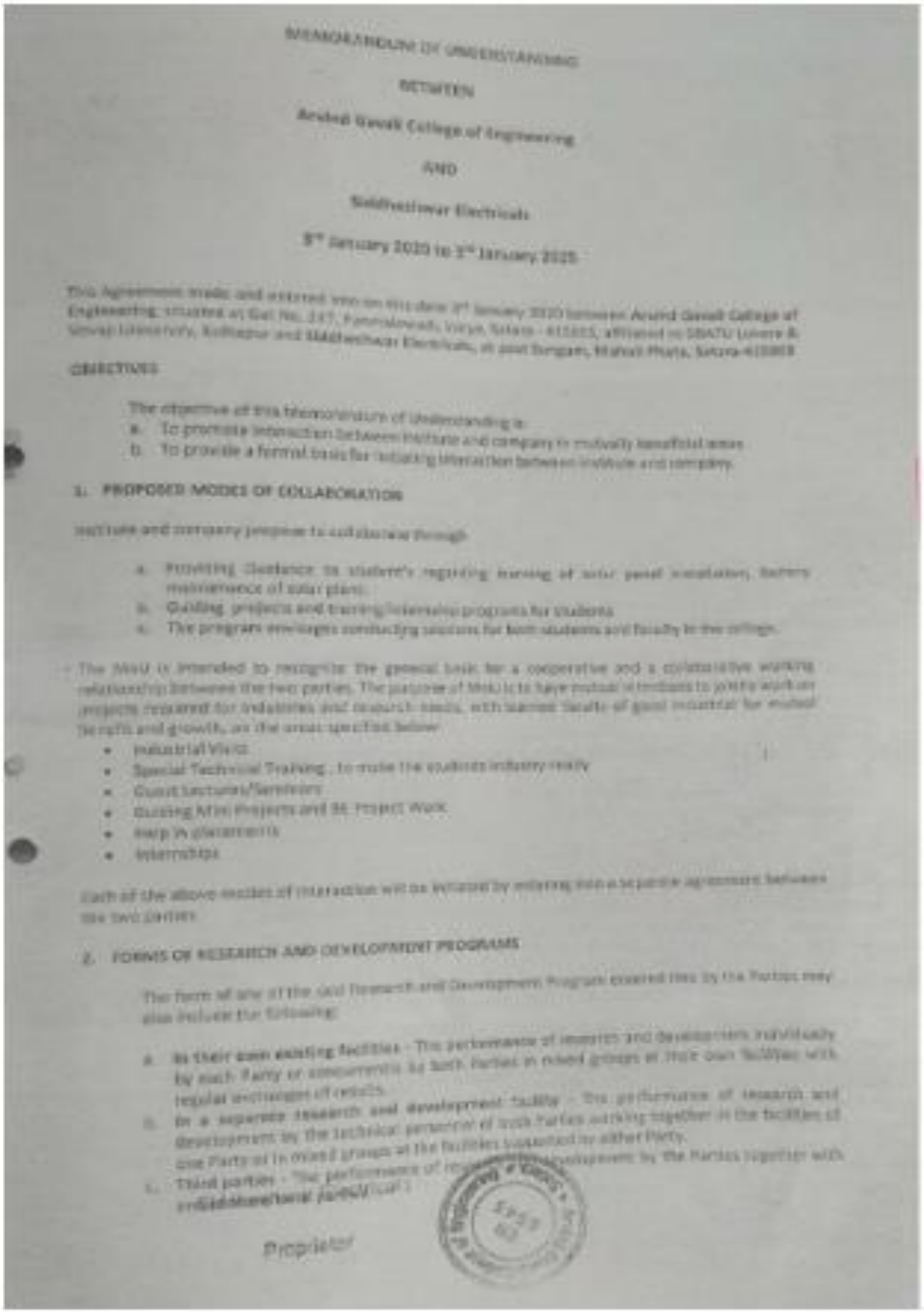
Figure 2.2.4 d: Industry Expert Visit for Project Exhibition

e. **MOUs with Industry**:

Following MOUs are signed with companies:

Table B. 2.2.4 b. Industry Institute MOUs

Sr. No.	Name of Company	Authorized Person	Duration
1	Skill and Career development Training program, Sangali	Mr. A. A. Shaikh	08th August 2018-08th August 2025
2	Ravi Electricals, Satara	Mr. Mohite Dhananjay M.	4th Feb 2020-4th Feb 2025
3	Siddheshwar Electricals	Mr. Karande Rupali Naresh	3rd Jan 2020- 3rd Jan 2025



MEMORANDUM OF UNDERSTANDING

BETWEEN

Arvind Gavali College of Engineering

AND

Siddheshwar Electricals

3rd January 2020 to 2nd January 2025

This Agreement made and entered into on this date 3rd January 2020 between Arvind Gavali College of Engineering, situated at Gat No. 247, Pannalawadi, Varye, Satara - 415015, affiliated to SRATU Latur & Shivaji University, Kolhapur and Siddheshwar Electricals, at post Sangam, Mahuli Phata, Satara-415003

OBJECTIVES

The objective of this Memorandum of Understanding is:

a. To promote interaction between institute and company in mutually beneficial areas
b. To provide a formal basis for initiating interaction between institute and company.

1. PROPOSED MODES OF COLLABORATION

Institute and company propose to collaborate through

a. Providing Guidance to student's regarding training of solar panel installation, battery maintenance of solar plant.
b. Guiding projects and training/internship programs for students
c. The program envisages conducting sessions for both students and faculty in the college.

The MoU is intended to recognize the general basis for a cooperative and a collaborative working relationship between the two parties. The purpose of MoU is to have mutual interests to jointly work on projects required for industries and research needs, with learned faculty of good industrial for mutual benefits and growth, on the areas specified below:

- Industrial Visits
- Special Technical Training , to make the students industry ready
- Guest Lectures/Seminars
- Guiding Mini Projects and M. Project Work
- Help in placements
- Internships

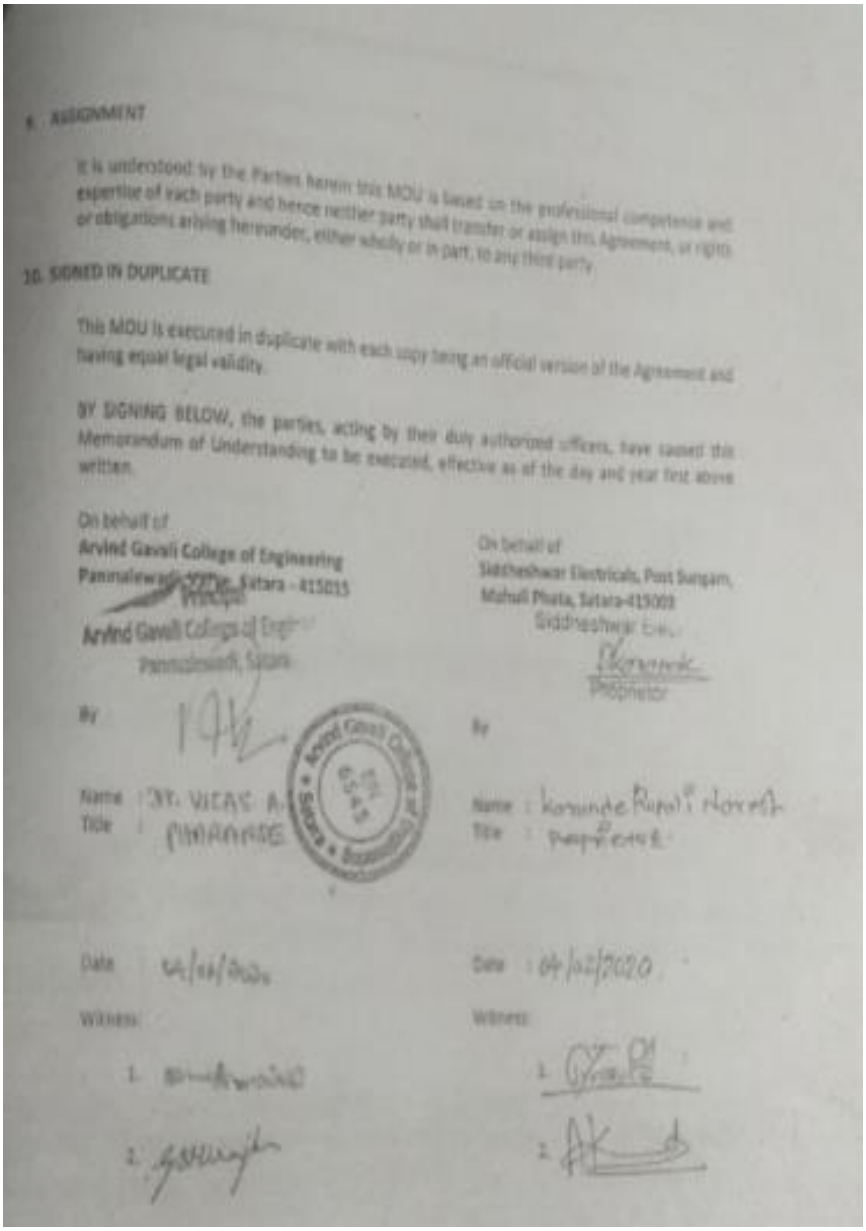
Each of the above modes of interaction will be initiated by entering into a separate agreement between the two parties.

2. FORMS OF RESEARCH AND DEVELOPMENT PROGRAMS

The form of any of the said Research and Development Program entered into by the Parties may also include the following:

a. **In their own existing facilities** - The performance of research and development individually by each Party or components by both Parties in mixed groups at their own facilities with regular exchanges of results.
b. **In a separate research and development facility** - The performance of research and development by the technical personnel of both Parties working together in the facilities of one Party or in mixed groups at the facilities supported by either Party.
c. **Third parties** - The performance of research and development by the Parties together with [illegible] personnel.

Proprietor



9. ASSIGNMENT

It is understood by the Parties herein this MOU is based on the professional competence and expertise of each party and hence neither party shall transfer or assign this Agreement, or rights or obligations arising hereunder, either wholly or in part, to any third party.

10. SIGNED IN DUPLICATE

This MOU is executed in duplicate with each copy being an official version of the Agreement and having equal legal validity.

BY SIGNING BELOW, the parties, acting by their duly authorized officers, have caused this Memorandum of Understanding to be executed, effective as of the day and year first above written.

On behalf of
Arvind Gavali College of Engineering
Panmalewadi, Satara - 415015

Principal
Arvind Gavali College of Engineering
Panmalewadi, Satara

By

Name : Dr. VIKAS A.
Title : PRINCIPAL

Date : 04/02/2020

Witness:
1.
2.

On behalf of
Siddheshwar Electricals, Post Sungam,
Mahuli Phata, Satara-415003

Siddheshwar Elec.
Proprietor

By

Name : Kamande Rupali Haresh
Title : Proprietor

Date : 04/02/2020

Witness:
1.
2.

Figure 2.2.4 e. MOU

f. Impact analysis of industry-institute interaction and actions are taken thereof(05)

Figure 2.2.4 f: Patent filed by Piyush Karande

Table B.2.2.4.c: Initiatives related to Industry Interaction

Sr. No	Industry Interaction Initiative	Industry Involved	Outcome	Impact Analysis
1	Invited Talks from Industry Experts	Conducted guest lecture on PLC key Products in Industrial Automation	Students understood the PLC architecture and ladder language programming	Enrichment of knowledge as per current industry needs
2	Invited Talks from Industry Experts	Conducted guest lecture on Career scope for Industrial Automation	Students got knowledge about the PLC, SCADA & VFD	Placement of a student in Industrial Automation industry

3	Invited Talks from Industry Experts	Conducted Online Webinar on Hybrid Electrical Vehicle Technology	Understanding about Hybrid vehicle technology	Students aware how to start career in HEV
4	Industrial Visits	Sunmitra Solar Pvt. Ltd. Satara	Study of Solar PV system.	Enhance Students knowledge about solar panel designing and application
5	Industrial Visit	132/33KV Substation Ambheri and 10MW Morries Energy Ltd. Aundh	Study of electrical energy generation and controlling by Renewable Sources	Enhance the practical knowledge and understanding of theoretical concepts
6	Industrial Visit	HVDC Substaion,Padghe.	Students are able to Design the Converter Layout	Enhanced the practical knowledge and Inline to this students developed the Inverter project.

Photographs of Industry Interactions

Figure 2.2.4 g: Industry Visit at Sunmitra Solar Pvt. Ltd. Satara

Figure 2.2.4 h: Industry Visit at AG Electro Services,Karad.

Fig 2.2.4 i: Industry expert talk

2.2.5 Initiatives related to internship / Summer Training

Industrial/Internship/Summer Training:

A. Industrial/Internship/Summer Training Course Objectives

1. To provide industry exposure to student
2. To make them the aware of working culture of the Industry
3. To provide knowledge of design, manufacturing, quality, and testing of products

B. Industrial/Internship/Summer Training Course Outcomes:

a) Understand industrial environment and practices.
b) Work on the specific project and complete it in the stipulated period.
c) Able to understand the importance of quality of product and human safety.
d) Apply theory and practical knowledge while dealing with industrial problems.

C. Implementation of Industrial Training:

1. The placement department approaches various companies every semester to provide internships to students. Some companies where students undergo are mentioned in Table B 2.2.4g.
2. Proper guidelines, suggestions, and scope of industry internship/summer training are provided to students.
3. Help students select the industry for summer training as per their domain of interest.
4. Based on the inputs by students, proper communication is carried out with the concerned industry.
5. Department provides the recommendation letter (Figure B.2.2.5b) and other necessary support to students for availing of industry internships.
6. All the students are required to submit their training reports along with a certificate from the concerned industry.

Table B 2.2.5 a: Industry Interaction Details

Sr. No	Company Name
1	400 KV Receiving Station, Karad
2	Maharashtra State Electricity Distribution Co. LTD
3	SP Electrical, Pune
4	Khare Elec-Transformer
5	Pawar Electrical & Electronics Works
6	M/s Shri Vishnudev Electricals
7	Precise Control
8	Chavan Electrical
9	Shree Dhananjay Electricals
10	MSEDCL Marali
11	Spectrum Software Satara
12	USAS Solution, Satara
13	Dr. Babasaheb Ambedkar Sahkari Sakhar Karkhana Ltd. Arvindnagar
14	KSB Limited, Kesurdi-Khandala
15	Green power sugar ltd.satara
16	Ajinkya Electro system,satara
17	Bhairavnath Electrical and Motor winding, Wai
18	Y.M.krishna S.S.K.Ltd Rethre
19	Girish Electrical and Services ,Satara
20	KSB.ltd Shirval

21	Jayprakash Engineers Kolhapur
22	Sagaon Energy Equipment pvt.ltd,Satara
23	Mahavitran, Gargoti
24	Sidheswar Electricals,Satara
25	Mahavitran, Kavate-Mahakal
26	Brisk Facilitirs pvt.ltd,Kolhapur
27	Dalmia Bharat Sugar ,Kolhapur
28	A.G.E. Motor ,Karad
29	Shivprasad Industries, Karad
30	Ashtvinayak Electricals and Rewinding ,Kavate-Mahakal
31	Mahavitran ,Patan
32	Tejas Electrical, Pune
33	Mahavitran ,Patan
34	YMKSSK, Retati
35	Yashita Automative Engineering, Wai
36	Rajaram Bapu Sahakari Sugar Factory,Sangali
37	Kumar Electrical ,Bhunj
38	Tarlekar Electric Works,Sangali
39	Indrajeet Power lines,Baramati
40	Chandrasen Electricals & Company Satara
41	Sai Service Electrical pvt ltd ,Shiroli
42	Pawar Electrical and Motar Winding, Wathar Station

43	Becon Gear transmission Satara
44	Generl Electric India Industrial pvt
45	inYantra Technology pvt.ltd
46	New Pawar Electronics
47	Lucas TVS Chakan
48	dana Anada India PVT.LTD
50	Centurion university Of management
51	Pragati Electrical Pvt.lmt
52	Shri Sai Vidut udyog
53	Samadhan Electricals Malashiras
54	Spark automesion Karad
55	IBM Electrical And Engi Solapur
56	Smart Pro System
57	TE Connectivity Shirval
58	Electra Solar System, Satara
59	Accurate Lesser Work & Engg Pvt Ltd, Pune
60	Prompt Industrial Services Pvt ltd, Pune
61	Sulzer India Pvt Ltd, Pune

Industry Internship Details (2022-23):

Sr.No	Name of the Candidate (2022-23)	Name of the Company
1	LOKARE SAUJANYA SURESH	PV Clean Mobility
2	GHATE HARSHALI VIJAY	ATB corporation
3	NIKITA SURESH KENJALE	Innovation Electrosoft (I) PVT Ltd
4	KATKAR PRATIK BABURAO	Shreeram Electromech
5	MOHITE SALONI DATTATRAY	pv clean mobility
6	JADHAV AKANKSHA SHASHIKANT	Innovation Electrosoft (I) PVT Ltd
7	YADAV SANJAY GANESH	Kinetic communication pvt Ltd
8	MOHITE MANASI SHARAD	Innovation Electrosoft (I) PVT Ltd
9	JADHAV AKANKSHA PRADIP	PV Clean Mobility
10	GALAVE GORAKSH SHIVAJI	PV Clean Mobility
11	JADHAV POOJA JAYSING	Rieder India Pvt Ltd , Shirval
12	SABLE SHUBHAM RAVINDRA	PV clean Mobility
13	JADHAV PRATIKSHA SHASHIKANT	PV clean Mobility
14	ASMITA SUNIL KAMBLE	General Industrial Controls Pvt Ltd
15	SHELAR SHAILESH DATTATRAY	Suvarna Electricals Pvt Ltd.
16	TIRMARE PRASAD RAJESH	Ajinkya Electronics Pvt Ltd.
17	MEMANE TUSHAR DATTATRAY	Raj Comp Tel LLP.
18	INDULKAR KAILAS VIJAY	IDEMI Mumbai (MSME)
19	MAHADIK VAISHANVI RAJENDRA	sanspots Pvt ltd
20	SONAWANE RAJESHWARI RAJAN	Harman international pvt.ltd
21	SURAVASHI PRAVIN RAMACHANDRA	M/S. Abhijeet Electricals Kolhapur
22	SHINDE ABHIJIT BHARAT	suzlon Global limited service
23	ANKITA SANJAY JADHAV	Indotech precision engg works pvt ltd
24	JADHAV OMKAR RAVINDRA	Bajaj auto pvt ltd
25	TARADE SHWETA TUKARAM	Yashita Automotive Pvt Ltd.
26	KADAM RAJESH DILIP	Telstra pvt ltd pune
27	Gore Sonali Kundalik	Cummins India Pvt Ltd, Phaltan
28	KAWAR PRASHANT SAKHARAM	Adani Electricity Mumbai Limited
29	PATIL HARSHAL PRASHANT	Yashita Automotive Pvt Ltd.
30	HERKAL ADITYA RAJENDRA	Yashita Automotive Pvt Ltd.

Industry Internship Details (2021-22):

Sr.No	Name of the Candidate (2021-22)	Name of the Company
1	Rohitkumar Prabhakar Shinde	Test YANTRA Software Solutions, Pune
2	Raut Amruta Dadaso	TVS LUCCAS PVT LTD, Pune
3	Pooja Namdev Patil	Tata Motors Ltd Pune
4	Komal Rangrao Patil	Tata Motors Ltd Pune
5	Mohite Raviraj Dhananjay	Ravi Electricals Pvt Ltd, Satara
6	Prajakta Kalyan Mahamulkar	Test YANTRA Software Solutions
7	Yadav Snehal Ashok	RAVI ELECTRICALS Satara
8	Pranita Hanmant Chavan	RAVI ELECTRICALS Satara
9	Chavan Utkarsha Ramchandra	RAVI ELECTRICALS Satara
10	Shubham Nandkumar Kenjale	Rajas Technical Solutions PVT LTD
11	Shriram Bhanudas Jadhav	Rubicon Research Pvt Ltd
12	Chalke Saurabh Ravindra	SpaceEx Elevator
13	Shubham Dhananjay Sonavane	Pravin Electricals
14	Sagar Kamble	Accurate Industrial Controls Pvt Ltd
15	Shedge Shubham Sanjay	RAVI ELECTRICALS
16	Saurabh Pawar	Technoartz Pvt Ltd
17	Asavari Vijay Jadhav	Mutha Engineering Pvt Ltd
18	Mayuri Mahcchindra Pawar	Mutha Engineering Pvt Ltd
19	Shital Shingate	Tata Motors Ltd Pune
20	Komal B Devkar	TVS LUCCAS PVT LTD
21	Poonam Abaso Kalange	Tata Motors Ltd Pune
22	Bhoite Nilam Prakash	Mutha Engineering Pvt Ltd
23	Archana Ravikumar Rao	Siddheshwar Electricals, Satara
24	Saloni Santosh Shivamkar	Galactic Electrical Pvt Ltd
25	Pooja Vaikrant Gaikwad	Galactic Electrical Pvt Ltd
26	Kshirsagar Ravikiran Shashikant	RV Lashkar Electrical & Consultant
27	Sujata Bhausaheb Ingle	Giant Engineering Solutions
28	Thorat Aba Balu	Minda Corporation Pune
29	Mr.Prashant Cahndrakant Mane	Khodashi Power Private Ltd
30	Nikhil S shinde	Finolex J-Power Systems pvt.Ltd
31	Pratik S Patil	Khodashi Power Private Ltd
32	Ghadge Mayuresh Pandurang	Ajinkya Electro System
33	Jamdade Shubham Rajendra	AG Electro Services
34	Shubham Patil	Ajinkya Electro System
35	Nishant Kiran Tawate	Chaitanya Electric & Electronic
36	Ruturaj Ananda Patane	DEEPTI ELECTRICAL ENGINEERING WORKS
37	Rohit K Shinde	Cummins India Pvt LTD.
38	Jamdade Shubham Rajendra	Shambhuraj Electrical Pvt Ltd
39	Shahaji Dinkar Patil	DEEPTI ELECTRICAL ENGINEERING WORKS

40	Kumbhar Kiran Sanjay	Shambhuraj Electrical Pvt Ltd
41	Anup Sanjay Kadam	SpaceEx Elevator
42	Aditya Suresh Shelar	SpaceEx Elevator
43	Jedhe Piyush Dushant	Indrajeet Power Lines
44	Amar Anil Chavan	SpaceEx Elevator
45	Godse Ganesh Ankush	Test YANTRA Software Solutions
46	Nikam Pratik Prabhakar	Parijaat Electricals
47	Deshmane Divya Somnath	Prarthana Services
48	Avishkar Balkrishna Khatte	Wipro Pari
49	Akansha Jaywant Chavan	Test YANTRA Software Solutions
50	Nikam Prajakta Mansing	Prarthana Services
51	Divya Vinodkumar Kadam	Shreyas Transport
52	Someshwar Ankush Pigale	Mahindra Buisness Solutions
53	Rutuja Rajendra Nalawade	Tata Motors Ltd Pune
54	Agawane Aparna Shrikant	Tata cummins Pvt Ltd
55	Kajal Satish Jadhav	Tata Motors Ltd Pune
56	Kale Shital Chandev	Siddheshwar Electricals
57	Dhaigude Sanee Gulab	Paresh Plast India
58	Gosawi Anita Eknath	M/s Harshwardhan Electricals
59	Shraddha Vijaysingh Thorat	Cheddha Electricals And Electronics Pvt Ltd, Shirval
60	Komal Rajaram Monde	Cheddha Electricals And Electronics Pvt Ltd, Shirval

Industry Internship Details (2020-21):

Sr. No.	Name of the Candidate (2020-21)	Name of the Company
1	Kadam Tejashri Sanjay	Chandrasen Electricals & Company Satara
2	Pol Snehal kailas	Chandrasen Electricals & Company Satara
3	Pawar Shivraj Sarjerao	Sai Service Electrical pvt ltd ,Shiroli
4	Jadhav Mahesh Ananda	Sai Service Electrical pvt ltd ,Shiroli
5	Pawar Sushant vinayak	Pawar Electrical and Motar Winding, Wathar Station
6	Ghadge vijay Sanjay	Becon Gear transmission Satara
7	Babar Nagraj Vivekanand	Becon Gear transmission Satara
8	Pise Madhuri Madhukar	Generl Electric India Industrial pvt
9	kulkarni Omakar Rajendra	Generl Electric India Industrial pvt
10	Rohini Hanamant Shinde	inYantra Technology pvt.ltd
11	Borate Aniket Sanjay	New Pawar Electronics
12	Sasane Rushikesh Ashok	Lucas TVS Chakan
13	Jangam Prirti Sanjay	dana Anada India PVT.LTD
14	Bagal Poonam	Centurion university Of management
15	Lawand Amruta S	Centurion university Of management
16	Pawar sanchita Nanaso	Centurion university Of management
17	Kumbhar Megha Sunil	inYantra Technology pvt.ltd
18	Solaskar Shital Prakash	Pragati Electrical Pvt.lmt
19	Thigale Chitanya Sunil	Shri Sai Vidut udyog
20	Phadatare Vikas Balaso	Samadhan Electricals Malashiras
21	Dhotare Dilip Dyanadev	Samadhan Electricals Malashiras

22	Patil Pranjali Satish	Spark automesion Karad
23	Kshirsagar Swati shashikanat	IBM Electrical And Engi Solapur
24	Bhahulekar Pallavi Balkrushan	Smart ProSystem
25	Salunkhe Aishwarya Sanjay	inYantra Technology pvt.ltd
26	Chavan Pooja Sanjay	Tulja Enterprizes Waluj Aurangabad
27	Pawar Soundarya Vijaykumar	inYantra Technology pvt.ltd
28	Pimpalkar Nikita madhav	inYantra Technology pvt.ltd
29	Bhosale Rahul Amit	TE Connectivity Shirval
30	Mane Dipali Ramesh	Electra Solar System,Satara
31	Barge Priti Sunil	Electra Solar System,Satara
32	Sutar Komal Ramchandra	Accurate Lesser Work & Engg Pvt Ltd, Pune
33	Jadhav Ashwini Satappa	Prompt Industrial Services Pvt ltd, Pune
34	Chavan Gauri Ashok	Sulzer India Pvt Ltd, Pune
35	Wandare Laxmi Baban	Sulzer India Pvt Ltd, Pune
36	Patil Swaranjali Vitthalrao	Sulzer India Pvt Ltd, Pune
37	Mali Rutuja Shankar	Sulzer India Pvt Ltd, Pune
38	Karande Piyush Naresh	Siddheshwar Electricals Satara
39	Jagtap Akash Ramesh	Siddheshwar Electricals Satara
40	Jambhale Akhilesh Subhash	Siddheshwar Electricals Satara
41	Kadale Yuvraj Vijay	Siddheshwar Electricals Satara
42	Gujar Tejas Sharad	Ajinkya Electro Systems Satara

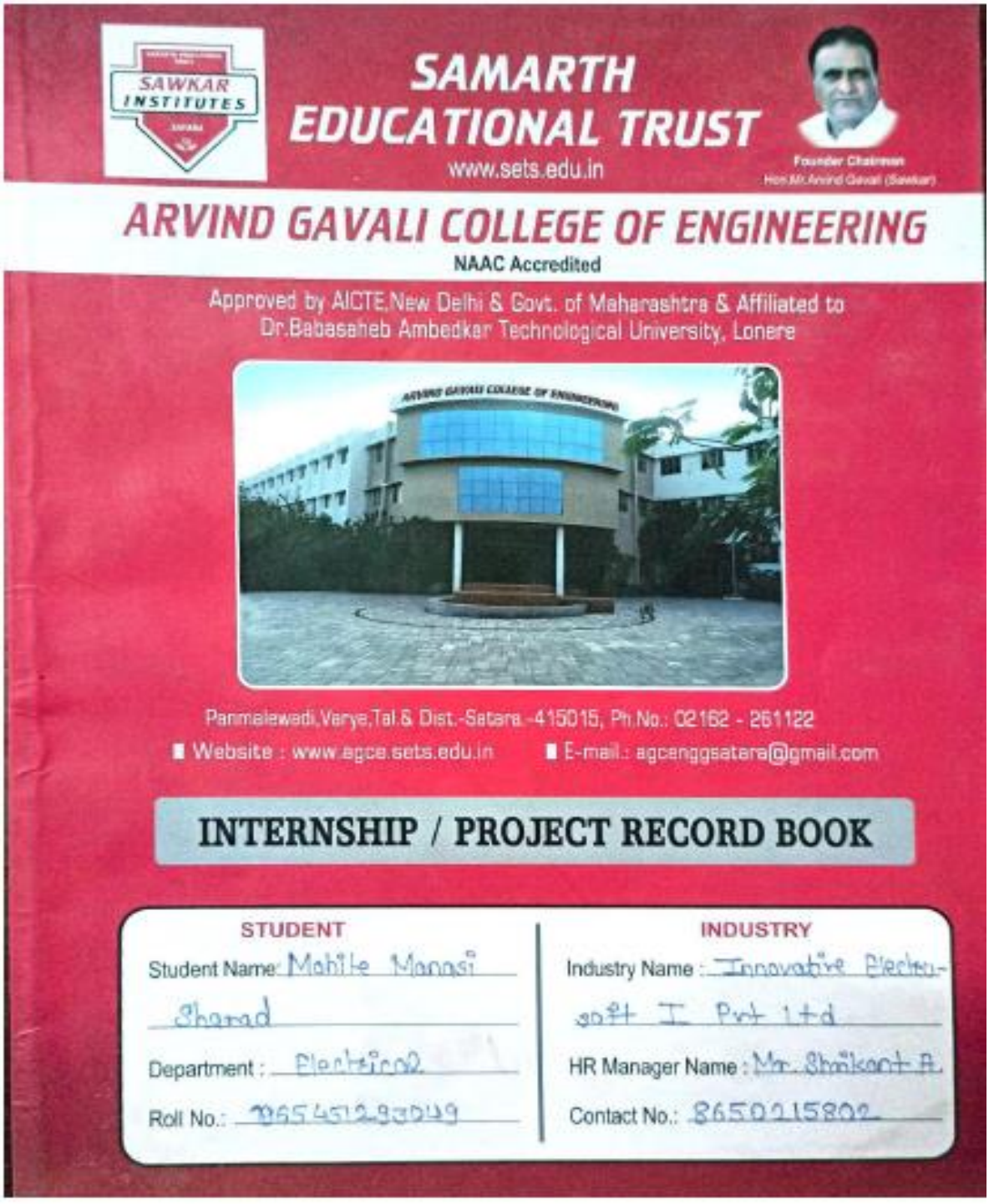
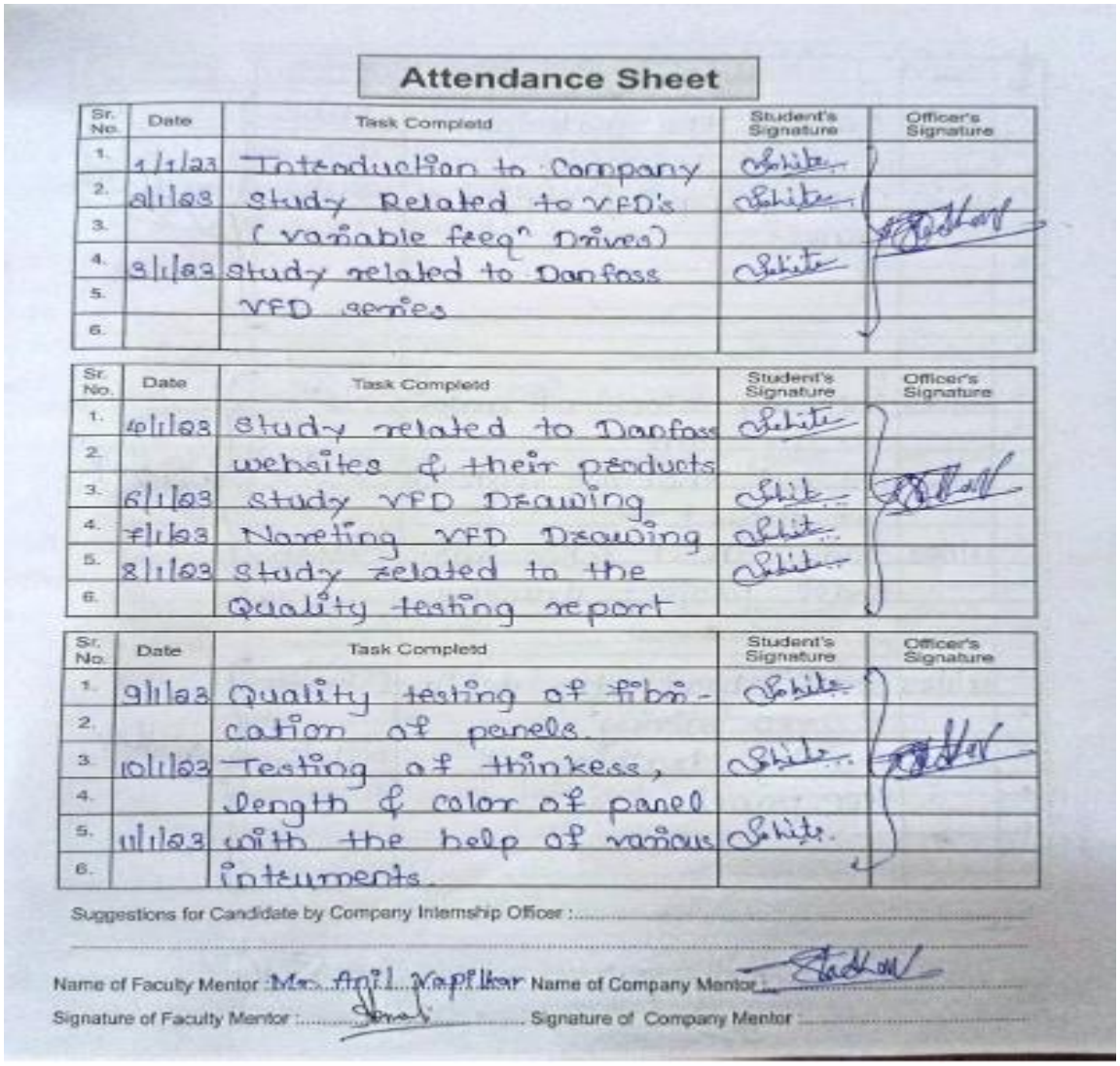


Figure B.2.2.5a: Industrial/Internship/Summer Training Record Book



Attendance Sheet

Sr. No.	Date	Task Completd	Student's Signature	Officer's Signature
1.	1/1/23	Introduction to Company	Sahite	
2.	2/1/23	Study Related to VFD's	Sahite	
3.		(variable freq^ Drives)		
4.	3/1/23	Study related to Danfoss	Sahite	
5.		VFD series		
6.				

Sr. No.	Date	Task Completd	Student's Signature	Officer's Signature
1.	4/1/23	Study related to Danfoss	Sahite	
2.		websites & their products		
3.	6/1/23	Study VFD Drawing	Sahite	
4.	7/1/23	Naming VFD Drawing	Sahite	
5.	8/1/23	Study related to the	Sahite	
6.		Quality testing report		

Sr. No.	Date	Task Completd	Student's Signature	Officer's Signature
1.	9/1/23	Quality testing of fibri-	Sahite	
2.		cation of panels.		
3.	10/1/23	Testing of thinkess,	Sahite	
4.		length & color of panel		
5.	11/1/23	with the help of various	Sahite	
6.		interuments.		

Suggestions for Candidate by Company Internship Officer :.....

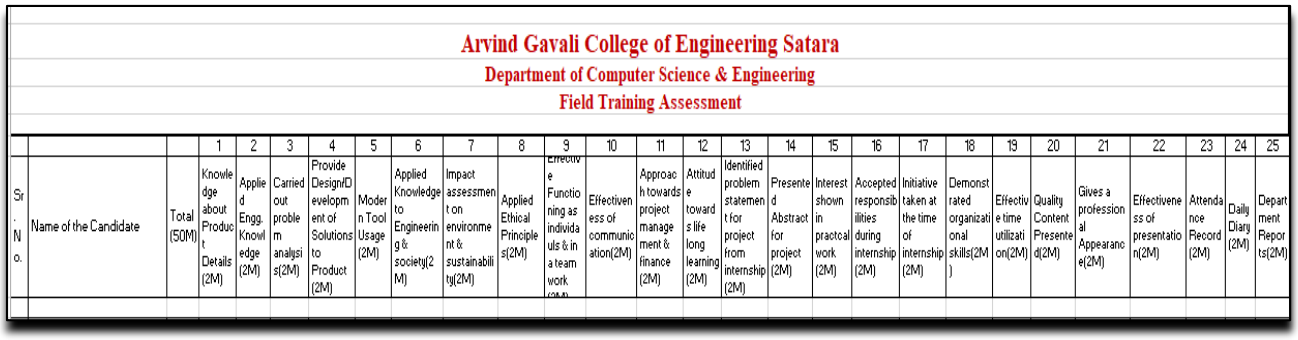
Name of Faculty Mentor : Mr. Anil Vaidkar Name of Company Mentor :.....

Signature of Faculty Mentor :..... Signature of Company Mentor .....

Figure B.2.2.5 b Industrial/Internship/Summer training attendance Sheet

Post Training Assessment:

Internal Assessment:



Arvind Gavali College of Engineering Satara

Department of Computer Science & Engineering

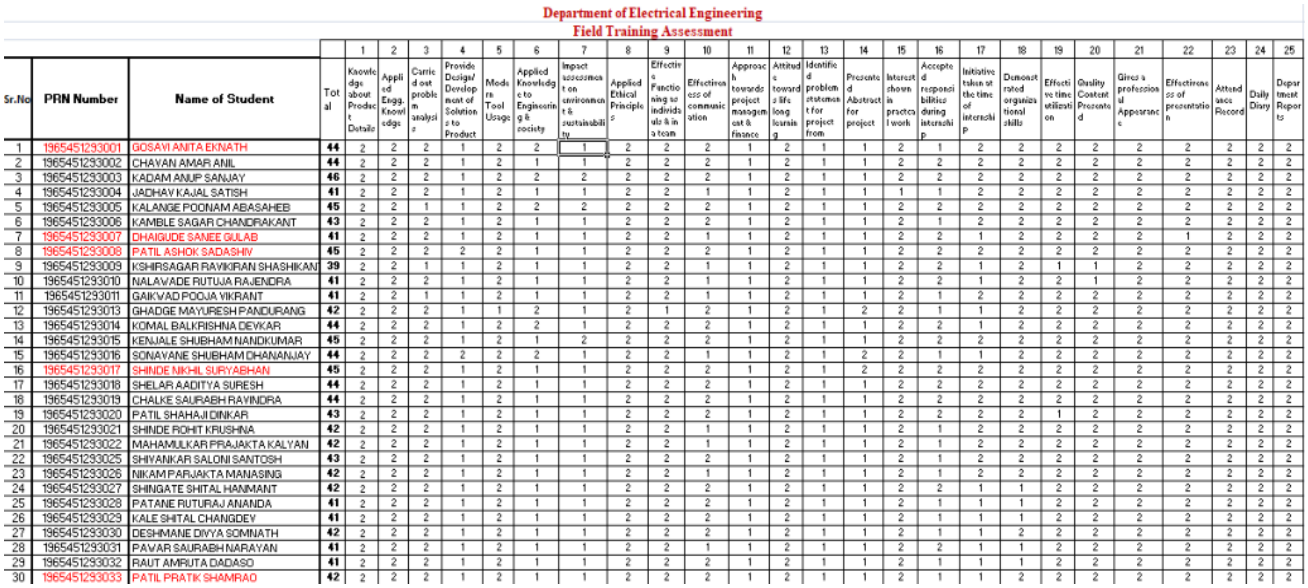
Field Training Assessment

Sr. No.	Name of the Candidate	Total (50M)	1 Knowledge about Product Details (2M)	2 Applied Engg. Knowledge (2M)	3 Carried out problem analysis(2M)	4 Provide Design/Development of Solutions to Product (2M)	5 Modern Tool Usage (2M)	6 Applied Knowledge to Engineering & society(2M)	7 Impact assessment on environment & sustainability(2M)	8 Applied Ethical Principle s(2M)	9 Effective Functioning as individuals & in a team work	10 Effectiveness of communication(2M)	11 Approach towards project management & finance (2M)	12 Attitude towards life long learning (2M)	13 Identified problem statement for project from internship (2M)	14 Presented Abstract for project (2M)	15 Interest shown in practcal work (2M)	16 Accepted responsibilities during internship (2M)	17 Initiative taken at the time of internship (2M)	18 Demonstrated organizational skills(2M)	19 Effective time utilization(2M)	20 Quality Content Presented(2M)	21 Gives a professional Appearance(2M)	22 Effectiveness of presentation(2M)	23 Attendance Record (2M)	24 Daily Diary (2M)	25 Department Reports(2M)

Figure B.2.2.5 c: Internship post-training assessment performance indicator

The following image shows the internship post-training assessment record as per the rubrics mentioned above

Industry Assessment:

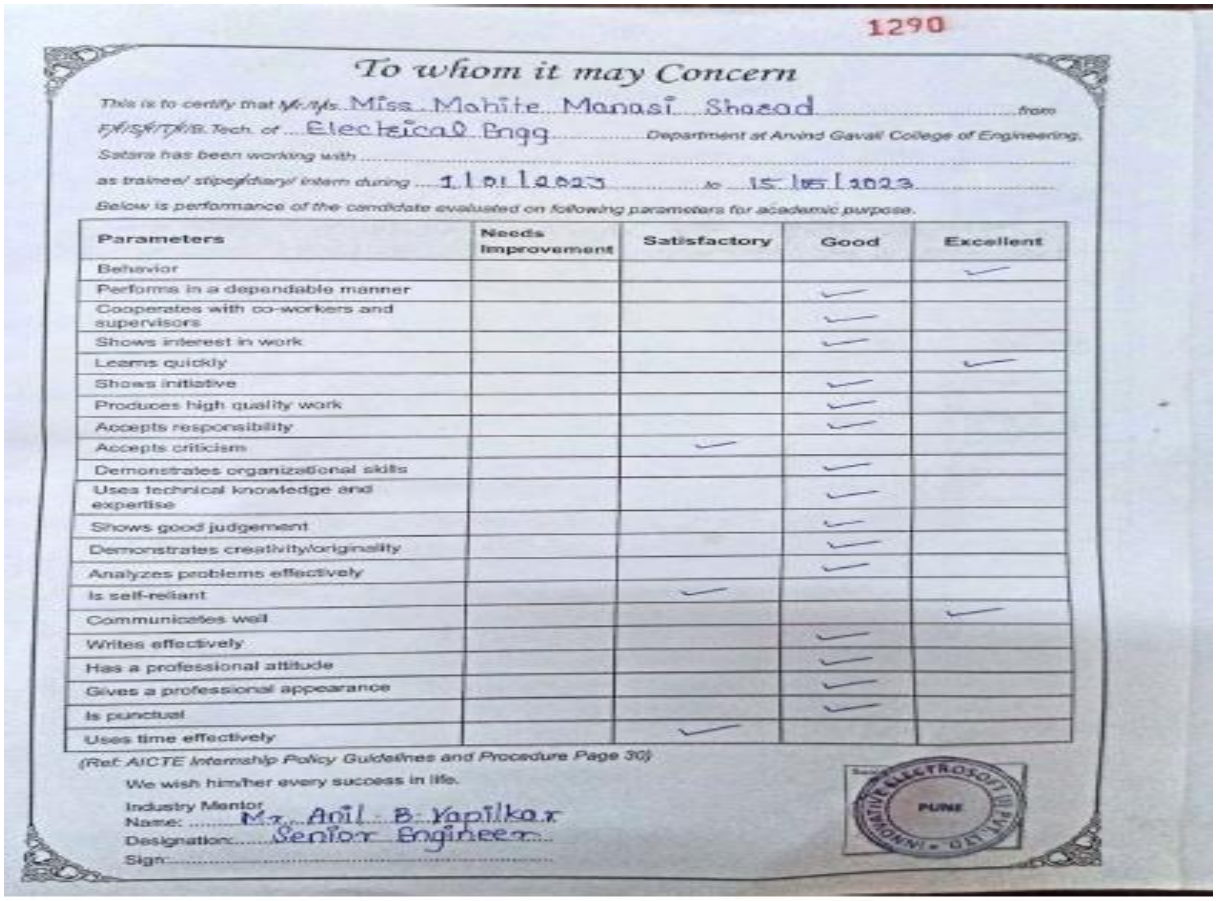


Department of Electrical Engineering

Field Training Assessment

Sr.No	PRN Number	Name of Student	Total	1 Knowledge about Product Details	2 Applied Engg. Knowledge	3 Carried out problem analysis	4 Provide Design/Development of Solution s to Product	5 Modern Tool Usage	6 Applied Knowledge to Engineering & society	7 Impact assessment on environment & sustainability	8 Applied Ethical Principles	9 Effective Functioning as individuals & in a team	10 Effectiveness of communication	11 Approach towards project managem ent & finance	12 Attitude towards life long learning	13 Identified problem statemen t for project from	14 Presented Abstract for project	15 Interest shown in practcal work	16 Accepted responsibilities during internship	17 Initiative taken at the time of internship	18 Demonstrated organizational skills	19 Effective time utilization	20 Quality Content Presented	21 Gives a professional Appearance	22 Effectiveness of presentation	23 Attendance Record	24 Daily Diary	25 Department Reports
1	1965451293001	GOSAVI ANITA EKNATH	44	2	2	2	1	2	2	1	2	2	2	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
2	1965451293002	CHAVAN AMAR ANIL	44	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
3	1965451293003	KADAM ANUP SANJAY	46	2	2	2	1	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
4	1965451293004	JADHAV KAJAL SATISH	41	2	2	2	1	2	1	1	2	2	1	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2
5	1965451293005	KALANGE POONAM ABASAHEB	45	2	2	1	1	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
6	1965451293006	KAMBLE SAGAR CHANDRAKANT	43	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
7	1965451293007	DHAIGUDE SAMEE GULAB	41	2	2	2	1	2	1	1	2	2	1	1	2	1	1	2	2	1	2	2	2	2	1	2	2	2
8	1965451293008	PATIL ASHOK SADASHIV	45	2	2	2	2	2	1	1	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
9	1965451293009	KSHIRSAGAR RAVIKIRAN SHASHIKAN	39	2	2	1	1	2	1	1	2	2	1	1	2	1	1	2	2	1	2	1	1	2	2	2	2	2
10	1965451293010	NALAVADE RUTUJA RAJENDRA	41	2	2	2	1	2	1	1	2	2	1	1	2	1	1	2	2	1	2	2	1	2	2	2	2	2
11	1965451293011	GAIKVAD POOJA VIKRANT	41	2	2	1	1	2	1	1	2	2	1	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
12	1965451293013	GHADGE MAYURESH PANDURANG	42	2	2	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	2	2	2	2	2	2	2	2
13	1965451293014	KOMAL BALKRISHNA DEVKAR	44	2	2	2	1	2	2	1	2	2	2	1	2	1	1	2	2	1	2	2	2	2	2	2	2	2
14	1965451293015	KENJALE SHUBHAM NANDKUMAR	45	2	2	2	1	2	1	2	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
15	1965451293016	SONAVANE SHUBHAM DHANANJAY	44	2	2	2	2	2	2	1	2	2	1	1	2	1	2	2	1	1	2	2	2	2	2	2	2	2
16	1965451293017	SHINDE NIKHIL SURYABHAN	45	2	2	2	1	2	1	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2
17	1965451293018	SHELAR AADITYA SURESH	44	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
18	1965451293019	CHALKE SAURABH RAVINDRA	44	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2
19	1965451293020	PATIL SHAHAJI DINKAR	43	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	2	2	2	1	2	2	2	2	2	2
20	1965451293021	SHINDE ROHIT KRUSHNA	42	2	2	2	1	2	1	1	2	2	1	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
21	1965451293022	MAHAMULKAR PRAJAKTA KALYAN	42	2	2	2	1	2	1	1	2	2	1	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
22	1965451293025	SHIVANKAR SALONI SANTOSH	43	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
23	1965451293026	NIKAM PARJAKTA MANASING	42	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2
24	1965451293027	SHINGATE SHITAL HANMANT	42	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	2	1	1	2	2	2	2	2	2	2
25	1965451293028	PATANE RUTURAJ ANANDA	41	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	1	1	2	2	2	2	2	2	2
26	1965451293029	KALE SHITAL CHANGDEV	41	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	1	1	2	2	2	2	2	2	2
27	1965451293030	DESHMANE DIVYA SOMNATH	42	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	1	2	2	2	2	2	2	2	2
28	1965451293031	PAWAR SAURABH NARAYAN	41	2	2	2	1	2	1	1	2	2	1	1	2	1	1	2	2	1	1	2	2	2	2	2	2	2
29	1965451293032	RAUT AMRUTA DADASO	41	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	1	1	2	2	2	2	2	2	2
30	1965451293033	PATIL PRATIK SHAMRAO	42	2	2	2	1	2	1	1	2	2	2	1	2	1	1	2	1	1	2	2	2	2	2	2	2	2

Figure B.2.2.5 d: Internship post-training assessment record



1290

To whom it may Concern

This is to certify that Mr./Ms. Miss. Mahite Manasi Shasad from
F.Y./S.Y./T.Y./B. Tech. of Electrical Engg Department at Arvind Gavali College of Engineering,
Satara has been working with
as trainee/ stipendiary/ intern during 1/01/2023 to 15/05/2023
Below is performance of the candidate evaluated on following parameters for academic purpose.

Parameters	Needs Improvement	Satisfactory	Good	Excellent
Behavior				✓
Performs in a dependable manner			✓	
Cooperates with co-workers and supervisors			✓	
Shows interest in work			✓	
Learns quickly				✓
Shows initiative			✓	
Produces high quality work			✓	
Accepts responsibility			✓	
Accepts criticism		✓		
Demonstrates organizational skills			✓	
Uses technical knowledge and expertise			✓	
Shows good judgement			✓	
Demonstrates creativity/originality			✓	
Analyzes problems effectively			✓	
Is self-reliant		✓		
Communicates well				✓
Writes effectively			✓	
Has a professional attitude			✓	
Gives a professional appearance			✓	
Is punctual			✓	
Uses time effectively		✓		

(Ref: AICTE Internship Policy Guidelines and Procedure Page 30)

We wish him/her every success in life.

Industry Mentor
Name: Mr. Anil B. Yapilkar
Designation: Senior Engineer
Sign:

INNOVATIVE ELECTROSOFT PUNE

Figure B.2.2.5 e: Industrial/Internship/summer training Assessment Sheet

INNOVATIVE ELECTROSOFT

INNOVATIV EELECTROSOFT(I)PVT.LTD.

Factory :Gate No 67912/2,At Alandi ,Road. Kuruli, Chakan, Tal Khed, Pune -410 501/INDIA)
Unit-II : Factory :Gate No 2131, Mohitewadi,Shalpimpalgaon, Taluka-Khed ,Dist-Pune 410501.

Revaluvation through smart solution

Date : 20/05/2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Miss. Manasi Sharad Mohite has successfully completed 5 months of an Internship program from 01/01/2023 to 15/05/2023 in the Engineering department of our organization. She was highly motivated and hardworking. She worked sincerely at her tasks and did a very good job.

We wish her great success in her future endeavors.

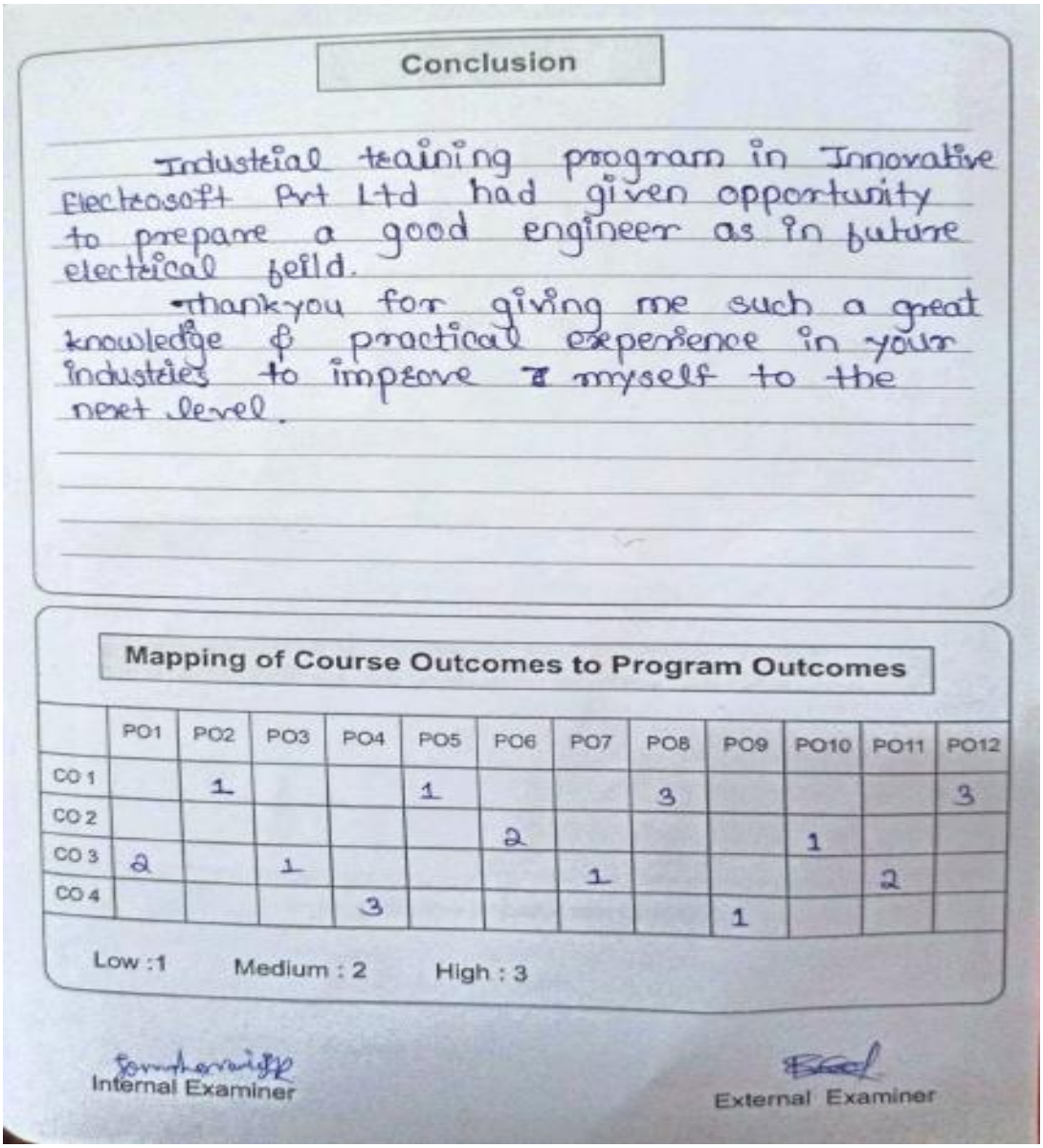
Sincerely,

Shrikant Athawale

Technical Director

Innovative Electrosoft (I) Pvt. Ltd.

Figure B.2.2.5 f: Industrial/Internship/Summer training completion certificate



Conclusion

Industrial training program in Innovative Electeosoft Pvt Ltd had given opportunity to prepare a good engineer as in future electeical feild.

•thankyou for giving me such a great knowledge & practical experience in your industries to impeove myself to the next level.

Mapping of Course Outcomes to Program Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1		1			1			3				3
CO 2						2				1		
CO 3	2		1				1				2	
CO 4				3					1			

Low :1 Medium : 2 High : 3

Internal Examiner

External Examiner

Figure B.2.2.5 g: Industrial/Internship/Summer training outcome mapping to program outcome.

Figure B.2.2.5 h: Training & Placement Officer Visit to Internship Company

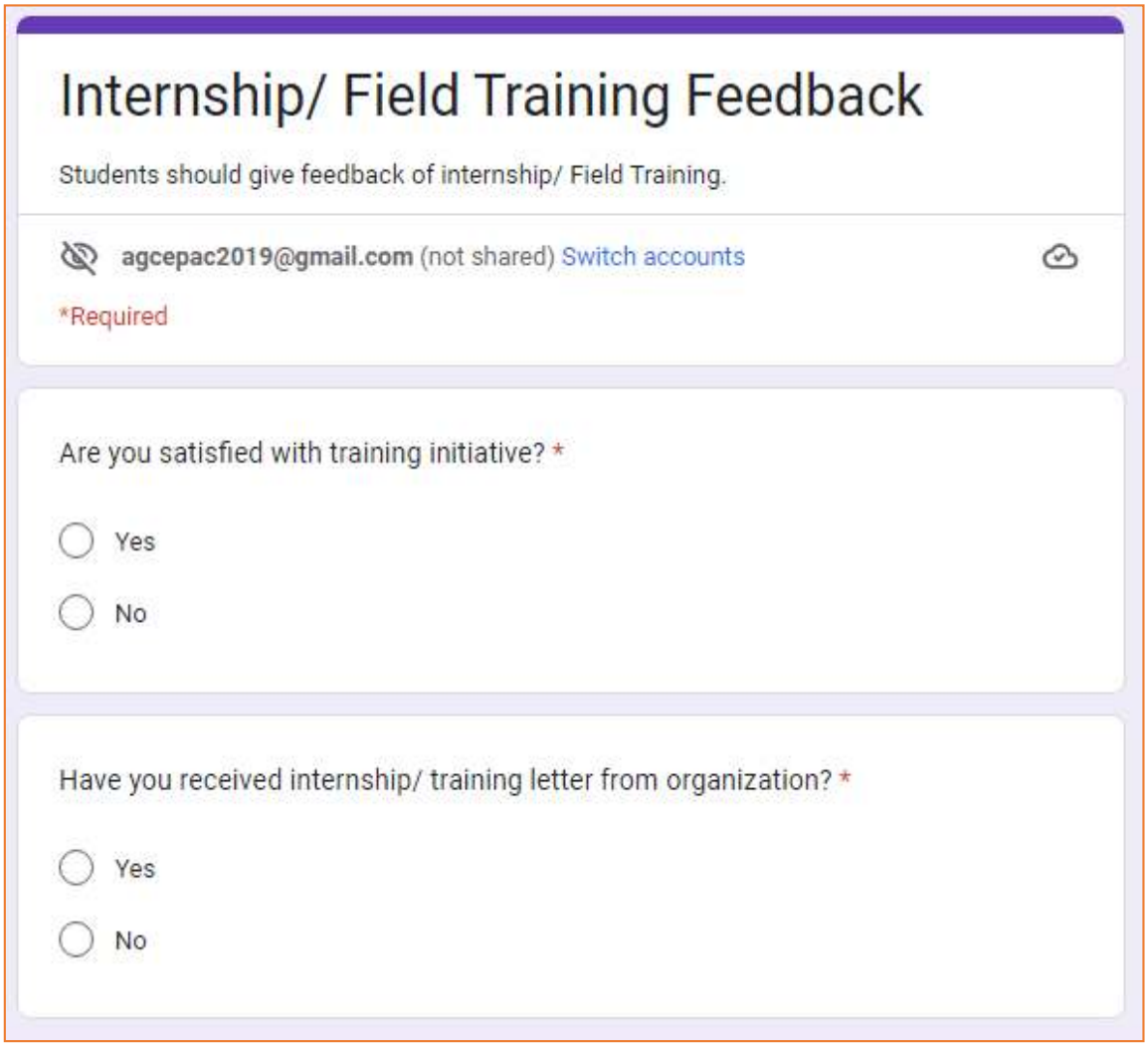
C. Impact Analysis:

- These training programs have helped students in the development of good projects in their final year.
- Students learn the industry standards and workplace culture.
- Students gain the basic needed skills for the development of real-world projects.
- Gain valuable work experience.
- Students gain confidence.
- The communication skills of the students improved.
- To expand teamwork and leadership skills**.**
- The internship program helps students get placed in the same domain or same company as that internship.

Student Feedback on Initiative

- The feedback on the initiative taken by the program is collected from the students when he joins back the institute after the completion of the internship in the industry.
- The feedback is conducted to understand the satisfaction of the students with the initiative and the scope for improvement in the initiative for future students.

- It is observed that the initiative is helpful for the students from the perspective of career advancement and life-long learning.
- The feedback of the students is also taken while submitting the report. The sample feedback form is as below.



Internship/ Field Training Feedback

Students should give feedback of internship/ Field Training.

agcepac2019@gmail.com (not shared) Switch accounts

*Required

Are you satisfied with training initiative? *

Yes

No

Have you received internship/ training letter from organization? *

Yes

No

Have you got guidance from supervisor/ senier members? *

- Yes
- No

Have you observed safety measures/precautions taken while working? *

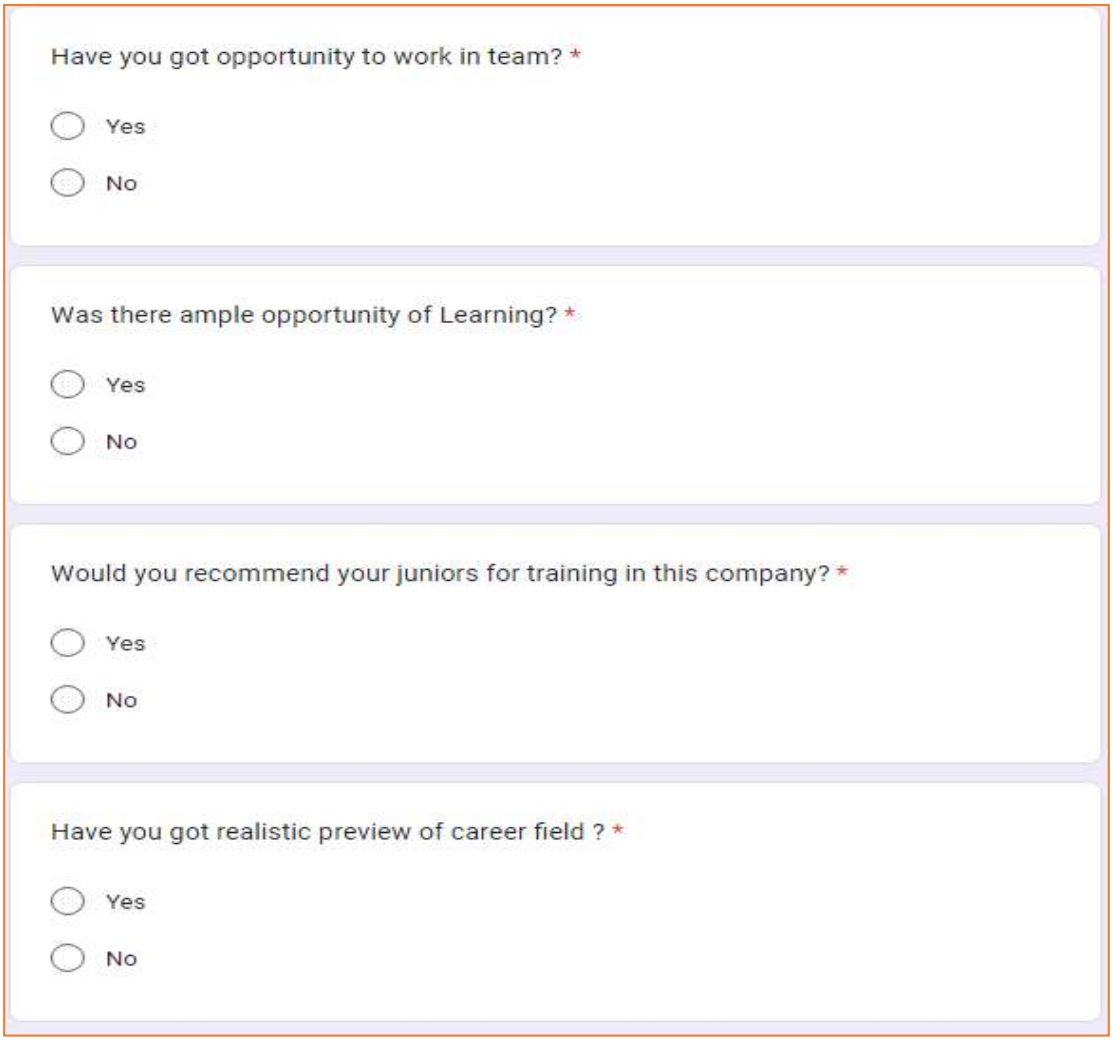
- Yes
- No

Have you applied engineering knowledge during training? *

- Yes
- No

Have you identified latest tools and technologies? *

- Yes
- No



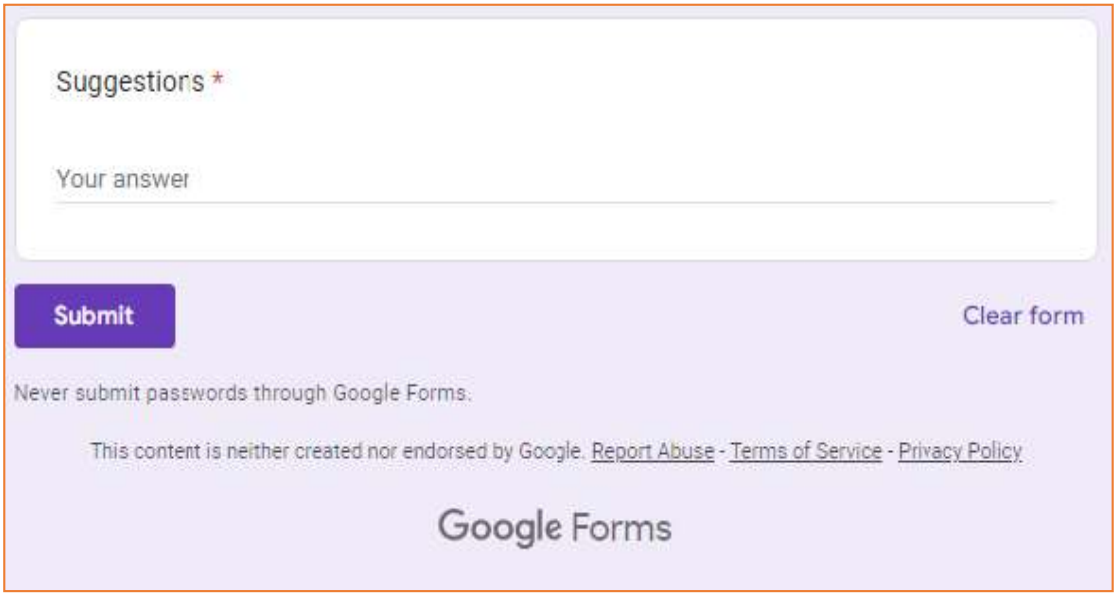


Figure B.2.2.5 i: Feedback Form of Industrial Training/Internship

CRITERION 03	COURSE OUTCOMES AND PROGRAM OUTCOMES	120

3.1. Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

Program Outcomes as mentioned in Annexure-I and Program Specific Outcomes as defined by the Program.

A. PROGRAM OUTCOMES (POs)

The students of Electrical Engineering will be able to:	
PO1	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

B. PROGRAM SPECIFIC OUTCOMES (PSO)

Electrical Engineering graduates will be able to	
PSO1	Demonstrate knowledge and hands-on experience with electrical machines, power/energy systems, power electronics, and automation problems.
PSO2	Develop the professionals and entrepreneurs in Renewable Energy system, electrical contracting and consultancy using modern tools and techniques.

3.1.1. Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (05)

Sem	Course	CO	Course Outcome
SEM-3	Network Analysis & Synthesis (BTEEC302)	BTEEC302.1	**Understand** basic circuit laws and simplify the dc and ac network problems.
		BTEEC302.2	**Analyze** and **solve** DC and AC circuits using mesh, nodal analysis and using theorems.
		BTEEC302.3	**Explain** the Laplace Transform and analyze the steady state and transient analysis problems.
		BTEEC302.4	**Apply** the concepts of two port networks to simplify the network problems.
SEM-4	Power System-I (BTEEC402)	BTEEC402.1	**Describe** general structure of power systems
		BTEEC402.2	**Impart the knowledge** of generation of electricity based on conventional and nonconventional energy sources
		BTEEC402.3	**Illustrate** the concept of microgrid and distributed generation
		BTEEC402.4	**Analyze** of mechanical and electrical design aspects of transmission system
SEM-5	Electrical Machines-II(BTEEC501)	BTEEC501.1	**Demonstrate** construction, operation and performance of three phase induction machines.
		BTEEC501.2	**Analyze** operation and performance of synchronous machine.
		BTEEC501.3	**Analyze** operation and performance of induction machines.
		BTEEC501.4	**Explain** construction, operation and application of special machines.

SEM-6	**Control System (BTEEC601)**	BTEEC601.1	**Characterize** any system in Laplace domain to illustrate different specification of the system using transfer function concept.
		BTEEC601.2	**Employ** time domain analysis to predict and diagnose transient performance parameters of the system for standard input functions.
		BTEEC601.3	**Formulate** different types of **analysis** in frequency domain to explain the nature of stability of the system.
		BTEEC601.4	**Describe** the needs of different types of controllers and compensator to ascertain the required Dynamic response from the system
SEM-7	**Electrical Drives (BTEEC703)**	BTEEC703.1	**Analyze** the dynamics of Electrical Drives system.
		BTEEC703.2	**Use** various control techniques for controlling the speed of AC and DC motors.
		BTEEC703.3	**Evaluate** the speed and frequency control method of Synchronous motor.
		BTEEC703.4	**Select** the appropriate Drive according to the particular applications.
SEM-8	**High Power Multilevel Converters (BTEEPE801)**	BTEEPE801.1	**Explain** the different types of converters and PWM schemes.
		BTEEPE801.2	**Interpret** the operational parameters of Modular multilevel, Cascaded H-Bridge converters and also **Demonstrate** the topologies and operation of CHB, MMC.
		BTEEPE801.3	**Design** and **Develop** the components used in Modular Multilevel Converters and also **Investigate** the different topologies of NPC converter.
		BTEEPE801.4	**Investigate** by case studying and monitoring of MMC, CHB and Gate Driver circuits.

3.1.2. CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from the 3rd to the 8th semester) (05)

All the courses in curriculum are studied in detail and correlation with POs and PSOs are declared. Six matrices are mentioned here from the 3rd to the 8th semester. Record for all courses is available with the program.

CO-PO matrices

Course Name: BTEEC302												
Course Outcome	**Programme Outcome (PO)**											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTEEC302.1	3	3			2	2			2	2		2
BTEEC302.2	2	3	2		2				2	2		2
BTEEC302.3	3	2			2	2			6	2		2
BTEEC302.4	3				2				2			2
Average	**2.75**	**2.67**	**2.00**		**2.00**	**2.00**			**3.00**	**2.00**		**2.00**

	Course Name: BTEEC402											
Course Outcome	**Programme Outcome (PO)**											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTEEC402.1	2	3				2				2		2
BTEEC402.2	2	3			2	2	2		2	2		2
BTEEC402.3	3				2	2						2
BTEEC402.4	2		2									
Average	**2.25**	**3.00**	**2.00**		**2.00**	**2.00**	**2.00**		**2.00**	**2.00**		**2.00**

Course Outcome	Course Name: BTEEC501											
	Programme Outcome (PO)											
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**
BTEEC501.1	3		3						3	2		2
BTEEC501.2	2	3										
BTEEC501.3	3	3	2						2	2		2
BTEEC501.4	2	3							2	2		2
Average	**2.50**	**3.00**	**2.50**						**2.33**	**2.00**		**2.00**

Course Outcome	Course Name: BTEEC601											
	Programme Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BTEEC601.1	3				2					2		
BTEEC601.2	3	3			2							
BTEEC601.3	3	3			2							
BTEEC601.4	2	3								2		
Average	**2.75**	**3**			**2**					**2**		

Course Outcome	Course Name: BTEEC703											
	Program Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
BTEEC703.1	2	3	0	0	0		0	0	0		0	3
BTEEC703.2	3					3						3
BTEEC703.3						2				3		2
BTEEC703.4		2				2				2		2
Average	**2.50**	**2.50**				**2.33**				**2.50**		**2.50**

	Course Name: BTEEPE801											
Course Outcome	**Program Outcome (PO)**											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
BTEEPE801.1	3	3		0	3	0	0	0	0		2	
BTEEPE801.2	2		2							3		
BTEEPE801.3	2	2	3		2							2
BTEEPE801.4	2	2	2		2							2
Average	**2.25**	**2.33**	**2.33**		**2.33**					**3.00**	**2.00**	**2.00**

CO-PSO matrices

Course Name: BTEEC302		
Course	**PSO1**	**PSO2**
BTEEC302.1	2	
BTEEC302.2	2	
BTEEC302.3		
BTEEC302.4	2	
Average	**2.00**	

Course Name: BTEEC402		
Course	**PSO1**	**PSO2**
BTEEC402.1	2	
BTEEC402.2		2
BTEEC402.3		
BTEEC402.4		2
Average	**2.00**	**2.00**

Course Name: BTEEC501		
Course	**PSO1**	**PSO2**
BTEEC501.1	3	
BTEEC501.2	2	
BTEEC501.3	2	
BTEEC501.4	2	
Average	**2.25**	

Course Name: BTEEC601		
Course	**PSO1**	**PSO2**
BTEEC601.1	3	
BTEEC601.2	2	
BTEEC601.3		
BTEEC601.4		
Average	**2.5**	

Course Name: BTEEC703		
Course	**PSO1**	**PSO2**
BTEEC703.1	3	
BTEEC703.2	2	2
BTEEC703.3	2	
BTEEC703.4	2	
Average	**2.25**	**2.00**

Course Name: BTEEPE801		
Course	**PSO1**	**PSO2**
TEEPE801.1	2	
TEEPE801.2		
TEEPE801.3	2	
TEEPE801.4	2	
Average	**2.00**	

3.1.3. Program level Course-PO matrix of all courses INCLUDING first year courses (10)

CO-PO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with POs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation is indicated by '-'. This correlation is derived from CO-PO mapping of the individual course. Average of all COs is taken and mapped at level 1, 2 and 3.

Class	Course	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
FY-SEM-I	BTBS101	Engineering Mathematics- I	1.5	2.25	2									1.5
	BTBS102	Engineering Physics	2	2	2			3		3				2
	BTES103	Engineering Graphics	1.67	3.00	2.50	3.00	1.67				2.50	2.50		2.50
	BTHM104	Communication Skills					1.00	1.00		1.5	2.5	2.75		
	BTES105	Energy and Environment Engineering	2.33		2.50			1.50	3.00	2.00		2.00		
	BTES106	Basic Civil and Mechanical Engineering	2	3	2	2		2	2			2	3	
	BTBS107L	Engineering Physics Lab	2	2	2			3.00		3				2
	BTES108L	Engineering Graphics Lab	1.67	3.00	2.50	3.00	1.67				2.50	2.50		2.50
	BTHM109L	Communication Skills Lab.	1				1	1		2	3	3		

FY-SEM-II	BTBS201	Engineering Mathematics-II	**1.5**	**2.25**	**2**	**2**								**1.50**
	BTBS202	Engineering Chemistry	**2.25**	**2.00**				**1.00**	**2.00**					
	BTES203	Engineering Mechanics	**2.67**	**3.00**	**2.00**						**2.00**			
	BTES204	Computer Programming in C	**2**	**2**	**2**						**2**	**3**		
	BTES205	Workshop Practices	**3**				**2.33**				**2**	**1**		
	BTES206	Basic Electrical and Electronics Engineering	**2.5**						**1**			**1**		**1.00**
	BTES207L	Computer Programming Lab	**2**	**2**	**2**						**2**	**3**		
	BTBS208L	Engineering Chemistry Lab	**2.25**	**2.00**				**1.00**	**2.00**					
	BTES209L	Engineering Mechanics Lab	**2.67**	**3.00**	**2.00**						**2.00**			
	BTES210P	Mini Project	**1**	**1**			**1**	**1**	**1**	**1**	**3**	**3**		
	BTES211P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).												

SY-SEM-III	BTBS301	Engineering Mathematics-III	**2.50**	**2.25**	**2.50**			**2.00**				**2.00**		**1.25**
	BTEEC302	Network Analysis and Synthesis	**2.75**	**2.67**	**2.00**		**2.00**	**2.00**			**3.00**	**2.00**		**2.00**
	BTEEC303	Fluid Mechanics and Thermal Engineering	**3.00**	**2.00**			**2.00**				**2.00**	**2.00**		
	BTEEC304	Measurement and Instrumentation	**2.75**	**2.00**	**3.00**			**2.00**			**2.00**	**2.00**		**2.00**
	BTEEE305A	Elective –I (A) Electrical Engineering Materials	**2.75**	**3.00**				**2.00**				**1.67**		**1.00**
	BTHM3401	Basic Human Rights	**3**	**2**				**6**			**2**	**2**		
	BTHM306	Engineering Economics	**2.67**	**2.33**								**2.25**		**2.00**
	BTEEL307	Network Analysis and Synthesis Lab	**2.25**	**2.00**	**2.00**		**3.00**	**2.00**			**2.00**	**2.50**		**2.00**
	BTEEL308	Measurement and Instrumentation Lab	**2**	**3**	**2**		**2**	**2**			**1**	**1**		**1**
	BTEEM309	Electrical workshop/ Mini project	**2**	**2**	**2**	**1**	**2**	**2**			**1**	**1**		**2**

	BTEEF310	Field Training/ Internship/ Industrial Training Evaluation	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**1**	**1**		**1**
SY-SEM-IV	BTEEC401	Electrical Machine-I	**2.75**	**2.75**	**2.00**			**2.00**			**1.75**	**1.50**		**2.00**
	BTEEC402	Power System-I	**2.25**	**3.00**	**2.00**		**3.00**	**2.00**	**2.00**		**2.00**	**2.00**		**2.00**
	BTEEC403	Electrical Installation and Estimation	**2.50**	**2.67**	**3.00**		**3.00**	**2.00**	**2.00**	**3**	**2.50**	**2.00**	**2**	**2.33**
	BTEEC404	Numerical Methods and Programming	**2.25**	**3.00**			**2.50**				**2.00**	**1.67**		**2.00**
	BTID405	Product Design Engineering	**2.50**	**2.00**			**2.00**				**1.00**	**2.00**		**1.50**
	BTEEE-406A	Elective –II- (A) Solid State Devices	**2.75**	**2.00**			**2.00**				**1.25**	**2.00**		
	BTEEOE407-B	Elective –III (B) Introduction to Non-Conventional energy sources	**2.50**	**2.33**	**2.00**			**3.00**	**2.33**		**2.00**	**2.50**		**2.00**
	BTEEL408	Electrical Machine-I Lab	**3**	**3**	**2**			**2**		**3**	**2**	**2**		**2**
	BTEEL409	Power System lab-I	**2.25**	**2.00**	**2.00**	**2.00**	**3.00**	**2.00**			**2.00**		**2.00**	**2.00**
	BTEEL410	Numerical Methods and Programming Lab	**2**	**3**	**2**		**3**				**2**	**2**		**2**

	BTEEEL411A	Elective-II Lab (A) Solid State Devices Lab	**3**	**2**			**2**				**1**	**2**		
		Field Training / Internship/ Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)												
TY-SEM-V	BTEEC501	Electrical Machine-II	**3**	**3**	**3**						**2**	**2**		**2**
	BTEEC502	Power System-II	**3**	**3**			**2**	**2**						
	BTEEL503	Microprocessor and micro Controller	**3**	**3**			**2**							**2**
	BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]						**3**	**3**	**2**		**2**		
	BTEEE505	Elective-IV-Illumination engineering	**2**	**3**										
	BTEEOE506	Elective-V-Electrical Mobility	**3**											
	BTEEL507	Electrical Machine-II Lab	**3**	**3**	**2**						**2**	**2**		**2**

	BTEEL508	Power System-II Lab	**3**	**2**			**2**	**2**						
	BTEEL509	Microprocessor and micro Controller Lab	**3**	**2**			**2**							**2**
	BTEEF510	Industrial Training	**3**	**3**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
TY-SEM-VI	BTEEC601	Control System	**3**	**3**			**2**					**2**		
	BTEEC602	Principles of Electrical Machine Design	**3**	**3**	**2**		**2**					**2**		
	BTEEC603	Power Electronics	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**2**	**3**	**2**	**2**	**2**
	BTEEE604	Elective-VI-Industrial automation and Control	**2**	**2**										
	BTEEC605	Elective-VII-Switch Gear and Protection	**2**	**2**			**2**		**2**		**2**	**2**		
	BTEEOE606	Elective-VIII-Project Management [MOOC/Swayam/NPTEL]	**3**	**3**				**3**				**3**	**2**	
	BTEEL607	Control System-Lab	**3**	**2**			**2**					**2**		
	BTEEL608	Principles of Electrical Machine Design Lab	**3**	**2**	**2**		**2**					**2**		

	BTEEL609	Power Electronics Lab	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**2**	**3**	**2**	**2**	**2**
B.Tech-SEM-VII	BTEEC701	Power System Operation & Control	**2.25**	**3.00**			**2.50**	**2.00**				**2.00**		
	BTEEC702	High Voltage Engineering	**3.00**	**2.75**		**3**		**2.50**	**2.25**			**2.00**		
	BTEEC703	Electrical Drives	**2.50**	**2.50**				**2.33**				**2.50**		**2.50**
	BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	**2.75**	**2.75**				**2.25**						
	BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	**3.00**	**2.50**		**3**		**2.50**				**2.50**		
	BTEEL706	Power System Operation & Control Lab	**2.50**	**3.00**			**2.50**					**2.75**		
	BTEEL707	High Voltage Engineering Lab	**2.50**	**2.33**			**3.00**	**2.67**	**3.00**			**3.00**		
	BTEEL708	Electrical Drives Lab	**3.00**	**3.00**			**3.00**	**2.50**				**2.00**		
	BTEES709	Seminar	**2.33**	**2.50**				**2.25**		**2.00**		**2.33**		
	BTEEP710	Project Part-I	**2.50**	**2.50**	**2.00**		**3.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.33**	**3.00**	**2.00**
	BTEEF711	Field Training/Internship/Industrial Training III	**2.25**	**3.00**	**2.50**	**2.33**	**2.00**	**2.00**	**2.67**	**3.00**	**2.50**	**2.50**	**2.50**	**2.00**
B.Tech-SEM-VIII	BTEEPE801	High Power Multilevel Converters	**2.25**	**2.33**	**2.33**		**2.33**					**3.00**	**2**	**2.00**

	BTEEP802	Entrepreneurship Essentials	**2.33**	**2.50**				**2.00**				**2.00**		
	BTEEP803	Project - II	**2.50**	**2.50**	**2.00**		**3.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.33**	**3.00**	**2.00**
AVERAGE VALUE			**2.43**	**2.48**	**2.15**	**2.28**	**2.18**	**2.12**	**2.10**	**2.13**	**2.00**	**2.08**	**2.35**	**1.84**
			PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**

Program level Course- PSO matrix:

CO-PSO correlation matrix for all courses in the program is given below. Course code is mentioned in the first column and correlation with PSOs is indicated as 1) slight, 2) moderate and 3) High. Courses not having any correlation are indicated by-. This correlation is derived from CO-PSO mapping of the individual course. Average of all Cos is taken and mapped at level 1, 2 and 3

Class	Course Code	Course Name	PSO-1	PSO-2
FY- SEM-I	BTBS101	Engineering Mathematics- I		
	BTBS102	Engineering Physics	**1**	
	BTES103	Engineering Graphics		
	BTHM104	Communication Skills		
	BTES105	Energy and Environment Engineering	**1.00**	
	BTES106	Basic Civil and Mechanical Engineering		
	BTBS107L	Engineering Physics Lab	**1**	
	BTES108L	Engineering Graphics Lab		
	BTHM109L	Communication Skills Lab.		
FY- SEM-II	BTBS201	Engineering Mathematics-II		
	BTBS202	Engineering Chemistry		
	BTES203	Engineering Mechanics		
	BTES204	Computer Programming in C		

	BTES205	Workshop Practices	**1.00**	
	BTES206	Basic Electrical and Electronics Engineering	**1.00**	
	BTES207L	Computer Programming Lab		
	BTBS208L	Engineering Chemistry Lab		
	BTES209L	Engineering Mechanics Lab		
	BTES210P	Mini Project	**1**	**1**
	BTES211P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).		
SY- SEM-III	BTBS301	Engineering Mathematics-III		
	BTEEC302	Network Analysis and Synthesis	**2.00**	
	BTEEC303	Fluid Mechanics and Thermal Engineering		
	BTEEC304	Measurement and Instrumentation	**1.50**	
	BTEEE305A	Elective –I (A) Electrical Engineering Materials	**1.25**	
	BTHM3401	Basic Human Rights		
	BTHM306	Engineering Economics		
	BTEEL307	Network Analysis and Synthesis Lab	**2.00**	
	BTEEL308	Measurement and Instrumentation Lab		
	BTEEM309	Electrical workshop/ Mini project	**2**	
	BTEEF310	Field Training/ Internship/ Industrial Training Evaluation		
SY- SEM-IV	BTEEC401	Electrical Machine-I	**2.00**	**2.00**
	BTEEC402	Power System-I	**2.00**	**2.00**
	BTEEC403	Electrical Installation and Estimation	**2.67**	**2.33**
	BTEEC404	Numerical Methods and Programming	**1.00**	

	BTID405	Product Design Engineering	**1.50**	
	BTEEE-406A	Elective –II- (A) Solid State Devices	**1.25**	
	BTEEOE407-B	Elective –III (B) Introduction to Non- Conventional energy sources	**2.33**	**2.33**
	BTEEL408	Electrical Machine-I Lab		
	BTEEL409	Power System lab-I	**2.00**	**2.00**
	BTEEL410	Numerical Methods and Programming Lab		
	BTEEEL411A	Elective-II Lab (A) Solid State Devices Lab		
		Field Training / Internship/ Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)		
TY- SEM-V	BTEEC501	Electrical Machine-II	**2**	
	BTEEC502	Power System-II	**3**	
	BTEEL503	Microprocessor and micro Controller	**3**	
	BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]		
	BTEEE505	Elective-IV- Illumination engineering	**2**	
	BTEEOE506	Elective-V- Electrical Mobility	**2**	
	BTEEL507	Electrical Machine-II Lab	**2**	
	BTEEL508	Power System-II Lab	**2**	**2**
	BTEEL509	Microprocessor and micro Controller Lab	**2**	
	BTEEF510	Industrial Training	**2**	
TY- SEM-VI	BTEEC601	Control System	**3**	
	BTEEC602	Principles of Electrical Machine Design	**2**	**2**
	BTEEC603	Power Electronics	**2**	**2**

	BTEEE604	Elective-VI- Industrial automation and Control	**2**	
	BTEEC605	Elective-VII- Switch Gear and Protection	**2**	
	BTEEOE606	Elective-VIII- Project Management [MOOC/Swayam/NPTEL]		
	BTEEL607	Control System- Lab	**2**	
	BTEEL608	Principles of Electrical Machine Design Lab	**2**	**2**
	BTEEL609	Power Electronics Lab	**2**	**2**
B.Tech-SEM-VII	BTEEC701	Power System Operation & Control	**2.00**	
	BTEEC702	High Voltage Engineering	**2.75**	
	BTEEC703	Electrical Drives	**2.25**	**2.00**
	BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	**2.25**	
	BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	**2.00**	
	BTEEL706	Power System Operation & Control Lab	**2.50**	
	BTEEL707	High Voltage Engineering Lab	**2.00**	
	BTEEL708	Electrical Drives Lab	**2.50**	
	BTEES709	Seminar	**2.25**	
	BTEEP710	Project Part-I	**2.50**	
	BTEEF711	Field Training/Internship/Industrial Training III	**3.00**	
B.Tech-SEM-VIII	BTEEPE801	High Power Multilevel Converters (Elective-I)	**2.00**	
	BTEEP802	Entrepreneurship Essentials (Elective-II)		**1.00**
	BTEEP803	Project - II	**2.50**	
AVERAGE VALUES			**1.97**	**1.85**
			PSO-1	**PSO-2**

3.2 Attainment of Course Outcomes (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

(Examples of data collection processes may include, but are not limited to tutorial questions, assignments, laboratory tests, project evaluation, student portfolios(A portfolio is a collection of artifacts that demonstrate skills, personal characteristics andaccomplishmentscreatedbythestudentduringstudyperiod),internallydevelopedassessmen texams, project presentations, oral exams etc.)

The key aspects in Outcome Based Education (OBE) are the assessment of course outcomes. At the initial stage of OBE implementation, the Course Outcomes (COs) for each course are defined based on the Program Outcome (POs) and other requirements. At the end of each course, the COs needs to be assessed and evaluated, to check whether it has been attained or not. Assessment is one more processes, carried out by the department, that identify, collect, and prepare data to evaluate the achievement of program educational objectives and program outcomes. Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test or examination result. Attainment of the COs can be measured by using direct and indirect tools. Direct attainment basically displays the student's knowledge and skills from their academic performance. It can be determined from the performance of the students in all the relevant assessment tools – like internal assessments, assignments, quiz and final university examination etc. These methods provide a sampling of what students know and /or actions they can perform, offering substantial.

This program consists of various types of courses for fulfillment of POs and PSOs. The process of data collection for attainment of COs is properly identified depending on the type of course. Major types of courses are

1. Practical/Oral/TW
2. Tutorial
3. Seminar
4. Project
5. Audit course

The Institution strives hard to ensure that the Learning across all the courses of the curriculum is Outcome oriented. There is continuous assessment of learning outcomes attainment and this procedure has been refined over a period of time.

The following are the two broadly classified tools used for assessment of Learning Outcome Attainment

• Direct Assessment Method:

Data collection mechanism includes direct assessment process which is

Theory

1. Continuous Assessment Test 1
2. Mid Semester Examination
3. Continuous Assessment Test 2
4. End Semester Examination

Laboratory

1. Continuous Assessment Test 1
2. Continuous Assessment Test 2
3. End Semester Examination

Data collection process for all above type of courses is clearly defined in table 3.2.1a given below.

Table 3.2.1a: Assessment Tools

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Mid Semester Examination [MSE]		One test/semester
3	Continuous Assessment Test 2 [CA2]		One/Semester
4	End Semester Examination [ESE]		One/Semester

Laboratory

Sr. No.	Assessment tools	Tool type	Time Span
1	Continuous Assessment Test1[CA1]	Direct Assessment	One test/semester
2	Continuous Assessment Test 2[CA2]		One test/semester
3	End Semester Examination [ESE]		One/Semester

Course Outcomes for the entire course are defined and they are 4 in number. As the program is affiliated to DBATU, external assessment is done as per the evaluation scheme of university and internal assessment is done as per the policy of the program.

All courses are categorized into 2 categories

1. Courses with theory examination: CO attainment is calculated considering 60 % of university examination and 40% of internal semester evaluation (CA1, MSE CA2)
2. Courses with practical examination: CO attainment is calculated considering 60% internal evaluation and 40% university examination evaluation

Attainment levels are assigned based on performance in Internal Semester Evaluation and University examinations

Theory

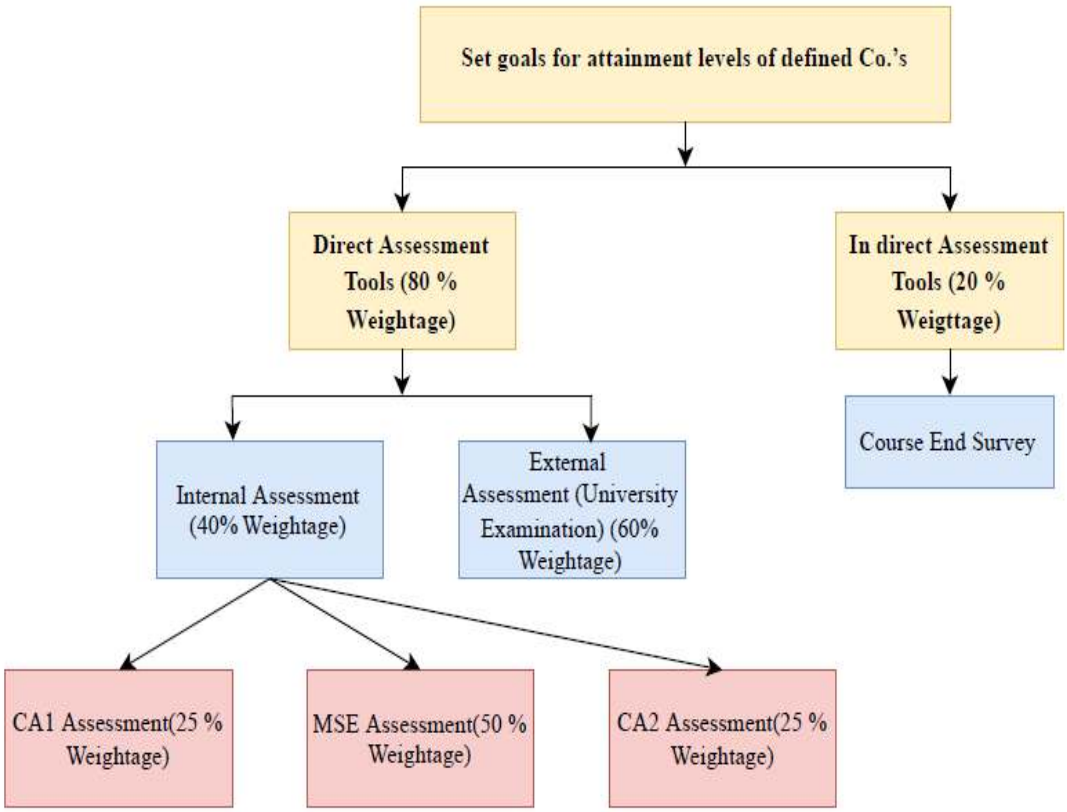


Fig. 1: Process of defining CO attainment theory examination

Sr. No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1[CA1]	Direct Assessment	3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
2	Mid Semester Examination [MSE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
3	Continuous Assessment Test 2[CA2]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%
4	End Semester Examination [ESE]		3 - 67%-100% 2 - 55%-66% 1 - 40%-54%

Laboratory

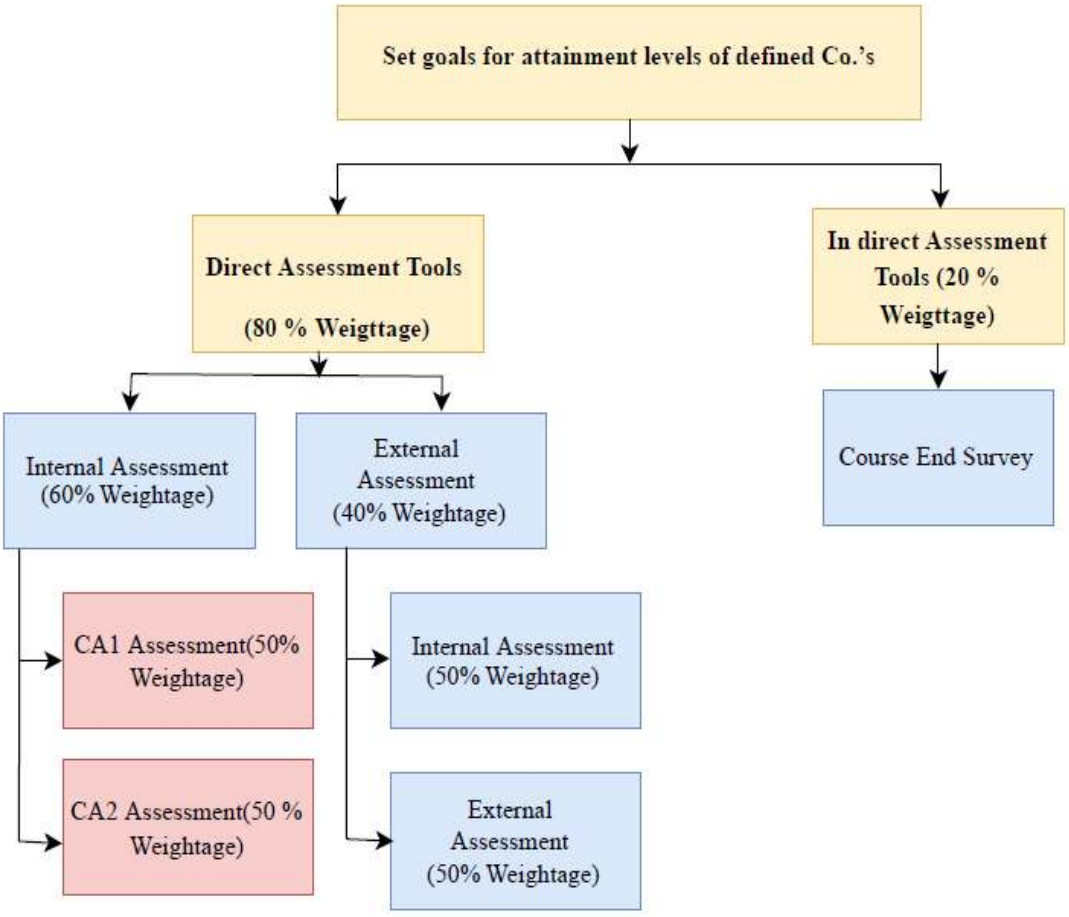


Fig. 2: Process of defining CO attainment practical examination

Sr.No.	Assessment tools	Tool type	Attainment Level
1	ContinuousAssessmentTest1 [CA1]	Direct Assessment	3 - 81% -100% 2 - 61%-80% 1 - 40%-60%
2	Continuous Assessment Test 2 [CA2]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%
3	End Semester Examination [ESE]		3 - 81%-100% 2 - 61%-80% 1 - 40%-60%

i. Record of the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

Course Name: Network Analysis and Synthesis **Course Name: BTEEC302**					**Year: 2019-20** **Sem-III**	
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Final Direct Course Attainment	Target	Remark
BTEEC302.1	[CA1]/ [CA2]/ [ESE]	1.2	**3**	**3.00**	1.8	Attained
BTEEC302.2		1.2	**3**	**3.00**	1.8	Attained
BTEEC302.3		1.2	**3**	**3.00**	1.8	Attained
BTEEC302.4		1.1	**3**	**2.90**	1.8	Attained

Course Outcome Attainment: 2.98

Course Name: Power System-I **Course Code: BTEEC402**					**Year: 2019-20** **Sem-IV**	
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTEEC402.1	[CA1]/ [CA2]/ [ESE]	1.2	**3**	**3.00**	1.8	Attained
BTEEC402.2		1.05	**3**	**2.85**	1.8	Attained
BTEEC402.3		0.95	**3**	**2.75**	1.8	Attained
BTEEC402.4		1.1	**3**	**2.90**	1.8	Attained

Course Outcome Attainment: 2.88

Course Name: Electrical Machine-II						**Year- 2020-21**
Course Code: BTEEC501						**Sem-V**
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTEEC501.1	[CA1]/ [CA2]/ [ESE]	0.80	**3**	**2.60**	1.95	Attained
BTEEC501.2		1.40	**3**	**2.50**	1.95	Attained
BTEEC501.3		1.87	**3**	**2.73**	1.95	Attained
BTEEC501.4		1.10	**3**	**2.90**	1.95	Attained

Course Outcome Attainment: 2.68

Course Name: Control System						**Year: 2020-21**
Course Code: BTEEC601						**Sem-VI**
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTEEC601.1	[CA1]/ [CA2]/ [ESE]	0.9	**3**	**2.70**	1.95	Attained
BTEEC601.2		1.2	**3**	**2.40**	1.95	Attained
BTEEC601.3		2.0	**3**	**2.78**	1.95	Attained
BTEEC601.4		0.9	**3**	**2.70**	1.95	Attained

Course Outcome Attainment: 2.65

Course Name: Electrical Drives						**Year: 2021-22**
Course Code: BTEEC703						**Sem-VII**
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTEEC703.1	[CA1]/ [CA2]/ [ESE]	1.2	**3**	**3.00**	2.1	Attained
BTEEC703.2		1.1	**3**	**2.90**	2.1	Attained
BTEEC703.3		1.15	**3**	**2.95**	2.1	Attained
BTEEC703.4		1.2	**3**	**3.00**	2.1	Attained

Course Outcome Attainment: 2.96

Course Name: High Power Multilevel Converters						**Year: 2021-22**
Course Code: BTEEPE801						**Sem-VIII**
Course Outcomes	Assessment Tools	Internal Assessment Attainment	University Result Attainment	Course Attainment	Target	Remark
BTEEPE801.1	[CA1]/ [CA2]/ [ESE]	1.2	**3**	**3.00**	2.1	Attained
BTEEPE801.2		1.1	**3**	**2.90**	2.1	Attained
BTEEPE801.3		1.15	**3**	**2.95**	2.1	Attained
BTEEPE801.4		1.2	**3**	**3.00**	2.1	Attained

Course Outcome Attainment: 2.96

SL.NO	COURSE NO.	COURSE NAME	CO1	CO2	CO3	CO4	Average CO Attainment
1	BTBS301	Engineering Mathematics-III	2.94	2.95	2.93	2.95	2.94
			Attained	Attained	Attained	Attained	Attained
2	BTEEC302	Network Analysis and Synthesis	2.97	2.96	2.94	2.87	2.94
			Attained	Attained	Attained	Attained	Attained
3	BTEEC303	Fluid Mechanics and Thermal Engineering	2.95	2.96	2.96	2.88	2.94
			Attained	Attained	Attained	Attained	Attained
4	BTEEC304	Measurement and Instrumentation	2.96	2.94	2.96	2.86	2.93
			Attained	Attained	Attained	Attained	Attained
5	BTEEE305A	Elective –I (A) Electrical Engineering Materials	2.96	2.94	2.94	2.90	2.94
			Attained	Attained	Attained	Attained	Attained
6	BTHM3401	Basic Human Rights	2.48	2.48	2.98	2.01	2.49
			Attained	Attained	Attained	Attained	Attained
7	BTHM306	Engineering Economics	2.95	2.91	2.93	2.96	2.94
			Attained	Attained	Attained	Attained	Attained
8	BTEEL307	Network Analysis and Synthesis Lab	2.96	2.95	2.97	2.94	2.96
			Attained	Attained	Attained	Attained	Attained
9	BTEEL308	Measurement and Instrumentation Lab	2.48	2.47	2.95	2.00	2.48
			Attained	Attained	Attained	Attained	Attained
10	BTEEM309	Electrical workshop/ Mini project	2.47	2.48	2.96	2.01	2.48
			Attained	Attained	Attained	Attained	Attained
11	BTEEF310	Field Training/ Internship/ Industrial Training Evaluation	2.46	2.48	2.96	1.99	2.47
			Attained	Attained	Attained	Attained	Attained

12	BTEEC401	Electrical Machine-I	2.97	2.96	2.91	2.91	2.94
			Attained	Attained	Attained	Attained	Attained
13	BTEEC402	Power System-I	2.96	2.84	2.76	2.88	2.86
			Attained	Attained	Attained	Attained	Attained
14	BTEEC403	Electrical Installation and Estimation	2.96	2.84	2.81	2.90	2.88
			Attained	Attained	Attained	Attained	Attained
15	BTEEC404	Numerical Methods and Programming	2.96	2.96	2.95	2.93	2.95
			Attained	Attained	Attained	Attained	Attained
16	BTID405	Product Design Engineering	2.94	2.89	2.87	2.94	2.91
			Attained	Attained	Attained	Attained	Attained
17	BTEEE-406A	Elective –II- (A) Solid State Devices	2.88	2.91	2.88	2.86	2.88
			Attained	Attained	Attained	Attained	Attained
18	BTEEOE407-B	Elective –III (B) Introduction to Non-Conventional energy sources	2.95	2.92	2.85	2.87	2.90
			Attained	Attained	Attained	Attained	Attained
19	BTEEL408	Electrical Machine-I Lab	2.97	2.96	2.91	2.91	2.94
			Attained	Attained	Attained	Attained	Attained
20	BTEEL409	Power System lab-I	2.34	2.33	2.29	2.30	2.32
			Attained	Attained	Attained	Attained	Attained
21	BTEEL410	Numerical Methods and Programming Lab	2.46	2.46	2.95	1.98	2.46
			Attained	Attained	Attained	Attained	Attained
22	BTEEEL411A	Elective-II Lab (A) Solid State Devices Lab	2.46	2.46	2.93	1.97	2.46
			Attained	Attained	Attained	Attained	Attained

23		Field Training / Internship/ Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)					
24	BTEEC501	Electrical Machine-II	2.64	2.50	2.68	2.81	2.66
			Attained	Attained	Attained	Attained	Attained
25	BTEEC502	Power System-II	2.61	2.47	2.67	2.74	2.62
			Attained	Attained	Attained	Attained	Attained
26	BTEEL503	Microprocessor and micro Controller	2.60	2.43	2.69	2.83	2.64
			Attained	Attained	Attained	Attained	Attained
27	BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]	2.98	2.88	2.10	2.07	2.51
			Attained	Attained	Attained	Attained	Attained
28	BTEEE505	Elective-IV- Illumination engineering	2.61	2.43	2.69	2.74	2.62
			Attained	Attained	Attained	Attained	Attained
29	BTEEOE506	Elective-V- Electrical Mobility	2.61	2.50	2.67	2.75	2.63
			Attained	Attained	Attained	Attained	Attained
30	BTEEL507	Electrical Machine-II Lab	2.62	2.06	2.58	2.03	2.32
			Attained	Attained	Attained	Attained	Attained
31	BTEEL508	Power System-II Lab	2.93	2.38	2.92	2.38	2.65
			Attained	Attained	Attained	Attained	Attained
32	BTEEL509	Microprocessor and micro Controller Lab	2.95	2.39	2.90	2.35	2.65
			Attained	Attained	Attained	Attained	Attained

33	BTEEF510	Industrial Training	2.64	2.54	2.59	2.51	2.57
			Attained	Attained	Attained	Attained	Attained
34	BTEEC601	Control System	2.73	2.50	2.68	2.58	2.62
			Attained	Attained	Attained	Attained	Attained
35	BTEEC602	Principles of Electrical Machine Design	2.62	2.43	2.64	2.58	2.57
			Attained	Attained	Attained	Attained	Attained
36	BTEEC603	Power Electronics	2.97	2.76	2.74	2.48	2.74
			Attained	Attained	Attained	Attained	Attained
37	BTEEE604	Elective-VI- Industrial automation and Control	2.95	2.78	2.89	2.65	2.82
			Attained	Attained	Attained	Attained	Attained
38	BTEEC605	Elective-VII- Switch Gear and Protection	2.96	2.79	2.93	2.69	2.84
			Attained	Attained	Attained	Attained	Attained
39	BTEEOE606	Elective-VIII- Project Management [MOOC/Swayam/NPTEL]	2.95	2.78	2.82	2.61	2.79
			Attained	Attained	Attained	Attained	Attained
40	BTEEL607	Control System- Lab	2.95	2.89	2.93	2.88	2.91
			Attained	Attained	Attained	Attained	Attained
41	BTEEL608	Principles of Electrical Machine Design Lab	1.98	2.35	1.93	2.83	2.27
			Attained	Attained	Not Attained	Attained	Attained
42	BTEEL609	Power Electronics Lab	2.92	2.83	2.89	2.83	2.87
			Attained	Attained	Attained	Attained	Attained
43	BTEEC701	Power System Operation & Control	2.93	2.83	2.85	2.89	2.87
			Attained	Attained	Attained	Attained	Attained

44	BTEEC702	High Voltage Engineering	2.93	2.86	2.92	2.89	2.90
			Attained	Attained	Attained	Attained	Attained
45	BTEEC703	Electrical Drives	2.90	2.84	2.85	2.89	2.87
			Attained	Attained	Attained	Attained	Attained
46	BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	2.94	2.88	2.88	2.92	2.90
			Attained	Attained	Attained	Attained	Attained
47	BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	2.93	2.86	2.91	2.97	2.92
			Attained	Attained	Attained	Attained	Attained
48	BTEEL706	Power System Operation & Control Lab	2.93	2.47	2.93	2.47	2.70
			Attained	Attained	Attained	Attained	Attained
49	BTEEL707	High Voltage Engineering Lab	2.95	2.46	2.94	2.46	2.70
			Attained	Attained	Attained	Attained	Attained
50	BTEEL708	Electrical Drives Lab	2.95	2.47	2.94	2.44	2.70
			Attained	Attained	Attained	Attained	Attained
51	BTEES709	Seminar	2.94	2.47	2.94	2.47	2.71
			Attained	Attained	Attained	Attained	Attained
52	BTEEP710	Project Part-I	2.95	2.44	2.91	2.96	2.82
			Attained	Attained	Attained	Attained	Attained
53	BTEEF711	Field Training/Internship/Industrial Training III	2.95	2.94	2.92	2.95	2.94
			Attained	Attained	Attained	Attained	Attained
54	BTEEPE801	High Power Multilevel Converters (Elective-I)	2.94	2.86	2.90	2.94	2.91
			Attained	Attained	Attained	Attained	Attained

55	BTEEP802	Entrepreneurship Essentials (Elective-II)	2.94	2.87	2.91	2.93	2.91
			Attained	Attained	Attained	Attained	Attained
56	BTEEP803	Project - II	2.96	2.94	2.91	2.95	2.94
			Attained	Attained	Attained	Attained	Attained
AVERAGE VALUE			**2.81**	**2.69**	**2.82**	**2.66**	**2.75**
			CO1	**CO2**	**CO3**	**CO4**	**AVERAGE**

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1 Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describetheassessmenttoolsandprocessesusedtogatherthedatauponwhichtheevaluation of each of the Program Outcomes and Program Specific Outcomesis basedindicating the frequency with which these processes are carried out. Describe the assessmentprocessesthatdemonstratethedegreetowhichthe ProgramOutcomesandProgramSpecificOutcomes are attained and document the attainment levels)

List of PO and PSO Assessment Tools:

Assessment tools are categorized into two types for Program Outcomes (POs), Program Specific Outcomes (PSOs).

1. Direct Assessment Method– Through CO attainment in relevant courses.
2. Indirect Assessment Method –Employer Feedback, Alumni feedback, Program Exit Survey.

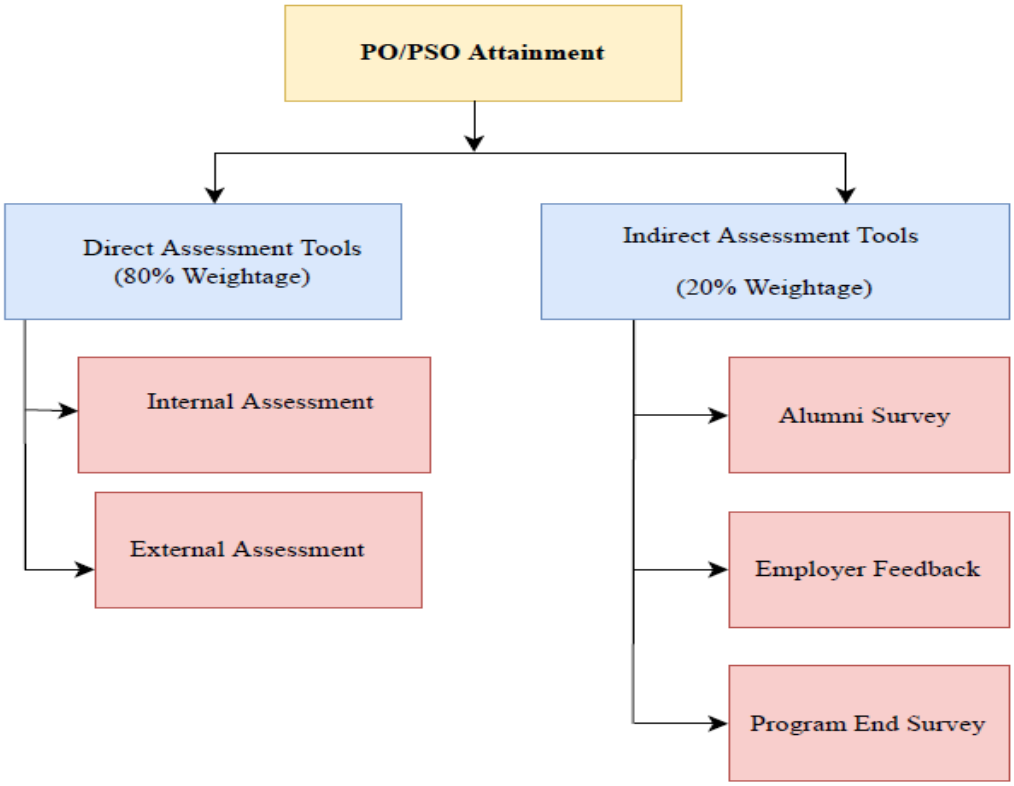


Fig. 3: Process of defining PO/PSO Attainment

Direct Assessment methods:

CO attainment of course shows knowledge and skills obtained by students from respective courses derived from their performance in the continuous assessment, unit tests, online examinations, in-semester examinations, end-semester examinations, reviews, assignments etc. These methods provide strong evidence of student learning.

Indirect Assessment methods:

Surveys of students are taken to know their learning. Feedback of various stake holders like employer, alumni etc is taken to know the capabilities and necessary improvements.

For example,

Employer survey: To provide information about our graduate's skills and capability.

Program exit survey: To evaluate the success of programme in providing students with opportunities to achieve the POs and PSOs every year.

Process for Evaluation and Assessment of POs & PSOs

The activity, questionaries' and frequency of feedback is defined by the Program for POs and PSOs attainment through in direct tools.

The CO-PO mapping and CO attainment is considered as reference for PO attainment as a part of direct tool. If the CO average attainment (Internal & External) is achieved at level 3 then the PO attainment level is same CO-PO mapping level.
If CO attainment level is 2/1/0 then CO - PO mapping level is transformed as per the CO attainment level as given below,

1. If CO attainment level is 1 and CO-PO mapping is at level 2 then PO attainment level will be (2*1)/3 = 0.667, here value 3 is maximum CO attainment level.
2. The same process is followed to calculate PSO attainment.

PO and PSO attainment are calculated by considering 80% weightage to direct assessment and 20% weightage to indirect assessment through surveys as shown in following figure

PO/PSO Attainment = 0.8 * Direct Attainment + 0.2 * Indirect Attainment

- **Direct Assessment Tools:**

Continuous Assessment Test1[CA1]
Mid Semester Examination [MSE]
Continuous Assessment Test 2[CA2]
End Semester Examination [ESE]
Lab Continuous Assessment Test 1
Lab Continuous Assessment Test 2

- **Indirect Assessment Tools:**

Course End Survey
Program End Survey
Employer Feedback
Examiner Feedback

3.3.2 Provide results of evaluation of each PO&PSO (40)

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course–PO & PSO matrix as indicated).

PO Attainment:

Subject Code	Name of Subject	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
BTBS101	Engineering Mathematics- I	2.92	2.82	2.66	2.90		2.90					2.93	2.87
BTBS102	Engineering Physics	2.83	2.75	2.90	2.74		2.57	2.57					2.84
BTES103	Engineering Graphics	2.95	2.74	2.58	2.61	2.74				2.79	2.85		3.00
BTHM104	Communication Skills	2.95				2.73	2.73		2.63	2.72	2.77		
BTES105	Energy and Environment Engineering	2.83	2.64	2.73	2.81		2.60	2.77	2.84		2.79	2.84	
BTES106	Basic Civil and Mechanical Engineering	2.97	2.97	2.97	2.97		2.97	2.97			2.97	2.97	
BTBS107L	Engineering Physics Lab	2.96	2.93	2.95	2.98		3.00	3.00					2.95
BTES108L	Engineering Graphics Lab	2.95	2.97	2.97	2.97	2.97				2.98	2.94		2.96
BTHM109L	Communication Skills Lab.	2.95				2.45	2.45		2.78	2.94	2.68		
BTBS201	Engineering Mathematics-II	2.92	2.82	2.66	2.90		2.90					2.93	2.87
BTBS202	Engineering Chemistry	2.79	2.75				2.75	2.84		2.75			
BTES203	Engineering Mechanics	2.87	2.86	2.65			2.77			2.95			
BTES204	Computer Programming in C	2.09	2.91	2.90						2.86	2.86		
BTES205	Workshop Practices	2.95				2.96				2.95	2.95		
BTES206	Basic Electrical and Electronics Engineering	2.77					2.81	2.65			2.77		2.77
BTES207L	Computer Programming Lab	2.83	2.80	2.81						2.48	2.49		

BTBS208L	Engineering Chemistry Lab	2.93	2.90				2.90	2.93		2.90			
BTES209L	Engineering Mechanics Lab	2.95	2.95	2.97			2.93			2.97			
BTES210P	Mini Project	2.19	2.17			2.17	2.19	2.17	2.17	2.18	2.18		
BTES211P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).												
BTBS301	Engineering Mathematics-III	2.94	2.94	2.94	2.94		2.93				2.95	2.95	2.94
BTEEC302	Network Analysis and Synthesis	2.93	2.96	2.96		2.94	2.96			2.94	2.96		2.94
BTEEC303	Fluid Mechanics and Thermal Engineering	2.94	2.94			2.96				2.96	2.96		
BTEEC304	Measurement and Instrumentation	2.94	2.93	2.96			2.95			2.93	2.94	2.96	2.92
BTEEE305A	Elective –I (A) Electrical Engineering Materials	2.94	2.95				2.94				2.94		2.92
BTHM3401	Basic Human Rights	2.49	2.55				2.98			2.65	2.57		
BTHM306	Engineering Economics	2.95	2.93								2.94		2.94
BTEEL307	Network Analysis and Synthesis Lab	2.96	2.95	2.96		2.96	2.94			2.96	2.97		2.96
BTEEL308	Measurement and Instrumentation Lab	2.59	2.43	2.48		2.57	2.48			2.71	2.36		2.32
BTEEM309	Electrical workshop/ Mini project	2.60	2.32	2.48	2.01	2.56	2.48			2.72	2.36		2.40
BTEEF310	Field Training/ Internship/ Industrial Training Evaluation	2.59	2.31	2.47	2.72	2.56	2.67	2.72	2.47	2.71	2.35		2.31
BTEEC401	Electrical Machine-I	2.94	2.94	2.94			2.91		2.91	2.94	2.94		2.94
BTEEC402	Power System-I	2.85	2.90	2.88		2.80	2.86	2.84		2.84	2.90		2.86
BTEEC403	Electrical Installation and Estimation	2.88	2.88	2.96		2.89	2.89	2.90	2.88	2.92	2.89	2.93	2.89
BTEEC404	Numerical Methods and Programming	2.95	2.95			2.95				2.95	2.95		2.96

BTID405	Product Design Engineering	2.92	2.91			2.89				2.92	2.94		2.91
BTEEE-406A	Elective –II- (A) Solid State Devices	2.89	2.88			2.88				2.88	2.88		
BTEEOE407-B	Elective –III (B) Introduction to Non-Conventional energy sources	2.91	2.89	2.86	2.89		2.87	2.90	2.87	2.87	2.94	2.95	2.86
BTEEL408	Electrical Machine-I Lab	2.94	2.94	2.94			2.91		2.91	2.94	2.94		2.94
BTEEL409	Power System lab-I	2.85	2.90	2.88		2.80	2.86	2.84		2.84	2.90		2.86
BTEEL410	Numerical Methods and Programming Lab	2.41	2.46	2.95		2.46				2.46	2.30		2.46
BTEEEL411A	Elective-II Lab (A) Solid State Devices Lab	2.41	2.46			2.46				2.46	2.46		
	Field Training / Internship/ Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)												
BTEEC501	Electrical Machine-II	2.66	2.66	2.66						2.70	2.71		2.71
BTEEC502	Power System-II	2.62	2.62			2.61	2.63						
BTEEL503	Microprocessor and micro Controller	2.64	2.64			2.63							2.71
BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]						2.42	2.54	2.35		2.64		
BTEEE505	Elective-IV- Illumination engineering	2.59	2.58										
BTEEOE506	Elective-V- Electrical Mobility	2.66											
BTEEL507	Electrical Machine-II Lab	2.71	2.73	2.70						2.71	2.71		2.63
BTEEL508	Power System-II Lab	2.71	2.78			2.74	2.79						
BTEEL509	Microprocessor and micro Controller Lab	2.77	2.71			2.63							2.95
BTEEF510	Industrial Training	2.71	2.73	2.70	2.95	2.47	2.71	2.71	2.79	2.71	2.71	2.68	2.71

BTEEC601	Control System	2.63	2.59			2.64					2.66		
BTEEC602	Principles of Electrical Machine Design	2.56	2.55	2.55		2.54					2.51		
BTEEC603	Power Electronics	2.76	2.73	2.83	2.65	2.74	2.71	2.61	2.61	2.71	2.73	2.61	2.69
BTEEE604	Elective-VI- Industrial automation and Control	2.83	2.82										
BTEEC605	Elective-VII- Switch Gear and Protection	2.84	2.80			2.89		2.96		2.81	2.89		
BTEEOE606	Elective-VIII- Project Management [MOOC/Swayam/NPTEL]	2.78	2.81				2.77				2.77	2.89	
BTEEL607	Control System- Lab	2.71	2.73			2.71					2.71		
BTEEL608	Principles of Electrical Machine Design Lab	2.56	2.55	2.55		2.54					2.51		
BTEEL609	Power Electronics Lab	2.73	2.73	2.83	2.65	2.71	2.68	2.72	2.72	2.59	2.74	2.72	2.56
BTEEC701	Power System Operation & Control	2.88	2.87			2.87	2.87				2.87		
BTEEC702	High Voltage Engineering	2.90	2.90				2.90	2.90			2.90		
BTEEC703	Electrical Drives	2.86	2.89				2.86				2.87		2.87
BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	2.91	2.90				2.91						
BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	2.92	2.92				2.92				2.92		
BTEEL706	Power System Operation & Control Lab	2.70	2.47			2.70					2.68		
BTEEL707	High Voltage Engineering Lab	2.66	2.60				2.77	2.95			2.71		
BTEEL708	Electrical Drives Lab	2.71	2.78				2.70				2.86		
BTEES709	Seminar	2.68	2.76				2.73		2.94		2.81		
BTEEP710	Project Part-I	2.75	2.65	2.44		2.95	2.96	2.70	2.78	2.77	2.72	2.91	2.95
BTEEF711	Field Training/Internship/Industrial Training III	2.94	2.93	2.93	2.94	2.95	2.95	2.94	2.95	2.94	2.94	2.94	2.95

BTEEPE801	High Power Multilevel Converters (Elective-I)	2.91	2.93	2.90		2.93					2.86	2.94	2.92
BTEEP802	Entrepreneurship Essentials (Elective-II)	2.91	2.91				2.93				2.92		
BTEEP803	Project - II	2.95	2.95	2.94		2.96	2.95	2.95	2.95	2.94	2.93	2.91	2.96
AVERAGE VALUES		**2.79**	**2.77**	**2.80**	**2.79**	**2.73**	**2.80**	**2.79**	**2.74**	**2.80**	**2.77**	**2.88**	**2.82**
		PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**

FINAL PO-ATTAINMENT:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.68	2.66	2.69	2.66	2.66	2.64	2.70	2.69	2.76	2.74	2.73	2.69
Direct Attainment	2.79	2.77	2.80	2.79	2.73	2.80	2.79	2.74	2.80	2.77	2.88	2.82
Indirect Attainment	2.26	2.23	2.29	2.16	2.35	2.03	2.36	2.47	2.62	2.58	2.16	2.21

PSO Attainment:

Subject Code	Name of Subject	PSO-1	PSO-2
BTBS101	Engineering Mathematics- I		
BTBS102	Engineering Physics	2.93	
BTES103	Engineering Graphics		
BTHM104	Communication Skills		
BTES105	Energy and Environment Engineering	2.95	
BTES106	Basic Civil and Mechanical Engineering		
BTBS107L	Engineering Physics Lab	2.97	
BTES108L	Engineering Graphics Lab		
BTHM109L	Communication Skills Lab.		
BTBS201	Engineering Mathematics-II		
BTBS202	Engineering Chemistry		
BTES203	Engineering Mechanics		
BTES204	Computer Programming in C		
BTES205	Workshop Practices	2.93	
BTES206	Basic Electrical and Electronics Engineering	2.78	
BTES207L	Computer Programming Lab		
BTBS208L	Engineering Chemistry Lab		
BTES209L	Engineering Mechanics Lab		
BTES210P	Mini Project	2.17	2.17
BTES211P	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).		
BTBS301	Engineering Mathematics-III		

BTEEC302	Network Analysis and Synthesis	2.93	
BTEEC303	Fluid Mechanics and Thermal Engineering		
BTEEC304	Measurement and Instrumentation	2.94	
BTEEE305A	Elective –I (A) Electrical Engineering Materials	2.94	
BTHM3401	Basic Human Rights		
BTHM306	Engineering Economics		
BTEEL307	Network Analysis and Synthesis Lab	2.96	
BTEEL308	Measurement and Instrumentation Lab	2.48	
BTEEM309	Electrical workshop/ Mini project	2.48	
BTEEF310	Field Training/ Internship/ Industrial Training Evaluation	2.47	2.96
BTEEC401	Electrical Machine-I	2.94	2.91
BTEEC402	Power System-I	2.96	2.86
BTEEC403	Electrical Installation and Estimation	2.88	2.91
BTEEC404	Numerical Methods and Programming	2.95	
BTID405	Product Design Engineering	2.94	
BTEEE-406A	Elective –II- (A) Solid State Devices	2.88	
BTEEOE407-B	Elective –III (B) Introduction to Non- Conventional energy sources	2.89	2.89
BTEEL408	Electrical Machine-I Lab	2.94	2.91
BTEEL409	Power System lab-I	2.96	2.86
BTEEL410	Numerical Methods and Programming Lab	2.30	
BTEEEL411A	Elective-II Lab (A) Solid State Devices Lab	2.36	

	Field Training / Internship/ Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)		
BTEEC501	Electrical Machine-II	2.65	
BTEEC502	Power System-II	2.61	
BTEEL503	Microprocessor and micro Controller	2.69	
BTHM504	Value Education, Human Rights and Legislative Procedures [MOOC/Swayam/NPTEL]		
BTEEE505	Elective-IV- Illumination engineering	2.60	
BTEEOE506	Elective-V- Electrical Mobility	2.63	
BTEEL507	Electrical Machine-II Lab	2.47	
BTEEL508	Power System-II Lab	2.94	2.48
BTEEL509	Microprocessor and micro Controller Lab	2.46	
BTEEF510	Industrial Training	2.70	
BTEEC601	Control System	2.64	
BTEEC602	Principles of Electrical Machine Design	2.57	2.57
BTEEC603	Power Electronics	2.74	2.64
BTEEE604	Elective-VI- Industrial automation and Control	2.82	
BTEEC605	Elective-VII- Switch Gear and Protection	2.81	
BTEEOE606	Elective-VIII- Project Management [MOOC/Swayam/NPTEL]		
BTEEL607	Control System- Lab	2.47	
BTEEL608	Principles of Electrical Machine Design Lab	2.57	2.57
BTEEL609	Power Electronics Lab	2.71	2.66
BTEEC701	Power System Operation & Control	2.87	
BTEEC702	High Voltage Engineering	2.90	

BTEEC703	Electrical Drives	2.87	2.84
BTEEE704B	Elective-IX- (B) Electrical Traction and Utilization	2.91	
BTEEE705D	Elective-X- (D) HVDC Transmission and FACTS	2.92	
BTEEL706	Power System Operation & Control Lab	2.70	
BTEEL707	High Voltage Engineering Lab	2.70	
BTEEL708	Electrical Drives Lab	2.70	
BTEES709	Seminar	2.68	
BTEEP710	Project Part-I	2.75	
BTEEF711	Field Training/Internship/Industrial Training III	2.94	
BTEEPE801	High Power Multilevel Converters (Elective-I)	2.93	
BTEEP802	Entrepreneurship Essentials (Elective-II)		2.93
BTEEP803	Project - II	2.95	
AVERAGE VALUES		**2.76**	**2.74**
		PSO-1	**PSO-2**

FINAL PSO-ATTAINMENT:

Course	PSO1	PSO2
CO Attainment	2.68	2.63
Direct Attainment	2.76	2.74
Indirect Attainment	2.38	2.17

CRITERION 04	**Students' Performance**	**150**

4. STUDENTS' PERFORMANCE (150)

TableB.4a

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY (2022-23)	CAY m 1(2021-22)	CAY *m*2 (2020-21)	CAY*m*3 (2019-20)	CAY*m*4 (2018-19)	CAY*m*5 (2017-18)	CAY*m*6 (2016-17
Sanctioned intake of the program (*N*)	30	30	30	30	60	60	45
Total number of students admitted in first year *minus* number of students migrated to other programs/institutions plus no. of students migrated to this program (*N*1)	31	9	22	9	14	14	11
Number of students admitted in 2nd year in the same batch via lateral entry (*N*2)	**0**	**28**	**14**	**24**	**52**	**60**	38
Separate division students, if applicable (*N3*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total number of students admitted in the Program (*N*1 + *N*2 + N3)	**31**	**37**	**36**	**33**	**66**	**74**	**49**

CAY– Current Academic Year

CAYm1-Current Academic Year minus1 = Current Assessment Year

CAYm2- Current Academic Year minus2 = Current Assessment Year minus1

LYG– Last Year Graduate minus 1

LYGm 1– Last Year Graduate minus 1

LYGm 2– Last Year Graduate minus

TableB.4b

Year of entry	*N*1+*N*2+N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study)			
		IYear	IIYear	IIIYear	IVYear
CAY(2022-23)	**31(31+0)**				
CAYm1(2021-22)	**37(9+28)**	**3**			
CAY*m*2(2020-21)	**36(22+14)**	**22**	**20+10**		
CAY*m*3(2019-2020)	**33(9+24)**	**9**	**9+14**	**9+14**	
CAY*m4*(2018-2019)	**66(14+52)**	**3**	**3+48**	**3+47**	**3+43**
CAY*m5* (LYG)(2017-18)	**74(14+60)**	**5**	**(5+23)**	**(5+23)**	**(5+23)**
CAY*m6* (LYG*m*1)(2016-17)	**49(11+38)**	**2**	(1+15)	**(1+14)**	**(1+14)**

TableB.4c

Year of entry	*N*1+*N*2+N3 (As defined above)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog+ without Backlog]			
		IYear	IIYear	IIIYear	IVYear
CAY(2022-23)	31(31+0)				
CAYm1(2021-22)	37(9+28)	8			
CAYm2(2020-21)	36(22+14)	22	21+14		
CAYm3(2019-2020)	33(9+24)	9	9+19	9+19	
CAYm4(2018-2019)	66(14+52)	14	11+ 51	11+ 49	11+48
CAYm5(LYG)(2017-18)	74(14+60)	14	14+49	14+43	14+42
CAYm6 (LYGm1)(2016-17)	49(11+38)	2	2+26	2+23	2+23

4.1 Enrolment Ratio (20) Enrolment Ratio=N1/N

Enrolment Ratio=N1/N

	N from table B.4a	N1 from tableB. 4a	Enrollment ratio
CAY(2022-23)	30	30+1	103
CAYm1(2021-22)	30	9	30
CAYm2(2020-21)	30	22	73
Average Enrollment=(ER1+ER2+ER3)/3=(103+30+73)/3= 68.66			

TableB.4.1

Item (StudentsenrolledattheFirstYearLevelonaveragebasisduringtheprevi ousthreeacademicyearsstartingfromcurrentacademicyear)	**Marks**
>=90%studentsenrolled	20
>=80%studentsenrolled	18
>=70%studentsenrolled	16
>=60%studentsenrolled	14
>=50%studentsenrolled	12
Otherwise	0

4.1 Success Rate in the stipulated period of the program (40)

4.1.1 Success rate without backlogs in any semester/year of study (25)

SI=(Number of students who have graduated from the program without backlog)/(Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI=Mean of Success Index(SI)for past three batches

*Success rate without backlogs in any year of study =25×Average SI=25*0.46=11.5*

TableB.4.2.1

Item	**Last Year of Graduate, LYG (2021-22)**	**Last Year of Graduate, minus1,LYGm 1 (2020-21)**	**Last Year of Graduate minus2,LYG*m*2 (2019-20)**
Number of students admitted in the corresponding First Year+ admitted in 2nd year via lateral entry and separate division, if applicable (x)	66	74	49
Number of students who have graduated without backlogs in the stipulated period(y)	46	28	15
Success Index(SI)=(y/x)	0.69	0.38	0.31
Average SI (SI1+SI2+SI3)/3	0.46		

4.2.2 Success rate in stipulated period of study (15)

SI=(Number of students who graduated from the program in the stipulated period of course duration)/(Number of students admitted in the first yea rof that batch and actual admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI=mean of Success Index (SI) for past three batches

Success rate=15×AverageSI=15 × 0.716=10.75

TableB.4.2.2

Item	Last Year of Graduate, LYG (2022-23)	Last Year of Graduate minus 1, LYGm1 (2020-21)	Last Year of Graduate minus 2, LYGm2 (CAYm5) (19-20)
Numberofstudentsadmittedinthecorrespondi ngFirstYear+admittedin2ndyearvialateralen tryandseparatedivision,ifapplicable X	**66**	**74**	**49**
Number of students who have graduated in the stipulated period Y	**59**	**56**	**25**
Success Index(SI)=(y/x)	**0.89**	**0.75**	**0.51**
Average Success Index (SI1+SI2+SI3)/3	**= 0.716**		

Note: If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1& 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Third Year(15)

*Academic Performance=1.5*Average API(Academic Performance Index)11.97*

***API**=((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale)or(Mean of the percentage of marks of all successful students in Third Year/10))x(number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the final year.

TableB.4.3

Academic Performance	**CAYm1 (2021-22)**	**CAYm2 (2020-21)**	**CAY*m3* (2019-20)**
Mean of CGPA or Mean Percentage of all successful students(X)	**8.36**	**7.20**	**8.12**
Total no. of successful students (Y)	**28**	**60**	**57**
Total no. of students appeared in the examination(Z)	**28**	**62**	**63**
API=x*(Y/Z)=	**8.36**	**6.97**	**7.34**
Average API =(AP1+AP2+AP3)/3	**7.55**		

4.4 Academic Performance in Second Year(15)

*Academic Performance Level=1.5*Average API (Academic Performance Index) 11.57*

***API**=((Mean of 2nd Year Grade Point Average of all successful Students on a 10 pointscale)or(Mean of the percentage of marks of all successful students in Second Year/10))x(number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the Third year.

TableB.4.4

AcademicPerformance	**CAYm 1 (2021-22)**	**CAYm 2 (2020-21)**	**CAY*m3* (2019-20)**
Mean of CGPA or Mean Percentage of all successful students(X)	**7.58**	**8.67**	**8.79**
Total no. of successful students(Y)	**33**	**28**	**62**
Total no. of students appeared in the examination(Z)	**33**	**33**	**66**
API=X*(Y/Z)	**7.58**	**7.31**	**8.25**
Average API=(AP1+AP2+AP3)/3	**7.71**		

4.5 Placement, Higher Studies and Entrepreneurship (33/40) 34.93

Assessment Points =40×averageplacement

Table B.4.5

Item	CAY*m1* (2021-22)	CAY*m1* (2020-21)	CAY *m2* (2019-20)
Total No. of Final Year Students(N)	62	56	28
No. of students placed in companies or Government Sector(x)	57	46	23
No. of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level Tests, GRE, GMAT etc.)(y)	1	0	0
No. of students turned entrepreneur in engineering/technology(z)	3	2	0
x+y+z=	61	48	23
Placement Index:(x+y+z)/N	0.98	0.64	1
Average placement=(P1+P2+P3)/3	**0.874**		

4.5 A Provide the placement data in the below mentioned form at with the name of the program and the assessment year:

Programs Name and Assessment Year(2021-22)				
S.no.	**Enrollment no.**	**Name of the student placed**	**Name of the Employer**	**Appointment letter reference no. with date**
1	1965451293021'	SHINDE ROHIT KRUSHNA	T.A ENGINEERING	TPC/1293/2022/021
2	"51654520181129310056"	RAO ARCHANA RAVIKUMAR	WIPRO TECHNOLOGIES	TPC/1293/2022/005
3	1965451293056'	AGAWANE APARNA SHRIKANT	CUMMINS	TPC/1293/2022/056
4	1965451293042'	PINGALE SOMESHWAR ANKUSH	MAHINDRA INTEGRATED BUSINESS SOLUTIONS PVT LTD	TPC/1293/2022/042
5	1965451293054'	JAMDADE SHUBHAM RAJENDRA	ONLYAS KAROL BAGH	TPC/1293/2022/054
6	"51654520181129310067"	KOMAL RAJARAM MONDE	CHEDDHA ELECTRICALS AND ELECTRONICS PVT LTD, SHIRVAL	TPC/1293/2022/10067
7	1965451293014'	KOMAL BALKRISHNA DEVKAR	TVS LUCCAS PVT LTD	TPC/1293/2022/014
8	1965451293055'	PAWAR MAYURI MACHHINDRA	MUTHA ENGINEERING PVT LTD	TPC/1293/2022/055
9	1965451293002'	CHAVAN AMAR ANIL	ACCURATE INDUSTRIAL CONTROLS PVT LTD	TPC/1293/2022/002
10	"51654520181129310058"	KHATTE AVISHKAR BALKRISHNA	WIPRO	TPC/1293/2022/005
11	1965451293001'	GOSAVI ANITA EKNATH	COMPETITIVE CLASSES KENDARE INTTITUTE	TPC/1293/2022/001
12	1965451293015'	KENJALE SHUBHAM NANDKUMAR	FORCE MOTORS LIMITED	TPC/1293/2022/015
13	1965451293026'	NIKAM PRAJAKTA MANASING	INFOSYS	TPC/1293/2022/026
14	1965451293016'	SONAVANE SHUBHAM DHANANJAY	PRAVIN ELECTRONICS	TPC/1293/2022/016
15	1965451293053'	UTKARSH RAMACHANDRA CHAVAN	SAI INDUSTRIES	TPC/1293/2022/053
16	1965451293039'	SHINDE ROHITKUMAR PRABHAKAR	WIPRO	TPC/1293/2022/039
17	1965451293032'	RAUT AMRUTA DADASO	SHIVAM ENTERPRISE	TPC/1293/2022/032

18	1965451293003'	KADAM ANUP SANJAY	MAHAGENCO	TPC/1293/2022/003
19	1965451293019'	CHALKE SAURABH RAVINDRA	UL SYSTEM AND CONTROLS INDIA PVT.LTD	TPC/1293/2022/019
20	1965451293033'	PATIL PRATIK SHAMRAO	QSPIDER PVT. LTD	TPC/1293/2022/033
21	1965451293006'	KAMBLE SAGAR CHANDRAKANT	ACCURATE INDUSTRIAL CONTROLS PVT LTD	TPC/1293/2022/006
22	1965451293011'	GAIKWAD POOJA VIKRANT	T & M CONSULTANCY PVT.LTD	TPC/1293/2022/011
23	"51654520181129310065"	THORAT SHRADDHA VIJAYSINH	CHEDDHA ELECTRICALS AND ELECTRONICS PVT LTD, SHIRVAL	TPC/1293/2022/006
24	1965451293004'	JADHAV KAJAL SATISH	TATA MOTORS LTD.	TPC/1293/2022/004
25	1965451293036	ABA BALU THORAT	MINDA CORPORATION PUNE	TPC/1293/2022/036
26	"51654520181129310059"	BHOITE NILAM PRAKASH	PROFOUND EDUTECH	TPC/1293/2022/056
27	1965451293009'	KSHIRSAGAR RAVIKIRAN SHASHIKANT	LOGICAL SOLUTIONS CONSULTANT	TPC/1293/2022/009
28	1965451293029'	KALE SHITAL CHANGDEV	QSPIDER PVT. LTD.	TPC/1293/2022/029
29	1965451293037'	JADHAV SHRIRAM BHANUDAS	CHHEDA ELECTRICALS & ELECTRONICS PVT. LTD.	TPC/1293/2022/037
30	1965451293007'	DHAIGUDE SANEE GULAB	RAJASHREE INTERNATIONAL	TPC/1293/2022/007
31	1965451293051'	PATIL KOMAL RANGRAO	TATA MOTORS LTD PUNE	TPC/1293/2022/051
32	1965451293005'	KALANGE POONAM ABASAHEB	SAI INDUSTRIES	TPC/1293/2022/005
33	1965451293013'	GHADGE MAYURESH PANDURANG	SURYAURJAA TECHNOLOGY ENERGY FOREVER	TPC/1293/2022/013
34	1965451293030'	DESHMANE DIVYA SOMNATH	Q SPIDERS	TPC/1293/2022/030
35	"51654520181129310064"	NIKAM PRATIK PRABHAKAR	SHIVAM ENTERPRISE	TPC/1293/2022/064
36	1965451293050'	PATIL POOJA NAMDEV	SHIVAM ENTERPRISE	TPC/1293/2022/050
37	1965451293040'	JADHAV ASAVARI VIJAY	PRICOL LIMITED	TPC/1293/2022/040
38	1965451293025'	SHIVANKAR SALONI SANTOSH	GALACTIC ELECTRIC PRIVATE LIMITED	TPC/1293/2022/025
39	1965451293022'	MAHAMULKAR PRAJAKTA KALYAN	ATTRA INFOTECH PVT. LTD.	TPC/1293/2022/022

40	1965451293027'	SHINGATE SHITAL HANMANT	TATA MOTORS LTD PUNE	TPC/1293/2022/027
41	1965451293044'	CHAVAN PRANITA HANMANT	TATA MOTORS(JAGUAR & LAND ROVER)PVT. LTD. PUNE	TPC/1293/2022/044
42	1965451293057'	YADAV SNEHAL ASHOK	BICARD	TPC/1293/2022/057
43	"51654520181129310085"	NISHANT KIRAN TAWATE	CHAITANYA ELECTRICAL	TPC/1293/2022/058
44	"51654520181129310053"	JEDHEDESHMUKH PIYUSH DUSHYANT	APTRON TECHNOLOGY	TPC/1293/2022/053
45	1965451293017'	SHINDE NIKHIL SURYABHAN	FINOLEX J POWER SYSTES LTD	TPC/1293/2022/017
46	1965451293031'	PAWAR SAURABH NARAYAN	TECHNOARTZ	TPC/1293/2022/031
47	1965451293020'	PATIL SHAHAJI DINKAR	APTRON TECHNOLOGY	TPC/1293/2022/020
48	1965451293059'	INGALE SUJATA BHAUSAHEB	STANTEC LTD.	TPC/1293/2022/059
49	1965451293018'	SHELAR AADITYA SURESH	CHAVARE ENGINEERING PVT.LTD	TPC/1293/2022/018
50	1965451293046'	KADAM DIVYA VINODKUMAR	CUMMINS	TPC/1293/2022/046
51	1965451293010'	NALAWADE RUTUJA RAJENDRA	TATA MOTORS LTD.	TPC/1293/2022/010
52	2065451293006'	MANE PRASHANT CHANDRAKANT	KHODSHI POWER PVT.LTD. KARAD	TPC/1293/2022/006
53	"51654520181129310066"	PATIL SHUBHAM MOHAN	SAGITEC SOLUTION PVT. LTD	TPC/1293/2022/066
54	"51654520181129310068"	CHAVAN AAKANKSHA JAYWANT	ATOS PVT. LTD	TPC/1293/2022/068
55	"51654520181129310009"	KUMBHAR KIRAN SANJAY	M.S.E.D.C.L	TPC/1293/2022/009
56	1965451293028'	PATANE RUTURAJ ANANDA	SHIVAM ENTERPRISE	TPC/1293/2022/028
57	"51654520181129310081"	JAMDADE SHUBHAM RANGRAO	SHIVAM ENTERPRISE	TPC/1293/2022/081
58	"51654520181129310055"	GODSE GANESH ANKUSH	CDAC	TPC/1293/2022/058

Programs Name and Assessment Year(2020-21)				
S.no.	**Name of the student placed**	**Enrollment no.**	**Name of the Employer**	**Appointment letter reference no. with date**
1	DHALE HARDIKA HEMANT	51654520171129310002	CEM ELECTROMECH PVT.LTD	TPC/1293/2021/002/ 19-11-21
2	GAIKWAD ANIKET RAJU	51654520171129310003	HONEYWELL	TPC/1293/2021/003/ 07-01-21
3	KUMBHAR MEGHA SUNIL	51654520171129310004	ABHINAV EDUCATION SOCIETY'S COLLEGE OF ENGINEERING, WADWADI	TPC/1293/2021/004/ 14-11-20
4	DEDE PRADIP ANKUSH	51654520171129300005'	PRICOL LMT, PLANT 5	TPC/1293/2021/005/ 27-9-21
5	CHAITANYA SUNIL THIGALE	51654520171129310006	SAITRONIX PVT LTD SATARA	TPC/1293/2021/006/ 7-11-21
6	AKHILESH SUBHASH JAMBHALE	51654520171129310007	TATA CONSULTANCY SERVICES LIMITED (TCSL).	REF: TCSL/DT20219030 479/LUCKNOW DATE: 19-02-2022
7	NIKITA MADHAV PIMPALKAR	51654520171129310008	BYJUS	TPC/1293/2021/008/ 19-11-21
8	KADAM TEJASHRI SANJAY	51654520171129310009	SAITRONIX PVT LTD SATARA	TPC/1293/2021/008/ 24-01-21
9	ASMITA ARVIND PATIL	51654520171129310010	SAITRONIX PVT LTD SATARA	TPC/1293/2021/010/ 26-08-21
10	SANDESH BABASAHEB WADKAR	51654520171129310011	AJINKAY ELECTRO SYSTEM SATARA	TPC/1293/2021/011/ 16-12-21
11	SHINDE ROHINI HANAMANT	51654520171129310012	SAITRONIX PVT LTD SATARA	TPC/1293/2021/012/ 27-08-221
12	SHINDE PRATIMA DATTATRAY	51654520171129310014	CEM ELECTROMECH PVT.LTD	TPC/1293/2021/014/ 20-08-21
13	BAGAL POONAM ANANDRAO	PRN:5165452018112931 0016	RAVI ELECTRICALS, SATARA	TPC/1293/2021/016/ 25-09-21
14	MALI RUTUJA SHANKAR	PRN:5165452018112931 0030	YAZAKI INDIA PVT.LTD	TPC/1293/2021/030/ 21-10-21
15	KULKARNI OMKAR RAJENDRA	PRN:5165452018112931 0013	GE INDIA INDUSTRIAL PVT LTD PUNE	TPC/1293/2021/013/ 26-8-21
16	DESHMUKH PRIYANKA BHANUDAS	PRN:5165452018112931 0020	RAVI ELECTRICALS, SATARA	TPC/1293/2021/020/ 2—7-21
17	MAHESH ANANDA JADHAV	51654520181129310005	LEAR COORPORARATION	TPC/1293/2021/005/ 24-3-21
18	KUMBHARKAR VAIBHAV VILAS	PRN:5165452018112931 0010	GM FINANCE	TPC/1293/2021/010/ 10-9-21
18	CHOUGALE SHUBHANGI SANJAY	PRN:5165452018112931 0011	RAVI ELECTRICALS, SATARA	TPC/1293/2021/011/ 15-9-21
20	SANKPAL NAMRATA NETAJI	PRN:5165452018112931 0035	TATA MOTORS	TPC/1293/2021/035/ 1-09-21
21	PAWAR SANCHITA NANASO	PRN:5165452018112931 0018	RAVI ELECTRICALS, SATARA	TPC/1293/2021/018/ 20-11-21
22	CHAVAN GOURI ASHOK	PRN:5165452018112931 0049	MACHBBIZ MARKETERS PVT LTD	TPC/1293/2021/049/ 22-12-21
23	LAWAND AMRUTA SHIVAJI	PRN:5165452018112931 0029	SIDDHESHWAR ELECTRICALS	TPC/1293/2021/029/ 9/9/21
24	AISHWARYA SANJAY SALUNKHE	PRN:5165452018112931 0027	SIDDHESHWAR ELECTRICALS	TPC/1293/2021/027/ 24/09/21

25	GUJAR TEJAS SHARAD	51654520181129310040	AJNKAY ELECTRONICS	TPC/1293/2021/040/ 17-9-21
26	PATIL SWARANJALI VITTHALRAO	PRN:5165452018112931 0019	YAZAKI INDIA PVT LTD	TPC/1293/2021/019/ 5-2-21
27	GARUD ASHISH ADHIKRAO	PRN:5165452018112931 0045	DATTASUMAN ELECTRICAL SERVICES	TPC/1293/2021/13/6 /21
28	DHOTRE DILIP DNYANDEV	PRN:5165452018112931 0062	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/062/ 16-10-21
29	JADHAV SHITAL SAMBHAJI	PRN:5165452018112931 0052	GROUPO ANTOLIN	TPC/1293/2021/052/ 27-10-21
30	POWAR SHIVRAJ SARJERAO	PRN:5165452018112931 0002	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/002/ 17-11-21
31	TIKUDAVE AKSHAY DHONDIRAM	PRN:5165452018112931 0043	KSB LTD, SHIRWAL	TPC/1293/2021/043/ 18/9-21
32	PAWAR SUSHANT VINAYAK	PRN:5165452018112931 0008	AMURA MARKETING TECHNOLOGIES PVT LTD	TPC/1293/2021/008/ 21-9-21
33	PISE MADHURI MADHUKAR	PRN:5165452018112931 0050	GE INDIA INDUSTRIAL PVT. LTD	TPC/1293/2021/005 0/18-08-21
34	LOKHANDE AKSHAY HANMANT	PRN:5165452018112931 0006	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/006/ 20-12-21
35	PAWAR PRATIK BALASAHEB	PRN:5165452018112931 0032	SUSTAINFOI ENERGY	TPC/1293/2021/032/ 18-02-21
36	SASANE RUSHIKESH ASHOK	PRN:5165452018112931 0003	VIROCH ENGG	TPC/1293/2021/003/ 29-07-21
37	KAKADE RUSHIRAJ RAJIV	51654520181129310036	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/036/ 18-11-21
38	GHADGE VIJAY SANJAY	PRN:5165452018112931 0021	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/021/ 23-08-21
39	MASAL SHANKAR MARUTI	PRN:5165452018112931 0063	DHOOT TRANSMISSION PVT.TLD	TPC/1293/2021/063/ 15-10-21
40	BHAGWAT DEVVRAT UMAKANT	PRN:5165452018112931 0004	BPCL WAI LPG PLANT,SATARA	TPC/1293/2021/004/ 01-11-21
41	PHADTARE VIKAS BALASO	PRN:5165452018112931 0051		TPC/1293/2021/051/ 29-04-21
42	PAWAR KIRAN VIJAY	PRN:5165452018112931 0038	NAMO NAMOKAR ENGINEERING PVT. LTD.	TPC/1293/2021/038/ 12-01-21
43	JANGAM PRITEE SANJAY	PRN:5165452018112931 0073	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/073/ 11-1-22
44	JADHAV ASHWINI SATAPPA	PRN:5165452018112931 0048	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/048/ 16-12-21
45	SAKATE RAHUL SIDDHARTH	PRN:5165452018112931 0031	KOHINOOR TECHNICAL INSTITUTE PVT.LTD	TPC/1293/2021/031/ 2-9-21
46	JADHAV KOMAL VILAS	PRN:5165452018112931 0041	SIGMA ENGG	TPC/1293/2021/041/ 05-12-21

Programs Name and Assessment Year(2020-21)				
S.no.	**Name of the student placed**	**Enrollment no.**	**Name of the Employer**	**Appointment letter reference no. with date**
1	DHALE HARDIKA HEMANT	51654520171129310002	ANUSHKA MULTI SERVICES	TPC/1293/2021/002/19-11-21
2	GAIKWAD ANIKET RAJU	51654520171129310003	HONEYWELL	TPC/1293/2021/003/07-01-21
3	KUMBHAR MEGHA SUNIL	51654520171129310004	ABHINAV EDUCATION SOCIETY'S COLLEGE OF ENGINEERING, WADWADI	TPC/1293/2021/004/14-11-20
4	DEDE PRADIP ANKUSH	51654520171129300005'	PRICOL LMT, PLANT 5	TPC/1293/2021/005/27-9-21
5	CHAITANYA SUNIL THIGALE	51654520171129310006	BALAJI ELECTRICAL	TPC/1293/2021/006/7-11-21
6	AKHILESH SUBHASH JAMBHALE	51654520171129310007	TATA CONSULTANCY SERVICES LIMITED (TCSL).	REF: TCSL/DT20219030479/ LUCKNOW DATE: 19-02-2022
7	NIKITA MADHAV PIMPALKAR	51654520171129310008	BYJUS	TPC/1293/2021/008/19-11-21
8	KADAM TEJASHRI SANJAY	51654520171129310009	BS CORPORATION LTD	TPC/1293/2021/008/24-01-21
9	ASMITA ARVIND PATIL	51654520171129310010	CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENTS	TPC/1293/2021/010/26-08-21
10	SANDESH BABASAHEB WADKAR	51654520171129310011	UNACADEMY	TPC/1293/2021/011/16-12-21
11	SHINDE ROHINI HANAMANT	51654520171129310012	QSP	TPC/1293/2021/012/27-08-221
12	SHINDE PRATIMA DATTATRAY	51654520171129310014	APTRON TECHNOLOGY	TPC/1293/2021/014/20-08-21
13	BAGAL POONAM ANANDRAO	PRN:5165452018112931001 6	REALTHINGKSINDIA	TPC/1293/2021/016/25-09-21
14	MALI RUTUJA SHANKAR	PRN:5165452018112931003 0	YAZAKI INDIA PVT.LTD	TPC/1293/2021/030/21-10-21
15	KULKARNI OMKAR RAJENDRA	PRN:5165452018112931001 3	GE INDIA INDUSTRIAL PVT LTD PUNE	TPC/1293/2021/013/26-8-21
16	DESHMUKH PRIYANKA BHANUDAS	PRN:5165452018112931002 0	PARANJAPE AUTOCAST PVT.LTD	TPC/1293/2021/020/2—7-21
17	MAHESH ANANDA JADHAV	51654520181129310005	LEAR COORPORARATION	TPC/1293/2021/005/24-3-21
18	KUMBHARKAR VAIBHAV VILAS	PRN:5165452018112931001 0	SHIVAM ENTERPRISE	TPC/1293/2021/010/10-9-21
19	CHOUGALE SHUBHANGI SANJAY	PRN:5165452018112931001 1	GET	TPC/1293/2021/011/15-9-21
20	SANKPAL NAMRATA NETAJI	PRN:5165452018112931003 5	TATA MOTORS	TPC/1293/2021/035/1-09-21
21	PAWAR SANCHITA NANASO	PRN:5165452018112931001 8	RAVI ELECTRICALS, SATARA	TPC/1293/2021/018/20-11-21
22	CHAVAN GOURI ASHOK	PRN:5165452018112931004 9	MACHBBIZ MARKETERS PVT LTD	TPC/1293/2021/049/22-12-21
23	LAWAND AMRUTA SHIVAJI	PRN:5165452018112931002 9	TATA TECHNOLOGIES	TPC/1293/2021/029/9/9/21
24	AISHWARYA SANJAY SALUNKHE	PRN:5165452018112931002 7	SURYAURJAA TECHNOLOGY ENERGY FOREVER	TPC/1293/2021/027/24/09/21

25	GUJAR TEJAS SHARAD	51654520181129310040	APTRON TECHNOLOGY	TPC/1293/2021/040/17-9-21
26	PATIL SWARANJALI VITTHALRAO	PRN:5165452018112931001 9	YAZAKI INDIA PVT LTD	TPC/1293/2021/019/5-2-21
27	GARUD ASHISH ADHIKRAO	PRN:5165452018112931001 45	SHIVAM ENTERPRISE	TPC/1293/2021/13/6/21
28	DHOTRE DILIP DNYANDEV	PRN:5165452018112931001 62	NEXTEER AUTOMATION INDIA PRIVATE LIMITED	TPC/1293/2021/062/16-10-21
29	JADHAV SHITAL SAMBHAJI	PRN:5165452018112931001 52	TACO PRESTOLITE ELECTIC	TPC/1293/2021/052/27-10-21
30	POWAR SHIVRAJ SARJERAO	PRN:5165452018112931001 02	SAI INDUSTRIES	TPC/1293/2021/002/17-11-21
31	TIKUDAVE AKSHAY DHONDIRAM	PRN:5165452018112931001 43	KSB LTD, SHIRWAL	TPC/1293/2021/043/18/9-21
32	PAWAR SUSHANT VINAYAK	PRN:5165452018112931001 08	AMURA MARKETING TECHNOLOGIES PVT LTD	TPC/1293/2021/008/21-9-21
33	PISE MADHURI MADHUKAR	PRN:5165452018112931001 50	GE INDIA INDUSTRIAL PVT. LTD	TPC/1293/2021/0050/18-08-21
34	LOKHANDE AKSHAY HANMANT	PRN:5165452018112931001 06	INNOVSOURCE SERVICES PRIVATE LIMITED	TPC/1293/2021/006/20-12-21
35	PAWAR PRATIK BALASAHEB	PRN:5165452018112931001 32	SUSTAINFOI ENERGY	TPC/1293/2021/032/18-02-21
36	SASANE RUSHIKESH ASHOK	PRN:5165452018112931001 03	VIROCH ENGG	TPC/1293/2021/003/29-07-21
37	KAKADE RUSHIRAJ RAJIV	51654520181129310036	LOGICAL SOLUTIONS	TPC/1293/2021/036/18-11-21
38	GHADGE VIJAY SANJAY	PRN:5165452018112931002 1	SURYAURJAA TECHNOLOGY ENERGY FOREVER	TPC/1293/2021/021/23-08-21
39	MASAL SHANKAR MARUTI	PRN:5165452018112931001 63	DHOOT TRANSMISSION PVT.TLD	TPC/1293/2021/063/15-10-21
40	BHAGWAT DEVVRAT UMAKANT	PRN:5165452018112931000 4	BPCL WAI LPG PLANT,SATARA	TPC/1293/2021/004/01-11-21
41	PHADTARE VIKAS BALASO	PRN:5165452018112931001 51	AGIO PHARMACEUTICALS LIMITES	TPC/1293/2021/051/29-04-21
42	PAWAR KIRAN VIJAY	PRN:5165452018112931001 38	NAMO NAMOKAR ENGINEERING PVT. LTD.	TPC/1293/2021/038/12-01-21
43	JANGAM PRITEE SANJAY	PRN:5165452018112931001 73	DANA ANAND INDIA PVT LTD,SATARA	TPC/1293/2021/073/11-1-22
44	JADHAV ASHWINI SATAPPA	PRN:5165452018112931001 48	LOGICAL SOLUTIONS	TPC/1293/2021/048/16-12-21
45	SAKATE RAHUL SIDDHARTH	PRN:5165452018112931001 31	KOHINOOR TECHNICAL INSTITUTE PVT.LTD	TPC/1293/2021/031/2-9-21
46	JADHAV KOMAL VILAS	PRN:5165452018112931001 41	SIGMA ENGG	TPC/1293/2021/041/05-12-21

Programs Name and Assessment Year(2019-20)				
S.no.	**Name of the student placed**	**Enrollment no.**	**Name of the Employer**	**Appointment letter reference no. with date**
1	BHASKAR SANYOJITA SUBHASH	2016102866	SHREE DHANANJAY ELECTRICALS	REF. NO: OPS/CBL/2021/084 EMP CODE-OPS282, 26/11/2021
2	JADHAV DIPALI SHIVAJI	2016102860	3 STAR IT SOLUTION AND SERVICES	TPC/1293/860/20-3-20
3	PAWAR PRIYA DHARMU	2016102858	SAI INDUSTRIES	TPC/1293/858/24/02-20
4	PAWAR SAURABH HARISHCHANDA	2016102867	SURYAURJAA TECHNOLOGY ENERGY FOREVER	TPC/1293/867/25-07-20
5	BHOSALE NIKITA	2017106703	FABTECH	TPC/1293/703/23-2-20
6	BORATE PRANJALI	2017106745	BBW HOCHSCHULE	TPC/1293/745/12-02-20
7	CHAVAN ASHVINI	2017106729	MSEB	TPC/1293/729/1-10-2-
8	DUBOLE PRIYANKA	2017106775	ONENESS AUTOMATION LLP	TPC/1293/775/16-04-2020
9	GUDBAL JAYASHRI	2017106780	BOSCH GLOBAL SOFTWARE	TPC/1293/780/25-02-20
10	JADHAV MANASI	2017106722	LOGICAL SOLUTIONS	TPC/1293/722/16-04-20
11	KADAM MANISHA	2017106778	APTRON TECHNOLOGY	TPC/1293/778/25-10-20
12	KADAM RADHIKA	2017106707	ONENESS CONTROL PANEL,SHIVAPUR	TPC/1293/707/1-10-20
13	KRISHNA AKASH	2017106750	SHIVAM ENTERPRISE	TPC/1293/750/15-12-20
14	MALI SARANG	2017106701	APTRON TECHNOLOGY	TPC/1293/701/24-08-20
15	NIKAM MAYURI	2017106711	SAI INDUSTRIES	TPC/1293/711/1-12-20
16	PATIL ABHISHEK	2017106719	TATA COMMUNICATIONS LTD.MUMBAI	TPC/1293/719/1-12-20
17	PATIL PRATIKSHA	2017106733	BEACON LIGHTING DESIGNER	TPC/1293/733/14-12-20
18	PAWAR DHANASHREE	2017106714	ONENESS CONTROL PANEL,SHIVAPUR	TPC/1293/714/27-12-20
19	PISAL OMKAR	2017106713	SURYAURJAA TECHNOLOGY ENERGY FOREVER	TPC/1293/713/04-08-20
20	RAJPURE PRATIK	2017106705	SHIVAM ENTERPRISE	TPC/1293/705/23-8-20
21	SALUNKHE PRAGATI	2017106699	ONENESS CONTROL PANEL,SHIVAPUR	TPC/1293/699/12-03-20
22	SHINDE VRUSHALI	2017106700	SAI INDUSTRIES	TPC/1293/700/04-08-20
23	SURYAWANSHI AKSHAY	2017106710	INFOSIS	TPC/1293/710/28-01-20

4.6 Professional Activities (20)

4.6.1 Professional societies/chapters and organizing engineering events (05)

Sr.No	NAMEOF CHAPTER	MEMBERSHIP NAME	NO./YEAR	MEMBERSHIP DURATION
1	THE INDIAN SOCIETY FORT ECHENICAL EDUCATION(ISTE)	ARVINDGAVALIC OLLEGEOFENGIN EERING,SATARA	MH-313/2023	LIFE TIME

Table. Professional Chapter 2022-2023

YEAR 2022-23

SR. NO	NAME OF ACTIVITY	DATE	RESOURCE PERSON	TYPE OF ACTIVITY(GUEST LECTURE/QUIZ/PROJECT COMPETITION
1	LEADERSHIP AND MANAGEMENT	30-03--2022	DR.B.S.SAWANT	**GUEST LECTURE**
2	INSTITUTE LEVEL PROJECT COMPETITION-AVISHKAR	18-11-2022	DR.MADHAV KUMTHEKAR	PROJECT COMPETITION
3	INDUSTRIAL VISIT	25-11-2022	HVDC SUBSTAION,PADGHE.	INDUSTRIAL TOUR
4	INDUSTRIAL TOUR	17-12-2022	IIT BOMBAY	INDUSTRIAL TOUR
5	“GUEST LECTURE BY ALUMNI”	22 -11- 2022	MS. KUMBHAR MEGHA	GUEST LECTURE
6	“GUEST LECTURE BY ALUMNI”	22 -11- 2022	MS,CHAVAN AKANSHA	GUEST LECTURE
7	“GUEST LECTURE BY ALUMNI”	22 -11- 2022	MR.SHINDE ROHITKUMAR	GUEST LECTURE
8	“GUEST LECTURE BY ALUMNI”	27 -12- 2022	MR. PAWAR PRATIK	GUEST LECTURE
9	“GUEST LECTURE BY ALUMNI”	2-12-2022	MR.MAYURESH GHADAGE	GUEST LECTURE
10	UNIVERSITY LEVEL PROJECT COMPETITION- AAVISHKAR	24-12-2022	MR. S.V KHOBRAGADE	UNIVERSITY LEVEL PROJECT COMPETITION

11	PLACEMENT LINKED SKILL BASED TRANING PROGRAM	06-01-2023	SYMBIOSIS	GUEST LECTURE
12	"GUEST LECTURE BY ALUMNI"	18 -01- 2023	MS.PRAJAKTA KALYAN MAHAMULKAR	GUEST LECTURE
13	IT CAREER IN DIGITAL MARKETING (AJDM)	10-03-2023	MR. AJINKYAPAWAR (AJDM, INDIA)	GUEST LECTURE
14	INDUSTRIAL VISIT	13-04-2023	AG ELECTRO SERVICES,KARAD.	INDUSTRIAL TOUR
15	NATIONAL LEVEL PROJECT EXHIBITION	16/04/2023	MR.ANIKET KADAM	GUEST LECTURE
16	OPPORTUNITIES IN IT INDUSTRY & JAPAN	3-05-2023	MR.BIPINKADAM	GUEST LECTURE
17	GUEST LECTURE ON SOFTWARE TESTING	05-05-2023	MR. SURAJ SAWANT& MR. OMKAR MALI	GUEST LECTURE
18	RECENT TRENDS AND OPPORTUNITIES IN IT	19-5-2023	MR.SHIVRAJ GAIKWAD	GUEST LECTURE
19	INTERNATIONAL CONFERENCE	13-05-2023 TO 14-05-2023	DR. ZEHILA SELAMOGLU	INTERNATIONAL CONFERENCE
20	FIVE DAYS WORKSHOP ON WEB DESIGNING AND DEVELOPMENT	14-06-2023 TO 19-06-2023	MR. NIKHIL KAMBALE CODE CULTURE PUNE	WORKSHOP
21	TOUR AT PRATHISHIRDI	25-12-2022	-	TOUR
22	TWO DAYS WORKSHOP ON "AUTOCAD"	2-12-2023 TO 3-12-2023	MRS. HAKE SHUBHANGI VINOD	WORKSHOP
23	C, C++ ON TURBO C AND HTML	01/08/2023 TO 14/08/2023	MR. SWAPNIL MAPARIDISHA COMPUTERS, SATARA	WORKSHOP
24	C, C++ AND ADVANCE JAVA	07/08/2023 TO 11/08/2023	MR. NILESH SONAWANEDESIGN SOLUTION, KARAD	WORKSHOP
25	C, C++ AND PYTHON	07/08/2023 TO 18/08/2023	MRS. PRANALI NALAWADESQUIRREL'S INFOTECH, SATARA	WORKSHOP
26	PCB DESIGN AND MANUFACTURING WORKSHOP	07/08/2023 TO 18/08/2023	APTRON TECH PVT. LTD. SATARA	WORKSHOP

27	AUTOCAD WORKSHOP	10/08/2023 TO 18/08/2023	ICT PANEL, COMPUTERS, SOFTWARE'S, INTERNET FACILITY, ACCESSORIES	WORKSHOP
28	FIVE DAYS WORKSHOP ON WEB DESIGNING AND DEVELOPMENT	14-06-2023 TO 19-06-2023	MR. NIKHIL KAMBALE CODE CULTURE PUNE	WORKSHOP

YEAR 2021-22			
SR. NO	**NAME OF ACTIVITY**	**DATE**	**TYPE OF ACTIVITY(GUEST LECTURE/QUIZ/PROJECT COMPETITION**
1	ONLINE WEBINAR ON HYBRID ELECTRICAL VEHICLE TECHNOLOGY	20TH DECEMBER 2021	WEBINAR
2	INDUSTRIAL VISIT AT AVALON POWER PVT.LTD,URMODI	22TH DECEMBER 2021	VISIT
3	GUEST LECTURE ON CONVERTERS USED IN ELECTRIC VEHICLE	24TH DECEMBER 2021	GUEST LECTURE
4	INDUSTRIAL VISIT AT 132/33 KV SUBSTATION AMBHERI	29TH DECEMBER 2021	VISIT
5	ONLINE EXPERT LECTURE ON ELECTRICAL TRACTION & UTILIZATION	28TH JANUARY 2022	GUEST LECTURE
6	ONLINE EXPERT LECTURE ON ELECTRICAL MACHINE-II	28TH JANUARY 2022	GUEST LECTURE
7	ONLINE EXPERT LECTURE ON HVDC AND FACTS	29TH JANUARY 2022	GUEST LECTURE
8	ONLINE EXPERT LECTURE ON ELECTRICAL MACHINE-I	30TH JANUARY 2022	GUEST LECTURE
9	ONLINE EXPERT LECTURE ON MM	1TH FEBRUARY 2022	GUEST LECTURE
10	ONLINE EXPERT LECTURE ON ELECTRICAL DRIVES	2ND FEBRUARY 2022	GUEST LECTURE
11	ONLINE EXPERT LECTURE ON POWER SYSTEM-II	3RD FEBRUARY 2022	GUEST LECTURE
12	ONLINE EXPERT LECTURE ON HIGH VOLTAGE ENGINEERING	4TH FEBRUARY 2022	GUEST LECTURE
13	ONLINE EXPERT LECTURE ON ELECTRICAL MOBILITY	05-FEB-22	GUEST LECTURE
14	GUIDANCE ON COMPETETIVE EXAMINATION	06-APR-22	GUEST LECTURE
15	GUEST LECTURE ON MANAGEMENT STUDIES	14TH FEBRUARY 2022	GUEST LECTURE
16	GUEST LECTURE ON CDAC	31TH MAY 2022	GUEST LECTURE

17	YUVA 360 DEGREE INTERNSHIP	14-JUN-22	GUEST LECTURE
18	INDUSTRIAL VISIT AT UNMITRA SOLAR PVT.LTD	14TH JUNE 2022	VISIT

YEAR 2020-21

SR NO	NAME OF ACTIVITY	DATE	TYPE OF ACTIVITY(GUEST LECTURE/QUIZ/PROJECT COMPETITION
1	CONDUCTED GUEST LECTURE ON HOW TO CRACK GATE EXAMINATION	5TH DECEMBER 2020	ONLINE GUEST LECTURE
2	CONDUCTED GUEST LECTURE ON CIVIL SERVICES AS A CAREER CHOICE	5TH NOV 2020	ONLINE GUEST LECTURE
3	CONDUCTED GUEST LECTURE ON CAREER OPPORTUNITIES IN BANKING SECTORS	11TH NOV 2020	ONLINE GUEST LECTURE
4	CONDUCTED GUEST LECTURE ON CAREER OPPORTUNITIES AFTER B.TECH	5TH NOV 2020	ONLINE GUEST LECTURE
5	CONDUCTED GUEST LECTURE ON CAREER IN SOFTWARE TESTING, PREREQUISITES	9TH MAY 2021	ONLINE GUEST LECTURE
7	CONDUCTED GUEST LECTURE ON CAMPUS TO CORPORATE SESSIONS	12 APRIL 2021	GUEST LECTURE
8	CONDUCTED GUEST LECTURE ON PREPARE YOURSELF FOR ABROAD OPPORTUNITIES	26TH NOV 2020	GUEST LECTURE

Table 4.6.1 c

YEAR 2019-20

SR NO	NAME OF ACTIVITY	DATE	TYPE OF ACTIVITY(GUEST LECTURE/QUIZ/PROJECT COMPETITION
1	CONDUCTED ALUMNI GUEST LECTURE ON VMC AND HMC MACHINE WORKING.	23 -08- 2019	GUEST LECTURE
2	CONDUCTED ALUMNI GUEST LECTURE ON M-G SET AND GENERATOR MAINTENANCE	16-09-2019	GUEST LECTURE
3	EVENT ORGANIZED ON INDUSTRIAL MOTIVATION CAMPAIGNING	18TH TO 19TH SEPTEMBER 2019	GUEST LECTURE
4	CONDUCTED ALUMNI GUEST LECTURE ON INDUSTRIAL SKILL REQUIREMENTS AND JOB OPPORTUNITIES	20 -08- 2019	GUEST LECTURE
5	CONDUCTED GUEST LECTURE ON PCB DESIGN & HOME AUTOMATION PRODUCTS	6 -02- 2020	GUEST LECTURE
6	EVENT ORGANIZED ON PERSONALITY DEVELOPMENT PROGRAM	10TH TO 12 SEPTEMBER 2019	GUEST LECTURE
7	EVENT ORGANIZED ON CUMMINS SCHOLARSHIP ORIENTATION	23 -08- 2019	GUEST LECTURE
8	YUGAM – FOUR WEEK TRAINING PROGRAM ON PCB DESIGN	29-7-2020 TO 24-8-2020	WORKSHOOP
9	GUEST LECTURE ON PCB DESIGN AND HOME AUTOMATION PRODUCTS	6-02-2022	GUEST LECTURE

Table 4.6.1 d

4.6.2 Publication of technical magazines, news letters, etc. (05)

(The Department shall list the publications mentioned earlier along with the names of the editors, publishers, etc.)

SR NO	NAME OF NEWSLETTER	YEAR	NAME OF EDITOR	PUBLISHER	TYPE
1	ELECTRO	2018-2019	MR. B M NAYAK	DEPARTMENT OF ELECTRICAL ENGINEERING	YEARLY
2	ELECTRO	2019-2020	MR. B M NAYAK	DEPARTMENT OF ELECTRICAL ENGINEERING	YEARLY
3	ELECTRO	2020-21	MR. B M NAYAK	DEPARTMENT OF ELECTRICAL ENGINEERING	YEARLY
4	ELECTRO	2021-22	DR. B M NAYAK	DEPARTMENT OF ELECTRICAL ENGINEERING	YEARLY
5	ELECTRO	2022-2023	DR. B M NAYAK	DEPARTMENT OF ELECTRICAL ENGINEERING	YEARLY

Table 4.6.2.a

Following students are collecting the data & make it ready for the news letterunder the supervision of upper mention faculty.

SR NO	NAME OF NEWSLETTER	YEAR	NAME OF COORDINATOR	PUBLISHER	TYPE
1	ELECTRO	2018-2019	PAWAR AMIT NAGESH	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	YEARLY
2	ELECTRO	2019-2020	BHASKAR SANYOJITA SUBHASH	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	YEARLY
3	ELECTRO	2020-21	KUMBHAR MEGHA SUNIL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	YEARLY
4	ELECTRO	2021-22	PATIL HARSHAL PRASHANT	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	YEARLY
5	ELECTRO	2022-2023	MOHITE MANASI	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	YEARLY

Table 4.6.2.b

4.6.3 Participation in inter-institute events by students of the program of study (10)

YEAR 2022-23

Co-curricular activities

NPTEL Examination 2022-2023

Sr. No	Name of Students	Course ID	Course Name	Final Score	Certificate Type
1	Bhise Vaishnavi Rajendra	NPTEL21EE60S64600297	Smart Grid basics to advance technology	42%	Successfully completed
2	Unune Shehal	NPTEL21EE01S44920437	Electric Vehicles-Part 1	48 %	Successfully completed

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	KADAM ROHIT VISHVAS	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING, MALEGAON	20TH &21TH APRIL 2023
2	KADAM ROHIT VISHVAS	THIRD PRIZE	YASHO TECHFEST 2K23	STATE	YASHODA TECHNICAL CAMPUS	11TH APRIL 2023
3	KADAM ROHIT VISHVAS	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
4	KADAM ROHIT VISHVAS	VOLUNTEER	PROJECT COMPETITION	NATIONAL	ROTARY CLUB OF SATARA	17TH TO 18TH APRIL 2023
5	SHILEWANT TEJAS VITTHAL	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
6	CHAVAN SANKET HANMANT	PARTICIPATED	EMBARK 2K23	STATE	KBP INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,VARYE,SATARA	13TH &14TH APRIL 2023
7	CHAVAN SANKET HANMANT	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
8	BHISE VASHNAVI RAJENDRA	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
9	CHAVAN ADITYA MADAN	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
10	KUMBHAR VARSHA JOTIRAM	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
11	CHAVAN SHRAVANI PRADIP	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
12	KUMBHAR SHWETA SAYAJI	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023
13	DESHMUKH ANKITA ANIL	PARTICIPATED	CRETECHOVA 2K34	NATIONAL	SVPM"S COLLEGE OF ENGINEERING,MALEGAON	20TH &21TH APRIL 2023

14	CHAVAN NIKITA	WINNER	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
15	KADAM ATHRAV	WINNER	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
16	CHAVAN SANKET	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
17	KUMBHAR DIVYA	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
18	KUMBHAR DIVYA	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
19	VISHAKHA DESAI	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
20	KHOMANE NAMRATA	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
21	KHOMANE NAMRATA	PARTICIPATED	DCODE 2K23	STATE	YASHODA TECHNICAL CAMPUS	20TH APRIL 2023
22	SHELAR SHAILESH	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
23	JADHAV AKANKSHA SHASHIKANT	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
24	JADHAV PRATIKSHA SHASHIKANT	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
25	JADHAV POOJA JAYSINGH	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
26	KAWAR PRASHANT	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
27	GHATE HARSHALI VIJAY	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
28	AKANKSHA PRADIP JADHAV	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
29	TARADE SHWETA	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
30	JADHAV ANKITA	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
31	SABALE SHUBHAM RAVINDRA	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
32	LOKARE SAUJANYA SURESH	PARTICIPATED	PROJECT COMPETITION	NATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING,SATARA	16TH APRIL 2023
33	PATIL ASHOK SADASHIV	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

34	LOKARE SAUJANYA SURESH	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
35	GHATE HARSHALI VIJAY	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
36	NIKITA SURESH KENJALE	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
37	KATKAR PRATIK BABURAO	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
38	MOHITE SALONI DATTATRAY	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
39	JADHAV AKANKSHA SHASHIKANT	WINNER	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
40	YADAV SANJAY GANESH	WINNER	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
41	MOHITE MANASI SHARAD	WINNER	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
42	JADHAV AKANKSHA PRADIP	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
43	TARADE SWETA TUKARAM	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
44	GALAVE GORAKSH SHIVAJI	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
45	JADHAV POOJA JAYSING	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
46	SABLE SHUBHAM RAVINDRA	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
47	JADHAV PRATIKSHA SHASHIKANT	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
48	ASMITA SUNIL KAMBLE	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

49	SHELAR SHAILESH DATTATRAY	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
50	TIRMARE PRASAD RAJESH	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
51	MEMANE TUSHAR DATTATRAY	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
52	JADHAV AMRUT SUHAS	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
53	INDULKAR KAILAS VIJAY	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
54	MAHADIK VAISHANVI RAJENDRA	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
55	SONAWANE RAJESHWARI RAJAN	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
56	SURAVASHI PRAVIN RAMACHANDRA	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
57	KAMBLE VIDYASHRI LAXMAN	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
58	SHINDE ABHIJIT BHARAT	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
59	ANKITA SANJAY JADHAV	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
60	JADHAV OMKAR RAVINDRA	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
61	KADAM RAJESH DILIP	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
62	GORE SONALI KUNDALIK	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
63	KAWAR PRASHANT SAKHARAM	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023

64	PATIL HARSHAL PRASHANT	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
65	HERKAL ADITYA RAJENDRA	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
66	PATIL ASHOK SADASHIV	PARTICIPATED	ICIRTES-2023	INTERNATIONAL	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	10/06/2023 TO 11/06/2023
67	INDULKAR KAILAS VIJAY	PARTICIPATED	DIPEX-2023	STATE	SIPNA COLLEGE OF ENGINEERING AND TECHNOLOGY, AMRAVATI.	7TH TO 9TH APRIL 2023
68	JADHAV AMRUT SUHAS	PARTICIPATED	DIPEX-2023	STATE	SIPNA COLLEGE OF ENGINEERING AND TECHNOLOGY, AMRAVATI.	7TH TO 9TH APRIL 2023
69	TIRMARE PRASAD RAJESH	PARTICIPATED	DIPEX-2023	STATE	SIPNA COLLEGE OF ENGINEERING AND TECHNOLOGY, AMRAVATI.	7TH TO 9TH APRIL 2023
70	MEMANE TUSHAR DATTATRAY	PARTICIPATED	DIPEX-2023	STATE	SIPNA COLLEGE OF ENGINEERING AND TECHNOLOGY, AMRAVATI.	7TH TO 9TH APRIL 2023
71	JADHAV AKANKSHA SHASHIKANT	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
72	YADAV SANJAY GANESH	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
73	MOHITE MANASI SHARAD	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
74	GHATE HARSHALI VIJAY	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
75	NIKITA SURESH KENJALE	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
76	KATKAR PRATIK BABURAO	PARTICIPATED	AVISHKAR	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	18TH NOV 2022
77	CHAVAN SHRAVANI PRADIP	SECOND PRIZE WINNEE	MATRIX 2K23	STATE	DNYANSHREE INSTITUTE OF ENGINEERING,SATARA	3RD MAY 2023
78	KUMBHAR SHWETA SAYAJI	SECOND PRIZE WINNEE	MATRIX 2K23	STATE	DNYANSHREE INSTITUTE OF ENGINEERING,SATARA	3RD MAY 2023
79	DESHMUKH ANKITA ANIL	SECOND PRIZE WINNEE	MATRIX 2K23	STATE	DNYANSHREE INSTITUTE OF ENGINEERING,SATARA	3RD MAY 2023
80	RAUT MAHESH	SECOND PRIZE WINNEE	MATRIX 2K23	STATE	DNYANSHREE INSTITUTE OF ENGINEERING,SATARA	3RD MAY 2023

Table 4.6.3.a

EXTRA CO-CURRICULAR ACTIVITIES

YEAR 2022-23

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	PAWAR MAYURI VILAS	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
2	CHAVAN SHRAVANI PRADIP	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
4	KATKAR RUTUJA BABASO	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
5	KUMBHAR SHWETA SAYAJI	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
6	KUMBHAR VARSHA JOTIRAM	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
7	SHINGATE KSHITIJA SATISH	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
8	JADHAV PRAJAKTA VISHWASRAO	RUNNER-UP	KABADI	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	5-4-2023
10	DESAI GANESH JAGANNATH	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
11	RAUT MAHESH HANMANT	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023

12	KASURDE OMKAR SANDEEP	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
13	BODAKE YASHRAJ KESHAV	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
14	DHAMMKIRTIRAJDHANAJIKAMBLE	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
15	PISAL PURUSHOTTAM NARAYAN	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
16	CHAVAN SANKET HANMANT	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
17	CHAVAN VAIBHAV VITTHAL	PARTICIPATED	CARROM	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
18	KUMBHARDIVYA VIJAY	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
19	KHOMANENAMRATA VIJAY	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
20	DESAI VISHAKHA ASHOK	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
21	CHAVAN NIKITA MAHESH	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023

22	BHINGARE TEJAL SANJAY	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
23	SONAWANE ADITI AVINASH	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
24	CHAVAN GAURI DIPAK	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
25	BUDHAWALE SAMRUDHEI DILIP	PARTICIPATED	BOX CRIKET	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	7-4-2023
26	NIKAMVIVEK	RUNNER-UP	BOLLYWOOD HOLLYWOOD AND TOLLYWOOD DAY	STATE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	6-4-2023
27	CHAVAN SHRAVANI PRADIP	PARTICIPATED	NSS CAMP	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9-3-2023
28	KUMBHAR SHWETA SAYAJI	PARTICIPATED	NSS CAMP	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9-3-2023
29	SHILEWANT TEJAS VITTHAL	PARTICIPATED	NSS CAMP	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9-3-2023
30	INDALKAR TEJAS CHANDRAKANT	PARTICIPATED	NSS CAMP	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9-3-2023
31	NIKAM VIVEK SANTOSH	PARTICIPATED	NSS CAMP	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9-3-2023

Table 4.6.3.b

YEAR 2021-22 CO-CURRICULAR ACTIVITIES						
SR NO	**NAME OF STUDENT**	**RANK**	**NAME OF THE EVENT**	**LEVEL**	**EVENT ORGANIZED INSTITUTE**	**DATE OF EVENT**
1	MOHITEMANASI SHARAD	PARTICIPATION	PROJECT COMPETITION	NATIONAL	KJ SOMAIYA INSTITUTE OF ENGINEERING AND INFORMATION TECHNOLOGY SION,MUMBAI	16 APRIL 2022
2	MOHITEMANASI SHARAD	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	NATIONAL	ARVIND GVALI COLLEGE OF ENGINEERING	28TH TO 29TH APRIL 2022
3	MOHITEMANASI SHARAD	PARTICIPATION	PROJECT COMPETITION	NATIONAL	BHARATIVIDYPEETH COLLEGE OF ENGINEERING PUNE	21 MAY 2022
4	JADHAVAAKANSHAPRADIP	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	NATIONAL	ARVIND GVALI COLLEGE OF ENGINEERING	28TH TO 29TH APRIL 2022
5	GHATEHARSHALI	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	NATIONAL	ARVIND GVALI COLLEGE OF ENGINEERING	28TH TO 29TH APRIL 2022
6	JADHAVAAKANKSHAJADHAV	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	NATIONAL	ARVIND GVALI COLLEGE OF ENGINEERING	28TH TO 29TH APRIL 2022
7	NIKITA SURESH KENJALE	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
8	KATKAR PRATIK BABURAO	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022

9	MOHITE SALONI DATTATRAY	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
10	SABLE SHUBHAM RAVINDRA	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
11	JADHAV PRATIKSHA SHASHIKANT	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
12	DESAI GANESH JAGANNATH	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
13	KADAM ROHIT RAVINDRA	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
14	KADAM ROHIT VISHWAS	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
15	NIKAM VIVEK SANTOSH	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
16	BODAKE YASHRAJ KESHAV	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022
17	SAYYAD TANVEER TAYUB	PARTICIPATION	INTERNAL HACKATHON OF SMART INDIA HACKATHON 2022	INSTITUTE	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	28-04-2022 TO 29-04-2022

18	PAWAR SNEHAL SUNIL	PARTICIPATION	PROJECT COMPITATION	NATIONAL	DULATRAOAAHER COLLEGE OF ENGINEERING, KARAD	20-05-2022
19	NIKAM VIVEK SANTOSH	PARTICIPATION	PROJECT COMPITATION	NATIONAL	DULATRAOAAHER COLLEGE OF ENGINEERING	20-05-2022
20	KADAM ROHIT VISHWAS	PARTICIPATION	PROJECT COMPITATION	NATIONAL	DULATRAOAAHER COLLEGE OF ENGINEERING	20-05-2022
21	BODAKE YASHRAJ KESHAV	PARTICIPATION	PROJECT COMPITATION	NATIONAL	DULATRAOAAHER COLLEGE OF ENGINEERING	20-05-2022

Table 4.6.3.c

YEAR 2021-22

Extra Co-curricular activities

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	CHAVAN NIKITA MAHESH	VOLUNTEER	SATARA HILL MARATHON	STATE	SATARA RUNNERS	18/09/2022
2	KHOMANENAMRATAVIJAY	VOLUNTEER	SATARA HILL MARATHON	STATE	SATARA RUNNERS	18/09/2022
3	BHISE VAISHNAVI RAJENDRA	VOLUNTEER	SATARA HILL MARATHON	STATE	SATARA RUNNERS	18/09/2022
4	DESHMUKH ANKITA ANIL	VOLUNTEER	SATARA HILL MARATHON	STATE	SATARA RUNNERS	18/09/2022
5	CHAVAN SHRAVANI PRADIP	VOLUNTEER	SATARA HILL MARATHON	STATE	SATARA RUNNERS	18/09/2022

Table 4.6.3.d

YEAR 2020-21

Co-curricular activities

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1.	DHALE HARDIKA HEMANT	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
2.	DEDE PRADIP ANKUSH	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
3.	NIKITA MADHAV PIMPALKAR	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
4.	ASMITA ARVIND PATIL	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
5.	SHINDE ROHINI HANAMANT	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
6.	BAGAL POONAM ANANDRAO	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
7.	PRADNYA POPAT GIDDE	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
8.	LAXMI BANAN WANDARE	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
9.	LAWAND AMRUTA SHIVAJI	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
10.	PISE MADHURI MADHUKAR	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021

11.	JANGAM PRITEE SANJAY	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
12.	SAKATE RAHUL SIDDHARTH	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
13.	JADHAV KOMAL VILAS	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
14.	GARUD ASHISH ADHIKRAO	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
15.	KAKADE RUSHIRAJ RAJIV	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021
16.	MASAL SHANKAR MARUTI	PARTICIPATION	PRAYOG - 2021	STATE LEVEL PROJECT EXHIBITION	ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA	9TH APRIL 2021

Table 4.6.3.e

Extra Co-curricular activities

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	KUMBHARKAR VAIBHAV VILAS	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
2	CHOUGALE SHUBHANGI SANJAY	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
3	SANKPAL NAMRATA NETAJI	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
4	BAHULEKAR PALLAVI BALKRUSHNA	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
5	LAXMI BANAN WANDARE	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
6	AKASH JAGANNATH DATE	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
7	PAWAR SANCHITA NANASO	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
8	CHAVAN GOURI ASHOK	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
9	PIYUSH NARESH KARANDE	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021
10	LAWAND AMRUTA SHIVAJI	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA RUNNERS FOUNDATION	12-12-2021

Table 4.6.3.f

YEAR 2019-20

CO-CURRICULAR ACTIVITIES

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	BHASKARSYOGITA	2ST PRIZE	AVISHKAR 2019-2020	DISTRICT LEVEL		6-01-2020
2	RAO ARCHANA RAVIKUMAR	PARTICIPATION	WORKSHOP ON ENERGY CONSERVATION AND AUDIT	DISTRICT LEVEL	SIT	28-11-2019
3	GITEPRADNYAPOPAT	RUNNERUP	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
4	SANKPAL NAMRATA NETAJI	PARTICIPATION	AVISHKAR COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
5	BAHULEKAR PALLAVI BALKRUSHNA	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
6	LAXMI BANAN WANDARE	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
7	AKASH JAGANNATH DATE	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
8	DUBOLE PRIYANKA	PARTICIPATION	AVISHKARPROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
9	GUDBAL JAYASHRI	PARTICIPATION	AVISHKARPROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF	19-10-2019

					ENGINEERING SATARA	
10	JADHAV MANASI	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
11	KADAM MANISHA	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
12	KADAM RADHIKA	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
13	KADAM SAGAR	PARTICIPATION	AVISHKAR PROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
14	KRISHNA AKASH	PARTICIPATION	AVISHKARPROJECT COMPETITION 2019-2020	INSTITUTE LEVEL	ARVIND GAVALI COLLEGE OF ENGINEERING SATARA	19-10-2019
15	BAGAL POONAM ANANDRAO	PARTICIPATION	IJSRET 2020	INTERNATIONAL	INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH AND ENGINEERING TRENDS	18/5/2020-23/05/2020
16	MALI RUTUJA SHANKAR	PARTICIPATION	IJSRET 2020	INTERNATIONAL	INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH AND ENGINEERING TRENDS	18/5/2020-23/05/2020
17	KULKARNI OMKAR RAJENDRA	PARTICIPATION	IJSRET 2020	INTERNATIONAL	INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH AND ENGINEERING TRENDS	18/5/2020-23/05/2020

18	SNEHALJADHAV	PARTICIPATION	WORKSHOP ON ENERGY CONSERVATION AND AUDIT	DISTRICT LEVEL	SIT	28-11-2019
19	RAVIRAJMOHITE	PARTICIPATION	WORKSHOP ON ENERGY CONSERVATION AND AUDIT	DISTRICT LEVEL	SIT	28-11-2019

Table 4.6.3.g

Extra Co-curricular activities

SR NO	NAME OF STUDENT	RANK	NAME OF THE EVENT	LEVEL	EVENT ORGANIZED INSTITUTE	DATE OF EVENT
1	KHATTEAVISHKARBALKRISHNA	PARTICIPATION	KHO-KHO	UNIVERSITY	DR. BABASAHEBAMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE, MAHARASHTRA, INDIA	26TH TO 30TH DEC 2019
2	RAO ARCHANA RAVIKUMAR	PARTICIPATION	KHO-KHO (WOMEN)	STATE LEVEL	SAWKAR PHARMACY COLLEGE, SATARA	11/10/2019-13/10/2019
3	CHAVAN AAKANKSHA JAYWANT	PARTICIPATION	KHO-KHO (WOMEN)	STATE LEVEL	SAWKAR PHARMACY COLLEGE, SATARA	11/10/2019-13/10/2019
4	JEDHEDESHMUKH PIYUSH DUSHYANT	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA HILL MARATHON	25/07/2019
5	GODSE GANESH ANKUSH	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA HILL MARATHON	25/07/2019
6	MOHITE RAVIRAJ DHANANJAY	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA HILL MARATHON	25/07/2019
7	SHINDE ROHITKUMAR PRABHAKAR	VOLUNTEER	SATARA HILL MARATHON	STATE LEVEL	SATARA HILL MARATHON	25/07/2019

Table 4.6.3.h

CRITERION 05	Faculty Information and Contributions	200

Faculty Information: Academic Year: 2022 – 2023

No	Name of FacultyMember	Qualification			CurrentDesignation	All Designations sincejoining institute	Date ofJoining the Institution	Distribution of teaching load (%)					Academic Research			SponsoredResearch(FundedResearc)	ConsultancyandProductDevelopmet	Specalisation
		Degree	University	Year ofGraduation				First Year	UG			PG	FacultyReceivingPh.D.during TheAssessmentYears	Guida	Pap			
									Serving 100 % Inprogram	otherprogramtothisprogram From	Fromthis program tootherprogram							
1	MEGHYA NAYAK BANOTH	M.Tech	JNTU Hyd.	05/02/2014	Associate Professor.	Assistant Professor, Associate Professor.	1/7/2014	0	100		0			NIL	10			Electrical
2	PARVATHI ISLAVATH	M.Tech	JNTU Hyd.	10/12/2014	Assistant Professor	Assistant Professor	15/06/2015	0	100		0			NIL	1			Power Electronics. &Elex. Drv.
3	BASAVARAJ NELOGAL	M.Tech		03/09/2015	Assistant Professor	Assistant Professor	01/01/2016	0	100		0			NIL	2			IndustriaElectronics
4	SOMPURA SOMESHA NAIK	M.Tech		01/01/2018	Assistant Professor	Assistant Professor	01/01/2019	0	100		0			NIL	2			Power Electronics
5	HRUTUJA BHUTKAR	M. Tech	Shivaji University	31/102020	Assistant Professor	Assistant Professor	17/03/2021	0	100		0			NIL	1			Power System
6	JIVAJEE BICHKAR	M. Tech	Shivaji University	31/10/2020	Assistant Professor	Assistant Professor	01/10/2020	0	100		0			NIL	1			Power System
7	ASHALESHA MALI	M. Tech	Shivaji University	12/01/2022	Assistant Professor	Assistant Professor	01/12/2021	0	100		0			NIL	2			Power System

Faculty Information: Year 2021-2022

	Name of Faculty Member	Qualification			Current Designation	All Designations since joining institute	Date of Joining the Institution	Distribution of teaching load (%)					Academic Research			SponsoredResearch(FundedResearc)	ConsultancyandProductDevelopmet	Specalisation
		Degree	University	Year ofGraduation				1st Year	UG			PG	Faculty RecevingPh. Dduring TheAssesmentYears	Ph.D.Guidance	Research Paper Publications			
									Serving 100 % In program	Fromotherprogram to this program	From this program to other program							
1	MEGHYA NAYAK BANOTH	M.Tech	JNTU Hyd.	05/02/2014	Associate Professor.	Assistant Professor, Associate Professor.	1/7/2014	0	100		0			NIL	10			Electrical
2	PARVATHI ISLAVATH	M.Tech	JNTU Hyd.	10/12/2014	Assistant Professor	Assistant Professor	15/06/2015	0	100		0			NIL	1			Power Electronics. &Elex. Drv.
3	SHITAL JADHAV	ME	Shivaji University	23/7/2015	Assistant Professor	Assistant Professor	11/05/2014	0	100		0			NIL	4			Power System
4	BASAVARAJ NELOGAL	M.Tech		03/09/2015	Assistant Professor	Assistant Professor	01/01/2016	0	100		0			NIL	2			IndustriaElectronics
5	SOMPURA SOMESHA NAIK	M.Tech		01/01/2018	Assistant Professor	Assistant Professor	01/01/2019	0	100		0			NIL	2			Power Electronics
6	EVA GUPTA	M.Tech	JNTU HyD	25/05/2016	Assistant Professor	Assistant Professor	05/02/2020	0	100		0			NIL	2			Power Dist. Spec. in smart grids
7	HRUTUJA BHUTKAR	M. Tech	Shivaji University	31/102020	Assistant Professor	Assistant Professor	17/03/2021	0	100		0			NIL	1			Power System
8	JIVAJEE BICHKAR	M. Tech	Shivaji University	31/10/2020	Assistant Professor	Assistant Professor	01/10/2020	0	100		0			NIL	1			Power System
9	ASHALESHA MALI	M. Tech	Shivaji University	12/01/2022	Assistant Professor	Assistant Professor	01/12/2021	0	100		0			NIL	2			Power System
10	PURANIK VIVEK VINAYAK	M.Tech		20/12/2019	Associate Professor.	Associate Professor.	01/04/2020	0	100		0			NIL	5			Electrical

Faculty Information: Year 2020-2021

	Name of Faculty Member	Qualification			Current Designation	All Designations since joining institute	Date of Joining the Institution	Distribution of teaching load (%)					Academic Research			SponsoredResearch(FundedResearc)	ConsultancyandProductDevelopmet	Specialisation
		Degree	University	Year of Graduation				1st Year	UG			PG	Faculty RecevingPh.D during	Ph.D.Guidance	Research Paper Publications			
									Serving 100 % In program	Fromotherprogram to this program	TheAssessmentYears		TheAssessmentYears					
1	MEGHYA NAYAK BANOTH	M.Tech	JNTU Hyd.	05/02/2014	Associate Professor.	Assistant Professor, Associate Professor.	01/07/2014	0	100		0			NIL	10			Power & Indus. Drives
2	VISHAKHA GAIKWAD	M.Tech		31/12/2019	Assistant Professor	Assistant Professor	06/11/2014		100		0			NIL	4			Power System
3	PARVATHI ISLAVATH	M.Tech	JNTU Hyd.	10/12/2014	Assistant Professor	Assistant Professor	15/06/2015		100		0			NIL	1			Power Electronics. &Elex. Drv.
4	SHITAL JADHAV	ME		23/7/2015	Assistant Professor	Assistant Professor	11/05/2014		100		0			NIL	4			Power System
5	BASAVARAJ NELOGAL	M.Tech		03/09/2015	Assistant Professor	Assistant Professor	01/01/2016		100		0			NIL	2			Industrial Electronics
6	SOMPURA SOMESHA NAIK	M.Tech		01/01/2018	Assistant Professor	Assistant Professor	01/01/2019		100		0			NIL	2			Power Electronics
7	EVA GUPTA	M.Tech		25/05/2016	Assistant Professor	Assistant Professor	05/02/2020		100		0			NIL	1			Power Dist. Spec. in smart grids
8	JIVAJEE BICHKAR	M. Tech		31/10/2020	Assistant Professor	Assistant Professor	01/10/2020		100		0			NIL	1			Power System
9	PURANIK VIVEK VINAYAK	ME	Shivaji University	07/06/2007	Professor	Professor.	01/04/2020		100		0			NIL	0			Electrical

5.1 Student – Faculty Ratio (SFR) (20)

(To be calculated at Department Level)

No. of UG Programs in the department (n): 01

No. of PG programs in the department (m): 00

No. of students in UG 2nd Year = u1

No. of students in UG 3rd Year = u2

No. of students in UG 4th Year = u3

No. of students in PG 1st Year = p1

No. of students in PG 2nd Year = p2

No. of students = Sanctioned Intake + Actual admitted lateral entry students
(The above data to be provided considering all the UG and PG programs of the department)

S = Number of students in the department = UG1 + UG2 + UG3 + PG1 + PG2

F = Total Number of faculty members in the department (excluding the first year faculty)

Student Teacher Ratio (STR) = S/F

Table B.5.1

Year	CAY	CAY1	CAYm2
u1.1	30 + 3	30 + 3	30 + 3
u1.2	30 + 3	30 + 3	60 + 6
u1.3	30 + 3	60 + 6	60 + 12
UG1 = u1.1 + u1.2 + u1.3	99	132	171
Total no. of students in the department (S) = UG1 + UG2 + … + UGn + PG1 + … +PGn	99	132	171
No. of faculty in the department(F)	7	F1 = 10	F2 = 09
Student Faculty Ratio(SFR)	SFR1=S1/F1= 14.14	SFR2=S1/F1 = 13.20	SFR3=S2/F2 = 19:00
Average SFR	**SFR=(SFR1+SFR2+SFR3)/3 = 15.44**		

5.1.1 Provide the information about the regular and contractual faculty as per the format mentioned below:

Table 5.1.1

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY	**7**	**0**
CAYm1	**10**	**0**
CAYm2	**09**	**0**
CAYm3	**10**	**0**

5.2 Faculty Cadre Proportion (20)

The reference faculty cadre Proportion is 1(F1):2(F2):6(F3)

F1: Number of Professors required = 1/9 x number of faculty required to comply with 20:1 Student-Faculty ratio based on the no. of students (N) as per 5.1

F2: Number of Associate Professors required = 2/9 x number of faculty required to comply with 20:1 Student-Faculty ratio based on the no. of students (N) as per 5.1

F3: Number of Assistant Professors required = 6/9 x number of faculty required to comply with 20:1 Student-Faculty ratio based on the no. of students (N) as per 5.1

Table B.5.2

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	RequiredF2	Available	Required F3	Available
CAY	0.55	0	1	1	3.3	6
CAYm1	0.73	1	1.46	1	4.4	8
CAY*m*2	0.95	1	1.9	0	5.7	08
CAY*m*3	1.05	0	2.1	0	6.3	10
Average Numbers	RF1=0.74	AF1=0.66	RF2=1.45	AF2=0.66	RF3=4.46	AF3=7.33

$$\text{Cadre Ratio Marks} = \left[\left[\frac{AF1}{RF1}\right] + \left[\frac{AF2}{RF2} \times 0.6\right] + \left[\frac{AF3}{RF3} \times 0.4\right]\right] \times 12.5$$

$$= \left[\left[\frac{0.66}{0.74}\right] + \left[\frac{0.66}{1.45} \times 0.6\right] + \left[\frac{7.33}{4.46} \times 0.4\right]\right] \times 12.5 = 22.77$$

If AF1 = AF2= 0 then zero marks

Maximum marks to be limited if it exceeds 25

Example: Intake = 60 (i.e. total no. of students= 180); Required number of Faculty: 9; RF1= 1, RF2=2 and RF3=6

Case 1: AF1/RF1= 1; AF2/RF2 = 1; AF3/RF3 = 1; Cadre proportion marks = (1+0.6+0.4) x 12.5
= 25

Case 2: AF1/RF1= 1; AF2/RF2 = 3/2; AF3/RF3 = 5/6; Cadre proportion marks = (1+0.9+0.3) x12.5 = limited to 25

Case 3: AF1/RF1=0; AF2/RF2=1/2; AF3/RF3=8/6; Cadre proportion marks = (0+0.3+0.53) x 12.5 = 10.4

5.3 Faculty Qualification (25)

FQ =2.5 x [(10X +4Y)/F)] where X is no. of regular faculty with Ph.D., Y is no. of regular faculty with M.Tech. F is no. of regular faculty required to comply 20:1 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Table B.5.3

Years	X	Y	F	FQ=2.5x[(10X+4Y)/F)]
CAY	1	6	4.95	17.17
CAYm1	2	8	6.6	19.69
CAY*m*2	1	8	8.55	12.28
CAY*m*3	0	10	9.45	10.58
Average Assessment				14.18

5.4 Faculty Retention (25)

No. of regular faculty members in CAYm3 = 10 (Required faculty = 09)

No. of regular faculty members in CAY*m*2=09 (Required faculty = 09)

No. of regular faculty members in CAYm1=10 (Required faculty = 09)

No. of regular faculty members in CAY=7 (Required faculty = 06)

% of faculty retained during the period of assessment = (10/9) × 100% =

% of faculty retained during the period of assessment = (12/15) × 100% =

Year	CAY (2022 – 2023)	CAY m1 (2021-2022)	CAYm2 (2020-2021)
No. of Faculty in the base year (2019 – 2020)	07	10	09
No. of Faculty Retained	04	05	06
Faculty Retention (%)	57%	50%	66.6%

Average Retention (%) = 57.86%

Item (%off aculty retained during the period of assessment keeping CAYm2 as base year)	Marks
>=90% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	25
>=75% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	20
>=60% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	15
>=50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	10
<50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year)	0

Criteria 5: Faculty Information and Contribution [Calculated Marks]

Sr. No.	Sub-Criteria	Sub-Criteria	Marks	Expected Marks
1	5.1	Student-Faculty Ratio	20	19
	5.1.1	Regular and Contractual Faculty		
2	5.2	Faculty-Cadre Proportion	20	16.5
3	5.3	Faculty Qualification	25	15.08
4	5.4	Faculty Retention	25	15
5	5.5	Innovations by the faculty in Teaching and Learning	20	10
6	5.6	Faculty as participants in Faculty Development/training activities/STTPs	15	5
7	5.7	Research and Development	30	
	5.7.1	Academic Research (10)		0
	5.7.2	Sponsored Research (5)		0
	5.7.3	Development Activities (10)		5
	5.7.4	Consultancy (from Industry) (5)		0
8	5.8	Faculty Performance Appraisal and Development System (30) A well-defined system for faculty appraisal for all the assessment years (10) Its implementation and effectiveness (20)		 5 5
9	5.9	Visiting/Adjunct/Emeritus faculty, etc (10)		5
Total				**112 Marks**

5.5 Innovations by the Faculty in Teaching and Learning (20)

Innovations by the faculty in the teaching and learning shall be summarized as per the following description.
Contributions to teaching and learning are activities that contribute to the improvement of student learning. These activities may include innovations not limited to, use of ICT, instruction delivery, instructional methods, assessment, evaluation, and inclusive class rooms that lead to effective, efficient, and engaging instruction.
Any contribution to teaching and learning should satisfy the following criteria:

- The work must be made available on Institute website
- The work must be available for peer review and critique
- The work must be reproducible and developed further by other scholars

These may typically include statement of clear goals, adequate preparation, use of appropriate methods, and significance of results, effective presentation and reflective critique.

The faculty members of Electrical engineering department follow innovative methodologies in the classroom, in addition to the conventional methods.

Conventional Methods Followed:

1. Blackboard
2. Sharing learning materials
3. Questioning in the class

- **MOODLE (Modular Object-Oriented Dynamic Learning Environment)**

The Institute has configured learning platform which is available 24 × 7 to the faculty and the students. The faculty has been using MOODLE, since 2019. Using MOODLE the faculty have created courses in their respective programs. Assignment questions, course material, presentations, and other material needed by the students for study purpose, is uploaded on MOODLE (Screenshot attached).The students are enrolled after access is given to them, by the MOODLE administrator.

Students can be automatically enrolled to the course with access rights given by the faculty as per their role in the course. Using MOODLE, faculty can maintain attendance of students, monitor their progress in exams, and maintain student assignments, internal exam data.

MOODLE Screenshot/Screen Print:

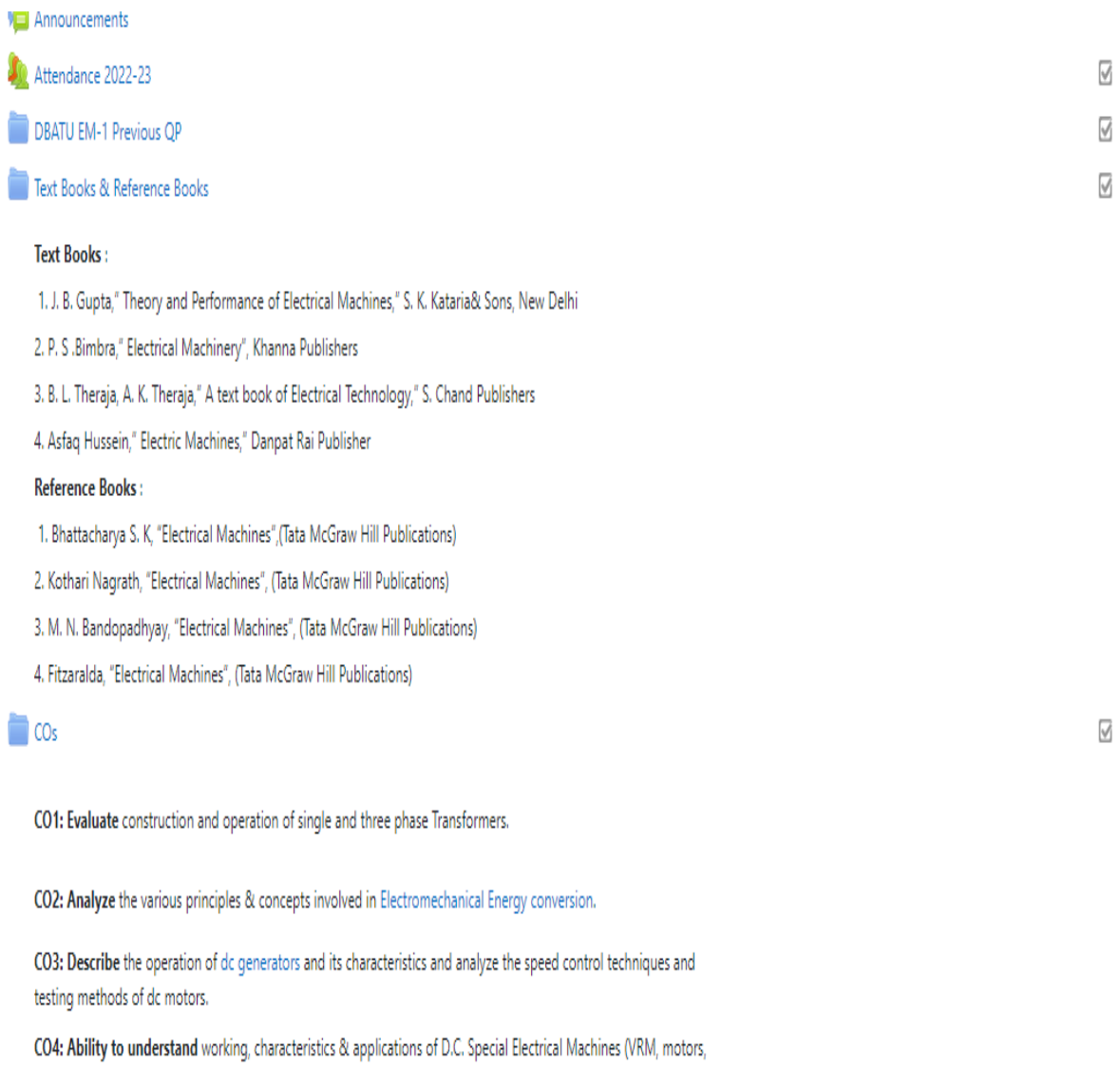


Figure 5.5(1.a) Screenshot of MOODLE Page of EM-I (Electrical)-sem-III

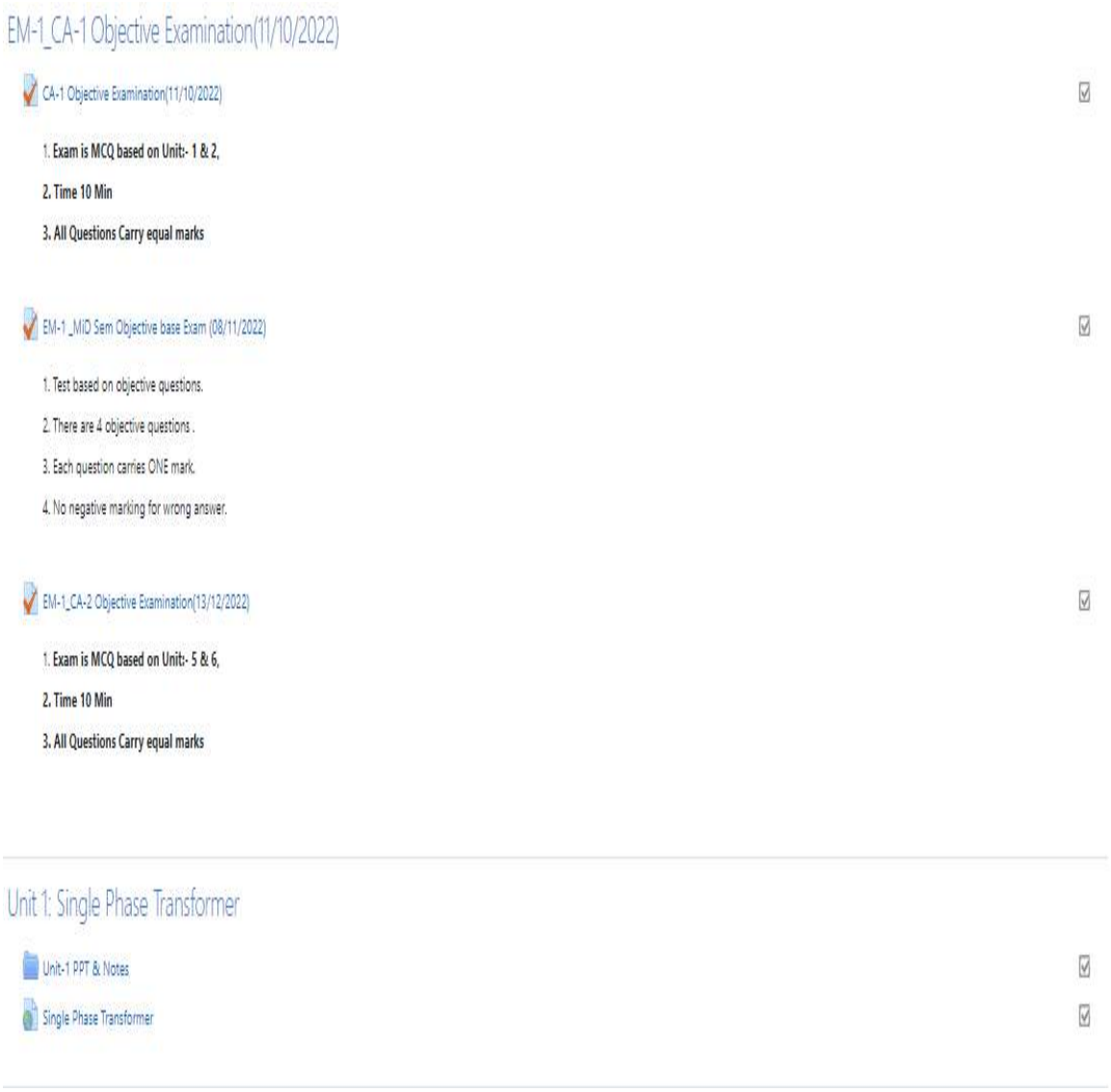


Figure 5.5(1.b) Screenshot of MOODLE Page of EM-I (Electrical)-sem-III

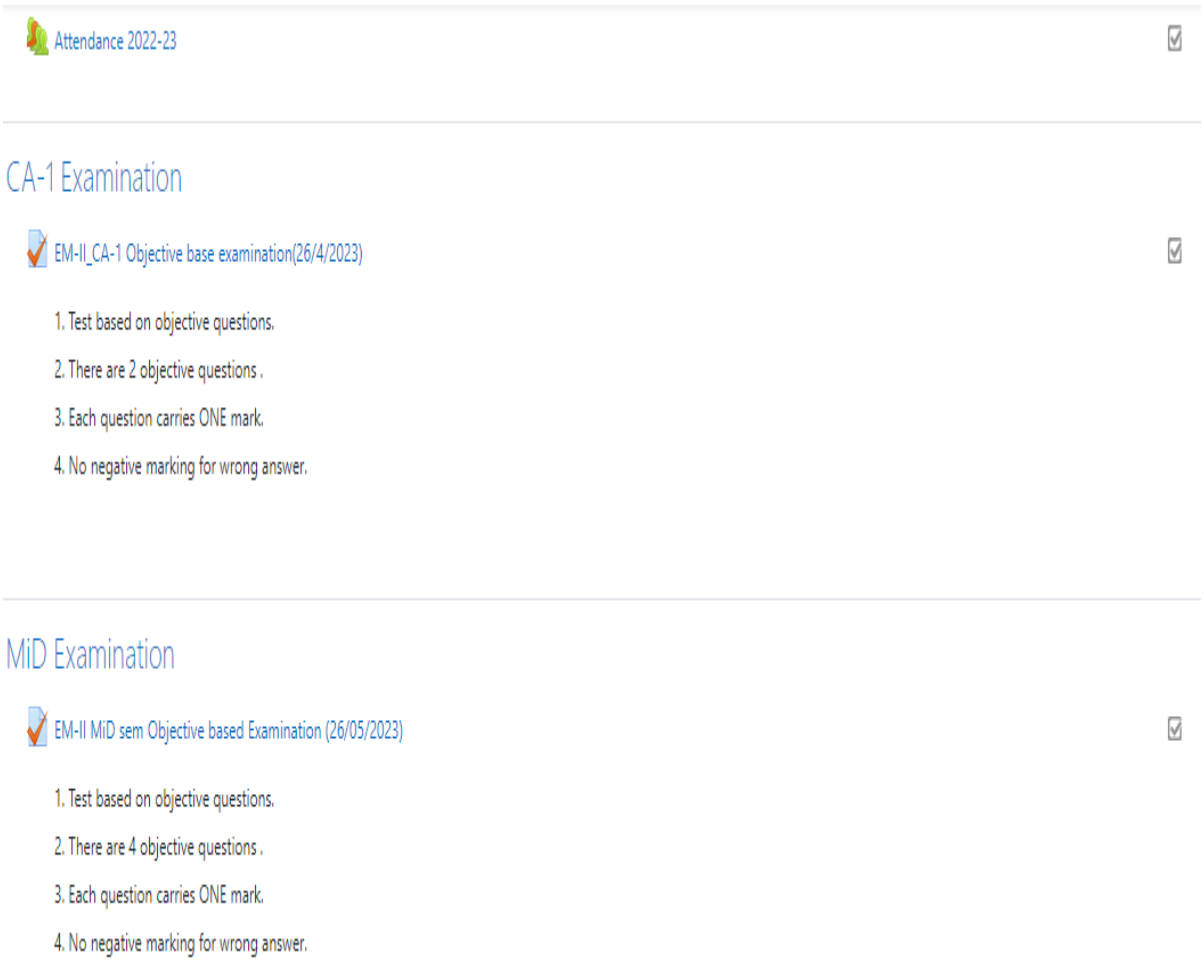


Figure 5.5(1.c) Screenshot of MOODLE Page of Electrical Machine-II (Electrical)-Sem-IV

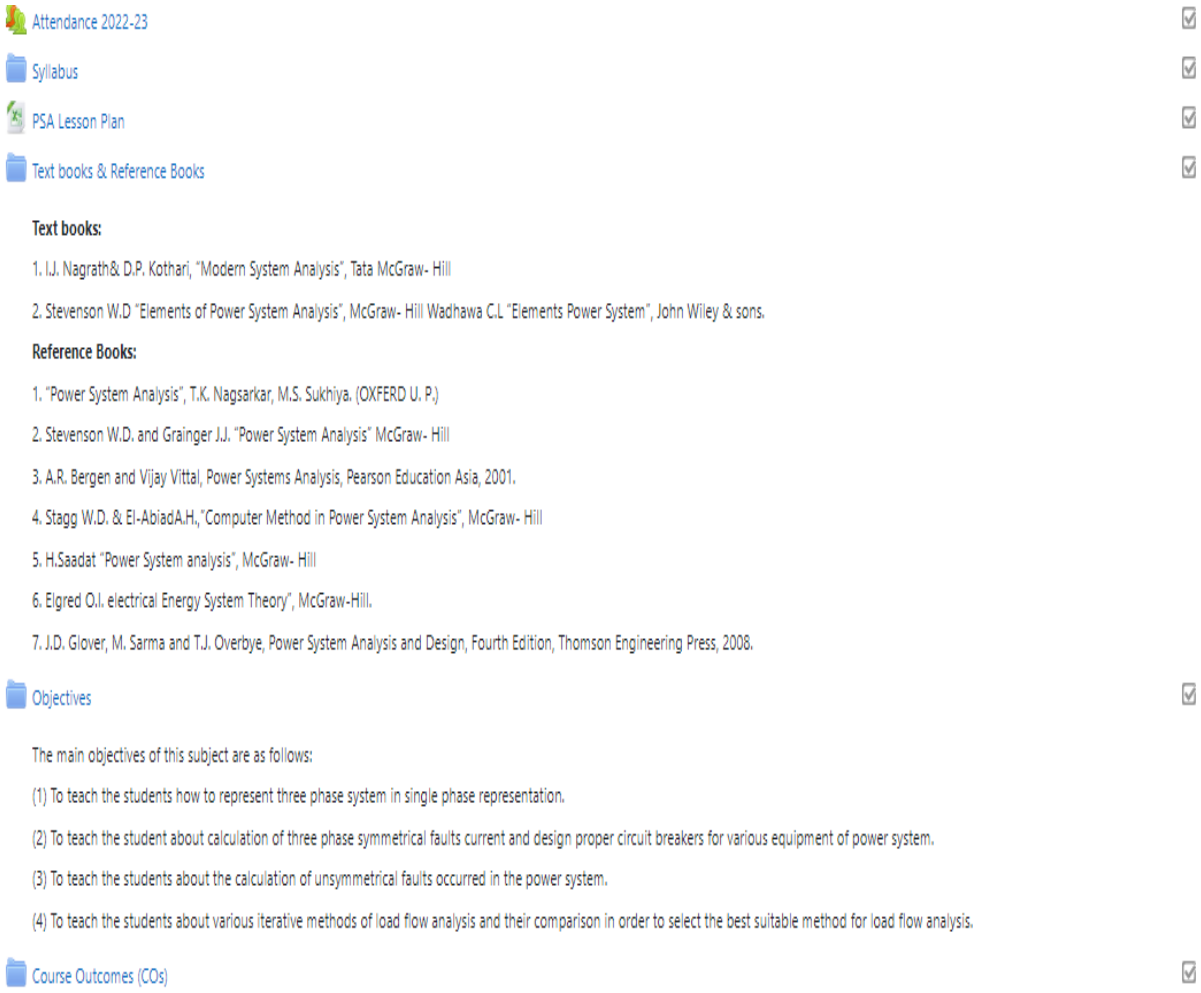


Figure 5.5(1.d) Screenshot of MOODLE Page of PSA (Electrical)-sem-V

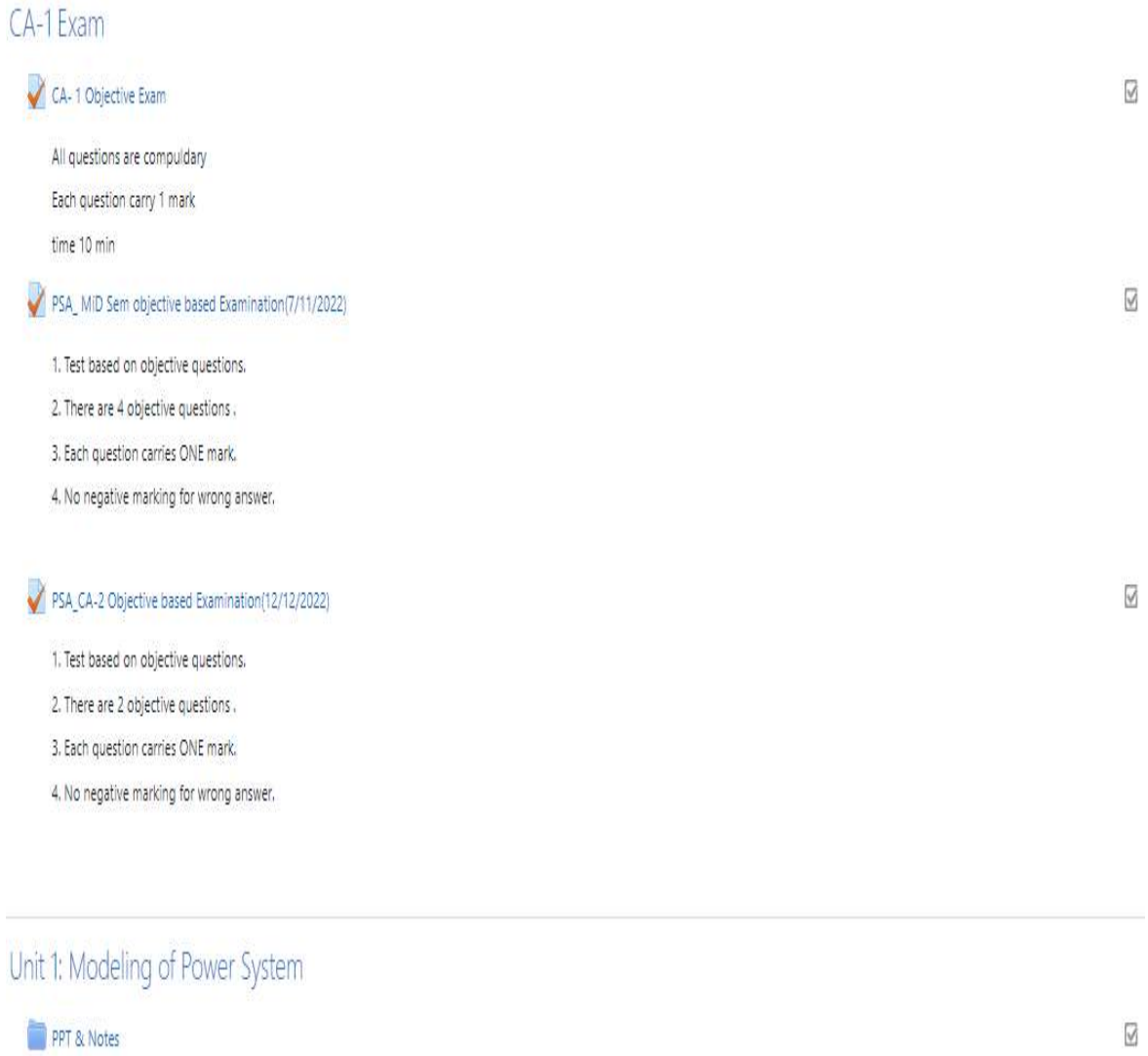
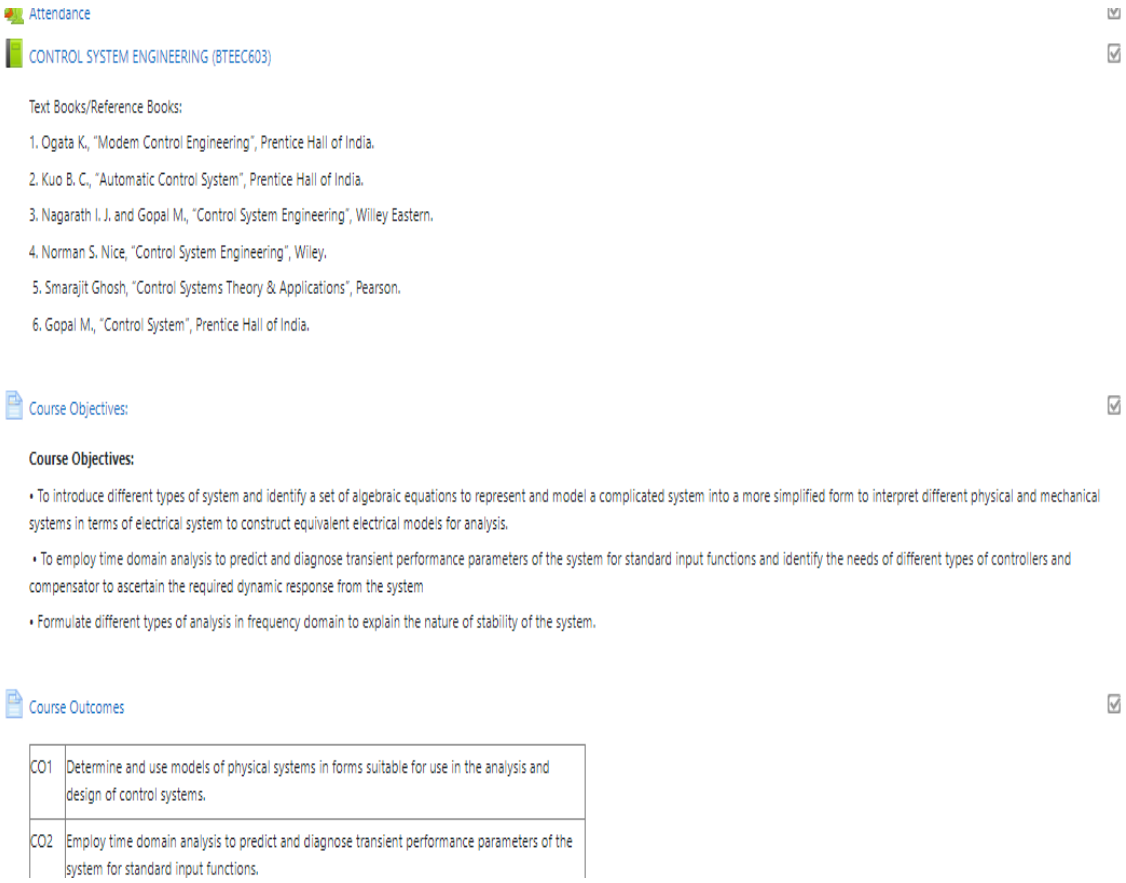


Figure 5.5(1.e) Screenshot of MOODLE Page of Power System Analysis (Electrical)-SEM-V



Attendance

CONTROL SYSTEM ENGINEERING (BTEEC603)

Text Books/Reference Books:

1. Ogata K., "Modem Control Engineering", Prentice Hall of India.
2. Kuo B. C., "Automatic Control System", Prentice Hall of India.
3. Nagarath I. J. and Gopal M., "Control System Engineering", Wiley Eastern.
4. Norman S. Nice, "Control System Engineering", Wiley.
5. Smarajit Ghosh, "Control Systems Theory & Applications", Pearson.
6. Gopal M., "Control System", Prentice Hall of India.

Course Objectives:

Course Objectives:

• To introduce different types of system and identify a set of algebraic equations to represent and model a complicated system into a more simplified form to interpret different physical and mechanical systems in terms of electrical system to construct equivalent electrical models for analysis.

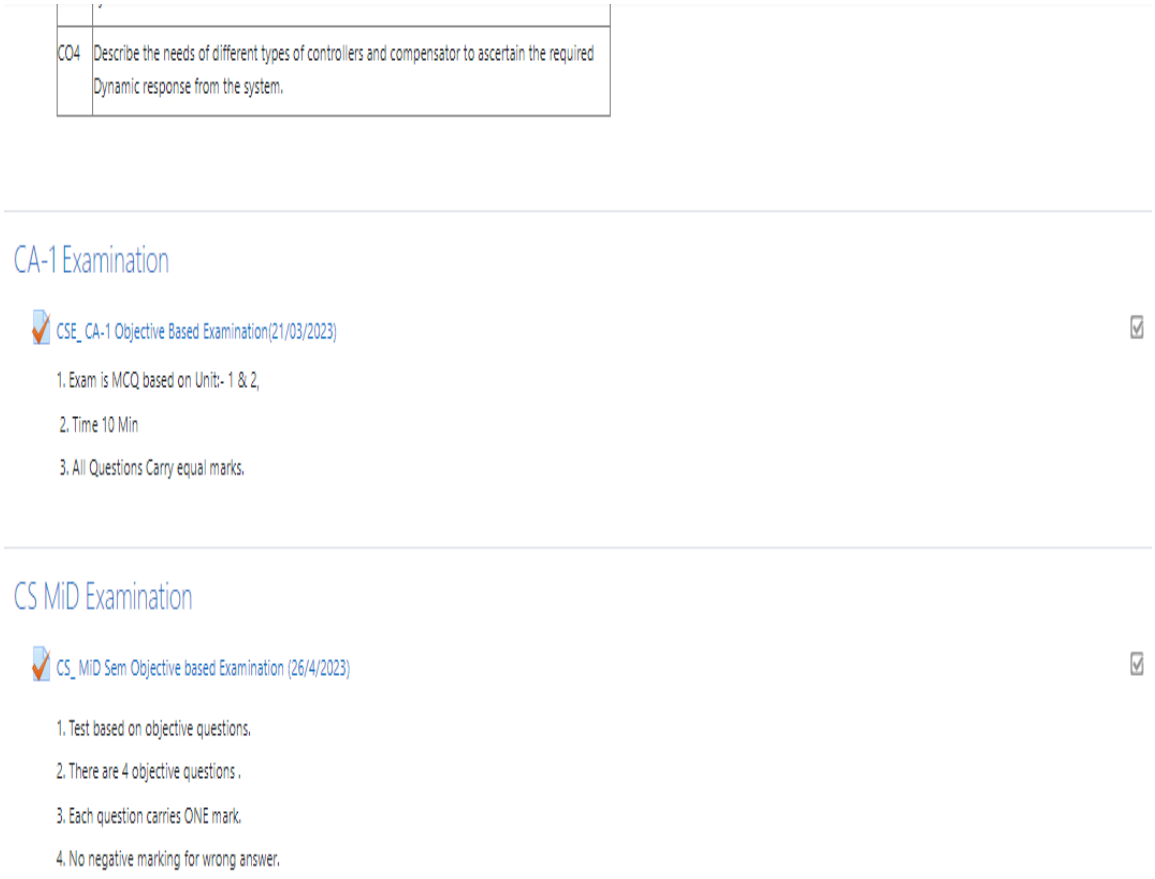
• To employ time domain analysis to predict and diagnose transient performance parameters of the system for standard input functions and identify the needs of different types of controllers and compensator to ascertain the required dynamic response from the system

• Formulate different types of analysis in frequency domain to explain the nature of stability of the system.

Course Outcomes

CO1	Determine and use models of physical systems in forms suitable for use in the analysis and design of control systems.
CO2	Employ time domain analysis to predict and diagnose transient performance parameters of the system for standard input functions.

Figure 5.5(1.f) Screenshot of MOODLE Page of Control System (Electrical)-sem-VI



CO4	Describe the needs of different types of controllers and compensator to ascertain the required Dynamic response from the system.

CA-1 Examination

CSE_ CA-1 Objective Based Examination(21/03/2023)

1. Exam is MCQ based on Unit:- 1 & 2,
2. Time 10 Min
3. All Questions Carry equal marks.

CS MiD Examination

CS_ MiD Sem Objective based Examination (26/4/2023)

1. Test based on objective questions.
2. There are 4 objective questions .
3. Each question carries ONE mark.
4. No negative marking for wrong answer.

Figure 5.5(1.g) Screenshot of MOODLE Page of Control System (Electrical)-SEM-VI

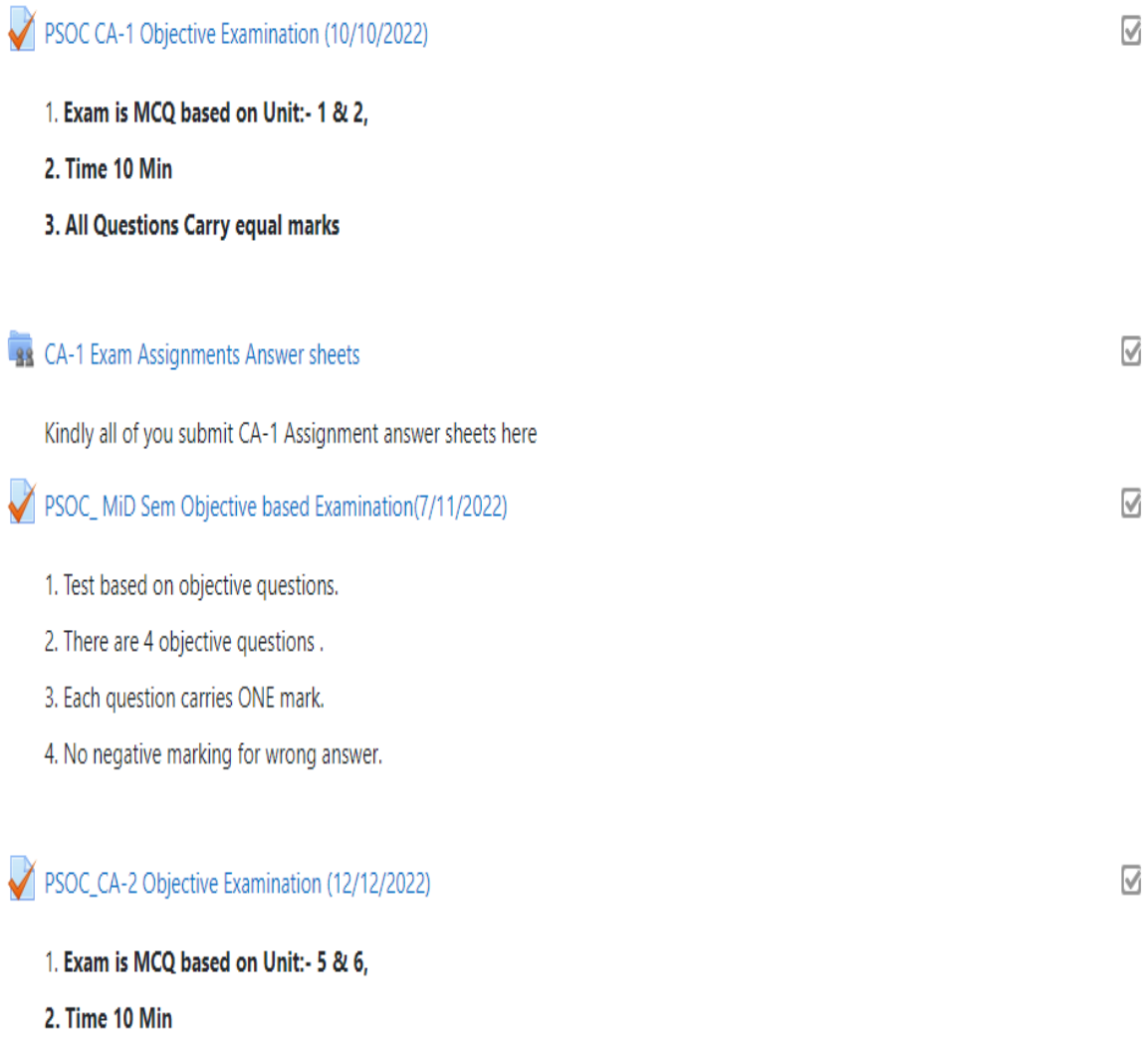


Figure 5.5(1.h) Screenshot of MOODLE Page of PSOC (Electrical)-SEM-VII

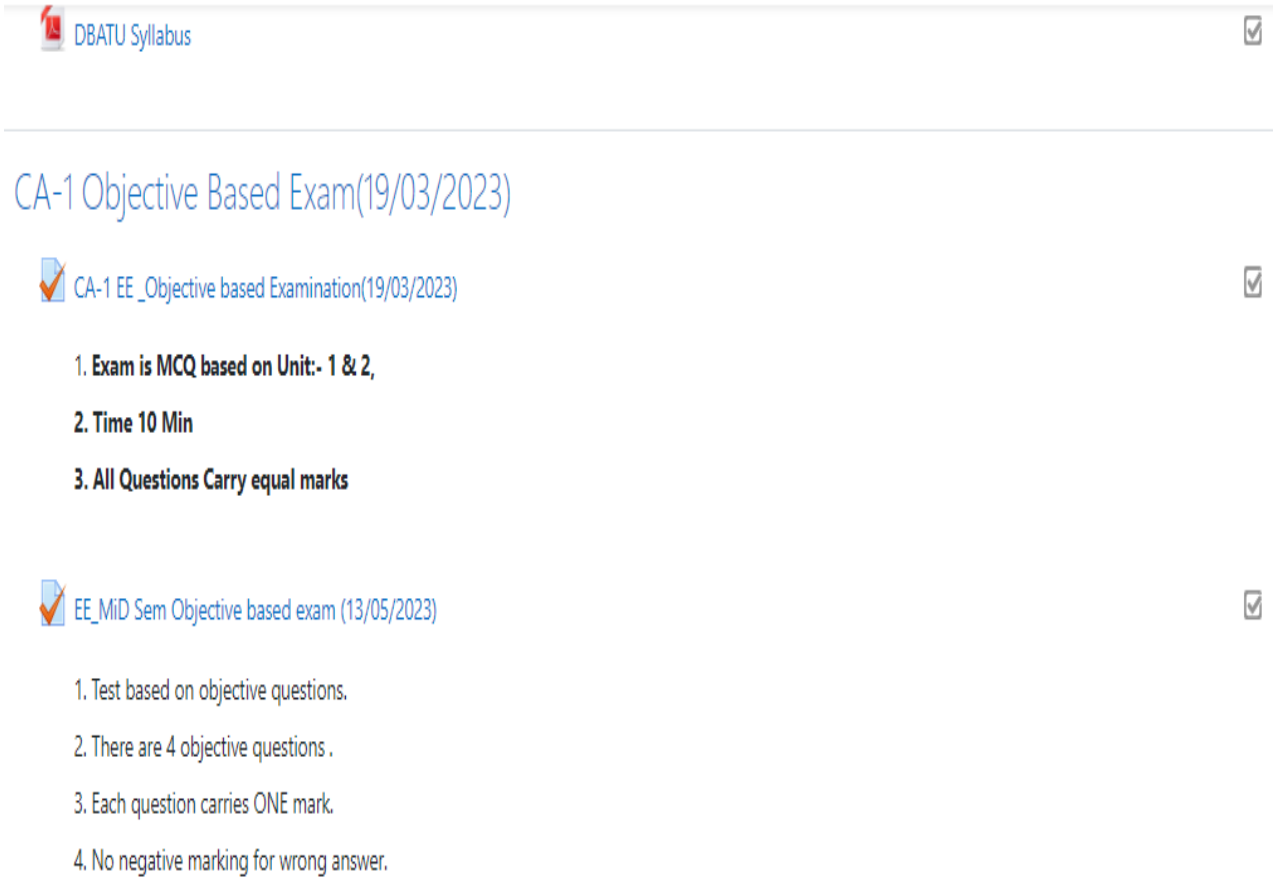
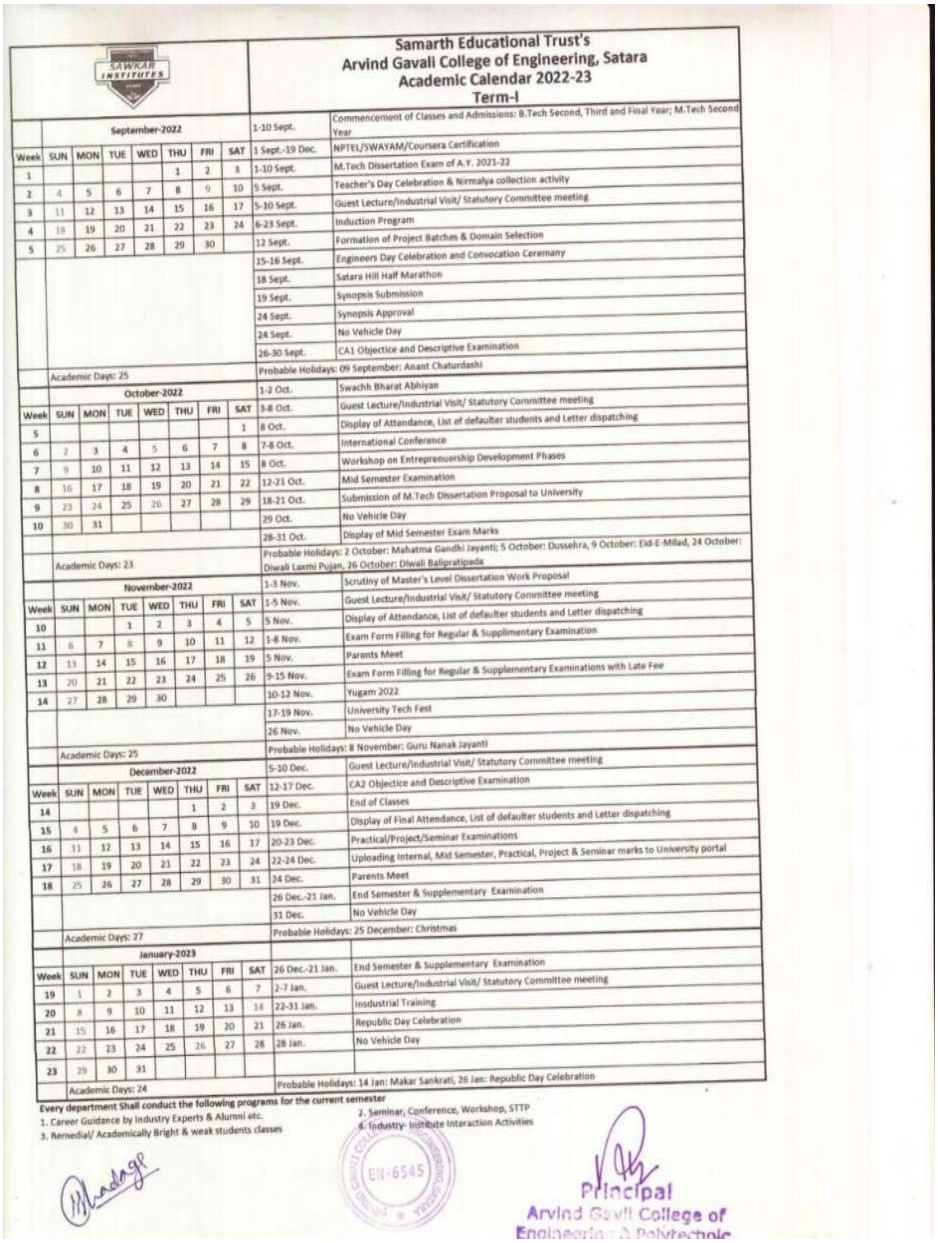


Figure 5.5(1.i) Screenshot of MOODLE Page of EE (Electrical)-SEM-VIII

- **Timetable:**

The Institute academic calendar which is accordance with the academic calendar of Dr.BabasahebAmbedkar Technological University, Lonere, Maharashtra, India, is made available on the Institute website, displayed on department and laboratory notice boards. The same also distributed to the students via student Whatsapp groups.



Samarth Educational Trust's
Arvind Gavali College of Engineering, Satara
Academic Calendar 2022-23
Term-I

September-2022

Week	SUN	MON	TUE	WED	THU	FRI	SAT
1					1	2	3
2	4	5	6	7	8	9	10
3	11	12	13	14	15	16	17
4	18	19	20	21	22	23	24
5	25	26	27	28	29	30	

Academic Days: 25

1-10 Sept.	Commencement of Classes and Admissions: B.Tech Second, Third and Final Year; M.Tech Second Year
1 Sept.-19 Dec.	NPTEL/SWAYAM/Coursera Certification
1-10 Sept.	M.Tech Dissertation Exam of A.Y. 2021-22
5 Sept.	Teacher's Day Celebration & Nirmalya collection activity
5-10 Sept.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
6-23 Sept.	Induction Program
12 Sept.	Formation of Project Batches & Domain Selection
15-16 Sept.	Engineers Day Celebration and Convocation Ceremony
18 Sept.	Satara Hill Half Marathon
19 Sept.	Synopsis Submission
24 Sept.	Synopsis Approval
24 Sept.	No Vehicle Day
26-30 Sept.	CA1 Objective and Descriptive Examination
Probable Holidays: 09 September: Anant Chaturdashi	

October-2022

Week	SUN	MON	TUE	WED	THU	FRI	SAT
5							1
6	2	3	4	5	6	7	8
7	9	10	11	12	13	14	15
8	16	17	18	19	20	21	22
9	23	24	25	26	27	28	29
10	30	31					

Academic Days: 23

1-2 Oct.	Swachh Bharat Abhiyan
3-8 Oct.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
8 Oct.	Display of Attendance, List of defaulter students and Letter dispatching
7-8 Oct.	International Conference
8 Oct.	Workshop on Entreprenuership Development Phases
12-21 Oct.	Mid Semester Examination
18-21 Oct.	Submission of M.Tech Dissertation Proposal to University
29 Oct.	No Vehicle Day
28-31 Oct.	Display of Mid Semester Exam Marks
Probable Holidays: 2 October: Mahatma Gandhi Jayanti; 5 October: Dussehra, 9 October: Eid-E-Milad, 24 October: Diwali Laxmi Pujan, 26 October: Diwali Balipratipada	

November-2022

Week	SUN	MON	TUE	WED	THU	FRI	SAT
10			1	2	3	4	5
11	6	7	8	9	10	11	12
12	13	14	15	16	17	18	19
13	20	21	22	23	24	25	26
14	27	28	29	30			

Academic Days: 25

1-3 Nov.	Scrutiny of Master's Level Dissertation Work Proposal
1-5 Nov.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
5 Nov.	Display of Attendance, List of defaulter students and Letter dispatching
1-8 Nov.	Exam Form Filling for Regular & Supplimentary Examination
5 Nov.	Parents Meet
9-15 Nov.	Exam Form Filling for Regular & Supplementary Examinations with Late Fee
10-12 Nov.	Yugam 2022
17-19 Nov.	University Tech Fest
26 Nov.	No Vehicle Day
Probable Holidays: 8 November: Guru Nanak Jayanti	

December-2022

Week	SUN	MON	TUE	WED	THU	FRI	SAT
14					1	2	3
15	4	5	6	7	8	9	10
16	11	12	13	14	15	16	17
17	18	19	20	21	22	23	24
18	25	26	27	28	29	30	31

Academic Days: 27

5-10 Dec.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
12-17 Dec.	CA2 Objective and Descriptive Examination
19 Dec.	End of Classes
19 Dec.	Display of Final Attendance, List of defaulter students and Letter dispatching
20-23 Dec.	Practical/Project/Seminar Examinations
22-24 Dec.	Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal
24 Dec.	Parents Meet
26 Dec.-21 Jan.	End Semester & Supplementary Examination
31 Dec.	No Vehicle Day
Probable Holidays: 25 December: Christmas	

January-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
19	1	2	3	4	5	6	7
20	8	9	10	11	12	13	14
21	15	16	17	18	19	20	21
22	22	23	24	25	26	27	28
23	29	30	31				

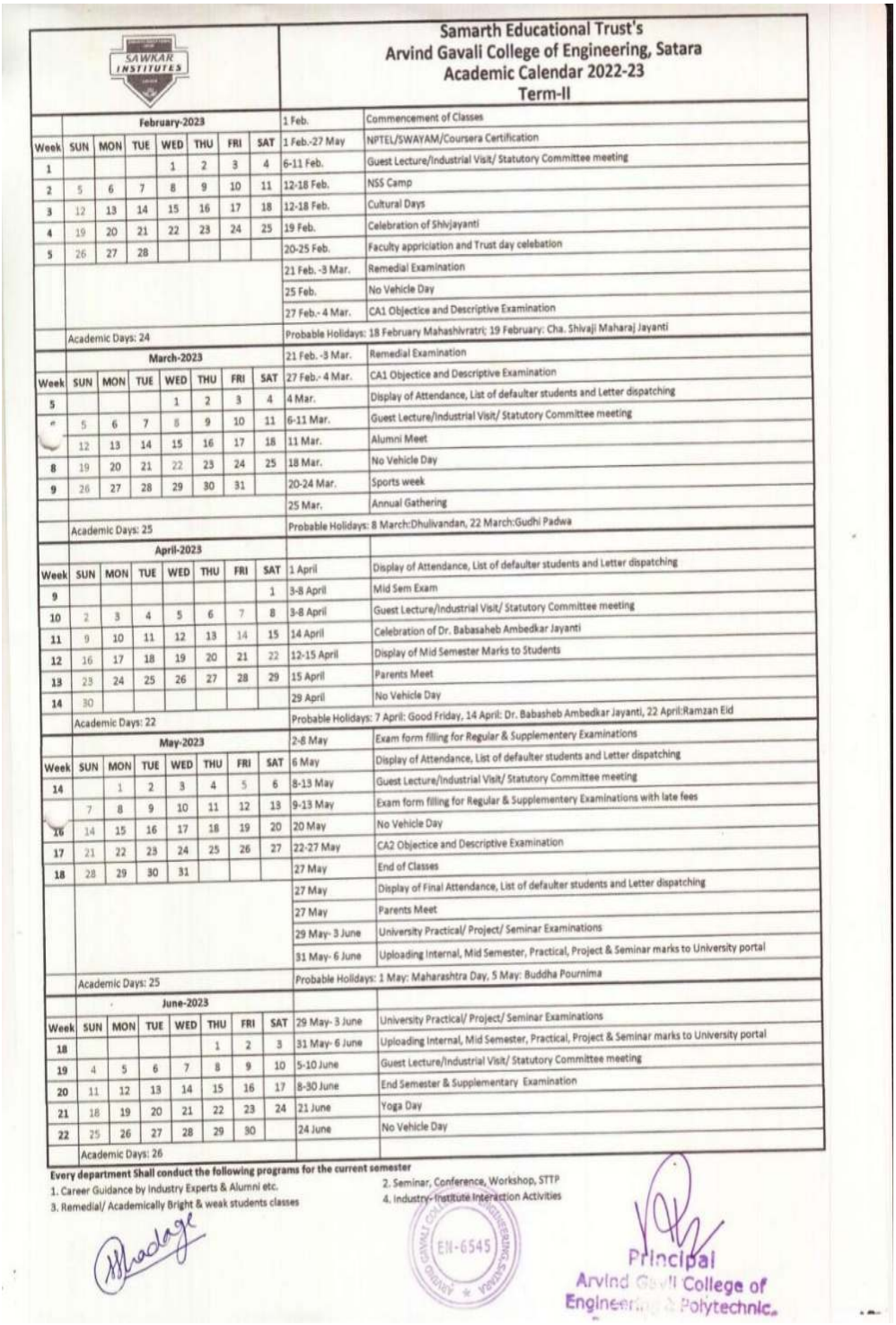
Academic Days: 24

26 Dec.-21 Jan.	End Semester & Supplementary Examination
2-7 Jan.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
22-31 Jan.	Insdustrial Training
26 Jan.	Republic Day Celebration
28 Jan.	No Vehicle Day
Probable Holidays: 14 Jan: Makar Sankrati, 26 Jan: Republic Day Celebration	

Every department Shall conduct the following programs for the current semester
1. Career Guidance by Industry Experts & Alumni etc.
2. Seminar, Conference, Workshop, STTP
3. Remedial/ Academically Bright & weak students classes
4. Industry- Institute Interaction Activities

Principal
Arvind Gavli College of Engineering & Polytechnic

Figure 5.5(2.a) Academic Calendar for the Academic Year 2022 – 23 (Odd Semester)



SAWKAR INSTITUTES

Samarth Educational Trust's
Arvind Gavali College of Engineering, Satara
Academic Calendar 2022-23
Term-II

February-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
1				1	2	3	4
2	5	6	7	8	9	10	11
3	12	13	14	15	16	17	18
4	19	20	21	22	23	24	25
5	26	27	28				

Academic Days: 24

March-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
5				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
8	19	20	21	22	23	24	25
9	26	27	28	29	30	31	

Academic Days: 25

April-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
9							1
10	2	3	4	5	6	7	8
11	9	10	11	12	13	14	15
12	16	17	18	19	20	21	22
13	23	24	25	26	27	28	29
14	30						

Academic Days: 22

May-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
14		1	2	3	4	5	6
	7	8	9	10	11	12	13
16	14	15	16	17	18	19	20
17	21	22	23	24	25	26	27
18	28	29	30	31			

Academic Days: 25

June-2023

Week	SUN	MON	TUE	WED	THU	FRI	SAT
18					1	2	3
19	4	5	6	7	8	9	10
20	11	12	13	14	15	16	17
21	18	19	20	21	22	23	24
22	25	26	27	28	29	30	

Academic Days: 26

1 Feb.	Commencement of Classes
1 Feb.-27 May	NPTEL/SWAYAM/Coursera Certification
6-11 Feb.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
12-18 Feb.	NSS Camp
12-18 Feb.	Cultural Days
19 Feb.	Celebration of Shivjayanti
20-25 Feb.	Faculty appriciation and Trust day celebation
21 Feb. -3 Mar.	Remedial Examination
25 Feb.	No Vehicle Day
27 Feb.- 4 Mar.	CA1 Objectice and Descriptive Examination
Probable Holidays: 18 February Mahashivratri; 19 February: Cha. Shivaji Maharaj Jayanti	
21 Feb. -3 Mar.	Remedial Examination
27 Feb.- 4 Mar.	CA1 Objectice and Descriptive Examination
4 Mar.	Display of Attendance, List of defaulter students and Letter dispatching
6-11 Mar.	Guest Lecture/Industrial Visit/ Statutory Committee meeting
11 Mar.	Alumni Meet
18 Mar.	No Vehicle Day
20-24 Mar.	Sports week
25 Mar.	Annual Gathering
Probable Holidays: 8 March:Dhulivandan, 22 March:Gudhi Padwa	
1 April	Display of Attendance, List of defaulter students and Letter dispatching
3-8 April	Mid Sem Exam
3-8 April	Guest Lecture/Industrial Visit/ Statutory Committee meeting
14 April	Celebration of Dr. Babasaheb Ambedkar Jayanti
12-15 April	Display of Mid Semester Marks to Students
15 April	Parents Meet
29 April	No Vehicle Day
Probable Holidays: 7 April: Good Friday, 14 April: Dr. Babasheb Ambedkar Jayanti, 22 April:Ramzan Eid	
2-8 May	Exam form filling for Regular & Supplementery Examinations
6 May	Display of Attendance, List of defaulter students and Letter dispatching
8-13 May	Guest Lecture/Industrial Visit/ Statutory Committee meeting
9-13 May	Exam form filling for Regular & Supplementery Examinations with late fees
20 May	No Vehicle Day
22-27 May	CA2 Objectice and Descriptive Examination
27 May	End of Classes
27 May	Display of Final Attendance, List of defaulter students and Letter dispatching
27 May	Parents Meet
29 May- 3 June	University Practical/ Project/ Seminar Examinations
31 May- 6 June	Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal
Probable Holidays: 1 May: Maharashtra Day, 5 May: Buddha Pournima	
29 May- 3 June	University Practical/ Project/ Seminar Examinations
31 May- 6 June	Uploading Internal, Mid Semester, Practical, Project & Seminar marks to University portal
5-10 June	Guest Lecture/Industrial Visit/ Statutory Committee meeting
8-30 June	End Semester & Supplementary Examination
21 June	Yoga Day
24 June	No Vehicle Day

Every department Shall conduct the following programs for the current semester

1. Career Guidance by Industry Experts & Alumni etc.
2. Seminar, Conference, Workshop, STTP
3. Remedial/ Academically Bright & weak students classes
4. Industry-Institute Interaction Activities

EN-6545

Principal
Arvind Gavli College of Engineering & Polytechnic.

Figure 5.5(2.b) Academic Calendar for the Academic Year 2022 – 23 (Even Semester)

Arvind Gavali College of Engineering, Satara

DEPARTMENT OF ELECTRICAL ENGINEERING

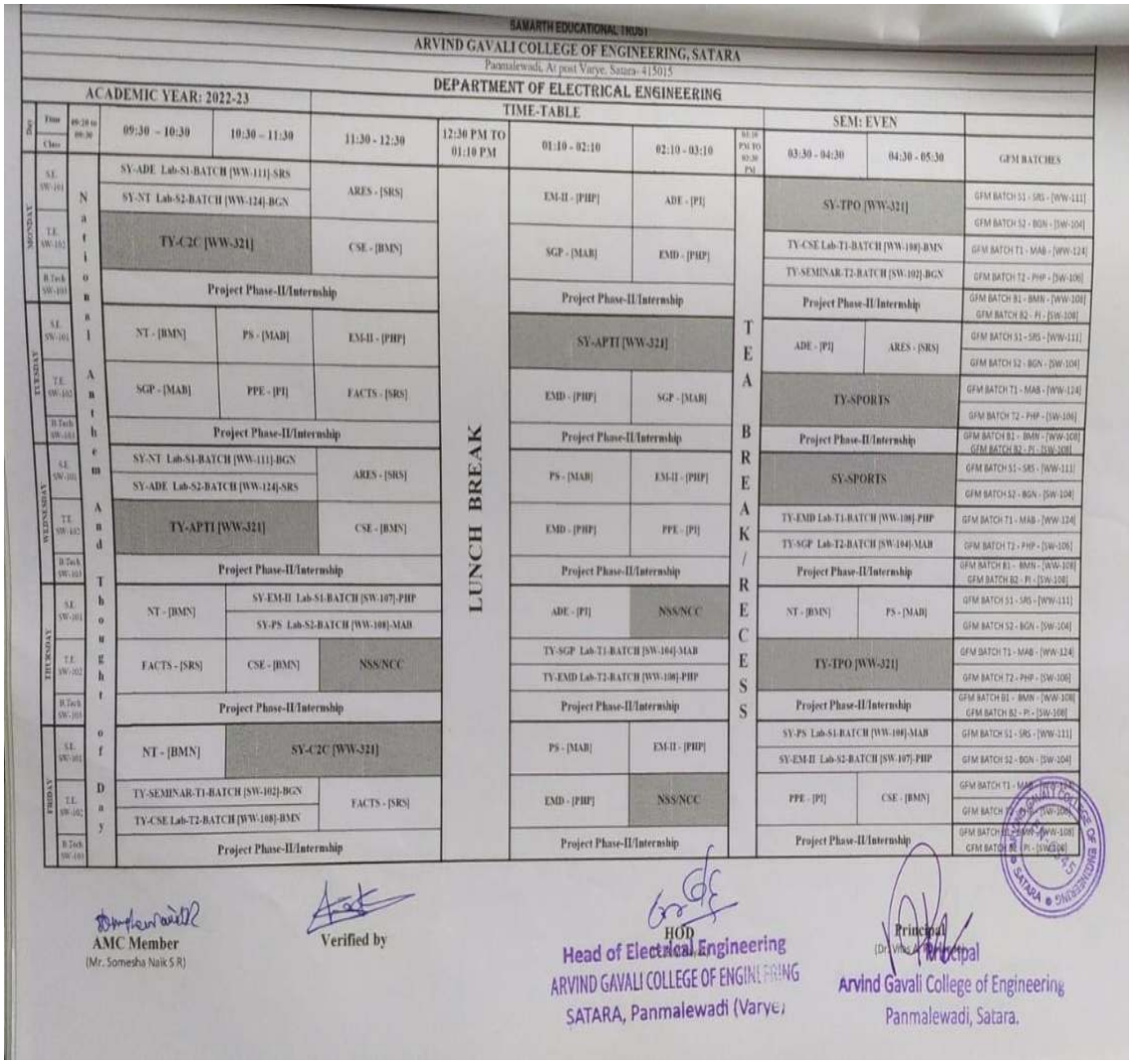
TIME - TABLE Academic Year 2022-23 (ODD Semester)

Day	Time / Class	9.30–10.30	10.30–11.30	11.30 to 12.1	12.10-1.10	1.10-2.10	2.10-3.10	3.10-3.30	3.30-4.30	4.30-5.30
MONDAY	S.E. SW-101	EMS	EM-III	LUNCH	EM-I	SY-C2C [WW-321]		RECESS	SY-MP-I Lab-[WW-108]	
	T.E. SW-102	PSA	PE		MM	HVDC	ES		HVDC	MM
	B.E. SW-103	EAC	ED		ETU	B.Tech-PSOC Lab-B1-[WW-108] B.Tech-HVE Lab-B2-[SW-101]			PSOC	HVE
TUESDAY	S.E. SW-101	E & EM	EMS		EM-III	SY-MP-I Lab-[SW-108]			EM-I	SY-Lib [Lib]
	T.E. SW-102	ES	MM		PE	TY-TPO [WW-321]			TY-MP-II-T2 Lab-[WW-108] TY-PE Lab-T1-[SW-106]	
	B.E. SW-103	PSOC	ED		HVE	EAC	ETU		B.Tech-Semi-[SW-101]	
WEDNESDAY	S.E. SW-101	SY-APTITUDE [WW-321]			E & EM	EM-I	E & EM		SY-EM-I Lab-S1-[SW-108] SY-E&EM Lab-S2-[WW-111]	
	T.E. SW-102	HVDC	PSA		MM	TY-CS [WW-321]			TY-PSA Lab-T2-[WW-108] TY-MM Lab-T1-[WW-209]	
	B.E. SW-103	B.Tech-ED Lab-[SW-108]			PSOC	B.Tech-PSOC Lab-B1-[SW-108] B.Tech-HVE Lab-B2-[SW-101]			B.Tech-Semi-[SW-101]	
THURSDAY	S.E. SW-101	BHR			EM-III	SY-TPO [WW-321]			SY-EM-I Lab-S2-[SW-108] SY-E&EM Lab-S1-[WW-111]	
	T.E. SW-102	TY-APTITUDE [WW-321]			ES	PE	PSA		TY-PSA Lab-T1-[WW-108] TY-MM Lab-T2-[WW-209]	
	B.E. SW-103	ETU	ED		PSOC	HVE	EAC		Project Phase-I [Respective Guide]	
FRIDAY	S.E. SW-101	EMS	E & EM		EM-I	SY-Lib [Lib]	EM-III		SY-CS [WW-321]-ECC	
	T.E. SW-102	PSA	TY-Lib [Lib]		PE	TY-C2C [WW-321]			TY-MP-II-T1 Lab-[WW-108] TY-PE Lab-T2-[SW-106]	
	B.E. SW-103	Project Phase-I [Respective Guide]			Project Phase-I [Respective Guide]				Project Phase-I [Respective Guide]	

AMC Verified by HOD Principal

Head of Electrical En... ARVIND GAVALI COLLEGE O... ...Gavali College of Engineering Panmalewadi, Satara

Figure 5.5(2. c) Time table for ODD Semester (2022 – 23)


SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

Panmalewadi, At post Varye, Satara- 415015

DEPARTMENT OF ELECTRICAL ENGINEERING

ACADEMIC YEAR: 2022-23 TIME-TABLE SEM: EVEN

Day	Time / Class	09:30 to 09:30	09:30 – 10:30	10:30 – 11:30	11:30 - 12:30	12:30 PM TO 01:10 PM	01:10 - 02:10	02:10 - 03:10	03:10 PM TO 03:30 PM	03:30 - 04:30	04:30 - 05:30	GFM BATCHES
MONDAY	S.E. SW-101	National Anthem And Thought of Day	SY-ADE Lab-S1-BATCH [WW-111]-SRS		ARES - [SRS]	LUNCH BREAK	EM-II - [PHP]	ADE - [PI]	TEA BREAK/ RECESS	SY-TPO [WW-321]		GFM BATCH S1 - SRS - [WW-111]
	T.E. SW-102		SY-NT Lab-S2-BATCH [WW-124]-BGN				SGP - [MAB]	EMD - [PHP]		TY-CSE Lab-T1-BATCH [WW-108]-BMN		GFM BATCH S2 - BGN - [SW-104]
	B.Tech SW-103		TY-C2C [WW-321]		CSE - [BMN]		Project Phase-II/Internship			TY-SEMINAR-T2-BATCH [SW-102]-BGN		GFM BATCH T1 - MAB - [WW-124]
			Project Phase-II/Internship							Project Phase-II/Internship		GFM BATCH T2 - PHP - [SW-106]
TUESDAY	S.E. SW-101		NT - [BMN]	PS - [MAB]	EM-II - [PHP]		SY-APTI [WW-321]			ADE - [PI]	ARES - [SRS]	GFM BATCH B1 - BMN - [WW-108] GFM BATCH B2 - PI - [SW-108]
	T.E. SW-102		SGP - [MAB]	PPE - [PI]	FACTS - [SRS]		EMD - [PHP]	SGP - [MAB]		TY-SPORTS		GFM BATCH S1 - SRS - [WW-111]
	B.Tech SW-103		Project Phase-II/Internship				Project Phase-II/Internship			Project Phase-II/Internship		GFM BATCH S2 - BGN - [SW-104]
WEDNESDAY	S.E. SW-101		SY-NT Lab-S1-BATCH [WW-111]-BGN		ARES - [SRS]		PS - [MAB]	EM-II - [PHP]		SY-SPORTS		GFM BATCH T1 - MAB - [WW-124]
	T.E. SW-102		SY-ADE Lab-S2-BATCH [WW-124]-SRS				EMD - [PHP]	PPE - [PI]		TY-EMD Lab-T1-BATCH [WW-108]-PHP		GFM BATCH T2 - PHP - [SW-106]
	B.Tech SW-103		TY-APTI [WW-321]		CSE - [BMN]		Project Phase-II/Internship			TY-SGP Lab-T2-BATCH [SW-104]-MAB		GFM BATCH B1 - BMN - [WW-108] GFM BATCH B2 - PI - [SW-108]
			Project Phase-II/Internship							Project Phase-II/Internship		GFM BATCH S1 - SRS - [WW-111]
THURSDAY	S.E. SW-101		NT - [BMN]	SY-EM-II Lab-S1-BATCH [SW-107]-PHP			ADE - [PI]	NSS/NCC		NT - [BMN]	PS - [MAB]	GFM BATCH S2 - BGN - [SW-104]
	T.E. SW-102			SY-PS Lab-S2-BATCH [WW-108]-MAB			TY-SGP Lab-T1-BATCH [SW-104]-MAB			TY-TPO [WW-321]		GFM BATCH T1 - MAB - [WW-124]
	B.Tech SW-103		FACTS - [SRS]	CSE - [BMN]	NSS/NCC		TY-EMD Lab-T2-BATCH [WW-108]-PHP			Project Phase-II/Internship		GFM BATCH T2 - PHP - [SW-106]
			Project Phase-II/Internship				Project Phase-II/Internship			SY-PS Lab-S1-BATCH [WW-108]-MAB		GFM BATCH B1 - BMN - [WW-108] GFM BATCH B2 - PI - [SW-108]
FRIDAY	S.E. SW-101		NT - [BMN]	SY-C2C [WW-321]			PS - [MAB]	EM-II - [PHP]		SY-EM-II Lab-S2-BATCH [SW-107]-PHP		GFM BATCH S1 - SRS - [WW-111]
	T.E. SW-102		TY-SEMINAR-T1-BATCH [SW-102]-BGN		FACTS - [SRS]		EMD - [PHP]	NSS/NCC		PPE - [PI]	CSE - [BMN]	GFM BATCH S2 - BGN - [SW-104]
	B.Tech SW-103		TY-CSE Lab-T2-BATCH [WW-108]-BMN				Project Phase-II/Internship			Project Phase-II/Internship		GFM BATCH T1 - MAB - [WW-124]
			Project Phase-II/Internship									GFM BATCH T2 - PHP - [SW-106]

AMC Member (Mr. Somesha Naik S R)

Verified by

HOD Head of Electrical Engineering ARVIND GAVALI COLLEGE OF ENGINEERING SATARA, Panmalewadi (Varye)

Principal Arvind Gavali College of Engineering Panmalewadi, Satara.

Figure 5.5 (2. d) Time tables for Even Semester (2022 – 23)

The timetable for the weekly lectures and practicals, is made available to the students well in advance, and displayed on the department notice boards. Course syllabus is displayed and made available to the students via the student Whatsapp groups.

- **Lesson Plan:**

The lesson plan for the individual subject is prepared by the individual faculty member, approved by the HoD and the corresponding Academic Monitoring Committee member of that department. The lesson plan is also displayed during the faculty induction program, for the subject experts, held at the beginning of the semester, and their suggestions are incorporated. The lesson plan is then conveyed to the students via MOODLE. This allows the students to understand the course structure.

The innovative methods employed by the faculty members help the students to get actively involved in the learning process .

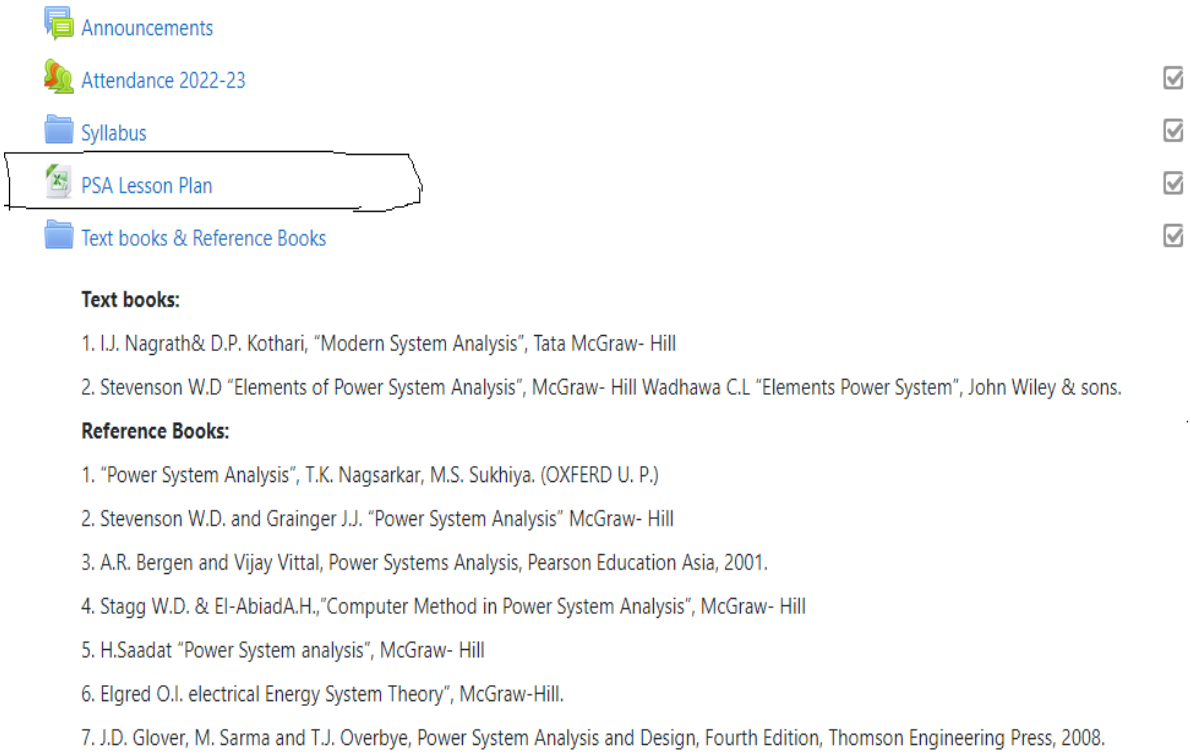
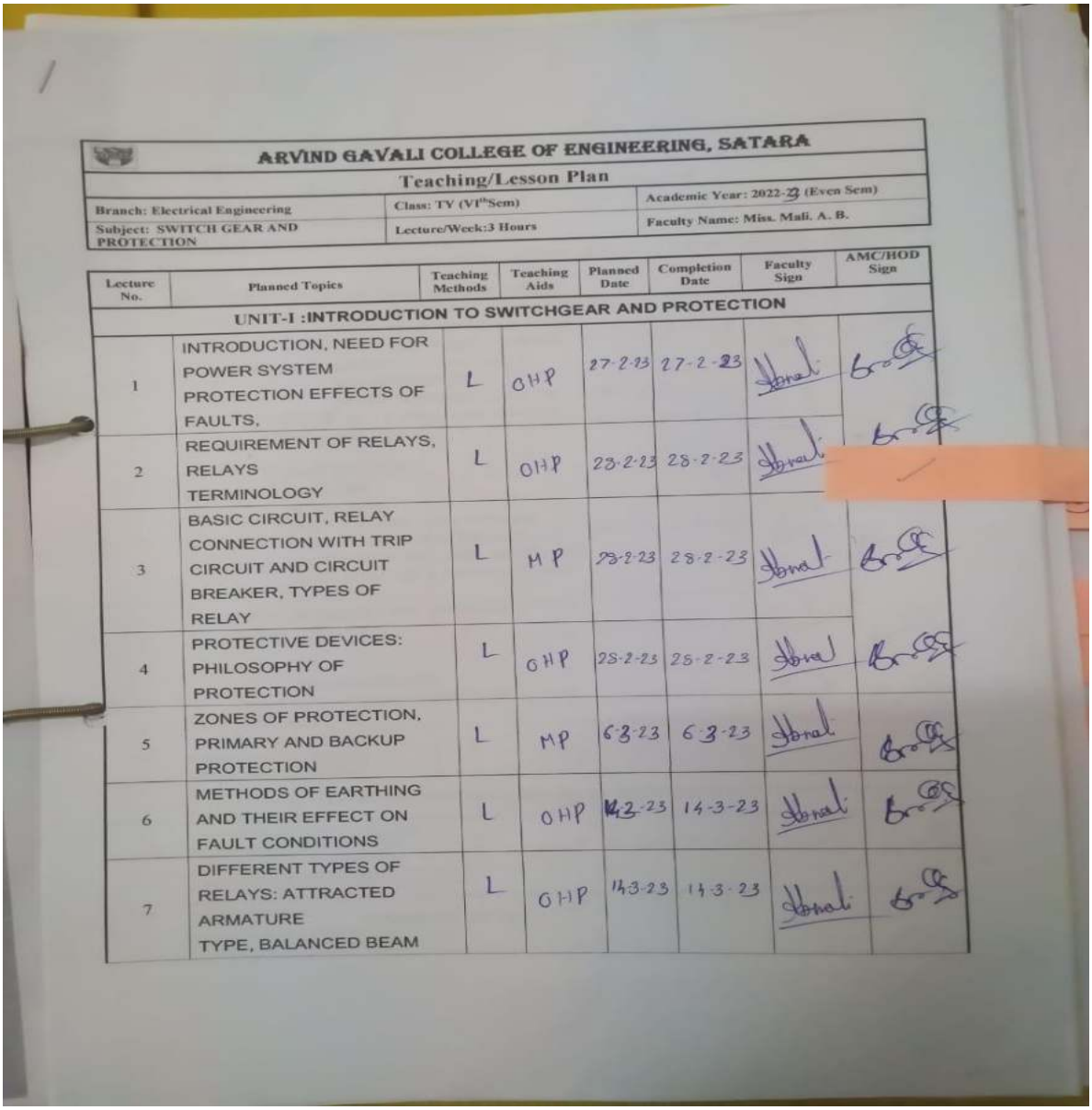


Figure 5.5 (3.a) Lesson Plan uploaded on Moodle



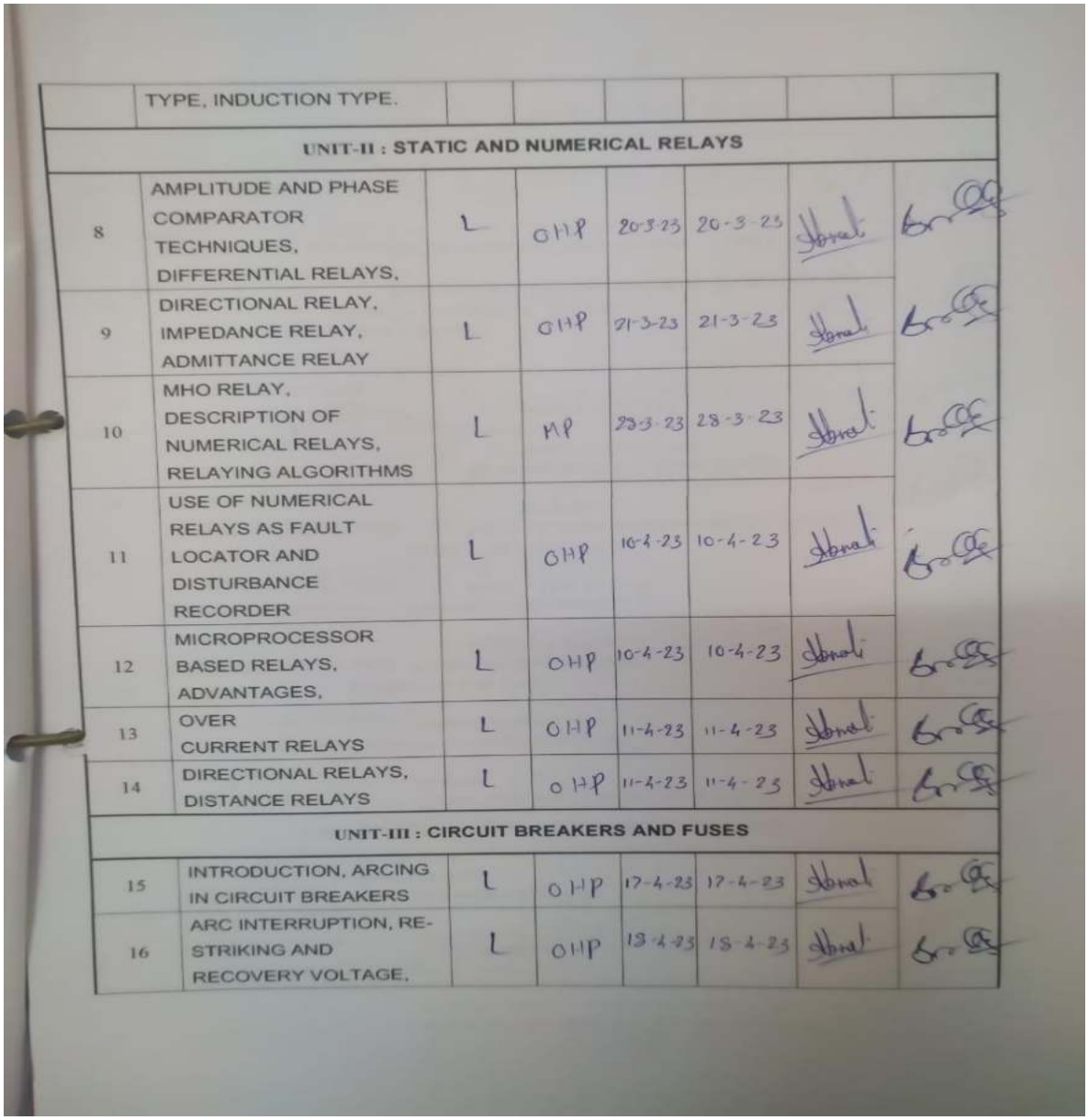
ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

Teaching/Lesson Plan

Branch: Electrical Engineering	Class: TY (VI[th]Sem)	Academic Year: 2022-23 (Even Sem)
Subject: SWITCH GEAR AND PROTECTION	Lecture/Week:3 Hours	Faculty Name: Miss. Mali. A. B.

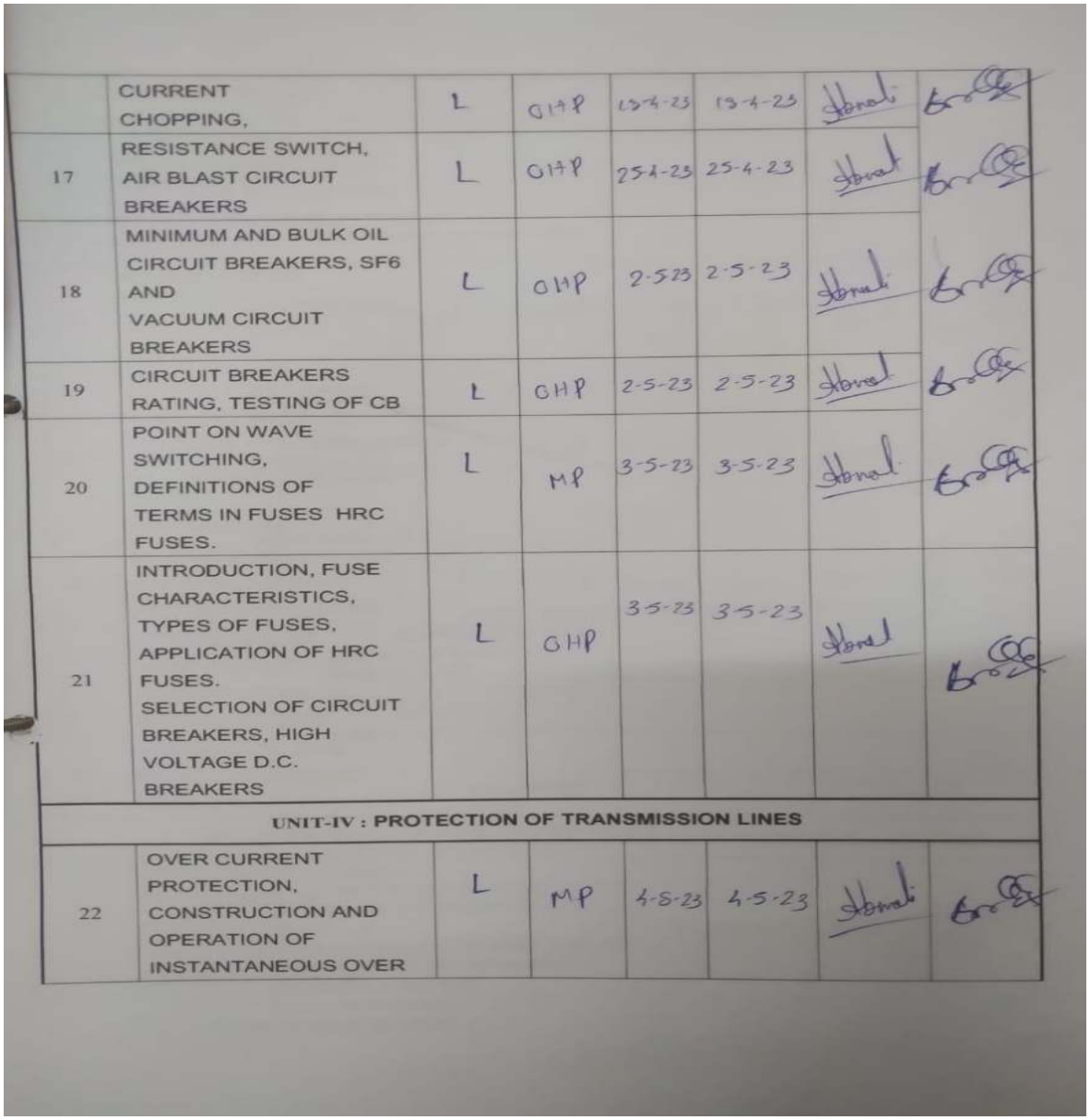
Lecture No.	Planned Topics	Teaching Methods	Teaching Aids	Planned Date	Completion Date	Faculty Sign	AMC/HOD Sign
	UNIT-I :INTRODUCTION TO SWITCHGEAR AND PROTECTION						
1	INTRODUCTION, NEED FOR POWER SYSTEM PROTECTION EFFECTS OF FAULTS,	L	OHP	27-2-23	27-2-23		
2	REQUIREMENT OF RELAYS, RELAYS TERMINOLOGY	L	OHP	28-2-23	28-2-23		
3	BASIC CIRCUIT, RELAY CONNECTION WITH TRIP CIRCUIT AND CIRCUIT BREAKER, TYPES OF RELAY	L	MP	28-2-23	28-2-23		
4	PROTECTIVE DEVICES: PHILOSOPHY OF PROTECTION	L	OHP	28-2-23	28-2-23		
5	ZONES OF PROTECTION, PRIMARY AND BACKUP PROTECTION	L	MP	6-3-23	6-3-23		
6	METHODS OF EARTHING AND THEIR EFFECT ON FAULT CONDITIONS	L	OHP	13-3-23	14-3-23		
7	DIFFERENT TYPES OF RELAYS: ATTRACTED ARMATURE TYPE, BALANCED BEAM	L	OHP	14-3-23	14-3-23		

Figure 5.5(3.b) Teaching Plan Page 1



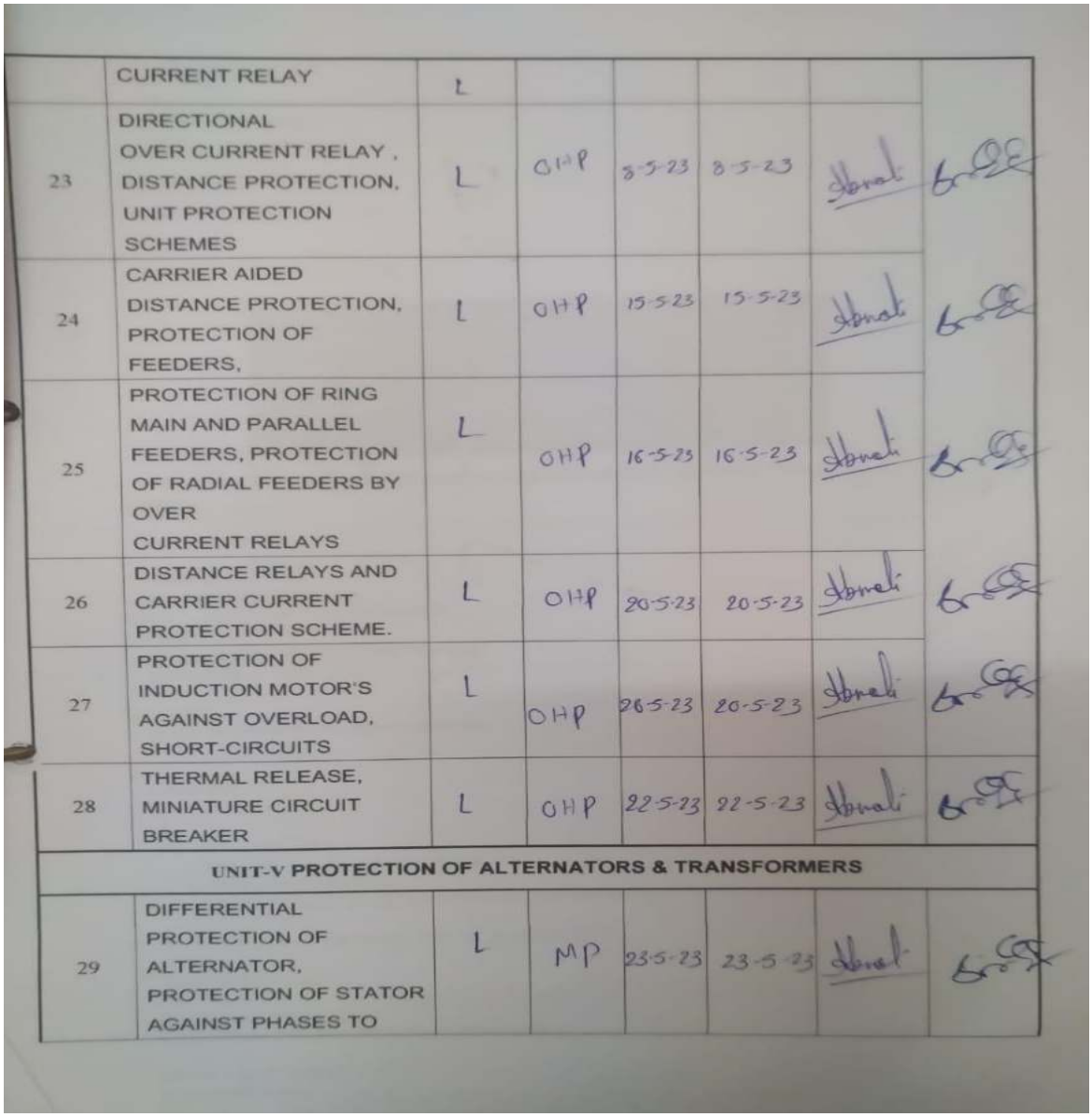
	TYPE, INDUCTION TYPE.						
	UNIT-II : STATIC AND NUMERICAL RELAYS						
8	AMPLITUDE AND PHASE COMPARATOR TECHNIQUES, DIFFERENTIAL RELAYS.	L	OHP	20-3-23	20-3-23		
9	DIRECTIONAL RELAY, IMPEDANCE RELAY, ADMITTANCE RELAY	L	OHP	21-3-23	21-3-23		
10	MHO RELAY, DESCRIPTION OF NUMERICAL RELAYS, RELAYING ALGORITHMS	L	MP	23-3-23	28-3-23		
11	USE OF NUMERICAL RELAYS AS FAULT LOCATOR AND DISTURBANCE RECORDER	L	OHP	10-4-23	10-4-23		
12	MICROPROCESSOR BASED RELAYS, ADVANTAGES,	L	OHP	10-4-23	10-4-23		
13	OVER CURRENT RELAYS	L	OHP	11-4-23	11-4-23		
14	DIRECTIONAL RELAYS, DISTANCE RELAYS	L	OHP	11-4-23	11-4-23		
	UNIT-III : CIRCUIT BREAKERS AND FUSES						
15	INTRODUCTION, ARCING IN CIRCUIT BREAKERS	L	OHP	17-4-23	17-4-23		
16	ARC INTERRUPTION, RE-STRIKING AND RECOVERY VOLTAGE.	L	OHP	18-4-23	18-4-23		

Figure 5.5 (3.c) Teaching Plan Page 2



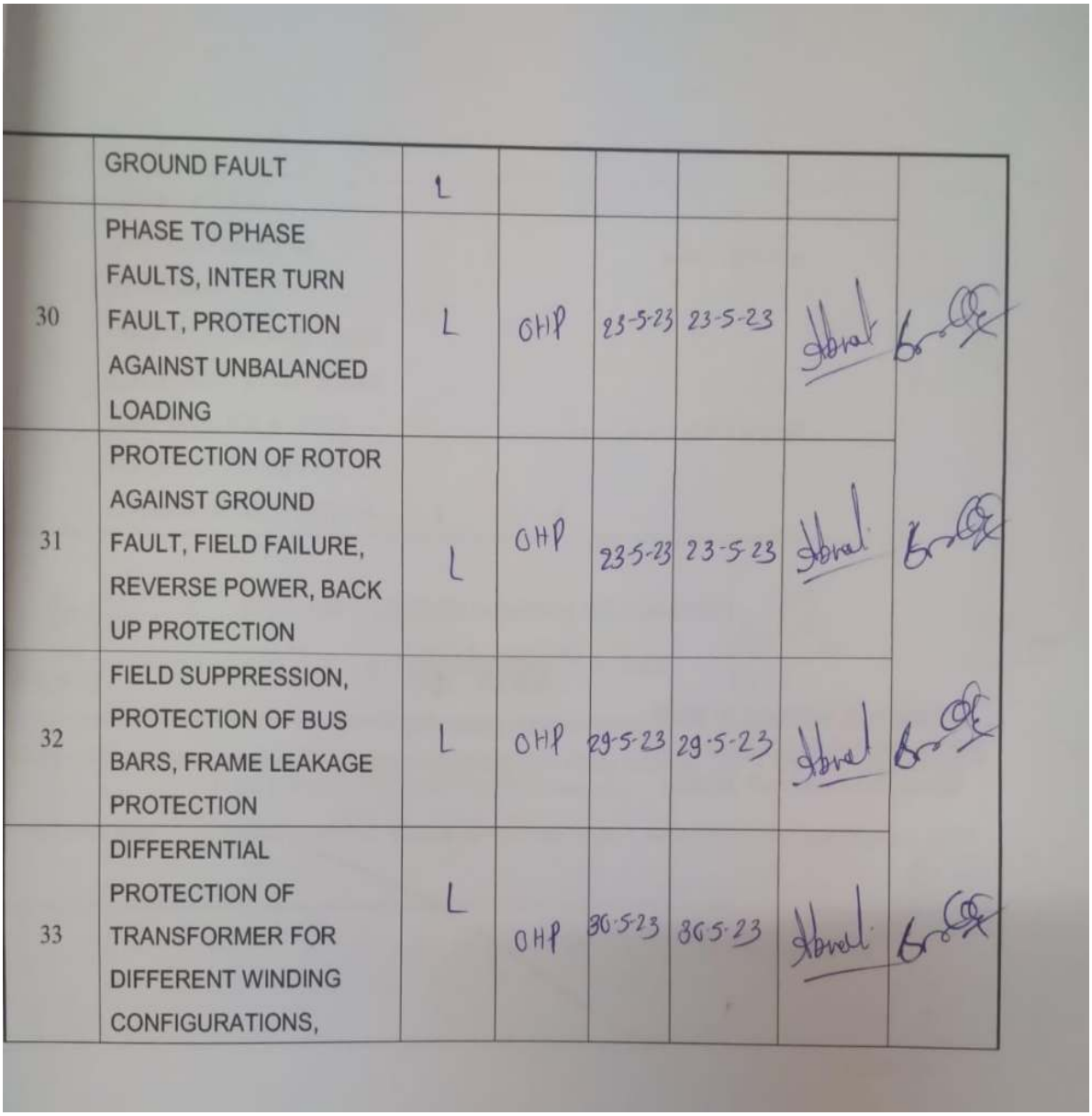
	CURRENT CHOPPING,	L	OHP	13-4-23	13-4-23		
17	RESISTANCE SWITCH, AIR BLAST CIRCUIT BREAKERS	L	OHP	25-4-23	25-4-23		
18	MINIMUM AND BULK OIL CIRCUIT BREAKERS, SF6 AND VACUUM CIRCUIT BREAKERS	L	OHP	2-5-23	2-5-23		
19	CIRCUIT BREAKERS RATING, TESTING OF CB	L	OHP	2-5-23	2-5-23		
20	POINT ON WAVE SWITCHING, DEFINITIONS OF TERMS IN FUSES HRC FUSES.	L	MP	3-5-23	3-5-23		
21	INTRODUCTION, FUSE CHARACTERISTICS, TYPES OF FUSES, APPLICATION OF HRC FUSES. SELECTION OF CIRCUIT BREAKERS, HIGH VOLTAGE D.C. BREAKERS	L	OHP	3-5-23	3-5-23		
	UNIT-IV : PROTECTION OF TRANSMISSION LINES						
22	OVER CURRENT PROTECTION, CONSTRUCTION AND OPERATION OF INSTANTANEOUS OVER	L	MP	4-5-23	4-5-23		

Figure 5.5(3.d) Teaching Plan Page 3



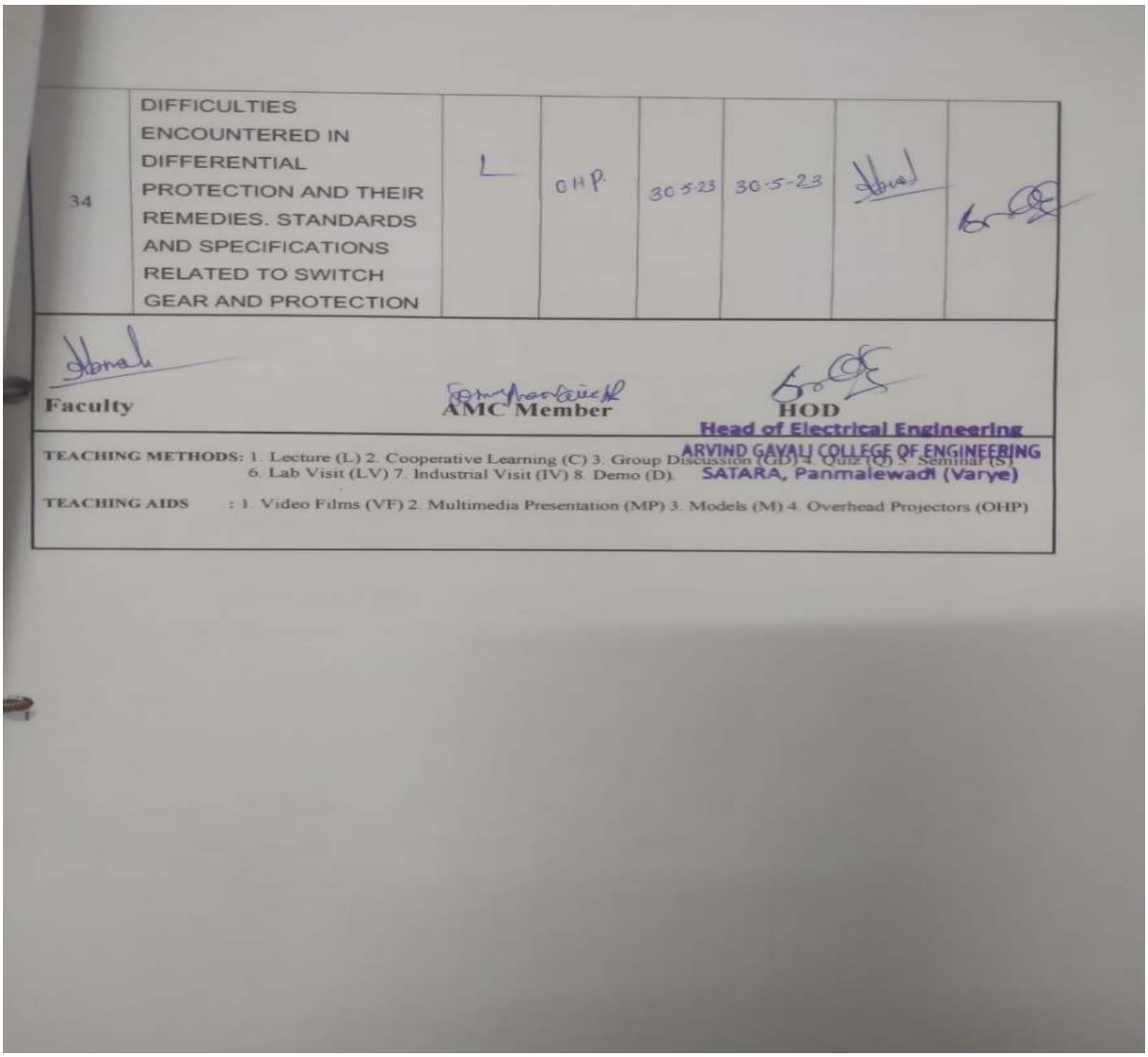
	CURRENT RELAY	L					
23	DIRECTIONAL OVER CURRENT RELAY , DISTANCE PROTECTION, UNIT PROTECTION SCHEMES	L	OHP	8-5-23	8-5-23	Shinde	
24	CARRIER AIDED DISTANCE PROTECTION, PROTECTION OF FEEDERS,	L	OHP	15-5-23	15-5-23	Shinde	
25	PROTECTION OF RING MAIN AND PARALLEL FEEDERS, PROTECTION OF RADIAL FEEDERS BY OVER CURRENT RELAYS	L	OHP	16-5-23	16-5-23	Shinde	
26	DISTANCE RELAYS AND CARRIER CURRENT PROTECTION SCHEME.	L	OHP	20-5-23	20-5-23	Shinde	
27	PROTECTION OF INDUCTION MOTOR'S AGAINST OVERLOAD, SHORT-CIRCUITS	L	OHP	20-5-23	20-5-23	Shinde	
28	THERMAL RELEASE, MINIATURE CIRCUIT BREAKER	L	OHP	22-5-23	22-5-23	Shinde	
	UNIT-V PROTECTION OF ALTERNATORS & TRANSFORMERS						
29	DIFFERENTIAL PROTECTION OF ALTERNATOR, PROTECTION OF STATOR AGAINST PHASES TO	L	MP	23-5-23	23-5-23	Shinde	

Figure 5.5 (3.e) Teaching Plan Page 4



	GROUND FAULT	L					
30	PHASE TO PHASE FAULTS, INTER TURN FAULT, PROTECTION AGAINST UNBALANCED LOADING	L	OHP	23-5-23	23-5-23		
31	PROTECTION OF ROTOR AGAINST GROUND FAULT, FIELD FAILURE, REVERSE POWER, BACK UP PROTECTION	L	OHP	23-5-23	23-5-23		
32	FIELD SUPPRESSION, PROTECTION OF BUS BARS, FRAME LEAKAGE PROTECTION	L	OHP	29-5-23	29-5-23		
33	DIFFERENTIAL PROTECTION OF TRANSFORMER FOR DIFFERENT WINDING CONFIGURATIONS,	L	OHP	30-5-23	30-5-23		

Figure 5.5 (3.f) Teaching Plan Page 5



34	DIFFICULTIES ENCOUNTERED IN DIFFERENTIAL PROTECTION AND THEIR REMEDIES. STANDARDS AND SPECIFICATIONS RELATED TO SWITCH GEAR AND PROTECTION	L	OHP	30-5-23	30-5-23		

Faculty AMC Member HOD
Head of Electrical Engineering
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA, Panmalewadi (Varye)

TEACHING METHODS: 1. Lecture (L) 2. Cooperative Learning (C) 3. Group Discussion (GD) 4. Quiz (Q) 5. Seminar (S) 6. Lab Visit (LV) 7. Industrial Visit (IV) 8. Demo (D).

TEACHING AIDS : 1. Video Films (VF) 2. Multimedia Presentation (MP) 3. Models (M) 4. Overhead Projectors (OHP)

Figure 5.5 (3.g) Teaching Plan Page 6

- **In-house Training:**

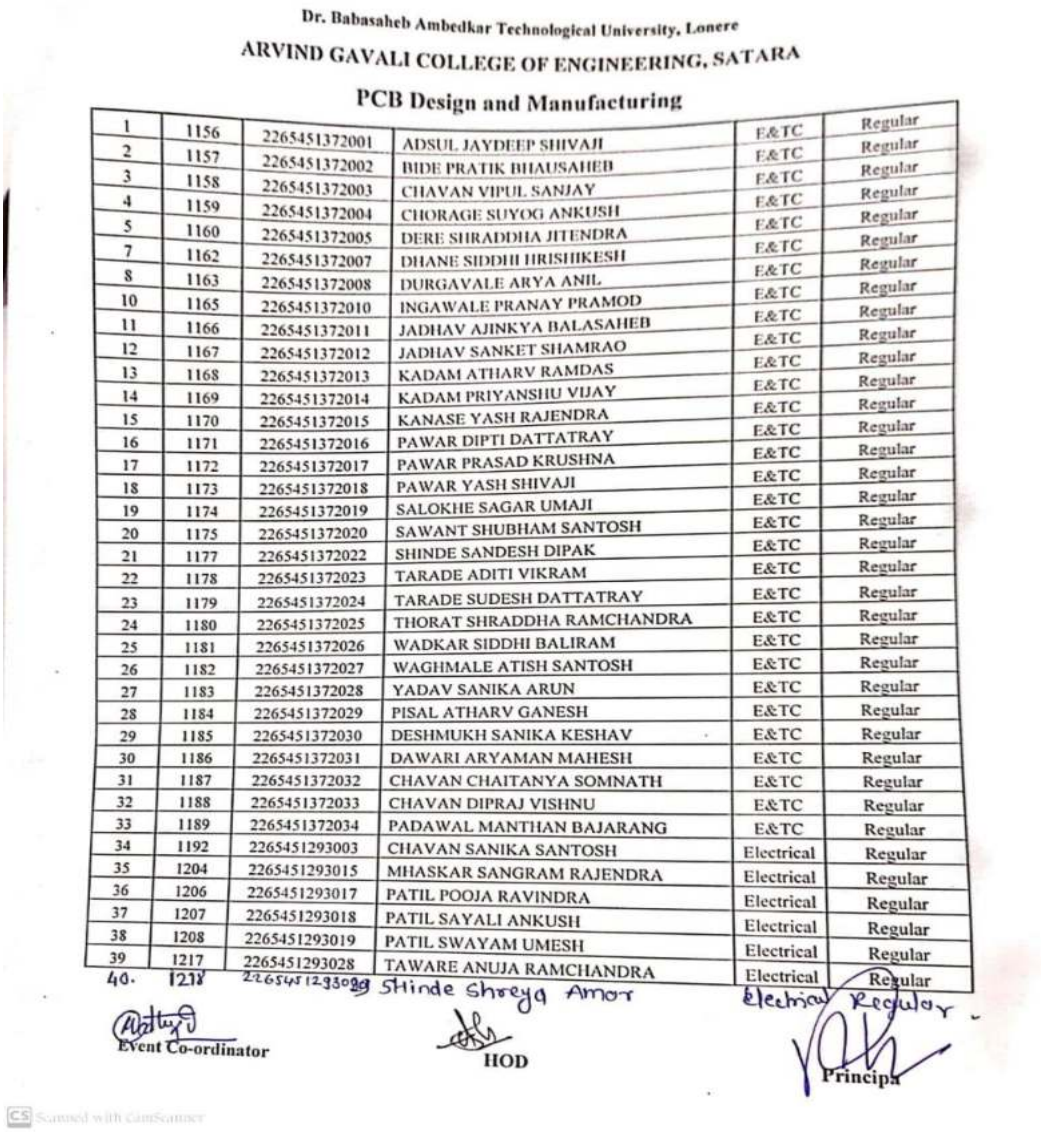
In-house training (hands-on) is organized by the department for skill development and technical proficiency. The duration of the training period is three weeks and the activity is called "YUGAM." The in-house training is conducted during the month of November which is also the vacation period for the odd semester.

The department offers this training in the areas of AutoCAD and Sketch Up Internet of Things (IoT), Artificial Intelligence (AI), and PCB Design. Experts from the industry are invited to conduct the course and also give hands-on training to the students.

Figure 5.5 (4.a) Pamphlet of workshop on Industry Oriented Skills for Aspiring Engineers 2023

Figure 5.5 (4.b)hands on practice

Figure 5.5 (4.c)AutoCAD practice



Dr. Babasaheb Ambedkar Technological University, Lonere

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

PCB Design and Manufacturing

1	1156	2265451372001	ADSUL JAYDEEP SHIVAJI	E&TC	Regular
2	1157	2265451372002	BIDE PRATIK BHAUSAHEB	E&TC	Regular
3	1158	2265451372003	CHAVAN VIPUL SANJAY	E&TC	Regular
4	1159	2265451372004	CHORAGE SUYOG ANKUSH	E&TC	Regular
5	1160	2265451372005	DERE SHRADDHA JITENDRA	E&TC	Regular
7	1162	2265451372007	DHANE SIDDHI HRISHIKESH	E&TC	Regular
8	1163	2265451372008	DURGAVALE ARYA ANIL	E&TC	Regular
10	1165	2265451372010	INGAWALE PRANAY PRAMOD	E&TC	Regular
11	1166	2265451372011	JADHAV AJINKYA BALASAHEB	E&TC	Regular
12	1167	2265451372012	JADHAV SANKET SHAMRAO	E&TC	Regular
13	1168	2265451372013	KADAM ATHARV RAMDAS	E&TC	Regular
14	1169	2265451372014	KADAM PRIYANSHU VIJAY	E&TC	Regular
15	1170	2265451372015	KANASE YASH RAJENDRA	E&TC	Regular
16	1171	2265451372016	PAWAR DIPTI DATTATRAY	E&TC	Regular
17	1172	2265451372017	PAWAR PRASAD KRUSHNA	E&TC	Regular
18	1173	2265451372018	PAWAR YASH SHIVAJI	E&TC	Regular
19	1174	2265451372019	SALOKHE SAGAR UMAJI	E&TC	Regular
20	1175	2265451372020	SAWANT SHUBHAM SANTOSH	E&TC	Regular
21	1177	2265451372022	SHINDE SANDESH DIPAK	E&TC	Regular
22	1178	2265451372023	TARADE ADITI VIKRAM	E&TC	Regular
23	1179	2265451372024	TARADE SUDESH DATTATRAY	E&TC	Regular
24	1180	2265451372025	THORAT SHRADDHA RAMCHANDRA	E&TC	Regular
25	1181	2265451372026	WADKAR SIDDHI BALIRAM	E&TC	Regular
26	1182	2265451372027	WAGHMALE ATISH SANTOSH	E&TC	Regular
27	1183	2265451372028	YADAV SANIKA ARUN	E&TC	Regular
28	1184	2265451372029	PISAL ATHARV GANESH	E&TC	Regular
29	1185	2265451372030	DESHMUKH SANIKA KESHAV	E&TC	Regular
30	1186	2265451372031	DAWARI ARYAMAN MAHESH	E&TC	Regular
31	1187	2265451372032	CHAVAN CHAITANYA SOMNATH	E&TC	Regular
32	1188	2265451372033	CHAVAN DIPRAJ VISHNU	E&TC	Regular
33	1189	2265451372034	PADAWAL MANTHAN BAJARANG	E&TC	Regular
34	1192	2265451293003	CHAVAN SANIKA SANTOSH	Electrical	Regular
35	1204	2265451293015	MHASKAR SANGRAM RAJENDRA	Electrical	Regular
36	1206	2265451293017	PATIL POOJA RAVINDRA	Electrical	Regular
37	1207	2265451293018	PATIL SAYALI ANKUSH	Electrical	Regular
38	1208	2265451293019	PATIL SWAYAM UMESH	Electrical	Regular
39	1217	2265451293028	TAWARE ANUJA RAMCHANDRA	Electrical	Regular
40.	1218	2265451293029	Shinde Shreya Amar	Electrical	Regular

Event Co-ordinator

HOD

Principa

Scanned with CamScanner

Figure 5.5 (4.d) Attendance

Figure 5.5 (4.e) Pamphlet of YUGAM 2020

- **Open Book Tests:**

To improve the analytical skills of the students, open book tests are conducted by the individual faculty member.

Figure 5.5 (5.a) Open Book Test forElectrical Machines Design TY Open book tests

Figure 5.5 (5.b) Open Book Test forElectrical Machines SY Open book test

- **Use of Interactive Panels (ICT):**

The faculty members of the department are encouraged to conduct lectures using smart boards and LCD projectors. This enables a more vivid representation of the concept by incorporation of videos to simplify the concepts. The use of ICT is encouraged in the department and minimum one lecture needs to be conducted using ICT panel.

Figure 5.5 (6.a) Faculty Member of the Department Using Interactive Panel while Conducting the Lecture

Figure 5.5 (6.b) Faculty Member of the Department Using Interactive Panel while Conducting the Lecture

- **Industrial Visits**

Industrial visits are carried out to make students aware of the current advances and requirements in the industry.

Figure 5.5 (7.a)Industrial Visit at AG Electro

Figure 5.5 (7.b)Industrial Visit at Padage Substation Mumbai

Figure 5.5 (7.c)Industrial Visit at Sunmitra Solar Pvt. Ltd.

- **Quiz**

Faculty members conduct quiz, based on objective questions to assess the understanding of the concepts, by the students. The quiz is conducted using MOODLE platform. Objective Multiple-Choice Questions (MCQs) are formulated using Bloom's taxonomy.

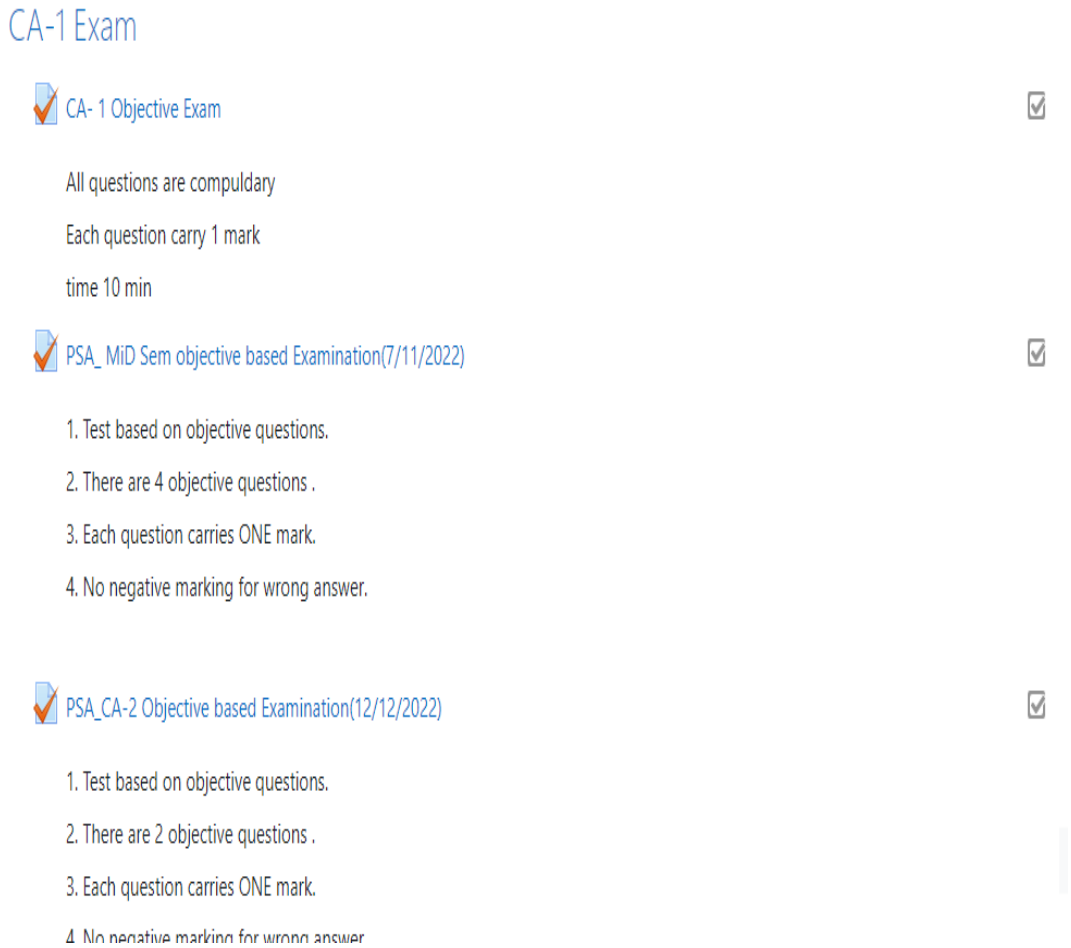


Figure 5.5 (8.a) Quiz on Moodle Screen shot

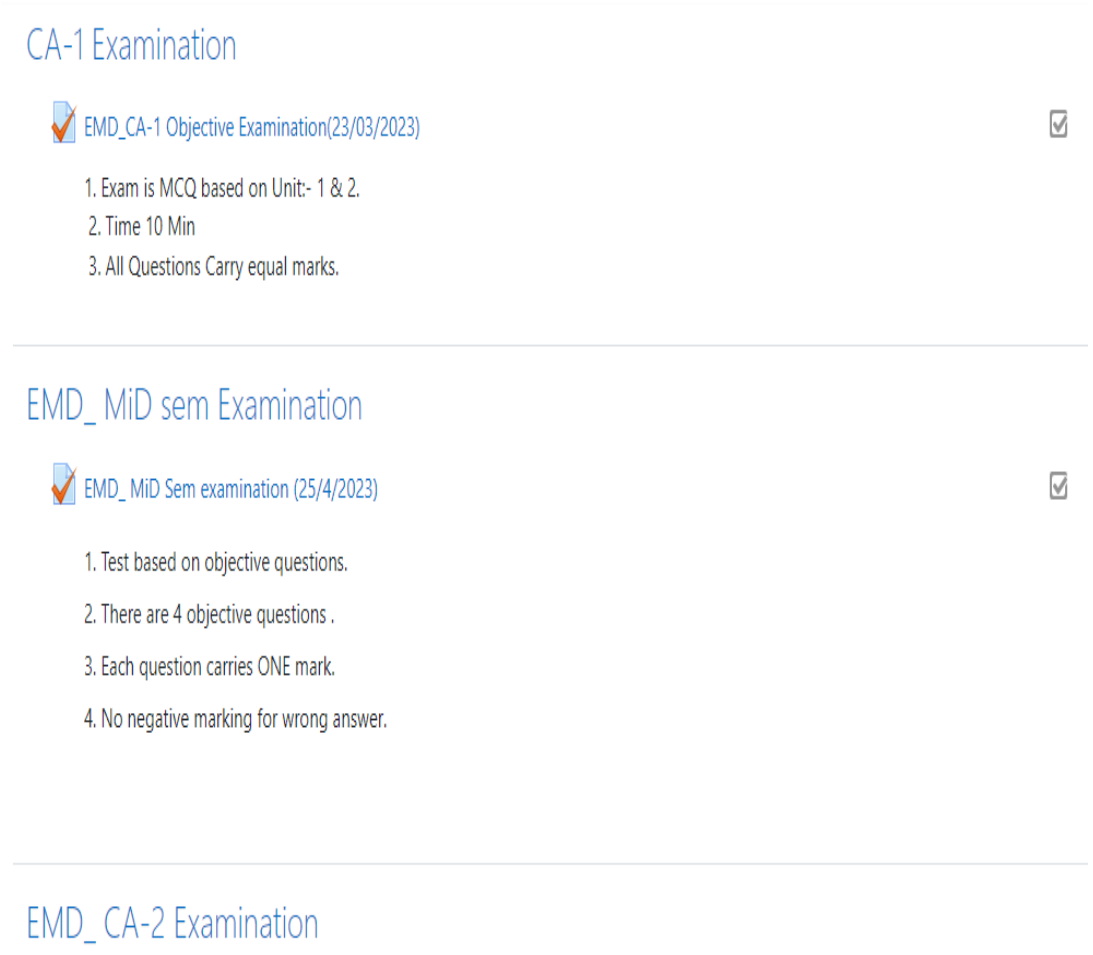


Figure 5.5 (8.b) Quiz on Moodle Screen shot

- **NPTEL Courses:**

The students are encouraged to enroll for National Programme on Technology Enhanced Learning (NPTEL) and Massive Open Online Course (MOOC) courses to enhance self-learning. These courses are further incorporated in the syllabus itself by the university.

The efforts of the SPOC, Ms.Samina Y. Mulla for NPTEL courses have been appreciated by IIT Bombay.

Table 1. NPTEL Courses Chosen by Students of TY B.Tech and Final Year B.Tech (Electrical) for 2022 – 23

Sr. No.	Timeline	Year	Courses Chosen by the Students
1	2022 – 2023 Odd Semester	TY B.Tech (Electrical)	1. Electric Vehicles - Part 1 2. Smart Grid: Basics to Advanced Technologies 3. Electrical Machines – II 4. Smart Grid: Basics to Advanced Technologies 5. Signals and Systems 6. Digital Protection of Power System
2	2022 – 2023 Odd Semester	Final Year B.Tech (Electrical)	1. Entrepreneurship Essentials 2. High Power Multilevel Converters-Analysis, design and operational issues

Table 2. NPTEL Courses Chosen by Students of TY B.Tech and Final Year B.Tech (Electrical) for 2021 – 22

Sr. No.	Timeline	Year	Courses Chosen by the Students
1	2021 – 2022 Odd Semester	TY B.Tech	1. An Introduction to Artificial Intelligence 2. Introduction To Programming In C

Table 3. NPTEL Courses Chosen by Students of TY B.Tech and Final Year B.Tech (Electrical) for 2020 – 21

Sr. No.	Timeline	Year	Courses Chosen by the Students
1	2020 – 2021 Odd Semester	TY B.Tech	1. Fuzzy Sets, Logic and Systems & Applications 2. Industrial Automation and Control
2	2020 – 2021 Odd Semester	Final Year B.Tech	1. Introduction to Industry 4.0 and Industrial Internet of Things

3	2020 – 2021 Even Semester	TY B. Tech (Electrical)	1. Basic Electrical Circuits 2. Electric vehicles and Renewable energy
4	2020 – 2021 Even Semester	Final Year B. Tech (Electrical)	1. Introduction to Industry 4.0 and Industrial Internet of Things

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VAISHNAVI RAJENDRA BHISE

for successfully completing the course

Smart Grid: Basics to Advanced Technologies

with a consolidated score of 42 %

Online Assignments	10.63/25	Proctored Exam	31.5/75

Total number of candidates certified in this course: 613

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Jan-Apr 2023

(12 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

FREE ONLINE EDUCATION swayam

Roll No: NPTEL23EE60S64600297 To validate the certificate No. of credits recommended: 3 or 4

5.5 (9.a) NPTEL Certificate

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SNEHALUNUNE

for successfully completing the course

Electric Vehicles - Part 1

with a consolidated score of **48** %

Online Assignments	17.5/25	Proctored Exam	30.62/75

Total number of candidates certified in this course: **1010**

Devendra Jalihal

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Jan-Feb 2023
(4 week course)

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

FREE ONLINE EDUCATION swayam

Roll No: NPTEL23EE01S44920437 To validate the certificate No. of credits recommended: 1 or 2

5.5 (9.b) NPTEL Certificate

- **Detailed Course Contents (Notes/PPTs, etc.):**

Reference books, notes, Power Point presentations, videos explaining the concepts are uploaded by the faculty on MOODLE platform, and made available to the enrolled students. Along with these, links to NPTEL course material are also provided on MOODLE.

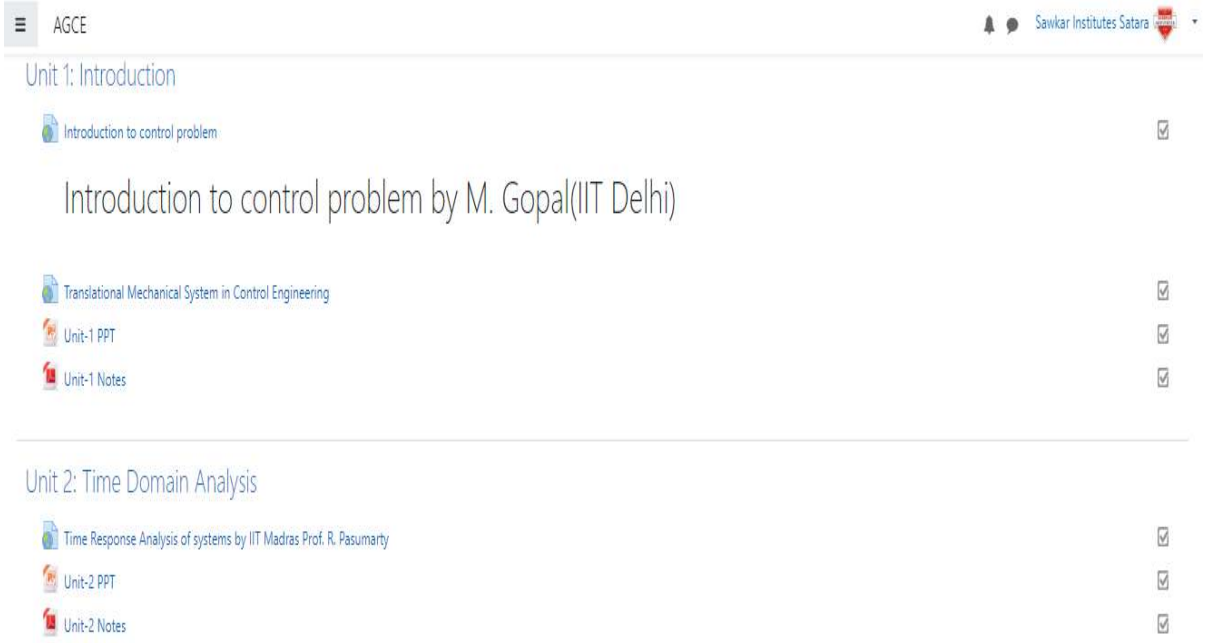


Figure 5.5 (10) Screen shot of MOODLE containing course material

- **List of Experiments:**

The list of experiments for the concerned subject as prescribed in the university syllabus is uploaded on the MOODLE platform by the concerned faculty member and made available to the enrolled students. The same list is also posted on the student WhatsApp groups.

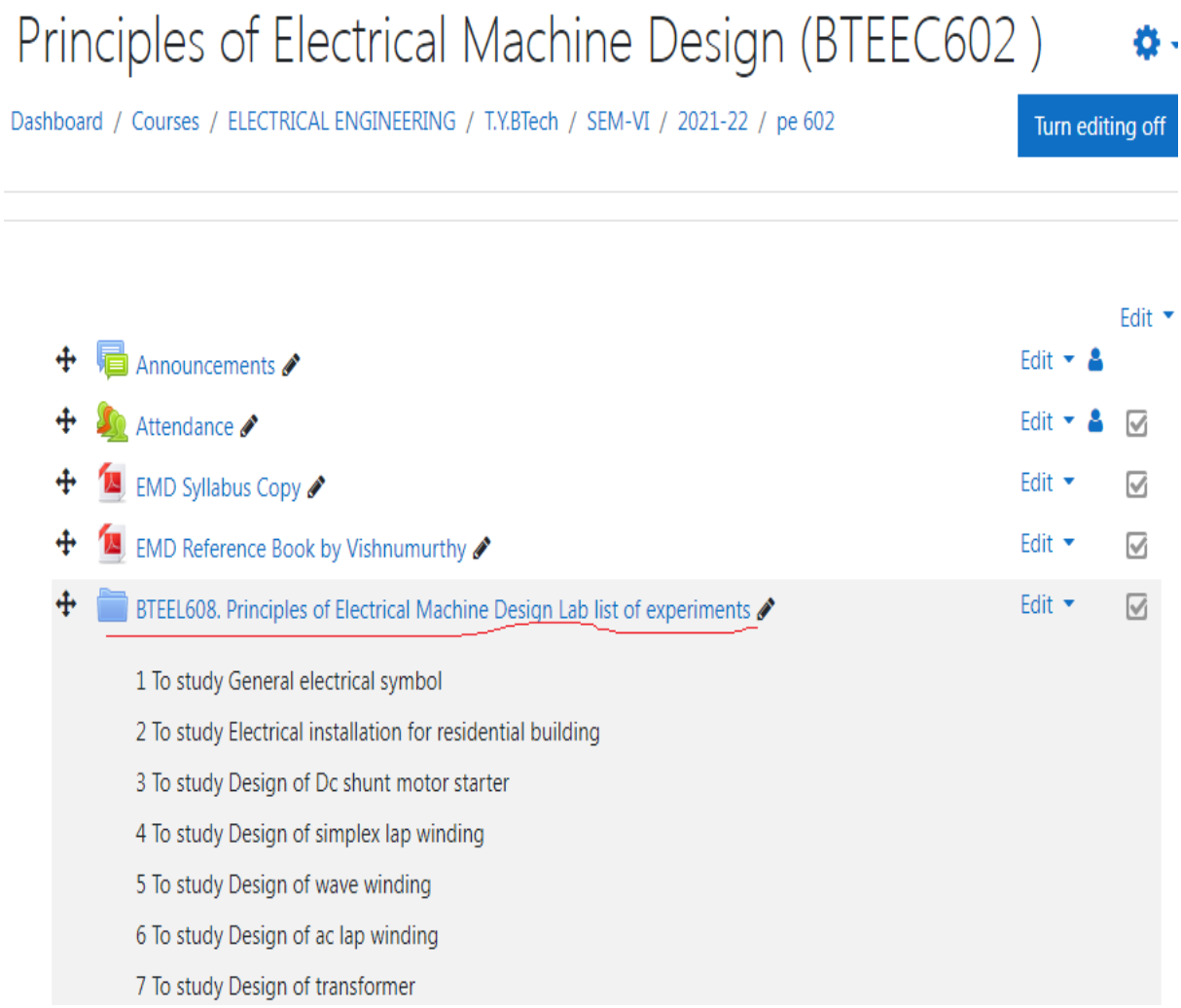


Figure 5.5 (11.a) Screen shot of MOODLE List of Experiments

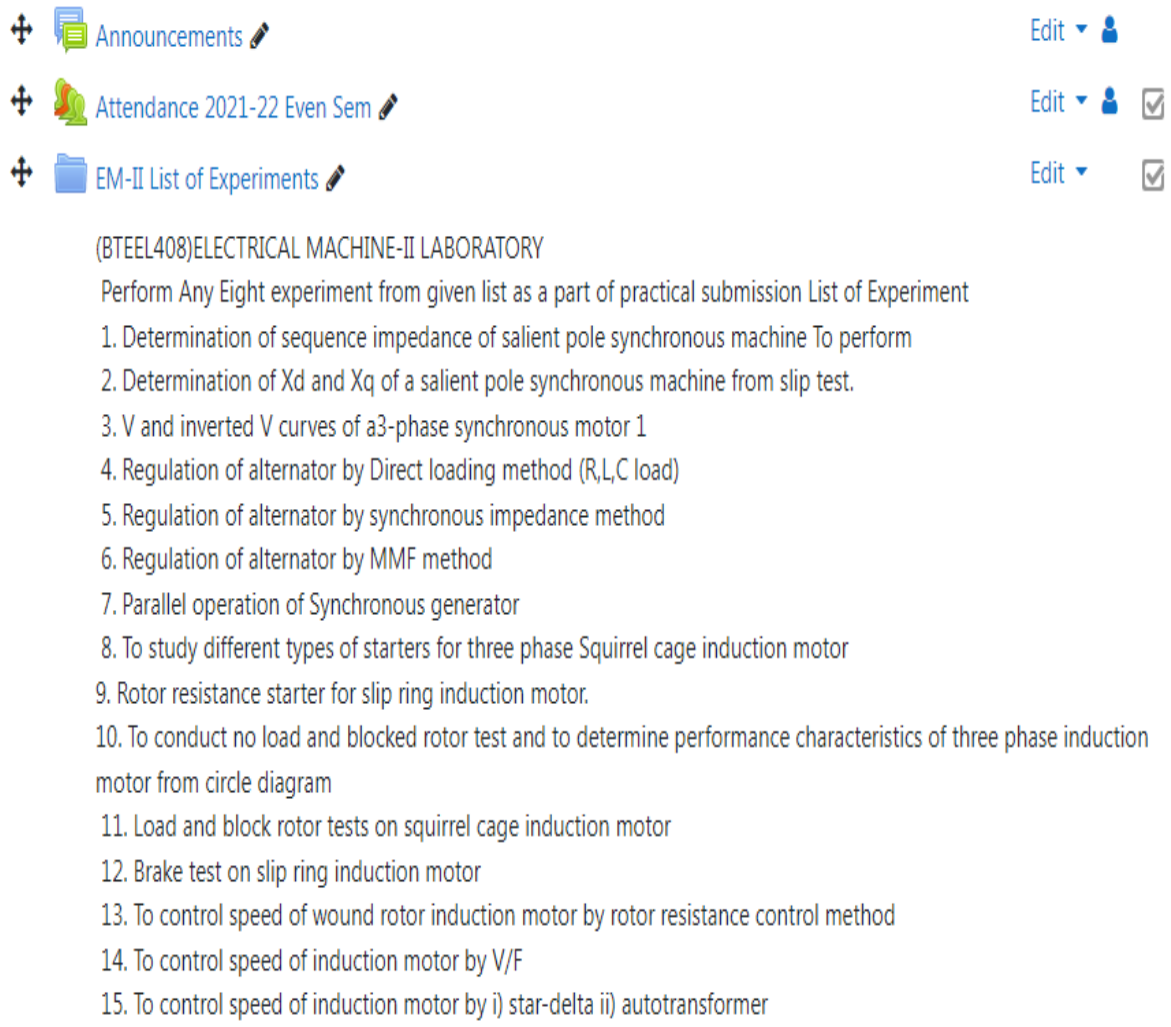


Figure 5.5 (11.b) Screen shot of MOODLE List of Experiments

- **Attendance:**

Attendance is maintained on MOODLE and in the hard copy form by the respective faculty members of the department. After the lecture the faculty is supposed to upload attendance before the next lecture.

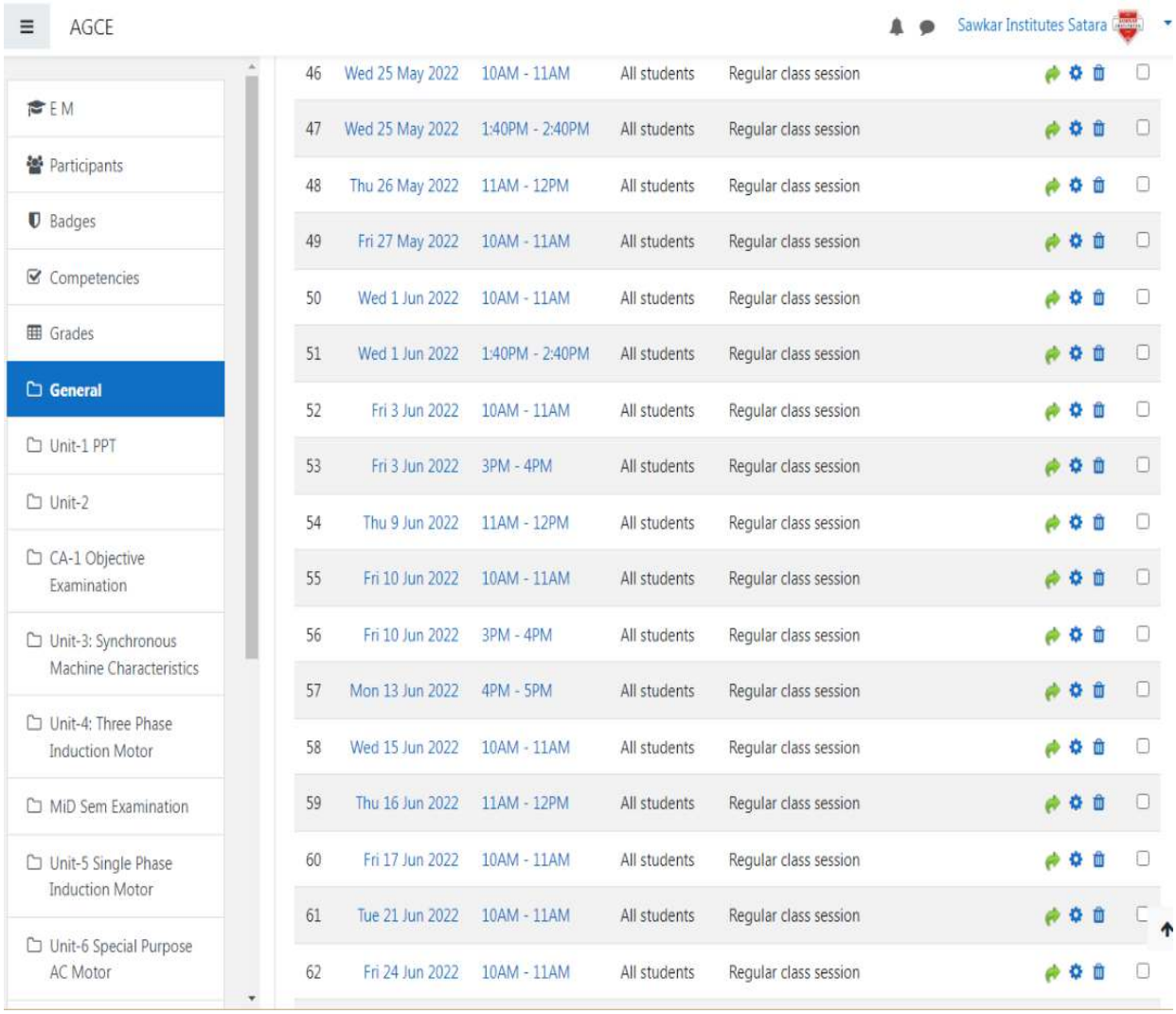


Figure 5.5 (12.a) Electrical Machines-II SY Electrical Sem-IV Moodle Attendance Screen shot

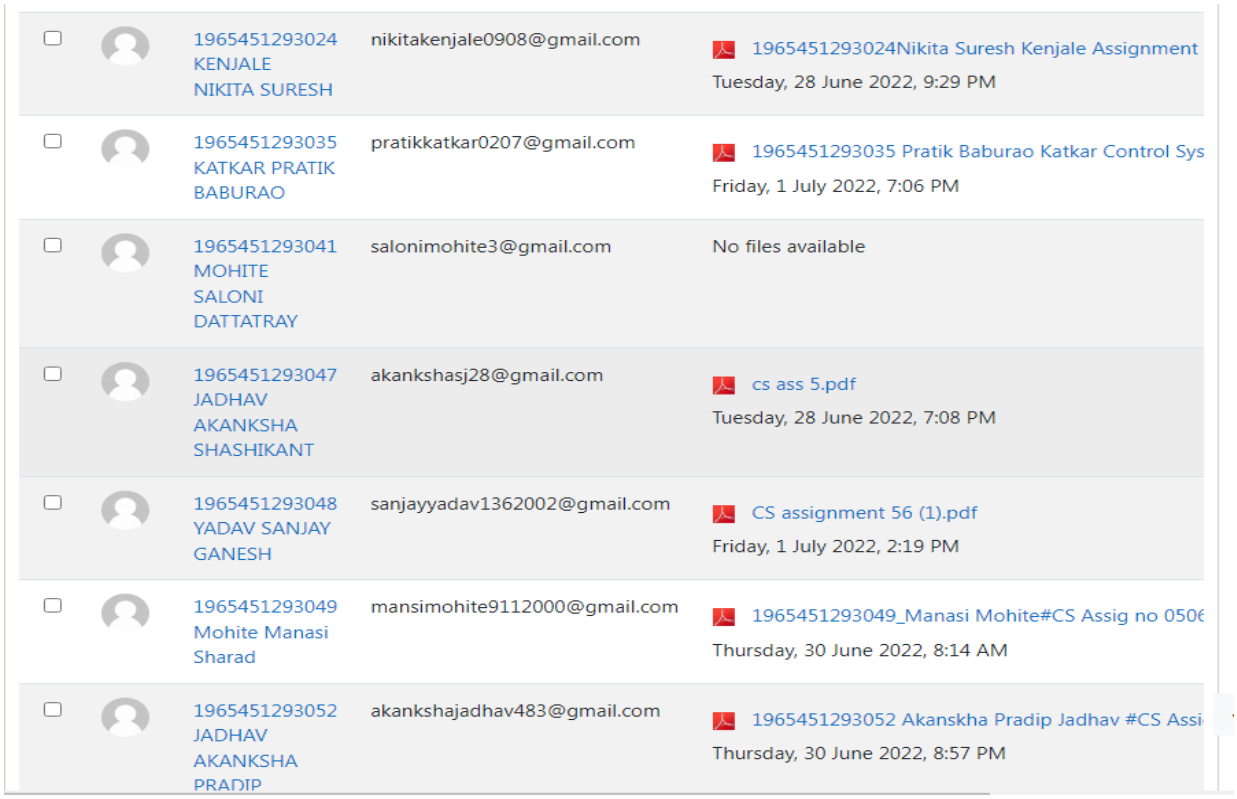
The department has a unique Guardian Faculty Mentor Scheme (GFM), under which fifteen students are assigned to a faculty member of the department. The GFM is responsible for counseling the students who have poor attendance, collecting their feedback regarding the difficult subjects.

Figure 5.5 (12.b) Faculty member conducting GFM Meeting with students

- **Assignments with Assessments:**

  Assignments are given to the enrolled students by the faculty members. The students submit these assignments on MOODLE in an online form. The uploaded assignments are assessed by the faculty members and marks are given to them. These assignment marks are considered for internal termwork calculations.

Screen shot of Assignments uploaded on Moodle and one assessed Assignment sheet PDF

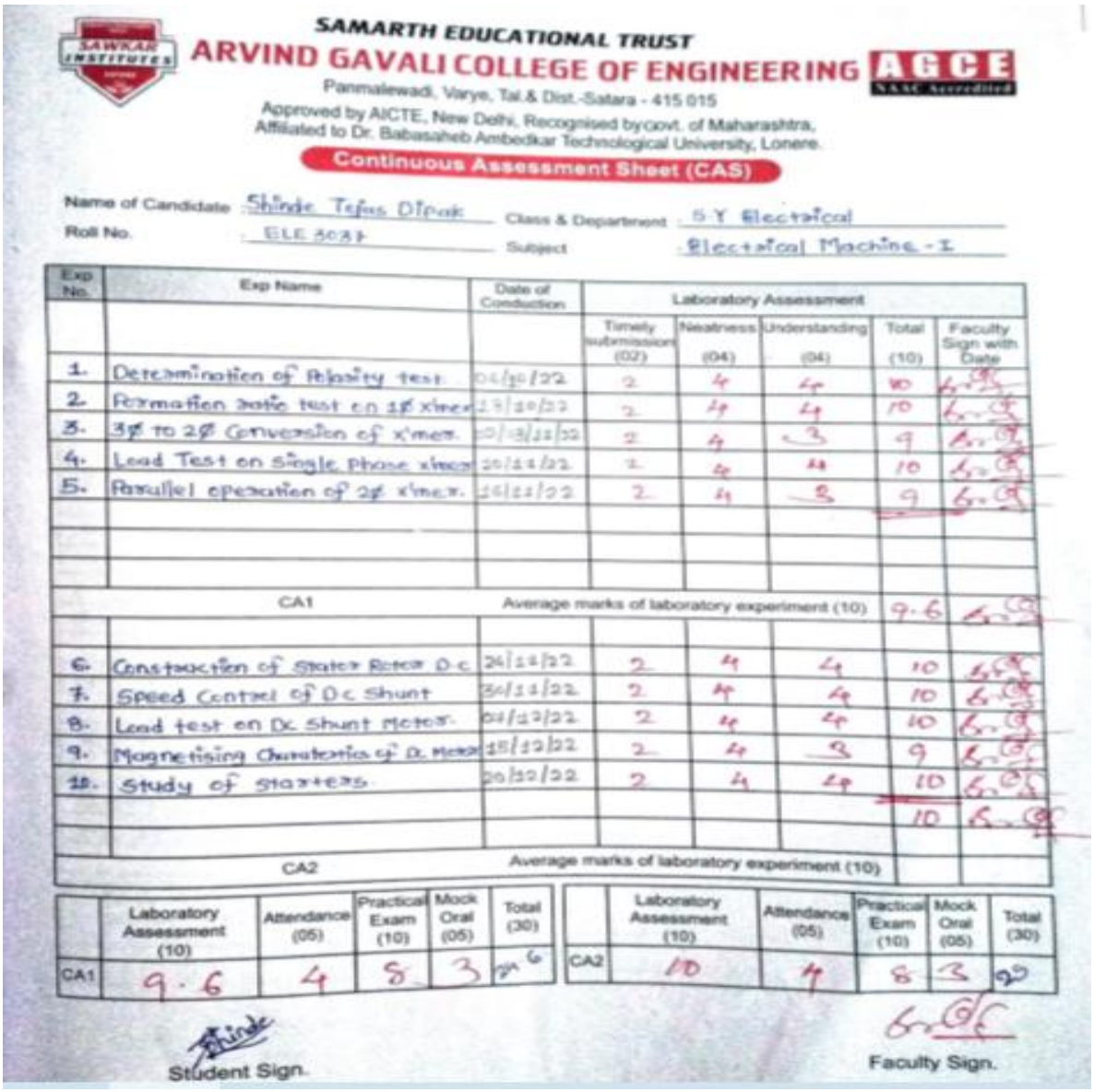


1965451293024 KENJALE NIKITA SURESH	nikitakenjale0908@gmail.com	1965451293024Nikita Suresh Kenjale Assignment Tuesday, 28 June 2022, 9:29 PM
1965451293035 KATKAR PRATIK BABURAO	pratikkatkar0207@gmail.com	1965451293035 Pratik Baburao Katkar Control Sys Friday, 1 July 2022, 7:06 PM
1965451293041 MOHITE SALONI DATTATRAY	salonimohite3@gmail.com	No files available
1965451293047 JADHAV AKANKSHA SHASHIKANT	akankshasj28@gmail.com	cs ass 5.pdf Tuesday, 28 June 2022, 7:08 PM
1965451293048 YADAV SANJAY GANESH	sanjayyadav1362002@gmail.com	CS assignment 56 (1).pdf Friday, 1 July 2022, 2:19 PM
1965451293049 Mohite Manasi Sharad	mansimohite9112000@gmail.com	1965451293049_Manasi Mohite#CS Assig no 0506 Thursday, 30 June 2022, 8:14 AM
1965451293052 JADHAV AKANKSHA PRADIP	akankshajadhav483@gmail.com	1965451293052 Akanskha Pradip Jadhav #CS Assi Thursday, 30 June 2022, 8:57 PM

Figure 5.5 (13) Control System TY Electrical Sem-VI Moodle Attendance Screen shot

- **Continuous Assessment Report:**

The continuous assessment report is generated based on the student attendance and the assessment grades defined by the faculty members.



SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING AGCE

Panmalewadi, Varye, Tal.& Dist.-Satara - 415 015

Approved by AICTE, New Delhi, Recognised by govt. of Maharashtra,
Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere.

Continuous Assessment Sheet (CAS)

Name of Candidate: Shinde Tejas Dipak — Class & Department: S.Y Electrical

Roll No.: ELE 3033 — Subject: Electrical Machine - I

Exp No.	Exp Name	Date of Conduction	Laboratory Assessment				
			Timely submission (02)	Neatness (04)	Understanding (04)	Total (10)	Faculty Sign with Date
1.	Determination of Polarity test	04/10/22	2	4	4	10	
2.	Formation date test on 1ϕ x'mer	13/10/22	2	4	4	10	
3.	3ϕ to 2ϕ Conversion of x'mers.	20/10/22	2	4	3	9	
4.	Load Test on single phase x'mer	26/10/22	2	4	4	10	
5.	Parallel operation of 2ϕ x'mers.	16/11/22	2	4	3	9	
	CA1		Average marks of laboratory experiment (10)			9.6	
6.	Construction of Slater Rotor D.C	24/11/22	2	4	4	10	
7.	Speed Control of D.C Shunt	30/11/22	2	4	4	10	
8.	Load test on DC Shunt Motor.	01/12/22	2	4	4	10	
9.	Magnetising Characteristics of D.C Motor	15/12/22	2	4	3	9	
10.	Study of starters	20/12/22	2	4	4	10	
						10	
	CA2		Average marks of laboratory experiment (10)				

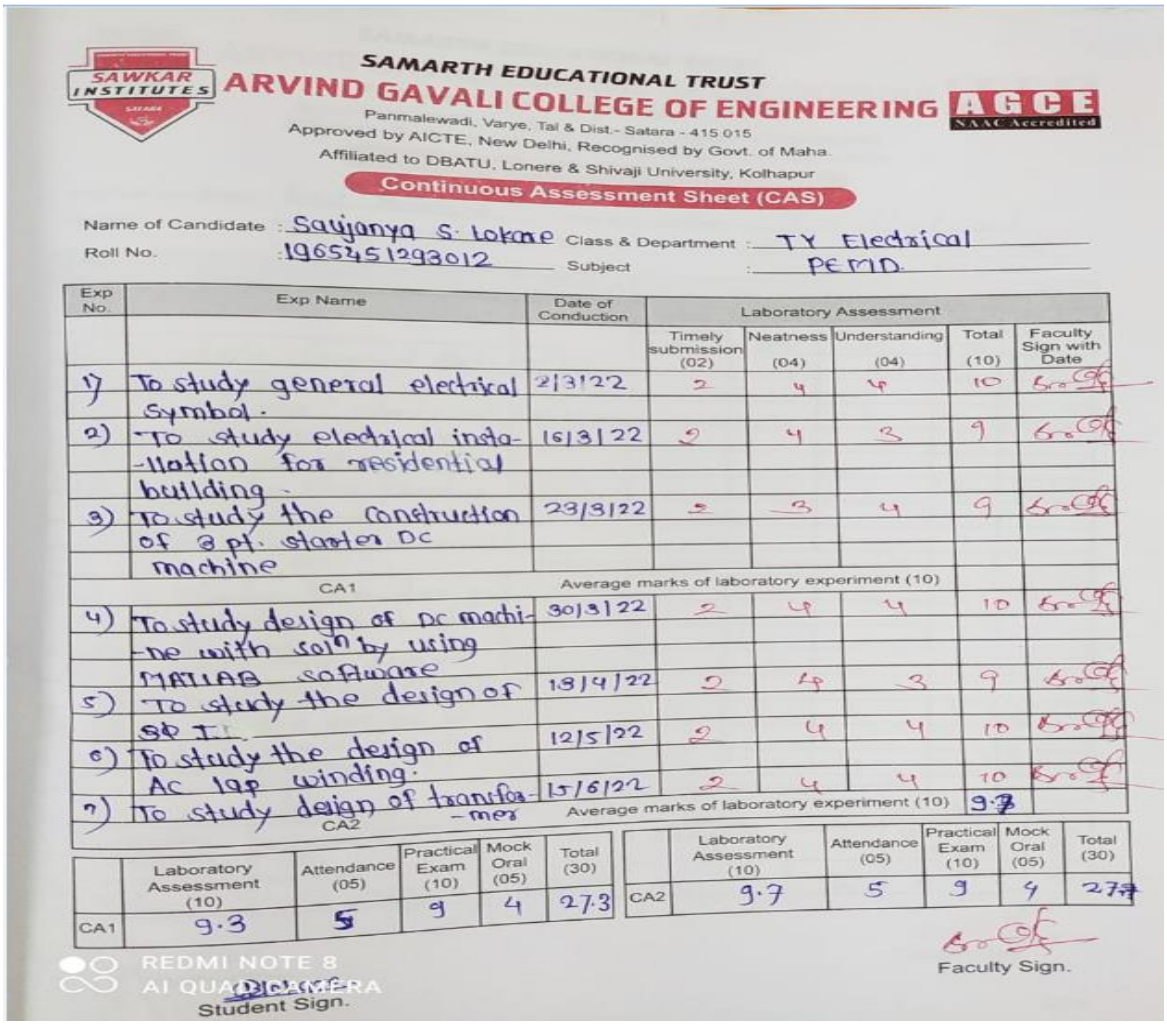
	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA1	9.6	4	8	3	25.6

	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA2	10	4	8	3	25

Student Sign.

Faculty Sign.

Figure 5.5 (14.a) Continuous Assessment sheet



SAMARTH EDUCATIONAL TRUST

SAWKAR INSTITUTES

ARVIND GAVALI COLLEGE OF ENGINEERING AGCE NAAC Accredited

Panmalewadi, Varye, Tal & Dist.- Satara - 415 015

Approved by AICTE, New Delhi, Recognised by Govt. of Maha.

Affiliated to DBATU, Lonere & Shivaji University, Kolhapur

Continuous Assessment Sheet (CAS)

Name of Candidate : Saujanya S. Lokare Class & Department : TY Electrical

Roll No. : 196545129012 Subject : PEMD.

Exp No.	Exp Name	Date of Conduction	Laboratory Assessment				
			Timely submission (02)	Neatness (04)	Understanding (04)	Total (10)	Faculty Sign with Date
1)	To study general electrical Symbol.	2/3/22	2	4	4	10	
2)	To study electrical installation for residential building.	16/3/22	2	4	3	9	
3)	To study the construction of 3 pt. starter DC machine	23/3/22	2	3	4	9	
	CA1	Average marks of laboratory experiment (10)					
4)	To study design of DC machine with soln by using MATLAB software	30/3/22	2	4	4	10	
5)	To study the design of SD IL	13/4/22	2	4	3	9	
6)	To study the design of Ac lap winding.	12/5/22	2	4	4	10	
7)	To study design of transformer	15/6/22	2	4	4	10	
	CA2	Average marks of laboratory experiment (10)				9.7	

	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA1	9.3	5	9	4	27.3

	Laboratory Assessment (10)	Attendance (05)	Practical Exam (10)	Mock Oral (05)	Total (30)
CA2	9.7	5	9	4	27.7

Student Sign.

Faculty Sign.

REDMI NOTE 8 AI QUAD CAMERA

Figure 5.5 (14.b) Continuous Assessment sheet

- **Virtual Labs:**

Virtual Labs are a complete Learning Management System configured in accordance with COEP, Pune. Virtual Labs do not require any additional infrastructural setup for conducting experiments at user premises. The simulations-based experiments can be accessed remotely via the internet.

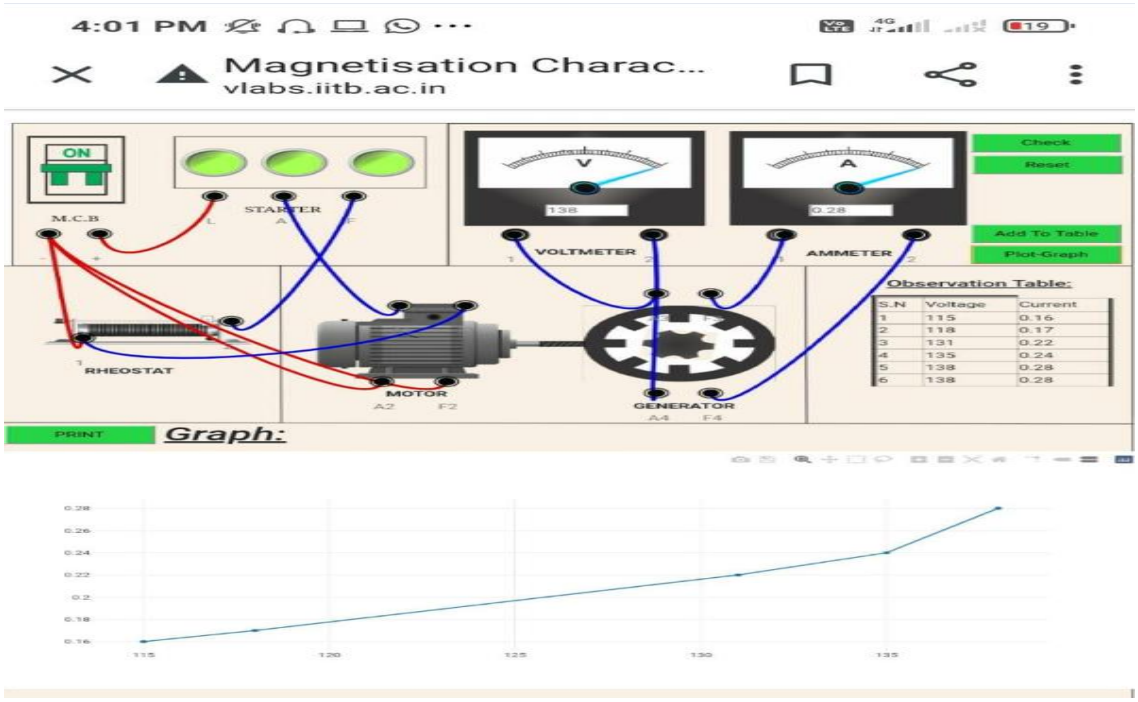


Figure 5.5 (15.a) Virtual Lab

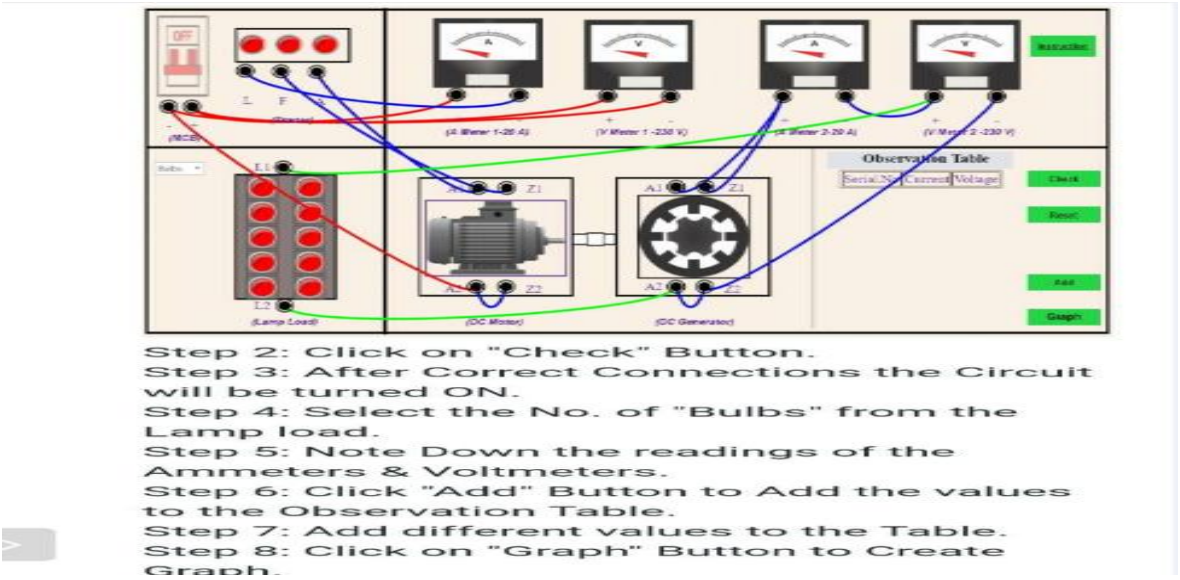


Figure 5.5 (15.b) Virtual Lab

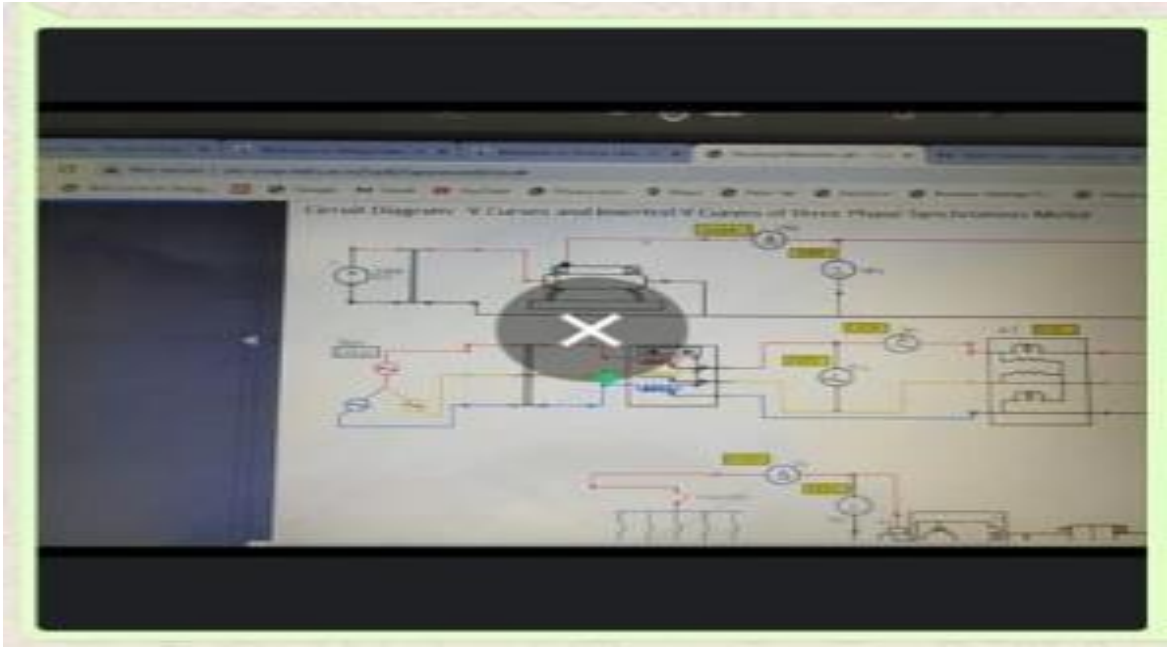


Figure 5.5 (15.c) Virtual Lab simulation result

Project-based and Self-learning:

Project-based and Self-learning: Students are encouraged to group in various domains such as Power System, Automation, Internet of Things, Power Electronics & Drives, Renewable Energy sources and Power Electronics, etc. and work in the development of projects in that domain. Emphasis is given on industry-based projects, innovative ideas, and research-paper based projects

Samarth Educational Trust
Arvind Gavali College of Engineeering
Project Groups
Electrical Engineering
Academic Year 2022-2023

Sr. No.	Group No.	Date of Examination	Domain	Name	Title of the Project
1	1	18-01-2023	Electrical Vehicle	GhateHarshali Vijay	Voice Control Robotic Vehicle
2				GalaveGorakshShivaji	
3				JadhavPratikshaShashikant	
4				Jadhav Pooja Jaysing	
5	2		Robot	Indulkar Kailas Vijay	SELF BALANCING ROBOT
6				Memane Tushar Dattatray	
7				Tirmare Prasad Rajesh	
8				Jadhav Amrut Suhas	
9	3		Electrical Vehicle	Kawar Prashant Sakharam	Battery Swapping System for Electrical Vehicle
10				Katkar Pratik Baburao	
11				Shelar Shailesh Dattatray	
12				Kambale Asmita Sunil	
13	4		Power Electronics	Lokare Saujanya Suresh	Arduino Based Five level Multi level Inverter with Resistive load
14				Jadhav Akankshaf Shashikant	
15				Yadav Sanjay Ganesh	
16				Mohite Manasi Shard	
17	5		IoT	Kenjale Nikita Suresh	IoT BASED SOLAR POWER PLANT AUTOMATION
18				Mohite Saloni Dattatraya	
19				Jadhav Akanksha Pradip	
20				Sabale Shubham Ravindra	
21	6		Solar	Tarade Shweta Tukaram	Solar Operated Mobile Pestiside and Fertilizer Sprayer
22				Jadhav Ankita Sanjay	
23				Patil Harshal Prashant	
24				Herkal Aditya Rajendra	

25	7		Irrigation	Sonawane Rajeshwari Rajan	Aumatic Drip Irrigation System using Microcontroller
26				Mahadik Vaishnavi Rajendra	
27				Suravashi Praveen Ramchandra	
28				Patil Ashok Sadashiv	
29	8		Electrical Drives	Kadam Rajesh Dilip	Triac based wireless Single phase Induction Motor speed Controller using microcontroller
30				Gore SonaliKundalik	
31				KambaleVidyashriLaxman	
32				JadhavOmkarRavindra	
33				Shinde Abhijit Bharat	

Final Year Project List for the Academic Year 2022 – 2023

Samarth Educational Trust
Arvind Gavali College of Engineering
Final Year Project Batches
Electrical Engineering
Academic Year 2021-2022

Sr. No.	Group No.	Domain	Name	Title of the Project	Guide Name
1	1	Power System	Rao Archana	Enhancement to DP Transformer Theft Monitoring System	Dr. Mirajkar G. S.
2			BhoiteNilam		
3			Thorat Shraddha		
4			Monde Komal		
5	2	IoT	MohiteRaviraj D.	Child Safety Wearable Device	Prof. Gujar V. B.
6			MahamulkarPrajakta K.		
7			Yadav Snehal A.		
8			ChavanPranita H.		
9	3	Power System	ShindeRohitkumar	Designing and Analysis of AC Power Control by Programmable Interface	Dr. Nayak B. M.
10			ChavanUtkarsh		
11			JadhavShriram		
12			KenjaleShubham		
13	4	IoT	ShingateShital	Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Using VFD Controller	Prof. Chavan S. G.
14			PawarMayuri		
15			JadhavAsavari		
16			DevkarKomal		
17	5	Power Electronics & Drives	KambleSagar	Iot based Solar Monitoring and Control	Dr. Nayak B. M.
18			Pawar Saurabh		
19			ShedgeShubham		
20			SonawaneShubham		
21	6	Automation	BhosaleDhanashri	Wireless robotic vehicle to supply food and medicines to covid-19 patients.	Prof. Somesha NSR
22			DeshmaneDivya		
23			NikamPrajkta		
24			ChavanAkanksha		

25	7	IoT	KshirsagarRavikiran	AI - Based Touchless Attendance System for School, Colleges after COVID-19 Situation with Temperature, Oxygen Level, Face Mask Detection	Dr. Mirajkar G. S.
26			ShivankarSaloni		
27			Gaikwad Pooja		
28			Ingale Sujata		
29	8	IoT	Chavan Amar	To Design and Develop Prototype for Industrial Cobot	Prof. Hingmire V. S.
30			ShelarAaditya		
31			Kadam Anup		
32			Chalke Saurabh		
33	9	Power Electronics	Agawane Aparna	Ultra Fast Circuit Breaker Using Arduino for Overlaod Protection	Prof. Somesha NSR
34			Kadam Divya		
35			PingaleSomeshwar		
36			NalawadeRutuja		
37	10	Renewable Energy Sources	Mane Prashant	Design and Implementtion of Manul rotation of Solar Plate for Maximum Energy Output	Prof. Bichkar J. S.
38			Shinde Nikhil		
39			Thorat Aba		
40			Patil Pratik		
41	11	IoT	Nikam Pratik	Solar Tracking System Using Arduino	Prof. Hingmire V. S.
42			JedheDeshmukhPiyush		
43			KhatteAvishkar		
44			Godse Ganesh		
45	12	Power Systems	JamdadeShubham	E - Lite Bicycle	Dr. Nayak B. M.
46			GhadgeMayuresh		
47			PatilShubham		
48			TawateNishant		
49	13	Power Systems	Kale Shital	Automatic Car Parking Using Arduino System	Prof. Jagtap D. B.
50			JadhavKajal		
51			Gosavi Anita		
52	14	IoT	ShindeRohit	IOT Based Smart Public Ration Distribution System	Prof. Gujar V. B.
53			PatilShahaji		
54			PataneRuturaj		

55	15	Automation	Kalange Poonam	Robot for Waste and Garbage Collection in Water	Prof. Chavan S. G.
56			PatilKomal		
57			Patil Pooja		
58			RautAmruta		
59	16	Renewable Energy Sources	Mahadik Rajesh	Design and Implementtion of Manul rotation of Solar Plate for Maximum Energy Output	Prof. Bichkar J. S.
60			JamdadeShubham		
61			Kumbhar Kiran		
62	17	Renewable Energy Sources	Jagtap Arvind Dipak	Analysis and Implemenatation of Solar Tracking System	Prof. Bichkar J. S.
63			DhaigudeSanee		

Final Year Project List for the Academic Year 2021 – 2022

Samarth Educational Trust

Arvind Gavali College of Engineering, Satara

B.Tech Final Year 2020-2021

Department of Electrical Engineering

Sr. No.	Name of the Project Group Members	Title of the Project	Domain	Name of the Guide
1	Aishwarya Sanjay Salunkhe SoundaryaVijayakumarPowar Nikita MadhavPimpalkar KumbharMegha Sunil	Underground Cable Fault Detection Using IOT	IoT	Dr. Mirajkar G S
2	Mahesh Ananda Jadhav KumbharkarVaibhav Vilas PowarShivrajSarjerao Sandesh BabasahebWadkar	IoT-Based Smart Energy Management System of Electrical Vehicle Charging Station	IoT	Dr. Bhosale V. K.
3	Dede PradipAnkush TikudaveAkshayDhondiram LokhandeAkshayHanmant Garud Ashish Adhikro	Reverse rotation controller for rotating equipment	Power Electronics & Drives	Prof. Nayak B. M.
4	Sakate Rahul Siddharth JadhavMeghaRajendra JadhavShitalSambhaji Jadhav Ashwini Satappa	IoT-Based induction motor monitoring system	IoT	Dr. Bhosale V. K.

5	PatilAtul Ashok PatilSuraj Ashok Sutar Pratik Prabhakar Akash Jagannath Date	Automatic Power factor controller	Power Systems	Prof. Eva Gupta
6	PawarSanchitaNanaso Pooja Sanjay Chavan Bagal Poonam Anadarao LawandAmrutaShivaji	Iot Based Smart Energy Meter Monitoring and Billing System	IoT	Dr. Mirajkar G S
7	PiseMadhuriMadhukar JangamPritee Sanjay SasaneRushikesh Ashok Borate Aniket Sanjay	IoT-Based Military Surveillance Robot	IoT	Dr. Mirajkar G S
8	ChavanGouri Ashok PatilSwaranjaliVitthalrao Mali Rutuja Shankar WandareLaxmiBaban	IoT-Based Work Data Recorder for Big Vehicles	IoT	Prof. Hingmire V. S.
9	AkhileshSubhashjambhale Pawar Pratik Balasahe Jagtap Akash Ramesh KudaleYuvraj Vijay	4KW Solar Control Panel Designing and Mounting	Power Systems	Prof. Eva Gupta

10	KarandePiyush Naresh KakadeRushiraj Rajiv Masal Shankar Maruti Pawar Sushant Vinayak Gujar Tejas Sharad	ON-Grid 4KW Solar Lighting Power Plant Installation	Power Systems	Prof. Eva Gupta
11	Asmita Arvind Patil ShindeRohiniHanamant BahulekarPallaviBalkrushna Kulkarni OmkarRajendra	Induction Motor Rotation in Bidirectional through a Remote Control Device	Power Electronics & Drives	Prof. Basavaraj B. Nelogal
12	Bhosale Rahul Anil Gaikwad Aniket Raju DhaleHardika Hemant ShindePratimaDattatraya	Power Distribution Station Monitoring System Using IoT	IoT	Prof. Jagtap D. B.
13	GiddePradnyaPopat SankpalNamrata Netaji ChougaleShubhangi Sanjay Deshmukh Priyanka Bhanudas	IoT-Based Water Distribution Monitoring System in Apartments	IoT	Prof. Barkade V. T.
14	Bhagwat DevvratUmakant Kadam Tejashri Sanjay Pol Snehal Kailas Ghadge Vijay Sanjay Babar Nagraj Vivekananda	Li-fi Data Transmission System	Power Electronics & Drives	Prof. B M Nayak

15	SutarKomalRamchandra NalwadeAkshada Anil JadhavKomal Vilas Pawar Kiran Vijay	Track Charging System for Electric Vehicle	Electrical Power Systems	Prof. Bichkar J. S.
16	Chaitanya Sunil Thigale SolaskarShital Prakash PhadtareVikasBalaso DhotreDilipDnyandev	4KW Solar Control Panel Designing and Mounting	Power Systems	Prof. Mahamuni P. N.
17	PranjaliPatil KalyaniWagdole DhanashreeRajgolkar Swati Kshirsagar	Industrial Automation Using WiFi (Earlier Industrial Automation Using IoT)	Power Electronics & Drives	Prof. Nayak B. M.
18	PritamBaluDhaske Dipali Ramesh Mane NilamBalkrishnaSalunkhe Priti Sunil Barge	Priority-wise Power Distribution and Safety Controller Monitoring System Using IoT	Power Systems	Prof. Eva Gupta
19	AdhikraoKumbhar VikasSawant RohitJangam Yogesh Kadam	Energy Regenerative Braking of BLDC Motor by Using Super Capacitor in EV Application	Power Electronics & Drives	Prof. Basavraj B. Nelogal

Final Year Project List for the Academic Year 2020 – 2021

5.6 Faculty as Participants in Faculty Development/ Training Activities/ STTPs (15)

A faculty scores maximum five points for participation
Participation in 2 to 5 days Faculty Development Program: 3 Points
Participation > 5 days Faculty Development Program: 5 Points

Name of the Faculty	Max. 5 per Faculty		
	2022-23 (CAY)	2021-22 (CAYm1)	2020-21 (CAYm2)
MEGHYA NAYAK BANOTH	03	3	10.00
PARVATHI ISLAVATH	0	1	1.00
SHITAL JADHAV	0	0	1.00
BASAVARAJ NELOGAL	0	1	2.00
SOMPURA SOMESHA NAIK	3	3	1.00
EVA GUPTA	0	0	2.00
HRUTUJA BHUTKAR	0	0	1.00
JIVAJEE BICHKAR	0	0	1.00
ASHALESHA MALI	1	2	3
PURANIK VIVEK VINAYAK	0	0	1.00
VISHAKHA GAIKWAD	0	0	1.00
DEVENDRAPPA LAMANI	0	0	1.00
PRATHMESH BHOSALE	0	0	1.00
SARITA JADHAV	0	0	1.00
CHENNABASAPPA BHERAJI	0	0	0.00
Sum	07	10	15.00
***RF*= Number of Faculty required to comply with 20:1 Student-Faculty ratio as per 5.1**	4.95	4.95	6.60

Assessment = 3 × (Sum/0.5RF) **(Marks limited to 15)**	8.49	12.12	13.64
Average assessment over three years (Marks limited to 15) =11.41			

Table B.5.6

CERTIFICATE NO PAN_EV_PART_0044

Pantech e Learning
DIGITAL LEARNING SIMPLIFIED

PANTECH SOLUTIONS
Technology Beyond The Dreams

Skill AP
APSSDC

CERTIFICATE
OF PARTICIPATION

NAME Dr.B. Meghya Nayak

COLLEGE ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

has Successfully Completed

30 DAYS MASTERCLASS ON EV DESIGN USING MATLAB

at Pantech e Learning Pvt Ltd, Chennai

From 08.02.2023 to 09.03.2023

Dr.Rajiv Gujala
Chief General Manger(Technical)
APSSDC

M.Malaiyappan
Director
Pantech e learning

5.7: Research and Development (30)

5.7.1: Academic Research (10)

Academic research includes research paper publications. Ph.D. guidance and faculty receiving Ph.D. during the assessment period.

- Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6)
- Ph.D. guided/Ph.D. awarded during the assessment period while working in the institute (4).

All relevant details shall be mentioned.

5.7.1 Academic Research:

Following is the list of research papers published by the faculty members in the reputed journals and conferences.

Academic Year 2022– 2023				
Sr. No.	**Faculty Name**	**Title of the Paper**	**Name of the Journal/Conference**	**Journal Details**
1	BanothMeghyaNayak	Power quality improvement by using photovoltaic based shunt active harmonic filter with Z-source inverter converter	Electrical Engineering &Electromechanics, 2022, no. 6	https://doi.org/10.20998/2074-272X.2022.6.06
2	BanothMeghyaNayak	Performance Investigation of Solar Photovoltaic System for Mobile Communication Tower Power Feeding Application	International Journal of Electrical and Electronics Research (IJEER)	Volume 10, Issue 4 | Pages 921-925 | e-ISSN: 2347-470X

3	BanothMeghyaNayak	COMPUTATION OF CLOUD IN SET STATISTICS TRANSFERRING	NeuroQuantology| December 2022	eISSN 1303-5150 Volume 20 | Issue 20 | Page 1485-1495 | doi: 10.48047/NQ.2022.20.20.NQ109151
4	BanothMeghyaNayak	Enhancement of Energy Management System In EV Fast Charging Stations Fed MicroGrid Using DVR	Eur. Chem. Bull. 2023	12(Special Issue 4), 2176-2187
5	BanothMeghyaNayak	Gas Level Monitoring and Automatic Gas Booking Using IOT Based Technology For Commercial Applications	ICIHCNN-2022	
6	Dr. B. M. Nayak	Voice Controlled Robotic Vehicle	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9
7	Ms. Mali AshleshaB.	Self Balancing Robot	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9

8	Mr. Somesha N S R	Arduino based Seven Stage Multi level Inverter	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9
9	Dr. B. M. Nayak	Aumatic Drip Irrigation System using Microcontroller and Electrical devices	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9
10	Mr. Somesha N S R	Solar Operated Mobile Pesticide and Fertilizer Sprayer	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9
11	Mr. Somesha N S R	IoT Based Solar Power Plant Automation	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9
12	Dr. B. M. Nayak	Battery Swapping System for Electrical Vehicle	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9

13	Mr. Somesha N S R	Speed Control of Induction motor	Proceedings of the International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023)	ISBN: 978-81-961931-1-9

Academic Year 2021 – 2022				
Sr. No.	**Faculty Name**	**Title of the Paper**	**Name of the Journal/Conference**	**Journal Details**
1	BanothMeghyaNayak	Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Consumption using VFD Controller"	International Journal of Advanced Research in Science, Communication and Technology (IJARSCT	ISSN 2581-9429, Volume 2, Issue 2, July 2022, Page No: 354.DOI: 10.48175/IJARSCT-5832
2	BanothMeghyaNayak	Monitoring and Controlling of Solar Power Plant Based on IoT"	International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)	ISSN 2581-9429, Volume 2, Issue 2, July 2022, Page No: 456.DOI: 10.48175/IJARSCT-5849

Academic Year 2020 – 2021				
Sr. No.	**Faculty Name**	**Title of the Paper**	**Name of the Journal/Conference**	**Journal Details**
1	Miss. Mali Ashlesha B.	Single phase PWM rectifier is method of converting AC to DC in charging system for electrical Vehicle	International conference on emerging trend in Engineering and Technology (ICETET-July 2021) But joined on Dec 2021	Vol. 8, no. 6, pp. 887 – 898, March 2020 ISSN: 2278 – 3878

2	BanothMeghyaNayak	Evolutionary Computing Assisted Control Environment for Six-Step Mode High-Speed and Accelerating Induction Motor Drives"	International Journal of Advanced Science and Technology (IJAST)	ISSN: 2005-4238, Vol. 29, No. 3, (2020), pp. 10442 – 10461
3	Eva Gupata	Stochastic and deterministic mathematical modeling and simulation to evaluate the next COVID-19 pandemic control measures	American Journal ofInfectious Disease	Nov. 2020 DOI: https://doi.org/10.3844/ajidsp.2020.135.170
4	Eva Gupata	Fabrication and characterization of novel nitinol particulate reinforced aluminium alloy metal matrix composites (NiTip/AA6061 MMCs)	Materials Today: Proceedings (Elsevier)	Oct 2020, https://doi.org/10.1016/j.matpr.2020.09.326
5	Eva Gupata	Finite element analysis of mechanical response of fracture fixation functionally graded bone plate at paediatric femur bone	Materials Today: Proceedings (Elsevier)	Oct 2020, https://doi.org/10.1016/j.matpr.2020.08.740

		fracture site under compressive and torsional loadings		
6	Eva Gupata	An Insight into the Simplified RP Transmission Network, Concise Baseline and SIR Models for Simulating the Transmissibility of the Novel Coronavirus Disease 2019 (COVID-19) Outbreak	American Journal of Infectious Diseases	Jul 2020 DOI : 10.3844/ajidsp.2020.89.108

5.7.2 B) PhD guided/Phd awarded during the assessment period while working in the institute (04)

Faculty Name	Phd guiding	During assessment year PhD award
Dr. B. M. Nayak	-	15th April 2021

पंजीकरण सं: 25916034
(Reg. No.)

नामांकन सं: PEN/PED/16/00245
(Enrollment No.)

Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu

श्री जगदीशप्रसाद झाबरमल टिबड़ेवाला विश्वविद्यालय, झुंझुनूं

डॉक्टर ऑफ़ फिलॉसफ़ी

प्रमाणित किया जाता है कि ***Baanoth Meghya Nayak*** को इस विश्वविद्यालय के ***Engineering*** संकाय के अन्तर्गत डॉक्टर ऑफ़ फिलॉसफ़ी की उपाधि से वर्ष ***2021*** में विभूषित किया गया।

इनके शोध प्रबन्ध का विषय निम्नलिखित था :—

SOPHISTICATED INTELLIGENT CONTROLLER DESIGN FOR THREE PHASE INDUCTION MOTOR APPLICATIONS

DOCTOR OF PHILOSOPHY

This is to certify that ***Baanoth Meghya Nayak*** *has been awarded the degree of Doctor of Philosophy in the faculty of* ***Engineering*** *of this University in the year* ***2021.***

The title of his/ her thesis was:-

SOPHISTICATED INTELLIGENT CONTROLLER DESIGN FOR THREE PHASE INDUCTION MOTOR APPLICATIONS

Registrar
रजिस्ट्रार

President
प्रेसीडेंट

06th March 2022

5.7.2 Sponsored Research (05)

- **Funded research:**

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during CAYm1, CAYm2, and CAYm3)

Amount > 20 Lakh
- 5 Marks

Amount >= 16 Lakh and <= 20 Lakh
- 4 Marks

Amount >=12 Lakh and < 16 Lakh
- 3 Marks

Amount >= 8 Lakh and < 12 Lakh
- 2 Marks

Amount >= 4 Lakh and < 8 Lakh
- 1 Mark

Amount < 4 Lakh
- 0 Marks

2022-23(CAY)

S. No.	Faculty Name	Funding Agency	Grant Amount (in Rs.)
1	Dr. B. M. Nayak	Vice-chancellors Research Promotion Scheme DBATU, Lonere	3,00,000/-

2022-23(CAY)

Project Title	Duration	Funding Agency	Amount
Voice Controlled Robotic Vehicle	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	20000.00
Self Balancing Robot	1Year	Ravi Electricals, Satara, Maharashtra, India	17000.00
Arduino based Seven Stage Multi level Inverter	1Year	Sai industries, additional MIDC, Satara, Maharashtra, India	15000.00
Aumatic Drip Irrigation System using Microcontroller and Electrical devices	1Year	Ravi Electricals, Satara, Maharashtra, India	16000.00
Solar Operated Mobile Pesticide and Fertilizer Sprayer	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
IoT Based Solar Power Plant Automation	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	20000.00
Battery Swapping System for Electrical Vehicle	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	12000.00
Speed Control of Induction motor	1Year	Ravi Electricals, Satara, Maharashtra, India	10000.00
			Total Amount(X):125000. 00

2021-22(CAYm1)

ProjectTitle	Duration	Funding Agency	Amount
Enhancement to DP Transformer Theft Monitoring System	1Year	AICTE	20000.00
Child Safety Wearable Device	1Year	Aptron Technologies, Maharashtra,India	18000.00
Designing and Analysis of AC Power Control by Programmable Interface	1Year	Aptron Technologies, Maharashtra,India	15000.00
Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Using VFD Controller	1Year	Ravi Electrical, Satara, Maharashtra,India	22000.00
Iot based Solar Monitoring and Control	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
Wireless robotic vehicle to supply food and medicines to covid-19 patients.	1Year	Ravi Electricals, Satara, Maharashtra, India	20000.00
AI - Based Touchless Attendance System for School, Colleges after COVID-19 Situation with Temperature, Oxygen Level, Face Mask Detection	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	10000.00
To Design and Develop Prototype for Industrial Cobot	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	10000.00
Ultra Fast Circuit Breaker Using Arduino for Overlaod Protection	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	22000.00
Design and Implementation of Manul rotation of Solar Plate for Maximum Energy Output	1Year	Shivam Enterprise, Satara,Maharashtra, India	20000.00
Solar Tracking System Using Arduino	1Year	Shivam Enterprise, Satara,Maharashtra, India	10000.00
E - Lite Bicycle	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
Automatic Car Parking Using Arduino System	1Year	Shivam Enterprise, Satara,Maharashtra, India	22000.00

IOT Based Smart Public Ration Distribution System	1Year	Siddheshwar Electricals, Satara, Maharashtra,India	15000.00
Robot for Waste and Garbage Collection in Water	1Year	Ravi Electricals, Satara, Maharashtra, India	20000.00
Design and Implementation of Manul rotation of Solar Plate for Maximum Energy Output		Siddheshwar Electricals, Satara, Maharashtra,India	10000.00
Analysis and Implementation of Solar Tracking System		Sai industries additional MIDC , Satara, Maharashtra,India	10000.00
			Total Amount(X):2 74000.00

2020-21(CAYm2)

ProjectTitle	Duration	Funding Agency	Amount
AICTE Margdarshan Menter-Mentee Scheme	1Year	Aptron Technology, MIDC, Satara, Maharashtra, India	500000.00
UndergroundCable FaultDetection UsingIoT	1Year	Aptron Technology, MIDC, Satara, Maharashtra, India	20000.00
IoT - BasedSmartEnergyManagementSystemofElectricalVehicle ChargingStation	1Year	Sai Industries, additional MIDC Satara, Maharashtra, India	18000.00
Reverse Rotation Controller for Rotating Equipment	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
IoT-BasedInductionMotorMonitoringSystem	1Year	Ravi Electricals, Satara, Maharashtra, India	22000.00
Automatic Power Factor Controller	1Year	Aptron Technology, MIDC, Satara, Maharashtra, India	15000.00
IoT-BasedSmartEnergyMeterMonitoringandBillingSystem	1Year	Arvind Gavali College of Engineering, Satara, Maharashtra, India	20000.00
4KW Solar Control Panel Designing and Mounting	1Year	Arvind Gavali College of Engineering, Satara, Maharashtra, India	10000.00
On-Grid 4KW Solar Lighting Power Plant Installation	1Year	Sai Industries, additional MIDC Satara, Maharashtra, India	10000.00
Induction Motor Rotation in Bidirectional Through A RemoteControl Device	1Year	Sai Industries, additional MIDC Satara, Maharashtra, India	22000.00
Power Distribution Station Monitoring System Using IoT	1Year	Aptron Technology, MIDC, Satara, Maharashtra, India	20000.00
IoT-BasedWaterDistributionMonitoringSysteminApartments	1Year	Ravi Electricals, Satara, Maharashtra, India	10000.00
			Total Amount(X): 23, 2000.00

Cumulative Amount (X + Y + Z) = 881000.00

5.7.3 Development Activities

ProductDevelopment:

1. **Title of the Invention: Automated battery distilled water filling, water filter flushing, and fertilizers sprayerPatent Application No.: 202121023957**

   Date of Filing: 29 May 2021Status: Published

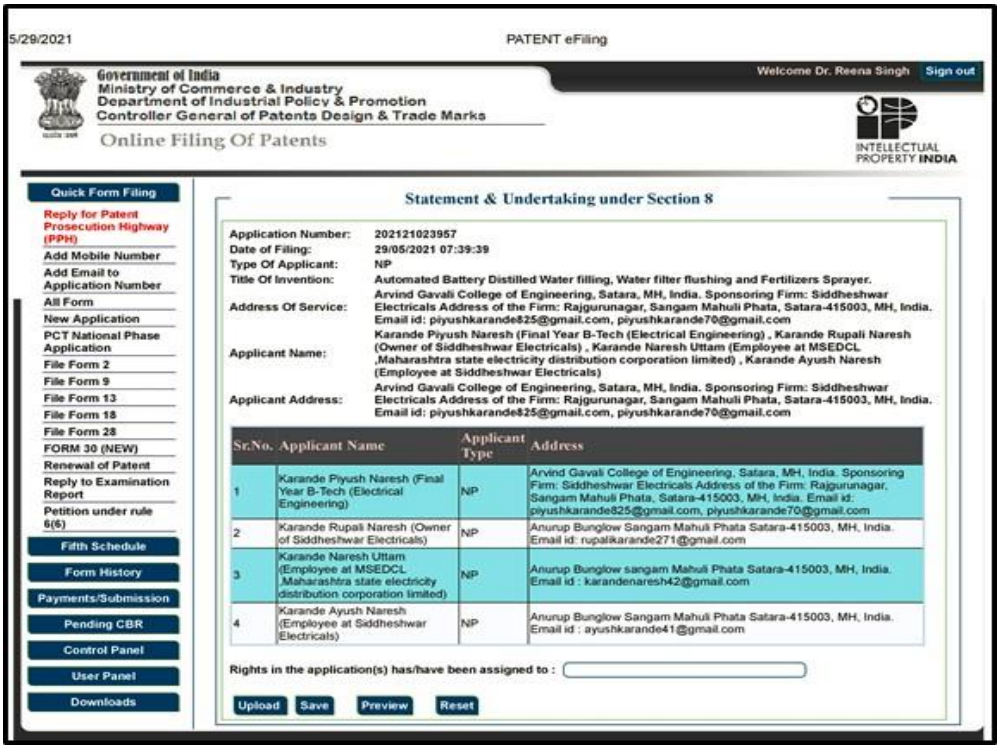


Figure5.7.3(a)

2. Title of the Invention: Retrofit kit to convert normal solar water heater system into hybrid solar water heater systemPatent Application No.: 202121048704

Date of Filing: 25thOctober 2021Status: Published

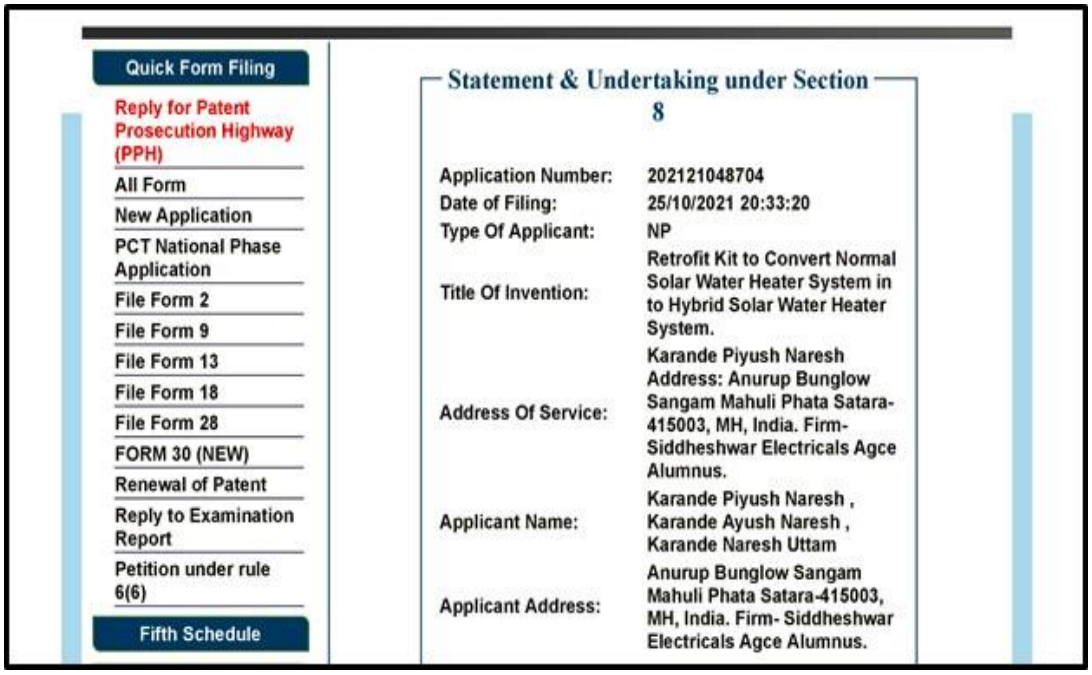


Figure5.7.3(b)

Thedepartment hasconducted EnergyAudit through project-basedlearning. TheEnergy Audit activitieshave beencarried out forthe followinggovernment offices:

1. Buildings/Officesof PanchganiGiristhanNagar Parishad, Panchgani, Dist.Satara, Maharashtra, India
2. Buildings/Officesof SataraNagar Parishad(District Satara):

- Energy Audit completed for Vaduj Nagar Panchayat
- EnergyAuditcompletedforKoregaonNagarPanchayat

Description:

An Energy audit is an on-site survey and assessment of Energy-using fixtures, appliances, and management practices to determine the efficiency of Energy use and to develop recommendations for improving Energy-useefficiency.Insimplewords, anEnergyauditis asystematicreviewof asitethatidentifiesthe quantitiesandcharacteristicsof

alltheEnergyuses. Thesitemayvary fromapublicEnergyutility, facility(institutionalorcommercial properties likemalls, offices, schools, etc.)or a Household. Theoverall objective ofconducting an Energy auditis to identify opportunitiesto make asystem or building Energyuse more efficient.

Objectives of the Energy Audit:

1. Isto achieveand maintainoptimum energyprocurement andutilization, throughout theOrganization.

2.Tominimizeenergycosts/wastewithoutaffectingproduction&quality.

3.Tominimizeenvironmentaleffects.

4.ConductasimpleWalk-Through auditorobservation oftheenergy consumptionofelectrical applianceswithinthe KoregoanNagarpalikabuilding.

5.Reviewand analyze energy usage history tocreate a baseline for which savings canbe measured in the Audited building

6.Determinewhat can be done to reduce energy consumptionthroughout the buildings and what options are availablefor system improvements if funding is available

7.Identify and evaluate measures that could improve the environmental performance of the Buildings/wards and provide recommendations

Instructional Material:

1. MOODLE System:

MOODLE is a learning platform designed to provide educators, administrators, and

learners with a single robust, secure, and integrated system to create personalized

learning environments.In every course, a teacher can store instructional materials like

PowerPoint presentations, videos, animations, and lab manuals. The same is available to

the enrolled students 24 × 7.

Teacherscanschedule quizzesand assignmentsfortheir subjectsperiodically. Quizzesare basedonMultiple ChoiceQuestions (MCQs)and assignmentscanbe uploadedfor assessment.The gradesobtainedby thestudents are visible immediately after the quiz is attempted.

2. ProjectPosters:

StudentsareencouragedtoparticipateinPosterPresentationcompetitions.Posterspreparedbyth estudentsandpresentedininnovativeprojectcompetitionssuchasAVISHKARandANVESHA Naremadeavailableto the students for study and presentation purposes.

3. Laboratory Manuals:

The following Laboratory Manuals have been developed by the faculty members:

Table 6.Lab Manuals for the Subjects under Electrical for the Academic Year 2022 – 23

Sr. No.	Semester	Year	Name of the Subject
1	Even Semester	SY B. Tech	1. Network Theory lab 2. Power System lab 3. Electrical Machines-II lab 4.Analog and Digital Electronics lab
		TY B. Tech	1. Switchgear and Protection lab 2. Electrical Machine Design lab 3. Control System Engineering lab
2	Odd Semester	SY B. Tech	1.Electrical Machines-I lab 2. Electrical and Electronics Measurement lab
		TY B. Tech	1.Power System Analysis lab 2. Microprocessor and Microcontroller lab 3. Power Electronics lab
		Final Year B. Tech	1.High Voltage Engineering lab 2. Electrical Drives lab 3. Power System Operation & Control lab

Table1:Lab.Manualsavailableinthedepartment

Table 7.Lab Manuals for the Subjects under Electrical for the Academic Year 2021 – 22

The laboratory manuals for the following subjects have been prepared by the faculty members of the department:

Sr.No.	Class	Name of the Subject
1	SYB.Tech(Electrical)	1. Electrical Machines – I 2. Electrical & Electronics Measurement 3. Analog & Digital Electronics 4. Network Theory 5. Power Systems 6. Electrical Machines - II
2	TY B. Tech(Electrical)	1. Power Systems – II 2. Microprocessor and Microcontroller 3. Principles of Electrical Machine Design 4. Power Electronics
3	Final Year B.Tech(Electrical)	1. Power System Operation & Control 2. Electrical Drives

Table2:Lab.Manualsavailableinthedepartment

4.Working Models/Charts/Monograms etc.:

Following is the list of charts displayed in the laboratories of the Electrical department:

Laboratory Charts:

The following is the list of Laboratory charts available in the laboratories of the department Academic year 2022-23:

Sr.No.	Name of the Laboratory	Name of the Chart
1	Electrical & Electronics Measurement Lab.&Analog Electronics & Circuit Lab.	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
2	Network Theory	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
3	Power System and Simulation lab	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
4	Electrical Machines Lab.1	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
5	Electrical Machines Lab. 2	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
6	Power Electronics & Electrical Drives and Control Lab.	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list
7	Switchgear and Protection& Basic Electrical Engineering Lab	1. Major equipments and lab layout 2. Domain-wise images and companies list 3. Top companies list

Table1:LaboratoryChartsavailableinthedepartmentlabs.

The following is the list of Laboratory charts available in the laboratories of the department Academic year 2021-22:

Sr.No.	Name of the Laboratory	Name of the Chart
1	Electrical & Electronics Measurement Lab.	4. List of Experiments of Measurement &Instrumentation 5. Transducers 6. Measuring Devices & Instruments
2	Analog Electronics & Circuit Lab.	1. List of Experiments of Electromagnetics &Electrical Circuits 2. Electric Circuit Analysis (NortonEquivalent Circuit) 3. Electric Circuit Analysis (Star-DeltaTransformation) 4. Electrical Schematic Symbols
3	Electrical Machines Lab.	1. Constructional Details of DC Motor 2. WorkingofDCMotor
4	Electrical Machines Lab. 2	1. List of Experiments of AC Machines 2. Synchronous Generator
5	Electrical Drives & Control Lab.	1. List of Experiments of Electrical Drives and Control
6	Basic Electrical Engineering Lab	1. Electrical Safety Precautions 2. Advanced Switchgear & Protection 3. Lightning Arrestors – 7 Types 4. Circuit Breakers

Table2:LaboratoryChartsavailableinthedepartmentlabs.

Provide details:

- Product Development
- Research laboratories
- Instructional materials
- Working models/charts/monograms etc.

Product Development:

- **Geo-tagging Application for Conducting Heritage Tree Census Survey**

The objective of the project is as follows:

- The primary objective was to map all the trees present in all zones under the jurisdiction of Panchgani Hill Station Municipal Council.
- The other objective was to understand the diversity, density, and distribution of trees in the Panchgani region.

The scope of the project is as follows:

- Development of mobile and web application for carrying out tree census in the Panchgani Hill Station Municipal Council jurisdiction area.
- Conduct the tree census in the Panchgani Hill Station Municipal Council jurisdiction area using GPS enabled android device.
- Create a digital library (database) of trees containing their common name, botanical name, tree photo, and its use.

Sr. No.	**Parameter Type**	**Parameter Name**
1	General Parameters	➢ Ward Number ➢ Photograph
2	Geographical Parameters	➢ Latitude ➢ Longitude
3	Technical Parameters	➢ Common Name/Botanical Name ➢ Condition of the Tree ➢ Age of the Tree ➢ Height of the Tree ➢ Girth of the Tree ➢ Whether Having Medicinal Uses

Figure 5.7.3(a) Heritage Tree Census Being Conducted by the Students of AGCE, Satara at Panchgani Hill Station, Panchgani, Dist. Satara, Maharastra, India

Figure 5.7.3(b) Heritage Tree Census Being Conducted by the Students of AGCE, Satara at Panchgani Hill Station, Panchgani, Dist. Satara, Maharashtra, India

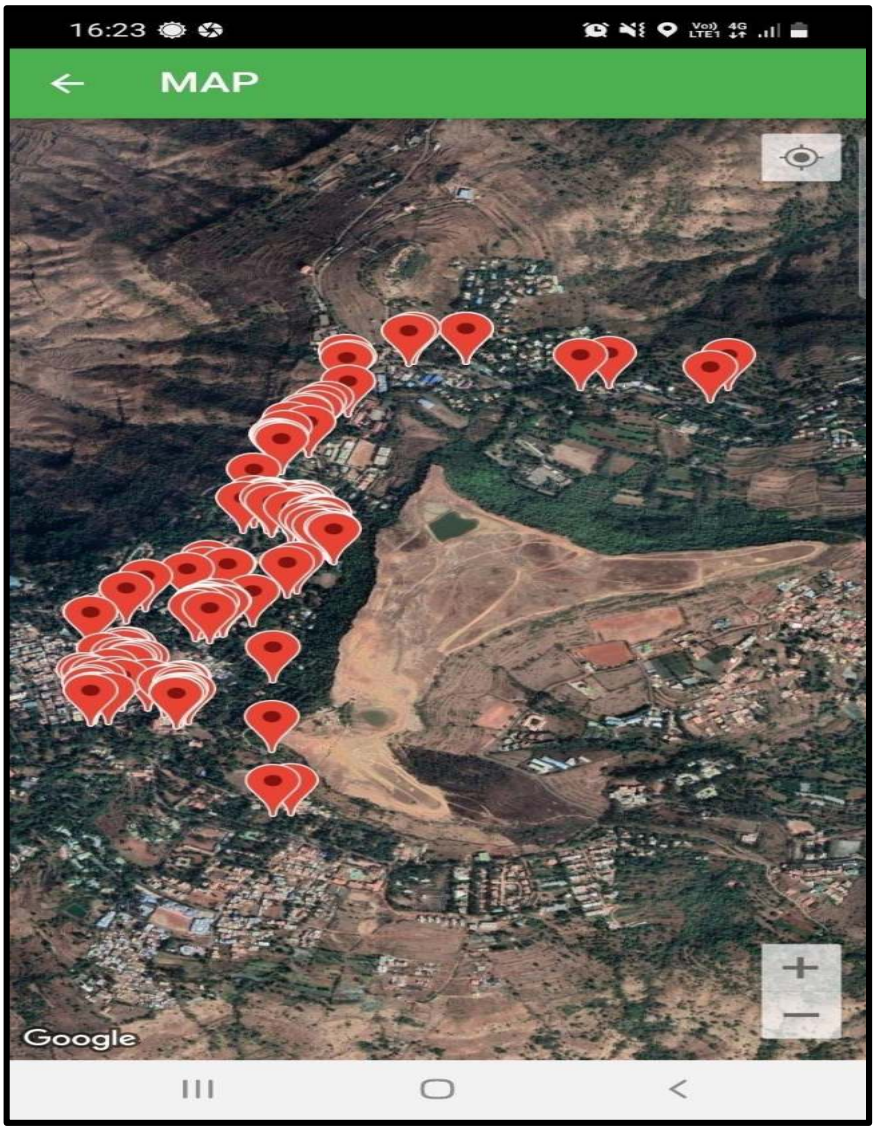


Figure 5.7.3(c) Screenshot of the Mobile Application (GeoPanchgani) Showing the Geo-tagged Trees on Google Earth

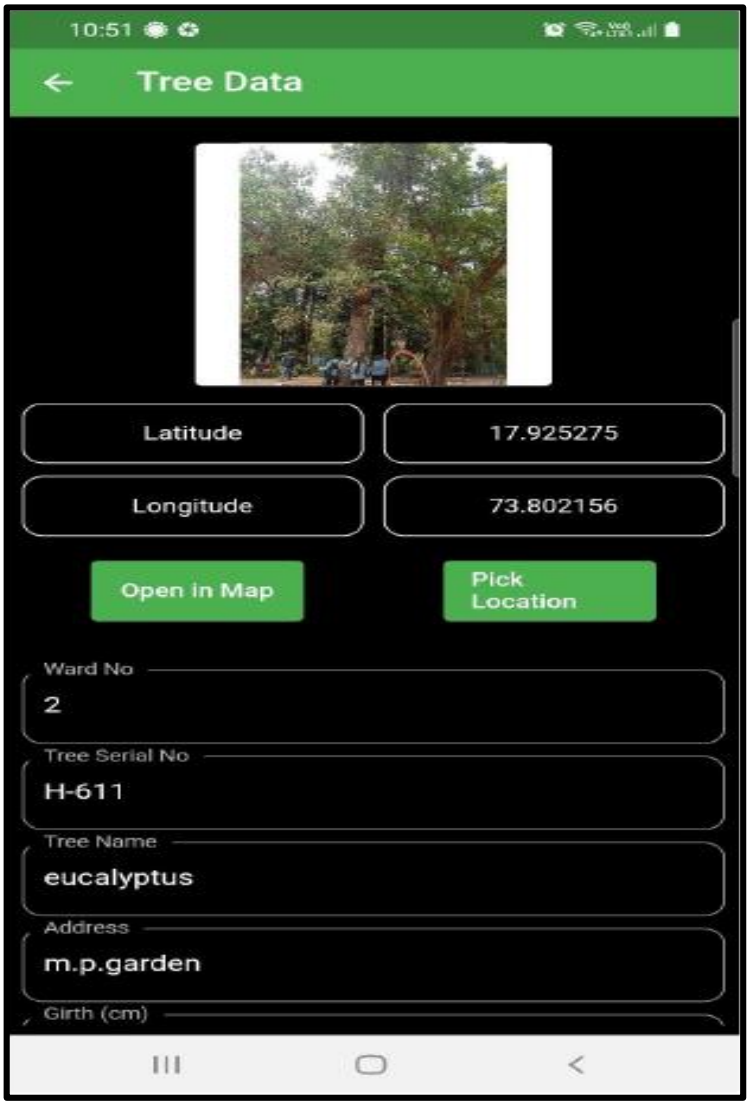


Figure 5.7.3(d) Screenshot of the Mobile Application Geo-Panchgani(Admin Section) Showing the Parameters for One Tree

- **Transformer Theft Protection and Monitoring:**

The objective of the project is as follows:

- Development of an anti-theft device for protection of distribution transformers of Maharashtra State Electricity Distribution Company Limited (MSEDCL) from theft in remote rural and agricultural areas.

The scope of the project is as follows:

- Development of an anti-theft device for distribution transformers based on the concept of Internet of Things (IoT).

- Attainment of minimum cost per device
- Designing the device to be compact and difficult to detect.

5.7.4 Consultancy (from Industry) (05)

Funding amount (Cumulative during CAYm1, CAYm2, and CAYm3):
Amount > 10 Lakh
- 5 Marks

Amount >= 8 Lakh and <= 10 Lakh
- 4 Marks

Amount >= 6 Lakh and <= 8 Lakh
- 3 Marks

Amount >= 4 Lakh and <= 6 Lakh
- 2 Marks

Amount >= 2 Lakh and <= 4 Lakh
- 1 Mark

Amount < 2 Lakh
- 0 Mark

2022-23(CAY)

S. No.	Faculty Name	Company	Revenue Generated (in Rs.)
1	Dr. B. M. Nayak	Ravi Electricals, Satara, Maharashtra, India	20,000/-

2022-23(CAY)

Project Title	Duration	Funding Agency	Amount
Voice Controlled Robotic Vehicle	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	20000.00
Self Balancing Robot	1Year	Ravi Electricals, Satara, Maharashtra, India	17000.00
Arduino based Seven Stage Multi level Inverter	1Year	Sai industries, additional MIDC, Satara, Maharashtra, India	15000.00
Aumatic Drip Irrigation System using Microcontroller and Electrical devices	1Year	Ravi Electricals, Satara, Maharashtra, India	16000.00
Solar Operated Mobile Pesticide and Fertilizer Sprayer	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
IoT Based Solar Power Plant Automation	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	20000.00
Battery Swapping System for Electrical Vehicle	1Year	Siddheshwar Electricals, Satara, Maharashtra, India	12000.00
Speed Control of Induction motor	1Year	Ravi Electricals, Satara, Maharashtra, India	10000.00
			Total Amount(X):1 25000.00

2021-22(CAYm1)

ProjectTitle	Duration	Funding Agency	Amount
Enhancement to DP Transformer Theft Monitoring System	1Year	AICTE	20000.00
Child Safety Wearable Device	1Year	Aptron Technologies, Maharashtra, India	18000.00
Designing and Analysis of AC Power Control by Programmable Interface	1Year	Aptron Technologies, Maharashtra, India	15000.00
Design and Installation of High Capacity Centralized Coolant Pump for Optimization of Power Using VFD Controller	1Year	Ravi Electrical, Satara, Maharashtra, India	22000.00
Iot based Solar Monitoring and Control	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
Wireless robotic vehicle to supply food and medicines to covid-19 patients.	1Year	Ravi Electricals, Satara, Maharashtra, India	20000.00
AI - Based Touchless Attendance System for School, Colleges after COVID-19 Situation with Temperature, Oxygen Level, Face Mask Detection	1Year	Siddheshwar Electricals, Satara, Maharashtra,India	10000.00
To Design and Develop Prototype for Industrial Cobot	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	10000.00
Ultra Fast Circuit Breaker Using Arduino for Overlaod Protection	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	22000.00
Design and Implementation of Manul rotation of Solar Plate for Maximum Energy Output	1Year	Shivam Enterprise, Satara, Maharashtra, India	20000.00
Solar Tracking System Using Arduino	1Year	Shivam Enterprise, Satara, Maharashtra, India	10000.00
E - Lite Bicycle	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
Automatic Car Parking Using Arduino System	1Year	Shivam Enterprise, Satara,Maharashtra, India	22000.00
IOT Based Smart Public Ration Distribution System	1Year	Siddheshwar Electricals, Satara, Maharashtra,India	15000.00
Robot for Waste and Garbage Collection in Water	1Year	Ravi Electricals, Satara, Maharashtra, India	20000.00
Design and Implementation of Manul rotation of Solar Plate for Maximum Energy Output	1Year	Siddheshwar Electricals, Satara, Maharashtra,India	10000.00
Analysis and Implementation of Solar Tracking System	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	10000.00
			Total Amount(X):274000.00

2020-21(CAYm2)

ProjectTitle	Duration	Funding Agency	Amount
AICTEMargdarshanMentor-MenteeScheme	1Year	AICTE	500000.00
UndergroundCable FaultDetection UsingIoT	1Year	Aptron Technologies, Maharashtra, India	20000.00
IoT-BasedSmartEnergyManagementSystemofElectricalVehicleChargingSystem	1Year	Aptron Technology,MIDC, Satara, Maharashtra, India;	18000.00
Reverse Rotation Controller for Rotating Equipment	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	15000.00
IoT-BasedInductionMotorMonitoringSystem	1Year	Ravi Electricals, Satara, Maharashtra, India	22000.00
Automatic Power Factor Controller	1Year	Ravi Electricals, Satara, Maharashtra, India	15000.00
IoT-BasedSmartEnergyMeterMonitoringandBillingSystem	1Year	Siddheshwar Electricals, Satara, Maharashtra,India	20000.00
Induction Motor Rotation in Bidirectional Through A Remote ControlDevice	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	22000.00
Power Distribution Station Monitoring System Using IoT	1Year	Sai industries additional MIDC , Satara, Maharashtra,India	20000.00
IoT-BasedWaterDistributionMonitoringSysteminApartments	1Year	Shivam Enterprise, Satara, Maharashtra, India	10000.00
Priority-WisePowerDistributionandSafetyControllerMonitoringSystem Using IoT	1Year	Aptron Technologies, old MIDC Satara,Maharashtra, India	15000.00
EnergyRegenerative Braking ofBLDC Motor byUsing Super Capacitor in EV applications	1Year	Ravi Electricals, Satara, Maharashtra, India	18000.00
			Total Amount(X):695 000.00

Cumulative Amount(X + Y + Z) =1094000.00

5.8 Faculty Performance Appraisal and Development System (FPADS) (30)

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real-life problems in industry. Another role relates to the shouldering of administrative responsibilities and co-operation with other Faculty, Heads-of-Department and the Head of Institute. An effective performance appraisal system for Faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

The assessment is based on:
A well-defined system for faculty appraisal for all the assessment years (10)
Its implementation and effectiveness (20)

1. Performance appraisal system of the faculty:

Annual self-assessment for the performance-based appraisal system is adopted as per the UGC notification 30th June 2010 approved by the Govt. of Maharashtra state vide GR dated 15th February 2011. Hence it is ensured that information on multiple activities is appropriately captured.

Category I: Teaching, Learning and Evaluation Related Activities

Brief Explanation:

Based on the teacher's self-assessment, API scores are proposed for (a) teaching related activities, (b) domain knowledge, (c) participation in examination and evaluation, (d) contribution to innovative teaching, new courses, etc. The minimum API score required by teachers from this category is 75. The self-assessment score should be based on objectively verifiable criteria wherever possible and will be finalized by the screening/selection committee.

Category II: Co-curricular, Extension and Professional Development Related Activities

Brief Explanation:

Based on the teacher's self-assessment, category II API scores are proposed for co-curricular and extension activities and Professional development related contributions. The minimum API required by teachers for eligibility for promotion is 15. A list of items and proposed scores is given below. It will be noticed that all teachers can earn scores from a number of items, whereas some activities will be carried out only by one or a few teachers. The list of activities is broad enough for the minimum API score required (15) in this category to accrue to all teachers. As before, the self-assessment score should be based on objectively verifiable criteria and will be finalized by the screening/selection committee.

Category III: Research and Academic Contributions

Brief Explanation:

Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API score required by teachers from this category is different for different levels of promotion and between university and colleges. The self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee.

Review of Performance Appraisal:
The Performance-based Appraisal System (PBAS) forms are submitted through the Head of Department to the Academic Monitoring Committee (AMC), R&D and IPR Committee, and IQAC Committee. The Head of Department along with the AMC, R&D and IPR Committee, and IQAC form the review committee.
The advantage of PBAS is that each faculty becomes aware of self-weakness and tries to improve oneself in those areas so that he/she can score better in the next year.
Faculty with good API scores is given letters of appreciation and the faculty members having low API scores are personally counseled by the Head of the Institute.

APPRAISAL AND 360° FEEDBACK FORM

Name	: Dr. B. M. Nayak.
Date of Birth	: 04/03/1986
Highest Qualification	: UG / PG / Ph.D
Designation	: Associate professor.
Experience	: Teaching: 12 Industrial: – Total: 12.
Program	: Electrical Engg.
Mobile No.	: 7775966294.
Email	: bmnayak.agce@gmail.com.
Permanent Address (with pin code)	: Alp. Satara.
Academic Year	: 2022-23.

SCORES FOR ACADEMIC PERFORMANCE INDICATORS (APIs) IN RECRUITMENTS AND CAREER ADVANCEMENT SCHEME (CAS) PROMOTIONS OF UNIVERSITY / COLLEGE TEACHERS

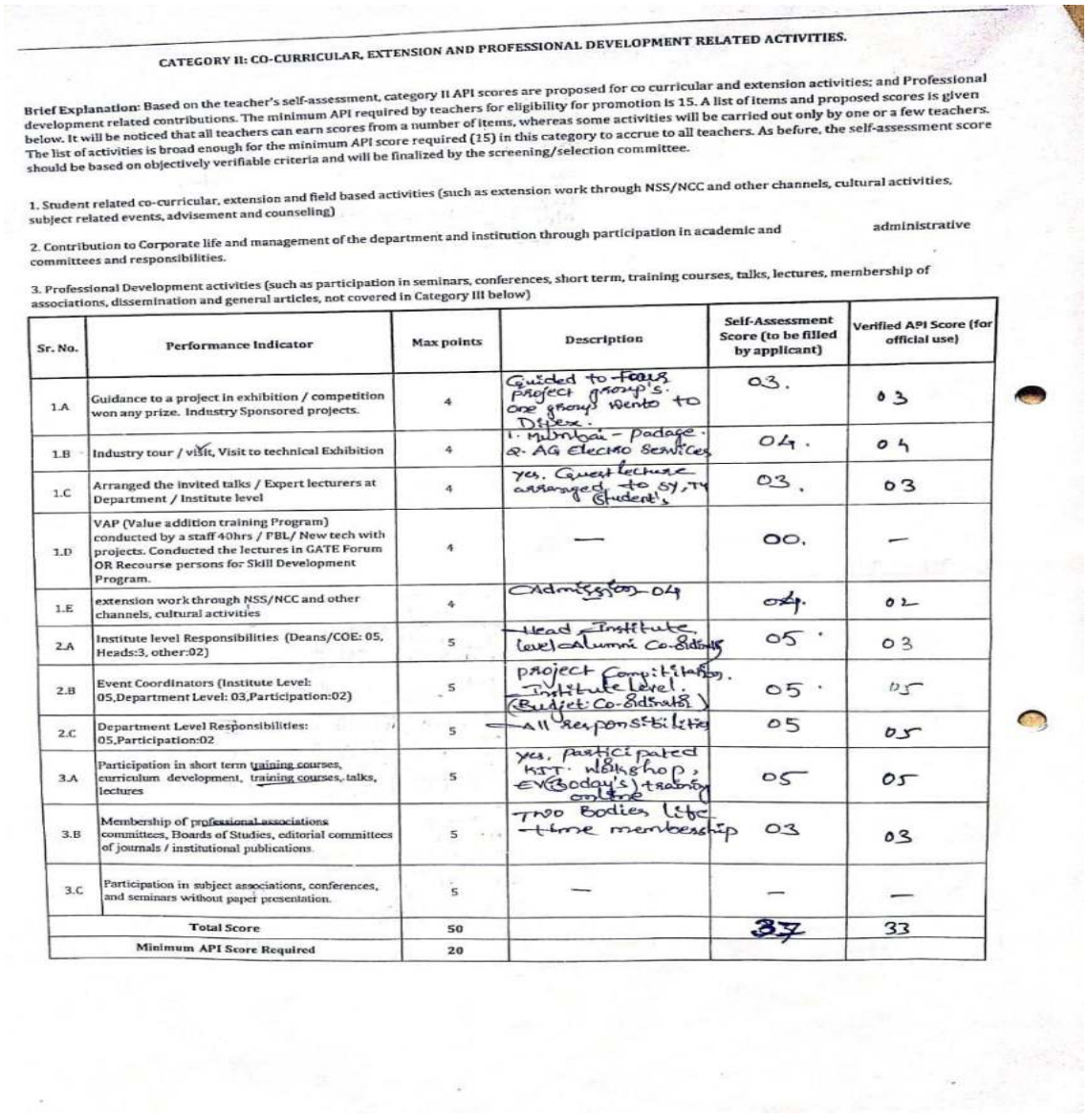
CATEGORY I: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for (a) teaching related activities; (b) domain knowledge; (c) participation in examination and evaluation; (d) contribution to innovative teaching, new courses etc. The minimum API score required by teachers from this category is 75. The self assessment score should be based on objectively verifiable criteria wherever possible and will be finalized by the screening/selection committee.

1. Lectures, seminars, tutorials, practical's, contact hours undertaken taken as percentage of lectures allocated.
2. Lectures or other teaching duties in excess of the UGC norms.
3. Preparation and imparting of knowledge / instruction as per curriculum; syllabus enrichment by providing additional resources to students.
4. Use of participatory and innovative teaching-learning methodologies; updating of subject content, course improvement etc.
5. Examination duties (Invigilation; question paper setting, evaluation/assessment of answer scripts) as per allotment.

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Excellent course file for the subject, teaching plan displayed	20	Course file per subject Completed.	18	16
1.B	Conducting practical lab. / tutorials; work nicely with lab innovations	20	EM-I, EM-II, EMD lab Conducted for SY, TY Laboratory prepared	19.	17
1.C	Student Feedback outcome	10	Extellent feed back	09.	08
2.A	Remedial Classes OR Extra lectures for DSE students	4	Extra lecture Conducted for all DSY, TY Stud.	04	04
2.B	Content beyond syllabus	6	Necessary extra point Covered for allotted. (EM-I, EMD)	05	04
3.A	Preparation and Imparting of knowledge / instruction as per curriculum;	10	All subjects EM-I, EM-II, CSE, EMD Conducted as per Curriculum.	10	09
3.B	syllabus enrichment by providing additional resources to students	10	NPTEL Videos, Simulations, Virtual lab links, PPT.	09.	08
4.A	Number of ICT Based Teaching material	5	60% Lecture Conducted through ICT.	04.	04
4.B	Number of Interactive Courses	5	NPTEL	03	02
4.C	Effective use of MOODLE	10	All instructive materials attendance, Exam through moodle	09	08
5.A	At Institute Level	15	HOD, Alumni Co-ordinator of College.	13.	13
5.B	At University Level	10	Paper Setter (EM-I, II) Research grants.	08.	08
	Total Score	125		111	101
	Minimum API Score Required	75			

Figure 5.8 (a) Performance Appraisal Form Page 1



CATEGORY II: CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES.

Brief Explanation: Based on the teacher's self-assessment, category II API scores are proposed for co curricular and extension activities; and Professional development related contributions. The minimum API required by teachers for eligibility for promotion is 15. A list of items and proposed scores is given below. It will be noticed that all teachers can earn scores from a number of items, whereas some activities will be carried out only by one or a few teachers. The list of activities is broad enough for the minimum API score required (15) in this category to accrue to all teachers. As before, the self-assessment score should be based on objectively verifiable criteria and will be finalized by the screening/selection committee.

1. Student related co-curricular, extension and field based activities (such as extension work through NSS/NCC and other channels, cultural activities. subject related events, advisement and counseling)

2. Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities.

3. Professional Development activities (such as participation in seminars, conferences, short term, training courses, talks, lectures, membership of associations, dissemination and general articles, not covered in Category III below)

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Guidance to a project in exhibition / competition won any prize. Industry Sponsored projects.	4	Guided to four Project group's. One group went to Differ.	03.	03
1.B	Industry tour / visit, Visit to technical Exhibition	4	1. Mumbai - Padage. 2. AG Electro Services	04.	04
1.C	Arranged the invited talks / Expert lecturers at Department / Institute level	4	Yes. Guest lecture arranged to SY, TY Student's	03.	03
1.D	VAP (Value addition training Program) conducted by a staff 40hrs / PBL/ New tech with projects. Conducted the lectures in GATE Forum OR Recourse persons for Skill Development Program.	4	—	00.	—
1.E	extension work through NSS/NCC and other channels, cultural activities	4	Admission - 04	04.	02
2.A	Institute level Responsibilities (Deans/COE: 05, Heads:3, other:02)	5	Head Institute level Alumni Co-ordinator	05.	03
2.B	Event Coordinators (Institute Level: 05,Department Level: 03,Participation:02)	5	project Competition. Institute Level. (Budget: Co-ordinator)	05.	05
2.C	Department Level Responsibilities: 05,Participation:02	5	All responsibilities	05	05
3.A	Participation in short term training courses, curriculum development, training courses, talks, lectures	5	Yes. Participated KIT. Workshop, EV(Bodgu's) training online	05	05
3.B	Membership of professional associations committees, Boards of Studies, editorial committees of journals / institutional publications.	5	TNSO Bodies Life time membership	03	03
3.C	Participation in subject associations, conferences, and seminars without paper presentation.	5	—	—	—
	Total Score	**50**		37	33
	Minimum API Score Required	**20**			

Figure 5.8 (b) Performance Appraisal Form Page 2

CATEGORY-III: RESEARCH AND ACADEMIC CONTRIBUTIONS

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API score required by teachers from this category is different for different levels of promotion and between university and colleges. The self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee.

1. Research Papers published in:
2. Research Publications(books, chapters in books, other than refereed journal articles)
3. RESEARCH PROJECTS
4. RESEARCH GUIDANCE
5. TRAINING COURSES AND CONFERENCE /SEMINAR/WORKSHOP PAPERS

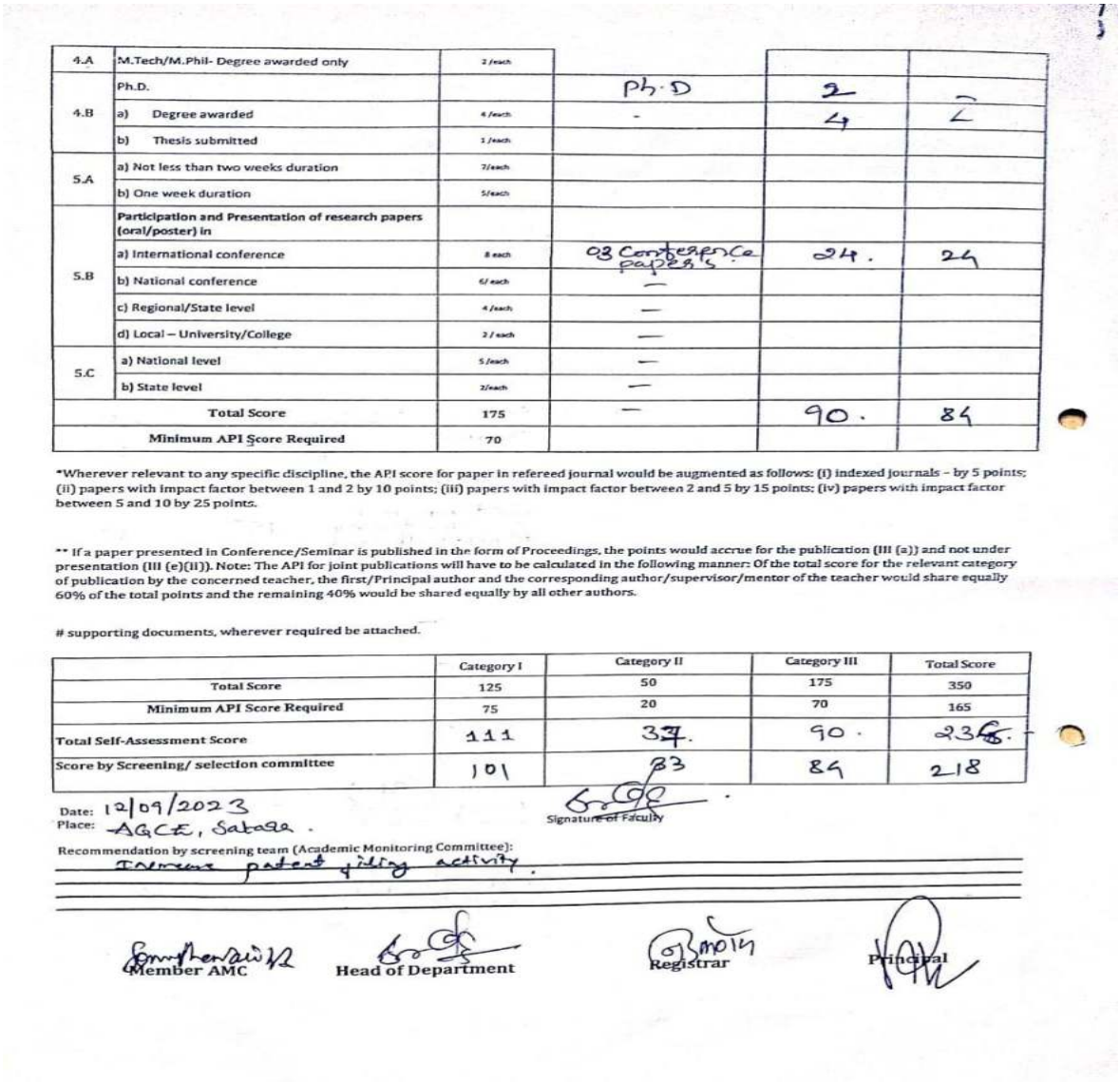
A. Refresher courses, Methodology workshops, Training, Teaching Learning Evaluation Technology Programs, Soft Skills development Program, Faculty Development Programs (Max: 30 points)

B. Papers in Conferences/ Seminars/ workshops etc.**

C. Invited lectures or presentations for conferences/ symposia

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Refereed Journals *	20/ 2 publication	EEE, IJEER, Hindawi	20	20
1.B	Non-refereed but recognized and reputable journals and periodicals, having ISBN/ISSN numbers	10 / 2 Publication	ICIRTES	10	10
1.C	Conference proceedings as full papers, etc. (Abstracts not to be included)	5/ 2 publication	ICIHCNN	05	05
2.A	Text or Reference Books Published by International Publishers with an established peer review system	20 /sole author; 5 /chapter in an edited book	Grid Connected Converter topology for Renewable power generation	15	15
2.B	Subjects Books by National level publishers/State and Central Govt. Publications with ISBN/ISSN numbers.	15/sole author, and 5/ chapter in edited books	—		—
2.C	Subject Books by Other local publishers with ISBN/ISSN numbers.	10/ sole author, and 2 / chapter in edited books	—		—
2.D	Chapters contributed to edited knowledge based volumes published by International Publishers	5 /Chapter	—		—
2.E	Chapters in knowledge based volumes by Indian/National level publishers with ISBN/ISSN numbers and with numbers of national and international directories	3 / Chapter	—		—
3.A	**Sponsored Projects carried out/ ongoing**				
	a) Major Projects amount mobilized with grants in between Rs.10,000 to Rs.50,000/-	10 /2 major project	DBATU (3L) Project Research Funding	5	5
	b) Minor Projects (Amount mobilized with grants upto Rs.10,000/-	7 /2 minor Project	—		
3.B	**Consultancy Projects carried out / ongoing:** Amount mobilized with upto Rs.15,000/-	10 consultancy	Consultancy work completed (20,000)	5	5
3.C	**Completed projects Quality Evaluation:** Completed project Report(Acceptance from funding agency)	7 /each major project and 5 /each minor project	—	—	—
3.D	**Projects Outcome / Outputs:** Patent/Technology transfer/ Product/Process	7 / each state level output or patent /15 /each for national level	—	—	—

Figure 5.8 (c) Performance Appraisal Form Page 3



4.A	M.Tech/M.Phil- Degree awarded only	2 /each			
4.B	Ph.D.		Ph.D	2	
	a) Degree awarded	4 /each	-	4	2
	b) Thesis submitted	1 /each			
5.A	a) Not less than two weeks duration	7/each			
	b) One week duration	5/each			
5.B	Participation and Presentation of research papers (oral/poster) in				
	a) International conference	8 each	03 Conference papers.	24.	24
	b) National conference	6/ each	—		
	c) Regional/State level	4 /each	—		
	d) Local – University/College	2 / each	—		
5.C	a) National level	5 /each	—		
	b) State level	2/each	—		
Total Score		175	—	90.	84
Minimum API Score Required		70			

*Wherever relevant to any specific discipline, the API score for paper in refereed journal would be augmented as follows: (i) indexed journals – by 5 points; (ii) papers with impact factor between 1 and 2 by 10 points; (iii) papers with impact factor between 2 and 5 by 15 points; (iv) papers with impact factor between 5 and 10 by 25 points.

** If a paper presented in Conference/Seminar is published in the form of Proceedings, the points would accrue for the publication (III (a)) and not under presentation (III (e)(ii)). Note: The API for joint publications will have to be calculated in the following manner: Of the total score for the relevant category of publication by the concerned teacher, the first/Principal author and the corresponding author/supervisor/mentor of the teacher would share equally 60% of the total points and the remaining 40% would be shared equally by all other authors.

supporting documents, wherever required be attached.

	Category I	Category II	Category III	Total Score
Total Score	125	50	175	350
Minimum API Score Required	75	20	70	165
Total Self-Assessment Score	111	37.	90.	238.
Score by Screening/ selection committee	101	33	84	218

Date: 12/09/2023
Place: AGCE, Satara.

Signature of Faculty

Recommendation by screening team (Academic Monitoring Committee):
Increase patent filing activity.

Member AMC | Head of Department | Registrar | Principal

Figure 5.8 (d) Performance Appraisal Form Page 4

Figure5.8:(a),(b),(c),and(d)Performanceappraisal formofDr.B.M.Nayak

APPRAISAL AND 360° FEEDBACK FORM

Name	: Miss. Mali Ashlesha Bhimrao
Date of Birth	: 18/11/1995
Highest Qualification	: UG / PG / Ph. D. – PG
Designation	: Assistant Professor
Experience	: Teaching: 1.9 Industrial: 1 Total: 2.9 .
Program	: Electrical Engineering.
Mobile No.	: - 7083743002
Email	: ashleshamali1995@gmail.com
Permanent Address (with pin code)	: A/P- kasegaon Tal- walwa Dist - Sangli
Academic Year	: 2022-23

SCORES FOR ACADEMIC PERFORMANCE INDICATORS (APIs) IN RECRUITMENTS AND CAREER ADVANCEMENT SCHEME (CAS) PROMOTIONS OF UNIVERSITY / COLLEGE TEACHERS

CATEGORY I: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for (a) teaching related activities; (b) domain knowledge; (c) participation in examination and evaluation; (d) contribution to innovative teaching, new courses etc. The minimum API score required by teachers from this category is 75. The self assessment score should be based on objectively verifiable criteria wherever possible and will be finalized by the screening/selection committee.

1. Lectures, seminars, tutorials, practical's, contact hours undertaken taken as percentage of lectures allocated.
2. Lectures or other teaching duties in excess of the UGC norms.
3. Preparation and Imparting of knowledge / instruction as per curriculum; syllabus enrichment by providing additional resources to students.
4. Use of participatory and innovative teaching-learning methodologies; updating of subject content, course improvement etc.
5. Examination duties (Invigilation; question paper setting, evaluation/assessment of answer scripts) as per allotment.

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Excellent course file for the subject, teaching plan displayed	20	course file completed as per syllabus	18	18
1.B	Conducting practical lab. / tutorials; work nicely with lab innovations	20	All lab practical conducted	18	17
1.C	Student Feedback outcome	10	Very good remark from students.	9	9
2.A	Remedial Classes OR Extra lectures for DSE students	4	Yes. for EMS subj Extra. lectures is taken.	4	3
2.B	Content beyond syllabus	6	Yes taken sum extra points	6	5
3.A	Preparation and Imparting of knowledge / Instruction as per curriculum;	10	All syllabus conducted as per curriculum.	10	10
3.B	syllabus enrichment by providing additional resources to students	10	video/animation shows in class	9	9
4.A	Number of ICT Based Teaching material	5	70 % ICT based material is used.	5.	4
4.B	Number of Interactive Courses	5	promoted students to complete NPTEL courses	5	5
4.C	Effective use of MOODLE	10	uploaded All material in moodle & pearl k exam	9	8
5.A	At Institute Level	15	1) SRPD 2) Extra curricular active 3) Rally	15	15
5.B	At University Level	10	SRPD of university Exam	8.	8
Total Score		125		116	108
Minimum API Score Required		75			

Figure 5.8 (a) Performance Appraisal Form Page 1

CATEGORY II: CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES.

Brief Explanation: Based on the teacher's self-assessment, category II API scores are proposed for co curricular and extension activities; and Professional development related contributions. The minimum API required by teachers for eligibility for promotion is 15. A list of items and proposed scores is given below. It will be noticed that all teachers can earn scores from a number of items, whereas some activities will be carried out only by one or a few teachers. The list of activities is broad enough for the minimum API score required (15) in this category to accrue to all teachers. As before, the self-assessment score should be based on objectively verifiable criteria and will be finalized by the screening/selection committee.

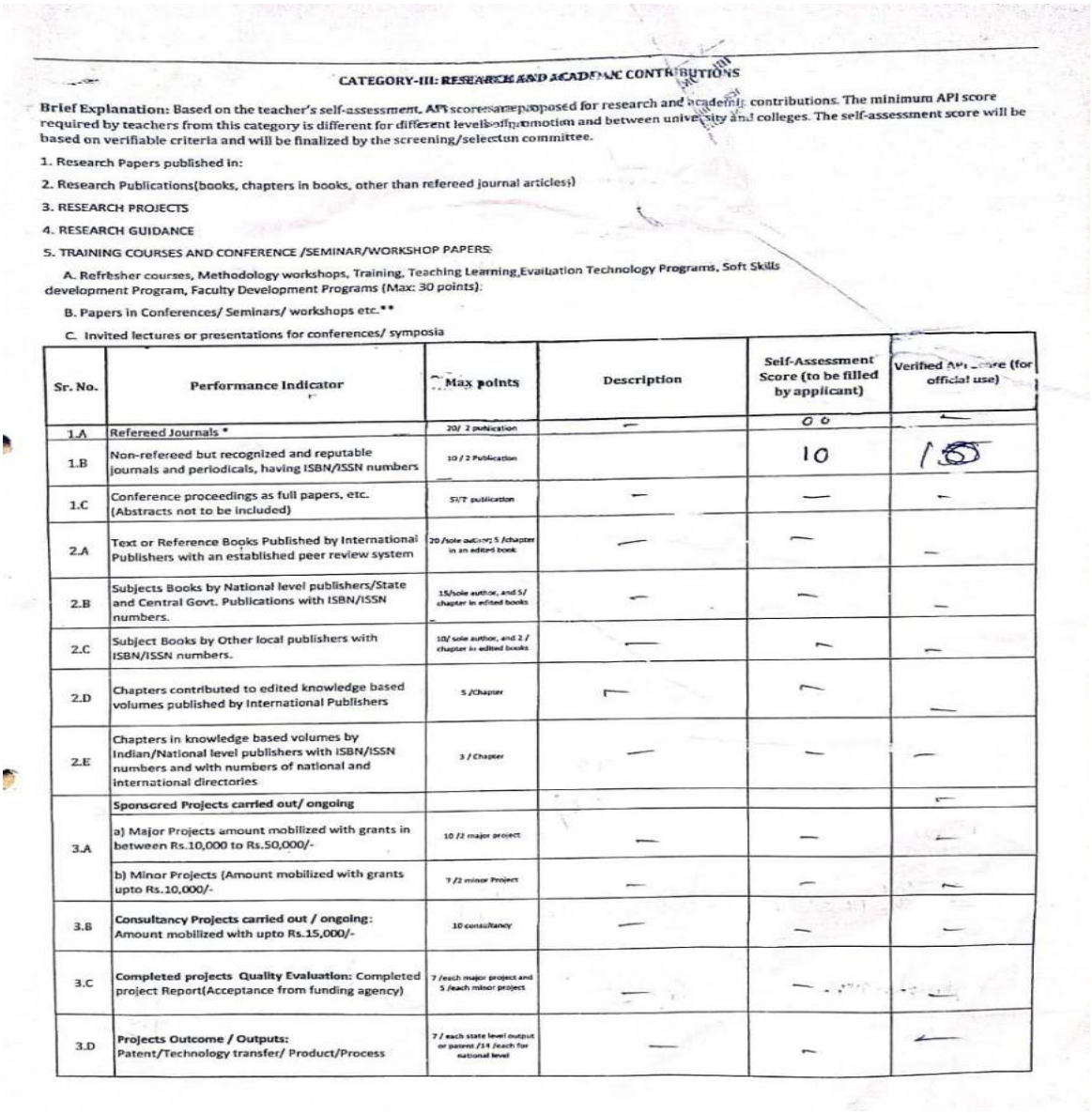
1. Student related co-curricular, extension and field based activities (such as extension work through NSS/NCC and other channels, cultural activities, subject related events, advisement and counseling)

2. Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities.

3. Professional Development activities (such as participation in seminars, conferences, short term, training courses, talks, lectures, membership of associations, dissemination and general articles, not covered in Category III below)

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Guidance to a project in exhibition / competition won any prize. Industry Sponsored projects.	4	Guide one B.Tech project & one TY. mini project won 1st prize in project competition.	4	3
1.B	Industry tour / visit, Visit to technical Exhibition	4	1) HVDC substation 2) AG, Electro servesrs-Anand.	4	4
1.C	Arranged the invited talks / Expert lecturers at Department / Institute level	4	Arranged online HVE Expert lectures for B.Tech students	4.	4
1.D	VAP (Value addition training Program) conducted by a staff 40hrs / PBL/ New tech with projects. Conducted the lectures in GATE Forum OR Recourse persons for Skill Development Program.	4	—	00	—
1.E	extension work through NSS/NCC and other channels, cultural activities	4	5 students from By GFM batch participated in NSS camp.	04.	4
2.A	Institute level Responsibilities (Deans/COE: 05, Heads:3, other:02)	5	1) SRPD incharge. 2) Rector of girls hostel	02.	2
2.B	Event Coordinators (Institute Level: 05,Department Level: 03,Participation:02)	5	cultural Event coordinator	05.	5
2.C	Department Level Responsibilities: 05,Participation:02	5	1) Exam coordinator 2) NBA criteria -4 +6 3) Extra-curricular	05.	5
3.A	Participation in short term training courses, curriculum development, training courses, talks, lectures	5	FDP & workshop	04.	3
3.B	Membership of professional associations committees, Boards of Studies, editorial committees of journals / institutional publications.	5	—	—	
3.C	Participation in subject associations, conferences, and seminars without paper presentation.	5	—	—	—
	Total Score	50		32.	30
	Minimum API Score Required	20			

Figure 5.8 (b) Performance Appraisal Form Page 2



CATEGORY-III: RESEARCH AND ACADEMIC CONTRIBUTIONS

Brief Explanation: Based on the teacher's self-assessment, API scores are proposed for research and academic contributions. The minimum API score required by teachers from this category is different for different levels of promotion and between university and colleges. The self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee.

1. Research Papers published in:
2. Research Publications(books, chapters in books, other than refereed journal articles)
3. RESEARCH PROJECTS
4. RESEARCH GUIDANCE
5. TRAINING COURSES AND CONFERENCE /SEMINAR/WORKSHOP PAPERS:

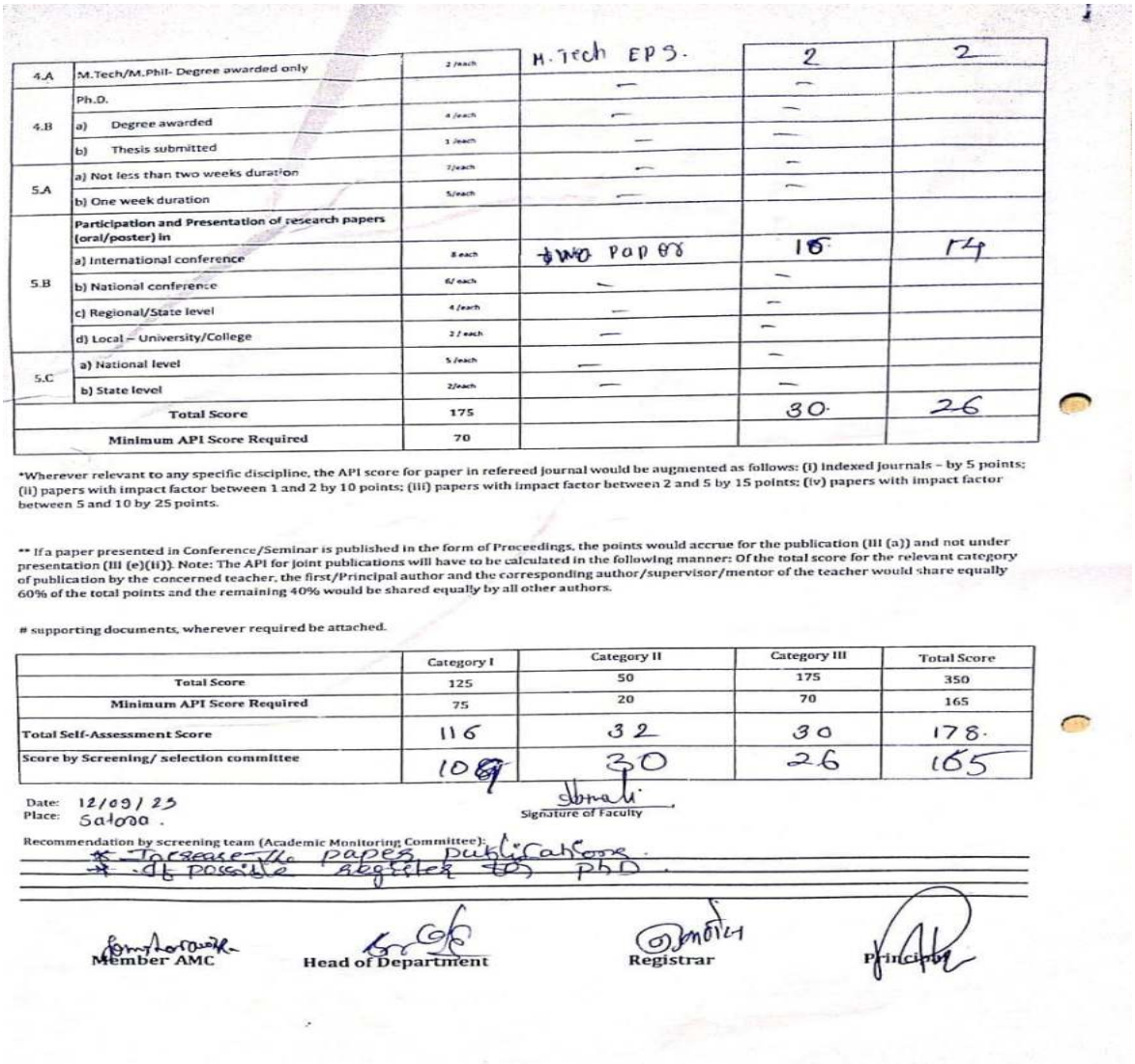
A. Refresher courses, Methodology workshops, Training, Teaching Learning,Evaluation Technology Programs, Soft Skills development Program, Faculty Development Programs (Max: 30 points):

B. Papers in Conferences/ Seminars/ workshops etc.**

C. Invited lectures or presentations for conferences/ symposia

Sr. No.	Performance Indicator	Max points	Description	Self-Assessment Score (to be filled by applicant)	Verified API Score (for official use)
1.A	Refereed Journals *	20/ 2 publication	—	00	—
1.B	Non-refereed but recognized and reputable journals and periodicals, having ISBN/ISSN numbers	10 / 2 Publication		10	15
1.C	Conference proceedings as full papers, etc. (Abstracts not to be included)	5\7 publication	—	—	—
2.A	Text or Reference Books Published by International Publishers with an established peer review system	20 /sole author; 5 /chapter in an edited book	—	—	—
2.B	Subjects Books by National level publishers/State and Central Govt. Publications with ISBN/ISSN numbers.	15/sole author, and 5/ chapter in edited books	—	—	—
2.C	Subject Books by Other local publishers with ISBN/ISSN numbers.	10/ sole author, and 2 / chapter in edited books	—	—	—
2.D	Chapters contributed to edited knowledge based volumes published by International Publishers	5 /Chapter	—	—	—
2.E	Chapters in knowledge based volumes by Indian/National level publishers with ISBN/ISSN numbers and with numbers of national and international directories	3 / Chapter	—	—	—
3.A	**Sponsored Projects carried out/ ongoing**				—
	a) Major Projects amount mobilized with grants in between Rs.10,000 to Rs.50,000/-	10 /2 major project	—	—	—
	b) Minor Projects (Amount mobilized with grants upto Rs.10,000/-	7 /2 minor Project	—	—	—
3.B	**Consultancy Projects carried out / ongoing:** Amount mobilized with upto Rs.15,000/-	10 consultancy	—	—	—
3.C	**Completed projects Quality Evaluation:** Completed project Report(Acceptance from funding agency)	7 /each major project and 5 /each minor project	—	—	—
3.D	**Projects Outcome / Outputs:** Patent/Technology transfer/ Product/Process	7 / each state level output or patent /10 /each for national level	—	—	—

Figure 5.8 (c)Performance Appraisal Form Page 3



4.A	M.Tech/M.Phil- Degree awarded only	2 /each	M.Tech EPS.	2	2
4.B	Ph.D.		—	—	
	a) Degree awarded	4 /each	—	—	
	b) Thesis submitted	1 /each	—	—	
5.A	a) Not less than two weeks duration	7/each	—	—	
	b) One week duration	5/each	—	—	
5.B	Participation and Presentation of research papers (oral/poster) in				
	a) International conference	8 each	TWO PAPERS	16	14
	b) National conference	6/ each	—	—	
	c) Regional/State level	4 /each	—	—	
	d) Local – University/College	2 / each	—	—	
5.C	a) National level	5 /each	—	—	
	b) State level	2/each	—	—	
Total Score		175		30	26
Minimum API Score Required		70			

*Wherever relevant to any specific discipline, the API score for paper in refereed journal would be augmented as follows: (i) Indexed Journals – by 5 points; (ii) papers with impact factor between 1 and 2 by 10 points; (iii) papers with impact factor between 2 and 5 by 15 points; (iv) papers with impact factor between 5 and 10 by 25 points.

** If a paper presented in Conference/Seminar is published in the form of Proceedings, the points would accrue for the publication (III (a)) and not under presentation (III (e)(ii)). Note: The API for joint publications will have to be calculated in the following manner: Of the total score for the relevant category of publication by the concerned teacher, the first/Principal author and the corresponding author/supervisor/mentor of the teacher would share equally 60% of the total points and the remaining 40% would be shared equally by all other authors.

supporting documents, wherever required be attached.

	Category I	Category II	Category III	Total Score
Total Score	125	50	175	350
Minimum API Score Required	75	20	70	165
Total Self-Assessment Score	116	32	30	178.
Score by Screening/ selection committee	108	30	26	165

Date: 12/09/23
Place: Satara.

Signature of Faculty

Recommendation by screening team (Academic Monitoring Committee):
* Increase the papers publications.
* If possible register for PhD.

Member AMC | Head of Department | Registrar | Principal

(d)Performance Appraisal Form Page 4

Figure5.8:(a),(b),(c),and(d)Performanceappraisal formofMs. Ashlesha Mali

5.9: Visiting/Adjunct/Emeritus Faculty etc. (10)

Adjunct faculty also includes Industry experts. Provide details of participation and contribution in teaching and learning and/or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years.

- Provision of inviting/having visiting/adjunct/emeritus faculty (1)
- Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.
  (Minimum 50 hours interaction in a year will result in 3 marks for that year; 3 marks × 3 years = 9 marks)

The following are the details for the Visiting faculty in the department:

Sr. No.	Academic Year	Odd/Even Semester	Name of the Faculty	Class	Subject	Taken Hours
1	2019 – 2020	Even Semester	Mr. ShrikantKhaire	TY B.Tech	Control Systems	36
2	2020 – 2021	Odd Semester	Mr. Abhishek Tonpe	TY B.Tech Final Year B.Tech	Illumination Engineering Power System Operational Control	14 36
3	2020 – 2021	Even Semester	Mr. ShrikantKhaire	TY B.Tech	Control Systems	36
4	2021 – 2022	Odd Semester	Mr. Abhay Kale	TY B.Tech	Campus to Corporate	24
5	2021 – 2022	Even Semester	Mr. Abhay Kale	TY B.Tech	Campus to Corporate	28
6	2022 – 2023	Even Semester	Mr. Kenjale N.	TY B.Tech	Power Plant Engineering	28
7	2022 – 2023	Odd Semester	Mrs. Sunita S.	TY B.Tech	German Language	18
8	2022 – 2023	Odd Semester	Adv. Dixit Chandrakant	SY B.Tech	Basic Human Rights	22

CRITERION 06	FACILITIES AND TECHNICAL SUPPORT	80

6.1Adequateandwellequippedlaboratories,andtechnical manpower (30)

A. Adequate well-equipped laboratories to run all program-specific curriculum (20)

Sr. No	NameoftheLaboratory	No. ofstudentsperrsetup (BatchSize)	NameoftheImportant/ Majorequipment	Weeklyutilizationonstatus(all Thecoursesforwhichthelabisutilized	TechnicalManpowersupport		
					Name ofthetechnicalstaff	Designation	Qualification
1.	Power electronics and Electrical driveslaboratory	15	1.Single phase full controlled bridge converter trainer kit 2.Three Phase controlled converter kit 3. DC drive trainer 4. Digital Storage oscilloscope 100 MHz Two channel Model 403 Sl.No. 061587	8 Hr	Mr.KirtikudaveK	Lab assistant	ITI Electrical
2.	Electrical machines (AC)laboratory	15	1.Single phase transformer (Tapping on both side)230V/230V,2KVA 2. 3 Phase Transformer (tapping on both side)440/440V, 1KVA 3. Three phase induction motor 3 HP 415 V 1440rpm With control panel	4Hr	Mr. Shaikh A.A	Lab Assistant	Diploma in Electrical

			4.Synchronous motor,3HP,3phase 415V-DC shunt Generator2.2kw,220V,1 500RPM with control panel 5. 3 HP,230V,1500RPM DC shunt motor coupled to 3 phase /2KVA 415V/1500RPM/150HZ Alternator with base and coupling with control panel				
3.	Electrical machines (DC)laboratory	15	1. 3HP/230V/1551 RPM DC Shunt Motor with Control panel 2. 3HP/230 V/1500 RPM DC shunt motor coupled with each other with base & coupling with control panel 3. 3HP/230V/1500 RPM DC series motor coupled with each other with base & coupling with control panel 4. DC compound motor 3HP/230V 1500 RPM with mechanical loading arrangement with control panel	4Hr	Mr. Shaikh A.A	Lab Assistant	Diploma in Electrical

			5. Transformer rectifier unit input, 3 phase 415V AC Supply(50A)				
4.	Electrical power system and Simulation laboratory	15	.ACER ASP4760 Core 2 duo, 2 GB DDR2 RAM, 500 GB HDD, Dell 17" Square LCD Acer Keyboard, Mouse, DVD RW	12 Hr	Mr. Shaikh A.A	Lab Assistant	Diploma in Electrical
5.	Electrical and Electronics Measurements &Analog&digital electronics laboratory	15	1.Power factor meter (1.5 amp 250 V) 2.Earth tester with complete setup 3.Insulation Testerwith Accessories 5.LVDT trainer kit	4hr	Mr. Kirtikudave K	Lab assistant	ITI Electrical
6.	Network Theory laboratory	20	1. RC,RL Circuit Kit 2. Maximum power transfer theorem , Norton's , Thevenins theorem kit 3. Series resonance (RLC) AND RLC parallel resonance kit	4Hr	Mr. Kirtikudave K	Lab Assistant	ITI Electrical

7	Switchgear and Protection & Basic Electrical Engineering laboratory	20	1.IDMT Over-Current Relay Trainer kit 2.Directional Over-Current Relay Trainer kit 3.Microprocessor Based Over-Current Relay Trainer kit	4hr	Mr. Shaikh A.A	Lab Assistant	Diploma in Electrical

Table. 6.1 Adequate and well equipped laboratories, and technical man power

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)

Sr.No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Internet Facility	Internet facility with Bandwidth 300 Mbps and Wi-Fi of 3 Mbps/User is provided.	Seminar/Mini-projects/Assignments/Self Learning	36 Hours/Week	Courses specified in Curriculum, to access Moodle,	PO5, PO8,PO10 & PO12 PSOs 1
2	Smart Class Room	Intelligent Interactive Panel& projector facility with the seating capacity of 32	• Smart class room are utilized for animation and video lectures. • These digital teaching learning is more effective than traditional teaching	36 Hours/Week	Courses specified in Curriculum like Power system, Analog & digital electronics etc.	PO5, PO8,PO10 PSO 1

3	NPTEL Local Chapter	Institute having NPTEL Local Chapter & server of NPTEL Content	• To keep student abreast with latest technology • To provide national level platform to student	36 Hours/Week	To grasp important concept of various subjects and modern tools used in Electrical engineering.	PO 1,PO2,PO3,PO5 PSO1
4	Digital Library	IEEE Xplore Access	• To keep student abreast with latest technology • To provide national level platform to student	36 Hours/Week	Project work	PO1, PO2, PO3, PO5, PO12 PSOs 1
5	Surveillance Cameras for exam rooms	IP cameras	• To enhance the security of the department	36 Hours/Week	Security purpose	PO5 PSOs 2
6.	Language Laboratory	Institute having separate language laboratory for communication subjects like English.	Effective teaching learning for said subject and effective English communication	36 Hours/Week	Communication Skills, Spoken Tutorial	PO5, PO8,PO10 & PO12 PSO 1

7.	Moodle Learning Management System	Institute having separate Moodle learning management system to provide digital content.	• For online digital record maintenance like attendance, examination results, feedback For sharing digital study material	36 Hours/Week	Courses specified in Curriculum	PO5, PO8,PO10 PSO 1
8	Koha automation for library facility	Institute having separate Koha library	To provide automated fast service to student like searching, checking book availability, borrowing of books etc	36 Hours/Week	Courses specified in Curriculum	PO1,PO2,PO3,PO5 PSO1
9	Departmental Library	Program Specific text books and reference books	To provide additional support for students	36 Hours/Week	Courses specified in Curriculum	PO1, PO2, PO3, PO5, PO12 PSO 1
10	Virtual Labs	Electrical Machine lab(), Power Electronics Lab() High Voltage Engineering Lab ()	To provide advanced facilities	36 Hours/Week	Courses specified in Curriculum	PO1, PO2, PO3, PO5, PO12 PSO 1

11	Central Computing Facility	Ethernet/WiFi	Facility to staff and students for enhancing Teaching Learning	36 Hours/Week	Courses specified in Curriculum	PO5, PO8,PO10 & PO12 PSO 1

Table 6.2 Additional facilities created for improving the quality of learning experience in laboratories

6.3 Laboratories :Maintenance and overall ambiance(10)

Each laboratory maintains a dead stock register with details of all equipment's in laboratory. Onregular basis maintenance of laboratory is carried out by in-house maintenance engineer. One lab assistant is assigned for two labs.

6.3.1 MaintenanceandRecords

6.3.1.1 Maintenance:

1. All the equipment in the Laboratory is maintained on a regular basis by the concerned laboratory technicians under the guidance and supervision of the laboratory in charge
2. Equipment is marked with indelible ink marking to identify.
3. General servicing is done during summer vacation before commencement of academic year.

Servicing is also done whenever necessary. Electrical fitting is checked in on regular basis by electrician.

4. As per the requirement, minor repairs are carried out by the lab assistant.
5. Any equipment which is found defective or out of calibration shall be immediately
6. withdrawn from services.
7. The fire extinguisher is available and mounted properly.
8. In case of maintenance of equipment and other facilities
    i. Regular check-up of equipment is carried out.
    ii. Breakdowns are registered in the laboratories.
    iii. As per the requirement, minor repairs are carried out by the lab assistant.
    iv. Maintenance of computers is taken care by IT and COMPUTER department.
    v. Major repairs are done by authorized outsourced by following the procedure of the institute

6.3.1.2 Records :

1) Laboratories with an appropriate maintenance record system to suit its particular requirements.

2) Laboratories are retained on record all original observations, calculations Andderiveddata, calibration record for an appropriate period preferably not Lessthan 3 years.

3) Storage of data and records is readily available in soft copy as well as hard copy.

4) Records are maintained for each equipment/ instrument stating

the commissioningdate, capacity, accuracy, calibration etc.

5) Stock records for equipment and consumables are maintained in the departments.

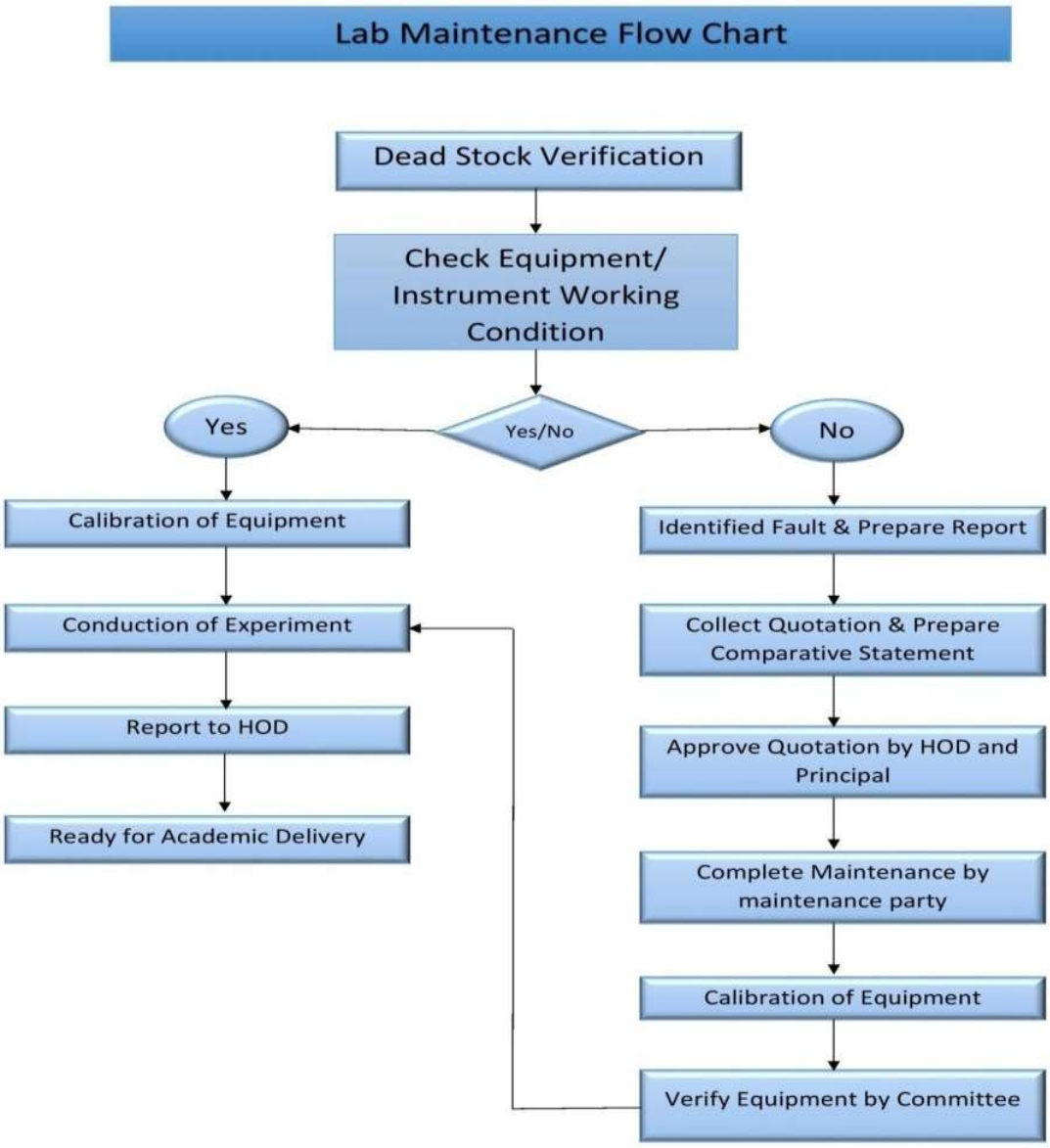


Fig.6.3.1 Lab Maintenance Flow Chart

6.3.1.3:Ambience

1. Laboratory area is spacious and furnished.

2. All laboratories have sufficient natural light and good ventilation.

3. Labs are also equipped with notice boards, black boards

4. Dusting and cleaning is done on regular basis

6.3.2 Measurement Traceability and Calibration:

SN	*Maintenance /Record facility*	*Details*	*Purpose*	*Utilization*	*Available /lab*	*Responsible Personal*	*Ambiance*
1	DeadStock Register	Aregister containing Detailsof equipment, tools, facility, Andsupplier with perspectives Withdate, time, purpose and signature.	To maintain inward record of all equipment, tooling and facilitates in a proper way	Lab assistant, LabIn charge	01	Lab In charge/ Lab Assistant	Good and Updated

2	Logbook	A register hard copy containing details of user with perspectives withdate, time, purpose andsignature.	To maintain labutilization details systematically in the proper way of recording. To get an indication to regulate maintenance of the equipment and facilities provided in the lab	All S.E., T.E., B.E. Students, Faculty, Staff of department	01	Lab Assistant	Good and updated
3	Laboratory Manual	Individual hard copy	To provide a stepwise experiment procedure to conduct experiments safely and a written format to make a report of lab experiment	All S.E., T.E., B.E. Students, Lab personnel , Assigned faculty of lab	01	Lab In charge	Good and updated

4	Laboratory preventive and breakdown register	A regi ster containing details	Experience collected over a long period to utilize thelab equipment properly and neatly to avoid any hazards to user and condition of the equipment.	Lab Assistant/ Technical staff and assigned Lab In charge.	01	Lab Assistant	Good and updated
5	Laboratory time-table	Timetables of student batches of all courses for which the lab isutilized along with thename and contact no of staffand technical labassistant available.	To know the engagement of the students as well staff and technical manpower concerned to the lab sothe floating of the lab utilization can be managed time to time.	All S.E., T.E., B.E. Students, Faculty, Staff of department	As per utilization	Lab In charge	Good and updated

6	Purchase orders and bills	Photocopy/ Xeroxof: Purchase ordersand billing details oflab equipment, tools, facility, maintenanc e and consumabl e materials, etc.	To maintain the records of purchase andbilling for further contact and maintenance aspects	Lab assistant, Lab In charge	As per condition	Lab In-Charge/ Lab Assistant	Good and updated
7	Consumable material record at	Hardcopy and details of consumabl e materials	To maintain the records of consumables	In-charge Faculty	01	In- charge Faculty	Good and updated.

Table. 6.3.2 Measurement Traceability and Calibration

A] Sample of Dead stock register

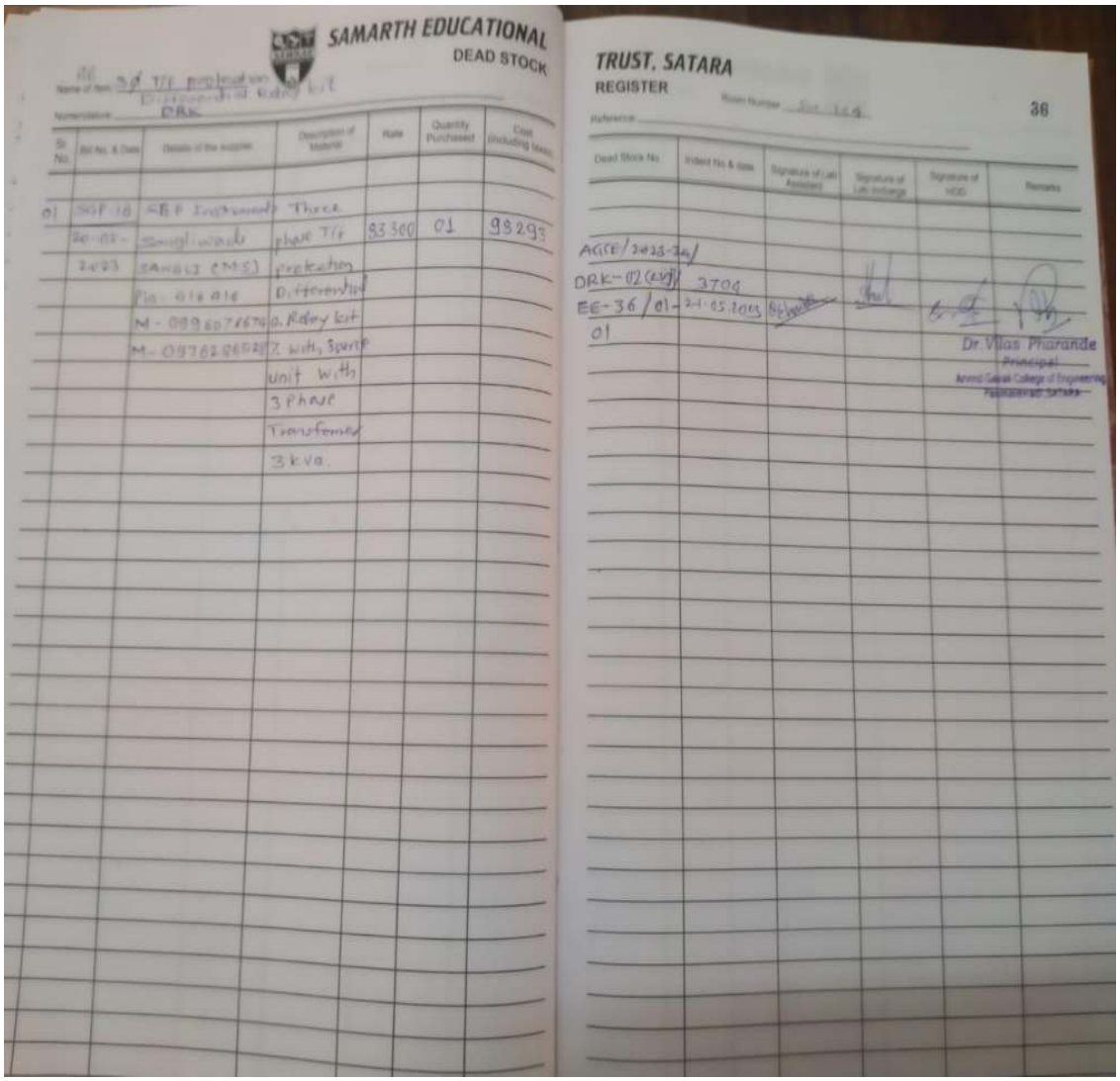
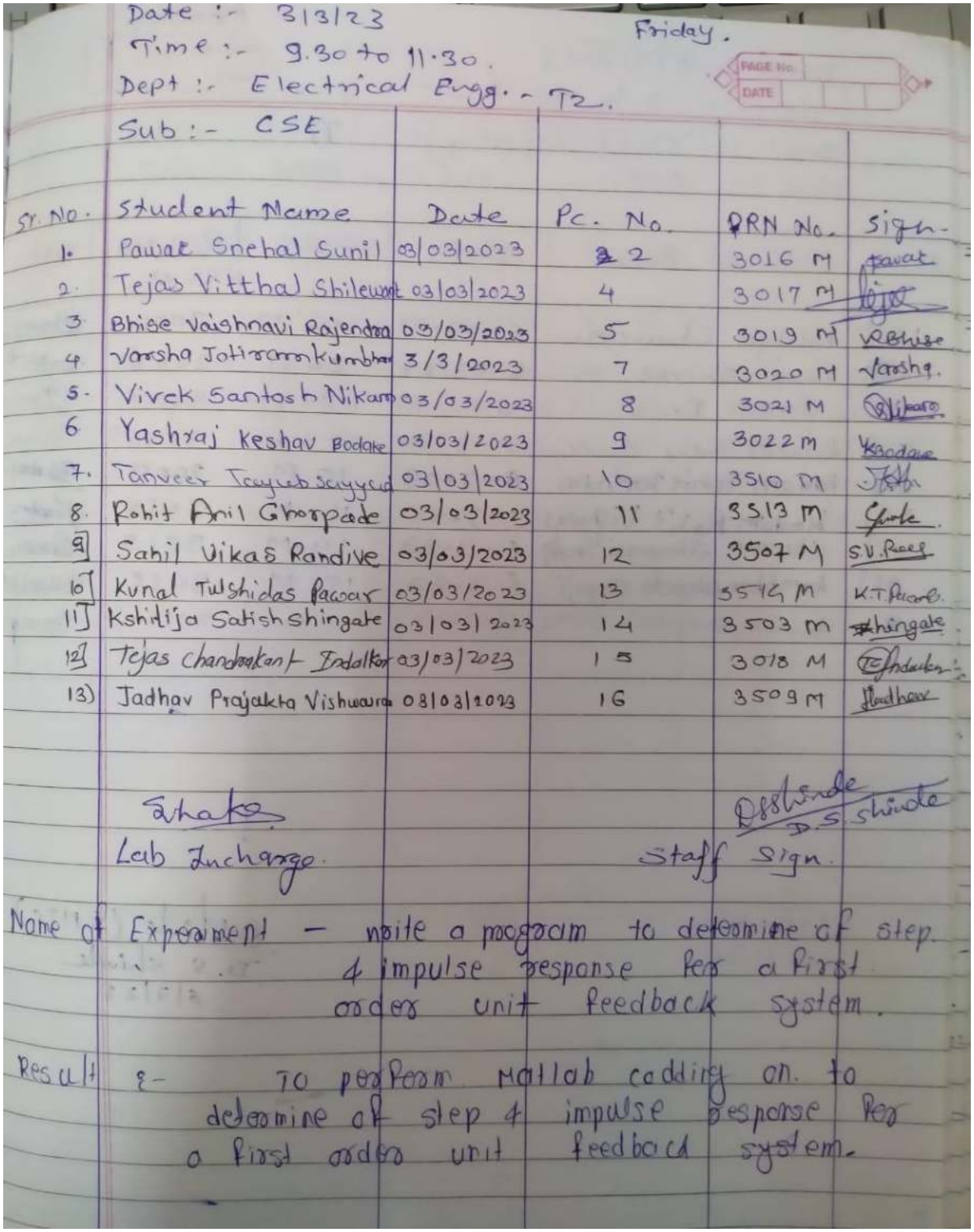


Fig 6.3.2 .A. Sample Copy of Dead stock register

B] Logbook :-



Date :- 3/3/23 Friday.
Time :- 9.30 to 11.30.
Dept :- Electrical Engg. - TE.
Sub :- CSE

Sr. No.	Student Name	Date	Pc. No.	PRN No.	Sign.
1.	Pawar Snehal Sunil	03/03/2023	2	3016 M	pawar
2.	Tejas Vitthal Shilewant	03/03/2023	4	3017 M	tejas
3.	Bhise Vaishnavi Rajendra	03/03/2023	5	3019 M	vaishnavi
4.	Varsha Jotiram Kumbhar	3/3/2023	7	3020 M	Varsha.
5.	Vivek Santosh Nikam	03/03/2023	8	3021 M	Nikam.
6.	Yashraj Keshav Bodake	03/03/2023	9	3022 M	Ybodake
7.	Tanveer Tayyab Sayyed	03/03/2023	10	3510 M	Sayyed
8.	Rohit Anil Ghorpade	03/03/2023	11	3513 M	Ghorpade.
9]	Sahil Vikas Randive	03/03/2023	12	3507 M	S.V.Randive
10]	Kunal Tulshidas Pawar	03/03/2023	13	3514 M	K.T.Pawar.
11]	Kshitija Satish Shingate	03/03/2023	14	3503 m	Shingate.
12]	Tejas Chandrakant Indalkar	03/03/2023	15	3018 M	Indalkar.
13)	Jadhav Prajakta Vishwajit	03/03/2023	16	3509 M	Jadhav

Shaikh
Lab Incharge.

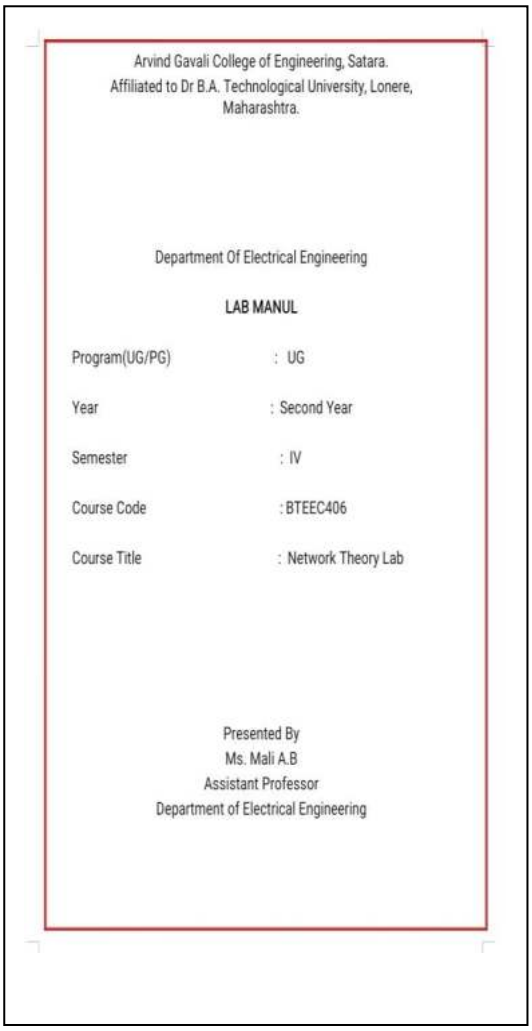
D.S. Shinde
Staff Sign.

Name of Experiment - Write a program to determine of step & impulse response for a first order unit feedback system.

Result :- To perform Matlab coding on to determine of step & impulse response for a first order unit feedback system.

Fig 6.3.2 .B. Logbook

C] Sample Lab Manual



Arvind Gavali College of Engineering, Satara.
Affiliated to Dr B.A. Technological University, Lonere, Maharashtra.

Department Of Electrical Engineering

LAB MANUL

Program(UG/PG) : UG

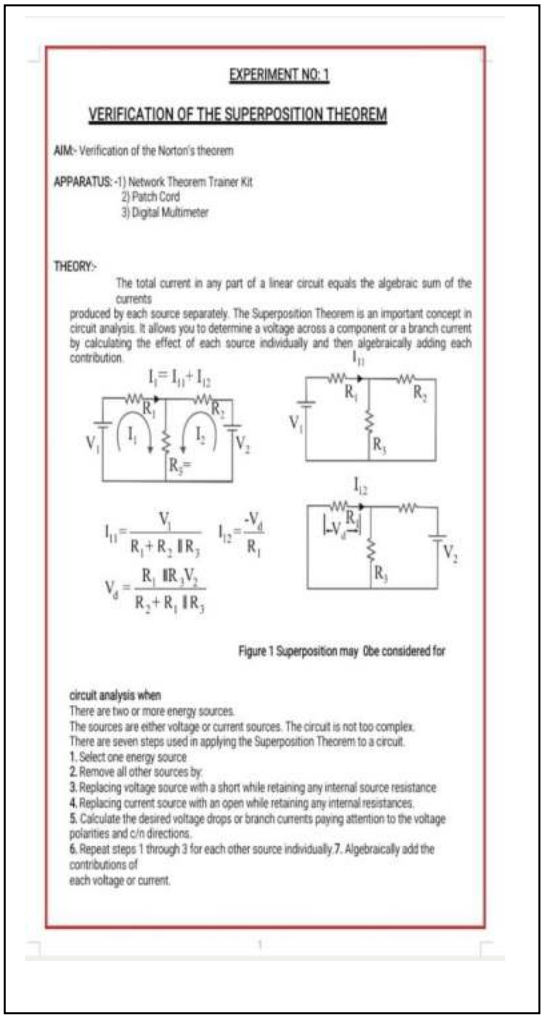
Year : Second Year

Semester : IV

Course Code : BTEEC406

Course Title : Network Theory Lab

Presented By
Ms. Mali A.B
Assistant Professor
Department of Electrical Engineering



EXPERIMENT NO: 1

VERIFICATION OF THE SUPERPOSITION THEOREM

AIM:- Verification of the Norton's theorem

APPARATUS: -1) Network Theorem Trainer Kit
2) Patch Cord
3) Digital Multimeter

THEORY:-

The total current in any part of a linear circuit equals the algebraic sum of the currents produced by each source separately. The Superposition Theorem is an important concept in circuit analysis. It allows you to determine a voltage across a component or a branch current by calculating the effect of each source individually and then algebraically adding each contribution.

$I_1 = I_{11} + I_{12}$

$I_{11} = \frac{V_1}{R_1 + R_2 \| R_3}$ $I_{12} = \frac{-V_d}{R_1}$

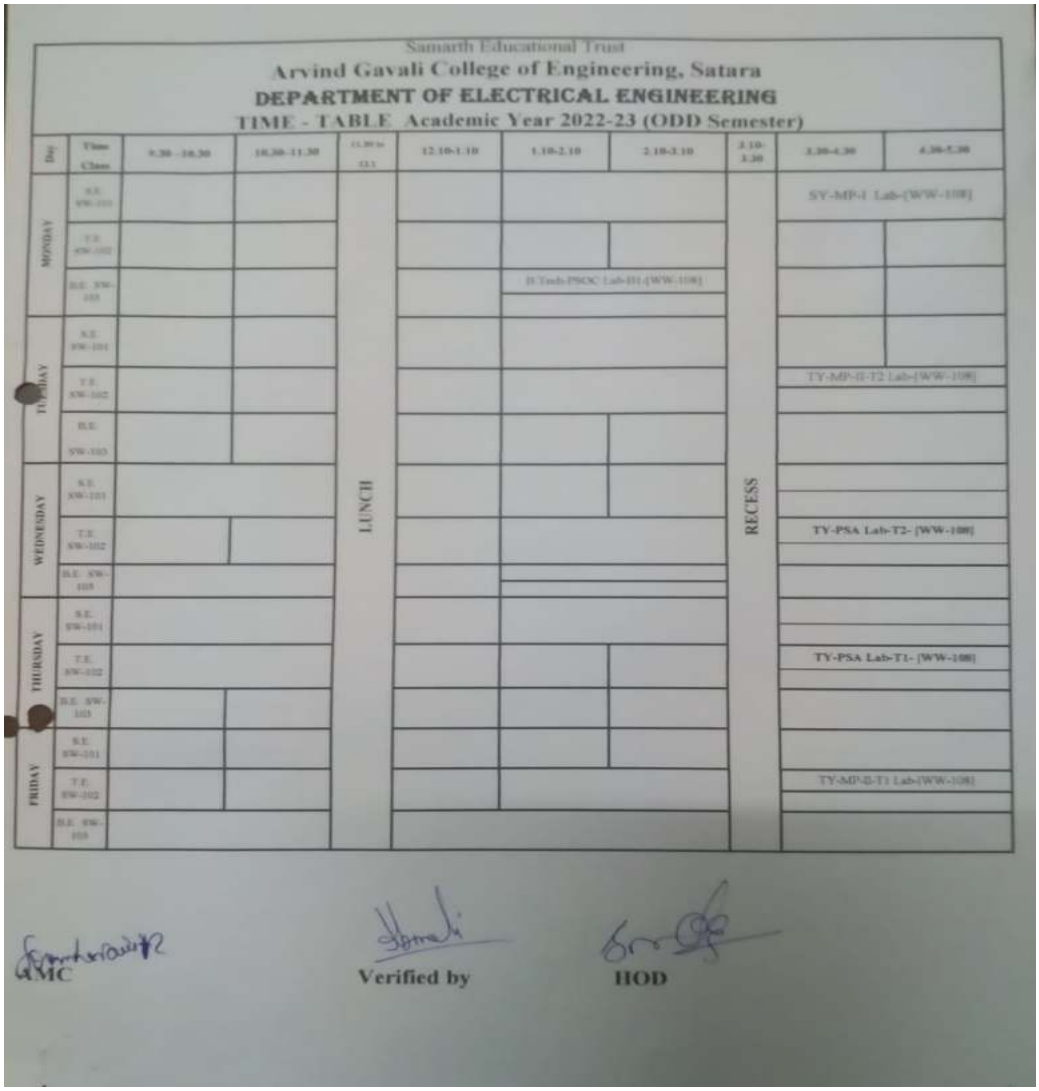
$V_d = \frac{R_1 \| R_3 V_2}{R_2 + R_1 \| R_3}$

Figure 1 Superposition may Obe considered for

circuit analysis when
There are two or more energy sources.
The sources are either voltage or current sources. The circuit is not too complex.
There are seven steps used in applying the Superposition Theorem to a circuit.
1. Select one energy source
2. Remove all other sources by:
3. Replacing voltage source with a short while retaining any internal source resistance
4. Replacing current source with an open while retaining any internal resistances.
5. Calculate the desired voltage drops or branch currents paying attention to the voltage polarities and c/n directions.
6. Repeat steps 1 through 3 for each other source individually.7. Algebraically add the contributions of
each voltage or current.

Fig 6.3.2 .C. Sample Lab Manual

D] SampleLabTimeTable:



Samarth Educational Trust

Arvind Gavali College of Engineering, Satara

DEPARTMENT OF ELECTRICAL ENGINEERING

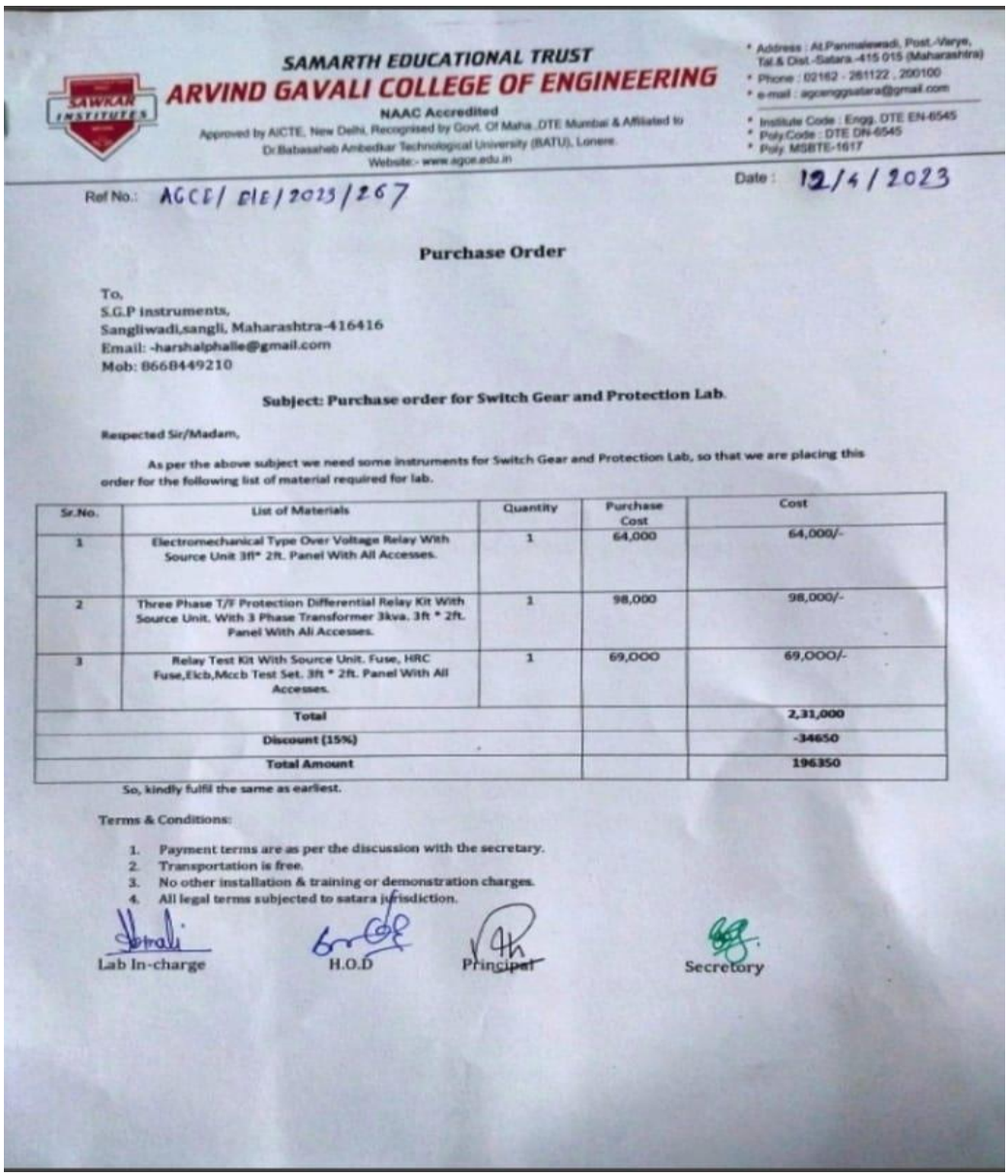
TIME - TABLE Academic Year 2022-23 (ODD Semester)

Day	Time / Class	9.30–10.30	10.30–11.30	11.30 to 12.1	12.10-1.10	1.10-2.10	2.10-3.10	3.10-3.30	3.30-4.30	4.30-5.30
MONDAY	S.E. SW-101			LUNCH				RECESS	SY-MP-I Lab-[WW-108]	
	T.E. SW-102									
	B.E. SW-103					B.Tech-PSOC Lab-III-[WW-108]				
TUESDAY	S.E. SW-101									
	T.E. SW-102								TY-MP-II-T2 Lab-[WW-108]	
	B.E. SW-103									
WEDNESDAY	S.E. SW-101									
	T.E. SW-102								TY-PSA Lab-T2- [WW-108]	
	B.E. SW-103									
THURSDAY	S.E. SW-101									
	T.E. SW-102								TY-PSA Lab-T1- [WW-108]	
	B.E. SW-103									
FRIDAY	S.E. SW-101									
	T.E. SW-102								TY-MP-II-T1 Lab-[WW-108]	
	B.E. SW-103									

IQAC Verified by HOD

Fig 6.3.2 .D. Lab Time Table

E] Sample purchase orders and bills-



SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING

NAAC Accredited

Approved by AICTE, New Delhi, Recognised by Govt. Of Maha.,DTE Mumbai & Affiliated to Dr.Babasaheb Ambedkar Technological University (BATU), Lonere.

Website:- www.agce.edu.in

* Address : At.Panmalewadi, Post.-Varye, Tal.& Dist.-Satara.-415 015 (Maharashtra)
* Phone : 02162 - 281122 , 200100
* e-mail : agcenggsatara@gmail.com
* Institute Code : Engg. DTE EN-6545
* Poly.Code : DTE DN-6545
* Poly. MSBTE-1617

Ref No.: AGCE/ EE/2023/267

Date : 12/4/2023

Purchase Order

To,
S.G.P instruments,
Sangliwadi,sangli, Maharashtra-416416
Email: -harshalphalle@gmail.com
Mob: 8668449210

Subject: Purchase order for Switch Gear and Protection Lab.

Respected Sir/Madam,

As per the above subject we need some instruments for Switch Gear and Protection Lab, so that we are placing this order for the following list of material required for lab.

Sr.No.	List of Materials	Quantity	Purchase Cost	Cost
1	Electromechanical Type Over Voltage Relay With Source Unit 3ft* 2ft. Panel With All Accesses.	1	64,000	64,000/-
2	Three Phase T/F Protection Differential Relay Kit With Source Unit. With 3 Phase Transformer 3kva. 3ft * 2ft. Panel With All Accesses.	1	98,000	98,000/-
3	Relay Test Kit With Source Unit. Fuse, HRC Fuse,Elcb,Mccb Test Set. 3ft * 2ft. Panel With All Accesses.	1	69,000	69,000/-
	Total			**2,31,000**
	Discount (15%)			**-34650**
	Total Amount			**196350**

So, kindly fulfil the same as earliest.

Terms & Conditions:

1. Payment terms are as per the discussion with the secretary.
2. Transportation is free.
3. No other installation & training or demonstration charges.
4. All legal terms subjected to satara jurisdiction.

Lab In-charge H.O.D Principal Secretory

Fig.a.

1

S.G.P.INSTRUMENT'S.

TAX-INVOICE

SANGLIWADI, SANGLI. 09960766740, 09762865287. E-mail- harshalphalle@gmail.com

Designing & Manufacturing of AC & DC machine lab, Switch Gear lab, Power lab, Measurement lab, Control lab, Industrial lab, Instrumentation lab Educational Instruments.

To- ARVIND GAVALI COLLEGE OF ENGG.
SATARA

PARTY GSTIN No.-

Bill No-SGP-16. Date- 20.05.2023.

PO R. No. – AGCE/ELE/2023/267.

Sr. No.	Name of Materials.	Qty.	Cost	Amount
1.	Electromechanical Type Over Voltage Relay With Source Unit	1No.	54,400-00	54,400-00
2.	Three Phase T/F Protection Differential Relay Kit With Source Unit. With 3 Phase Transformer 3kva.	1No.	83,300-00	83,300-00
3.	Relay Test Kit With Source Unit. Fuse, HRC Fusc, Elcb, Mccb Test Set	1No.	58,650-00	58,650-00
			TOTAL	1,96,350-00
			SGST @09%	+17,671-00
			CGST @ 09%	+17,671-00
	GSTIN NO.-27BACPP3863R1ZX.		**TOTAL AMOUNT**	**2,31,692-00**

Rs. In Words-Two Lakh Thirty-One Thousand Six Hundred Ninety Two Only.

I/we here by certify that my/our registration certificate under the GST ACT 2017 is in force on the data on which the sales of goods specified in this tax invoice in made by me/us.

For: SGP INSTRUMENT'S

SGP Instruments SANGLI

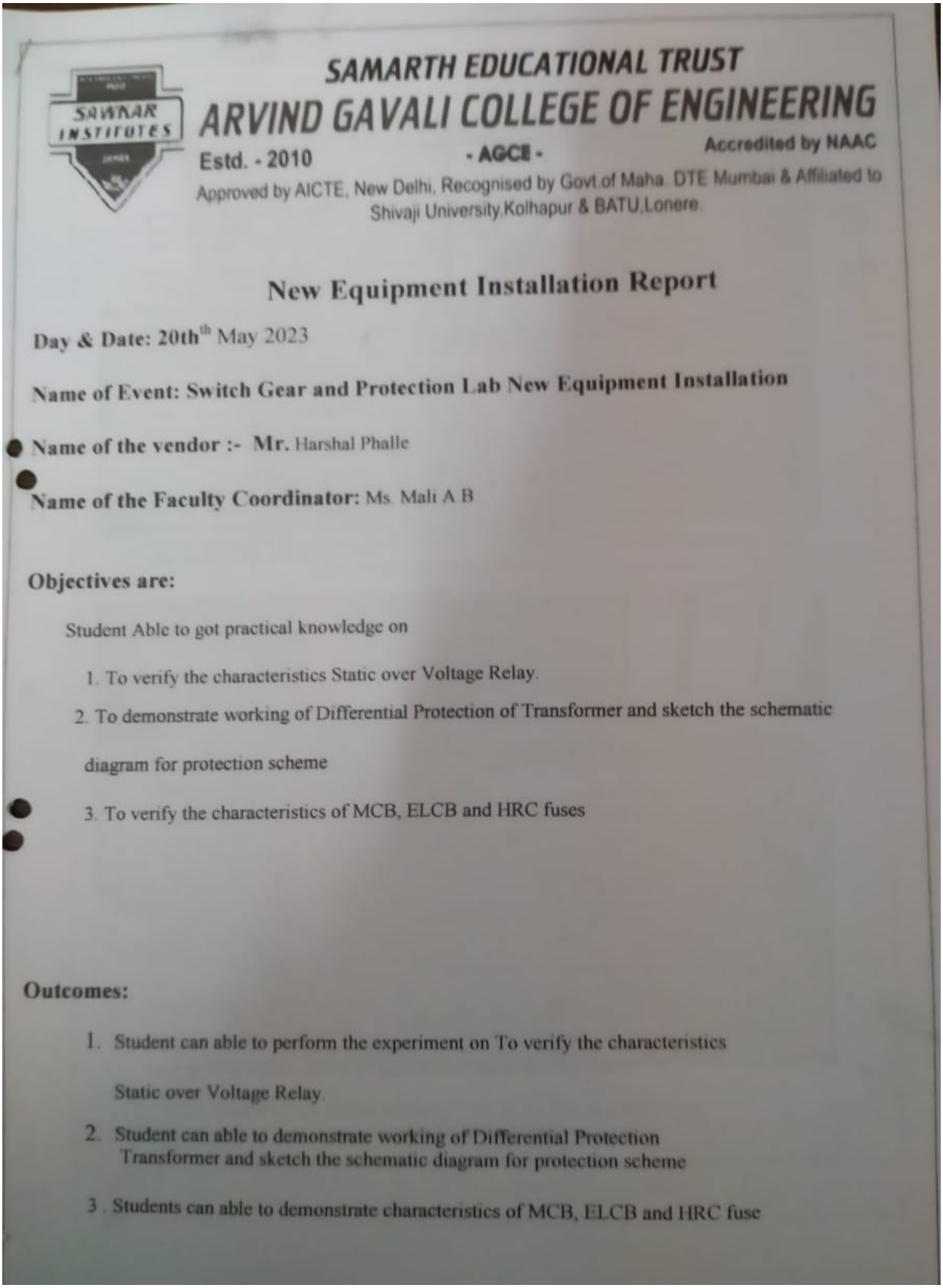
(Authorized Signatures)

NOTE- ALL MATERIAL ARE RECEIVED IS GOOD CONDITION AND DEMOSTRATION IS SATISFIDE.

Head of Electrical Engineering
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA, Panmalewadi (Varye)

Paid

Fig.b.



SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING

Estd. - 2010 - AGCE - Accredited by NAAC

Approved by AICTE, New Delhi, Recognised by Govt.of Maha. DTE Mumbai & Affiliated to Shivaji University,Kolhapur & BATU,Lonere.

New Equipment Installation Report

Day & Date: 20th May 2023

Name of Event: Switch Gear and Protection Lab New Equipment Installation

Name of the vendor :- Mr. Harshal Phalle

Name of the Faculty Coordinator: Ms. Mali A B

Objectives are:

Student Able to got practical knowledge on

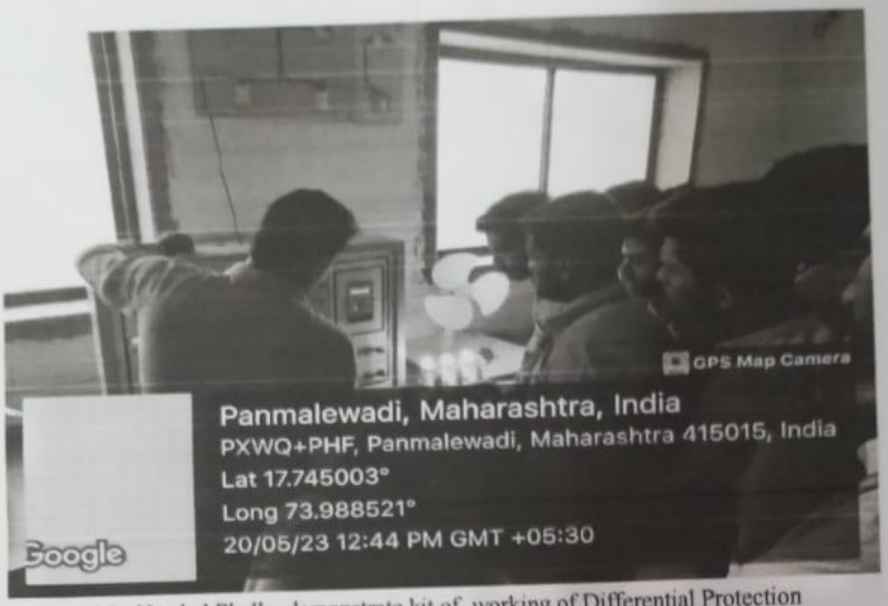
1. To verify the characteristics Static over Voltage Relay.
2. To demonstrate working of Differential Protection of Transformer and sketch the schematic diagram for protection scheme
3. To verify the characteristics of MCB, ELCB and HRC fuses

Outcomes:

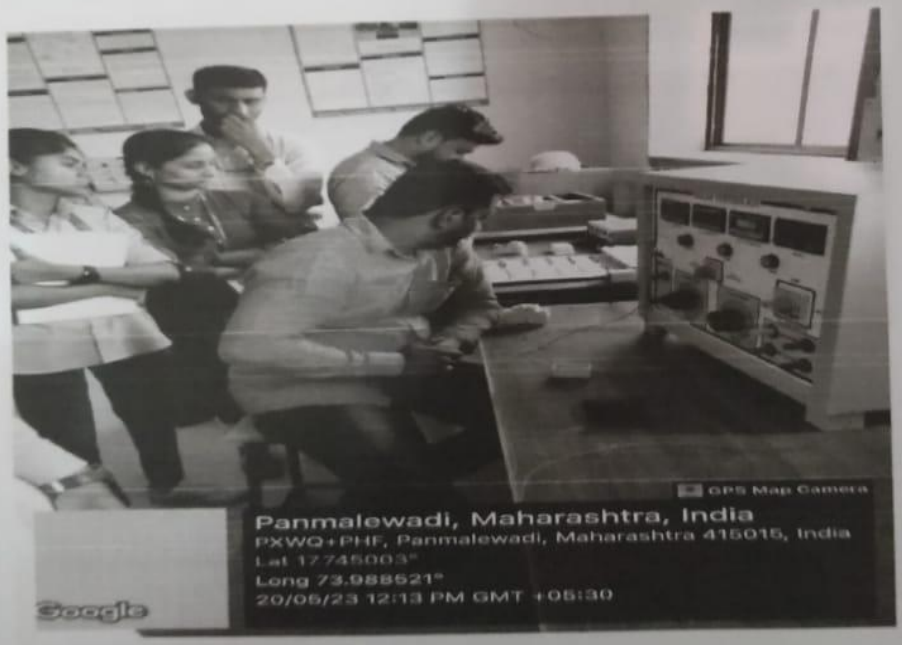
1. Student can able to perform the experiment on To verify the characteristics Static over Voltage Relay.
2. Student can able to demonstrate working of Differential Protection Transformer and sketch the schematic diagram for protection scheme
3. Students can able to demonstrate characteristics of MCB, ELCB and HRC fuse

Fig.c.

Photograph:



Mr. Harshal Phalle demonstrate kit of working of Differential Protection Transformer for different faults



demonstrate characteristics of MCB, ELCB and HRC fuse

Fig.d.

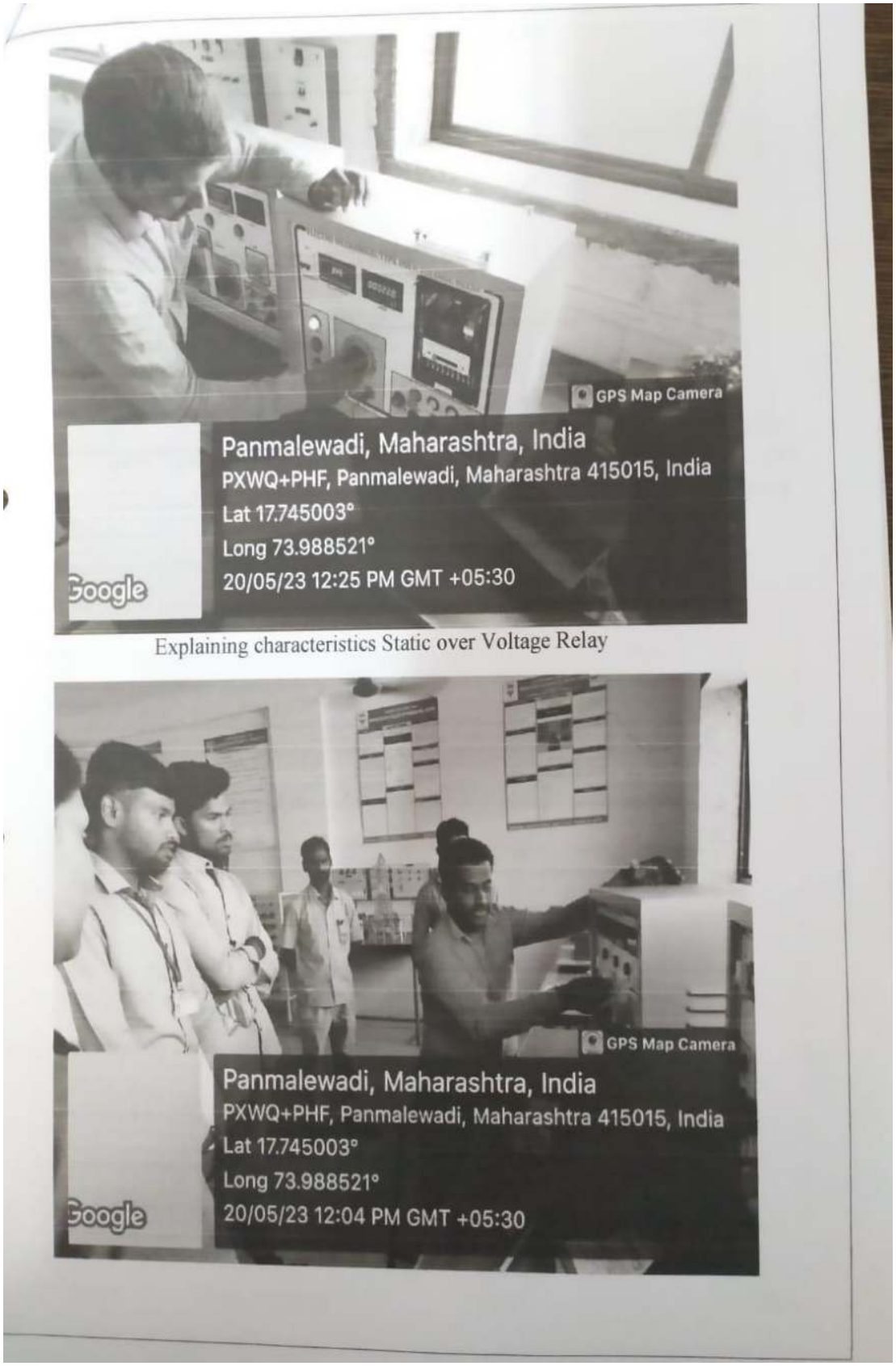

GPS Map Camera
Panmalewadi, Maharashtra, India
PXWQ+PHF, Panmalewadi, Maharashtra 415015, India
Lat 17.745003°
Long 73.988521°
20/05/23 12:25 PM GMT +05:30
Google
Explaining characteristics Static over Voltage Relay
GPS Map Camera
Panmalewadi, Maharashtra, India
PXWQ+PHF, Panmalewadi, Maharashtra 415015, India
Lat 17.745003°
Long 73.988521°
20/05/23 12:04 PM GMT +05:30
Google

Fig. e.

Circuit Diagram :

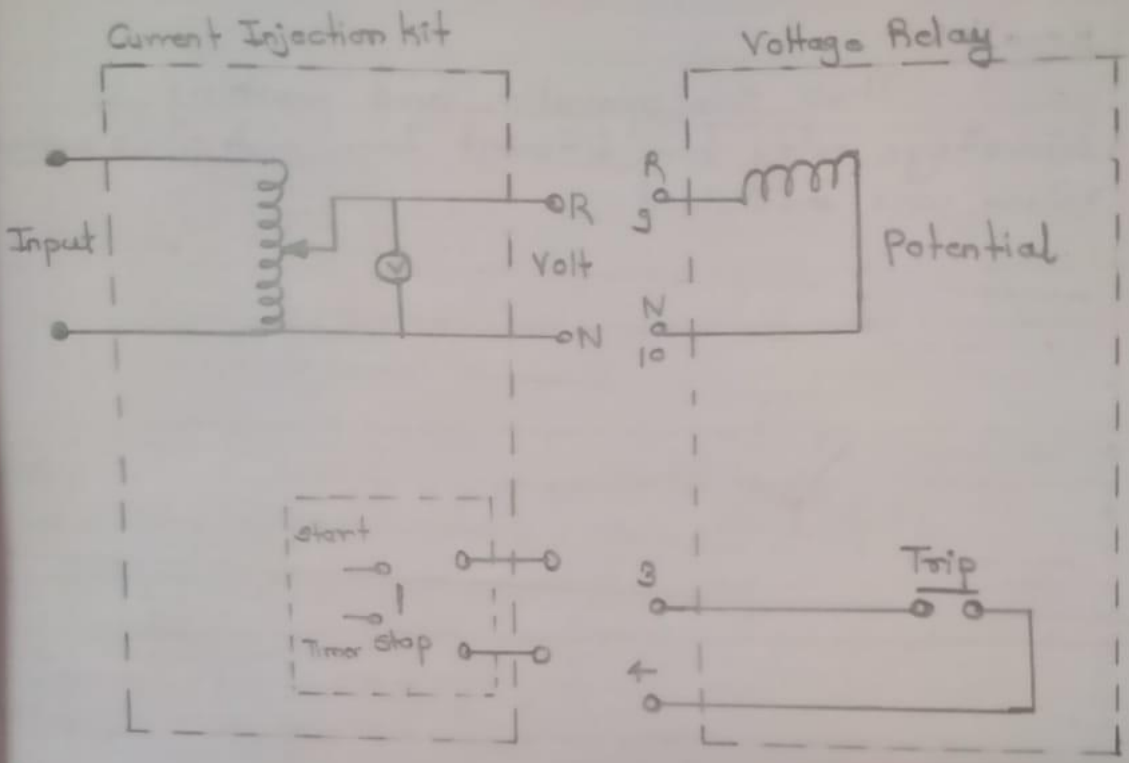


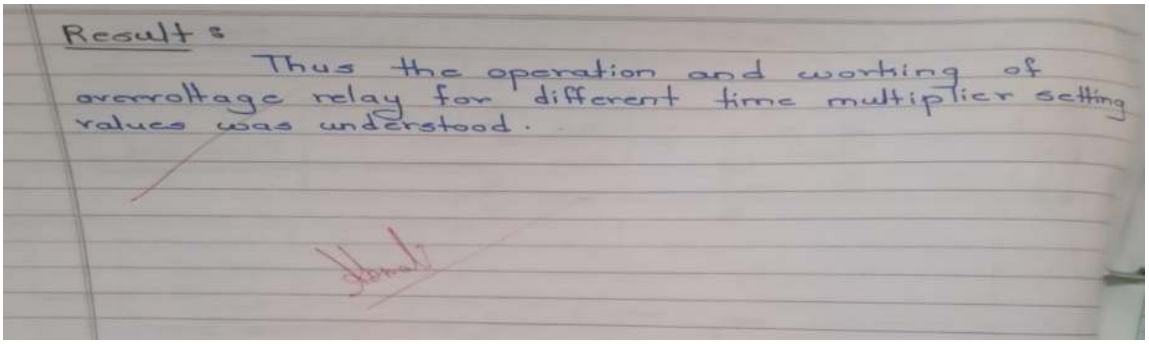
Fig: Static Over voltage relay

Tabular column :-

Plug setting multiplier = 193.

Sr. No.	Voltge given	Time required.
1)	160	16.2
2)	170	10.2
3)	180	7.4
4)	190	5.9
5)	200	5.0

Fig. f.


Result :
Thus the operation and working of overvoltage relay for different time multiplier setting values was understood.

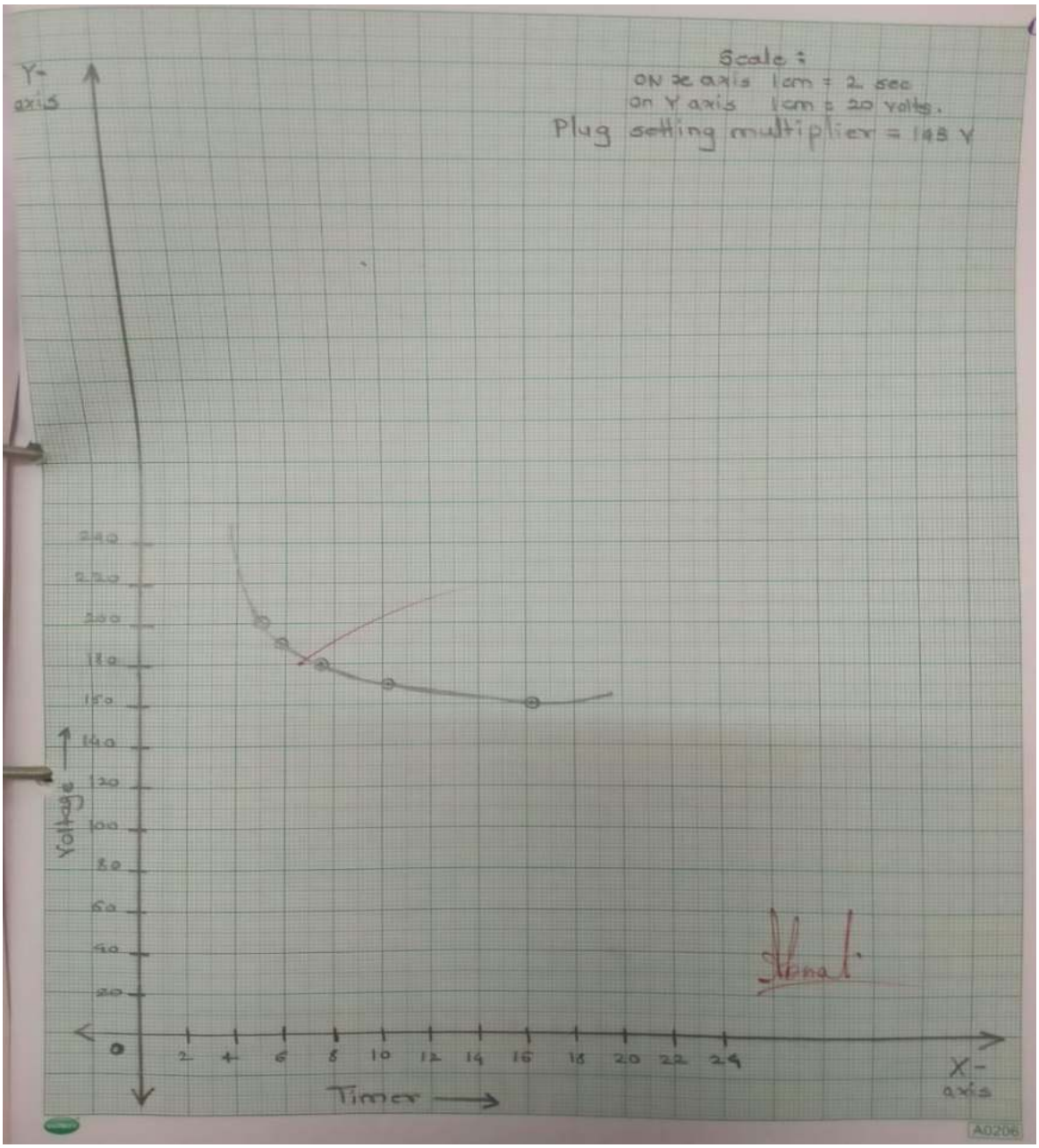

Y-axis
Scale :
ON x axis 1cm = 2 sec
on Y axis 1cm = 20 volts.
Plug setting multiplier = 145 V
Voltage
Timer
X-axis
0
2
4
6
8
10
12
14
16
18
20
22
24

Fig.g.

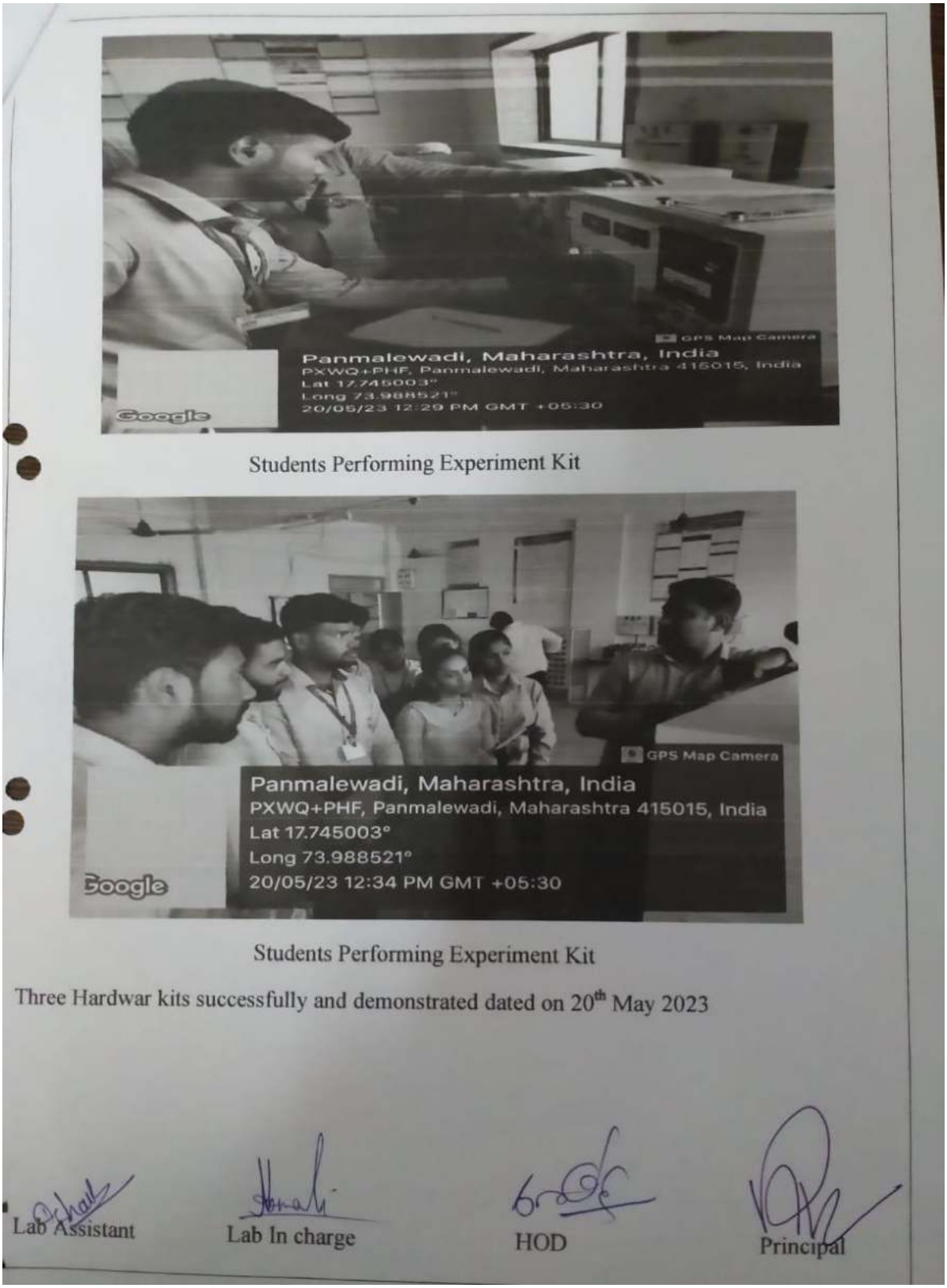


Fig 6.3.2 .E .a,b,c,d,f,g Sample purchase orders, bills and report.

F] Sample consumable material record of department level:

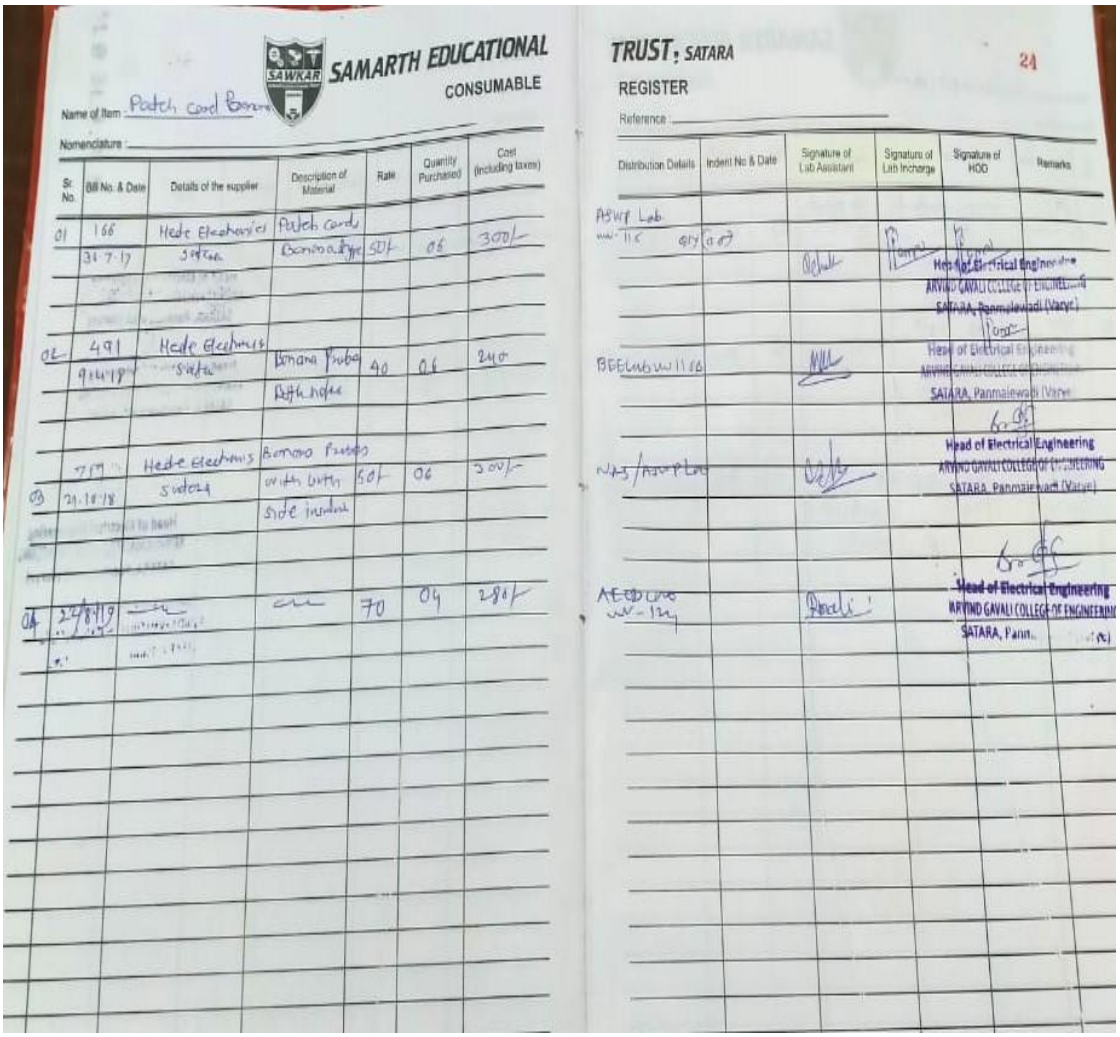
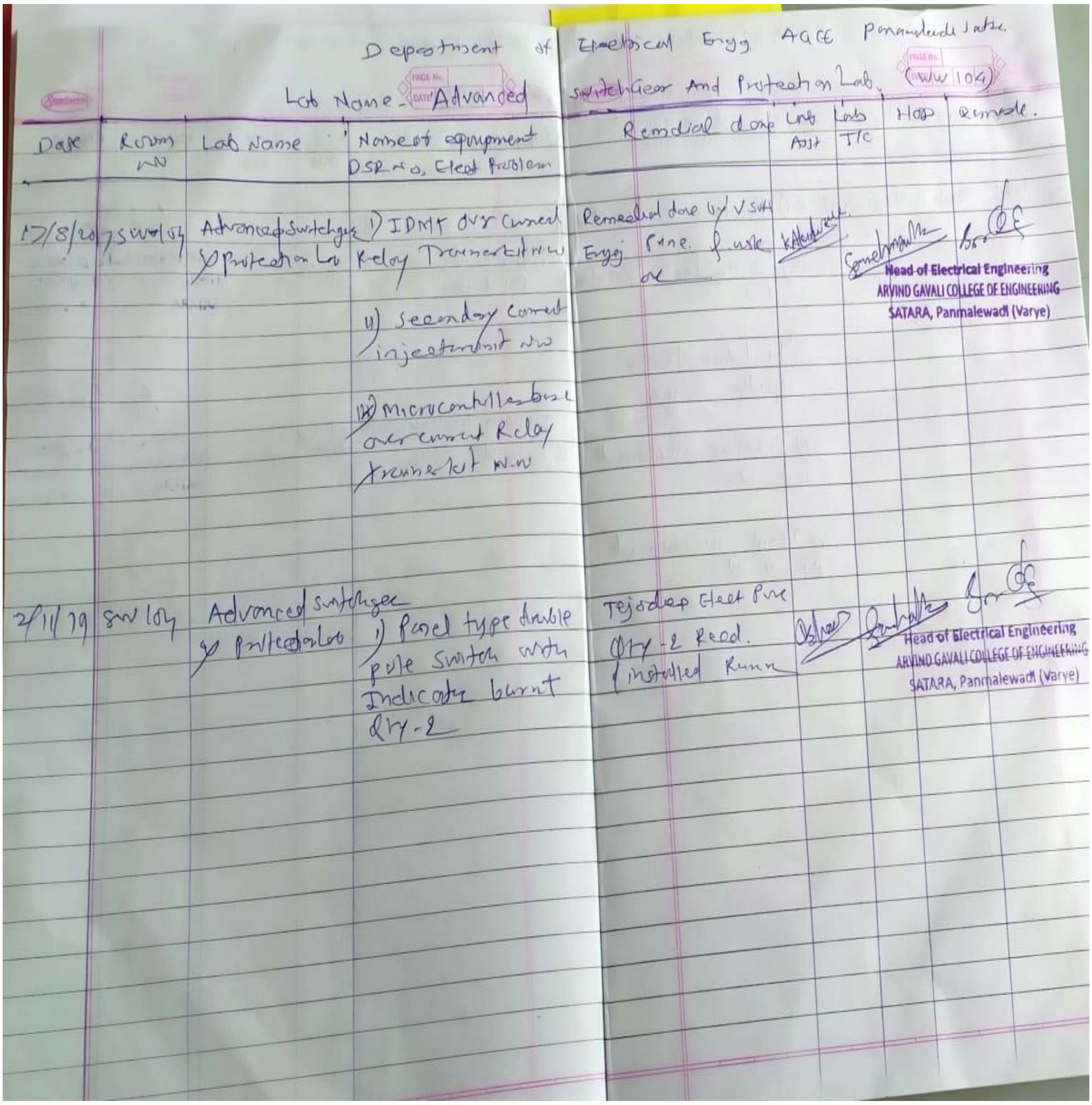


Fig. 6.3.2.F. Sample consumable material record of department level

G] Laboratory preventive and breakdown register:-



Department of Electrical Engg AGCE Panmalewadi Satara

Lab Name - Advanced Switchgear And Protection Lab. (SW 104)

Date	Room No	Lab Name	Name of equipment DSR no, Elect Problem	Remedial done	Lab Asst	Lab I/C	HOD	Remark
17/8/20	SW 104	Advanced Switchgear & Protection Lab	i) IDMT over Current Relay Trainer kit n.w ii) Secondary current injection unit n.w iii) Microcontroller base overcurrent Relay trainer kit n.w	Remedial done by V Sutt Engg Pune & use OK	[illegible]	[illegible]	Head of Electrical Engineering ARVIND GAVALI COLLEGE OF ENGINEERING SATARA, Panmalewadi (Varye)	
2/11/19	SW 104	Advanced Switchgear & Protection Lab	i) Panel type double pole switch with Indicator burnt Qty-2	Tejasdeep Elect Pune Qty-2 Reqd. & installed Running	[illegible]	[illegible]	Head of Electrical Engineering ARVIND GAVALI COLLEGE OF ENGINEERING SATARA, Panmalewadi (Varye)	

Fig. 6.3.2.G. Sample consumable material record of department level

6.4 Project laboratories (05)

Department of electrical engineering has one separate dedicated project laboratory.The project laboratory offers the opportunity to gain valuable hands-on experience with adequate facilities and equipment.

Sr. No.	Name Of Lab	Name Of Equipment	Purpose
1	Project Lab (104)	Single Phase Transformer, Voltmeter, Ammeter, wattmeter, Three Phase Transformer, DC Motor, PLC Kit	Hardware implementation, Analysis, Measurement, Experimentation and Project work.

Fig 6.4 Project demonstration by students

6.5 Safety measures in laboratories (10)

Sr. No	LaboratoryName	SafetyMeasures
1	Power electronics and electrical drives laboratory	1) Safety instructions are placed in lab notice board. 2) All Laboratory Equipment are maintained along with electrical ground earthing. 3) The fire extinguishers are installed near labs, staff and students are trained to use them in case of an emergency. 4) Electrical Wires are protected byMCB,RCBO,fuses and electrical fitting checking is carried by technician periodically. 5) For emergency of electrical issue MCB's are mounted in all power lines. Separate earthling for lab has been provided. 6) All laboratories are fully ventilated along with full light and fan arrangement. 7) Each laboratory maintains student entry register. 8) One Teaching faculty and lab assistant are in-charge of the overall maintenance of lab.
2	Electrical machine (AC) laboratory	
3	Electrical Machine (DC) Laboratory	
4	Electrical Power System Laboratory	
5	Measurement &Instrument Laboratory	
6	Analog digital electronics And network analysis synthesis laboratory	

Table. 6.5 .Safety measures in laboratories

CRITERION 07	CONTINUOUS IMPROVEMENT	50

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Pos and PSOs Attainment Levels and Actions for improvement: 2021-22

PO/PSO	1	2	3	4	5	6	7	8	9	10	11	12	PSO1	PSO2
Target	2.43	2.48	2.15	2.28	2.18	2.12	2.10	2.13	2.00	2.08	2.35	1.84	1.97	1.85
Attainment	2.79	2.77	2.80	2.79	2.73	2.80	2.79	2.74	2.80	2.77	2.88	2.82	2.76	2.74

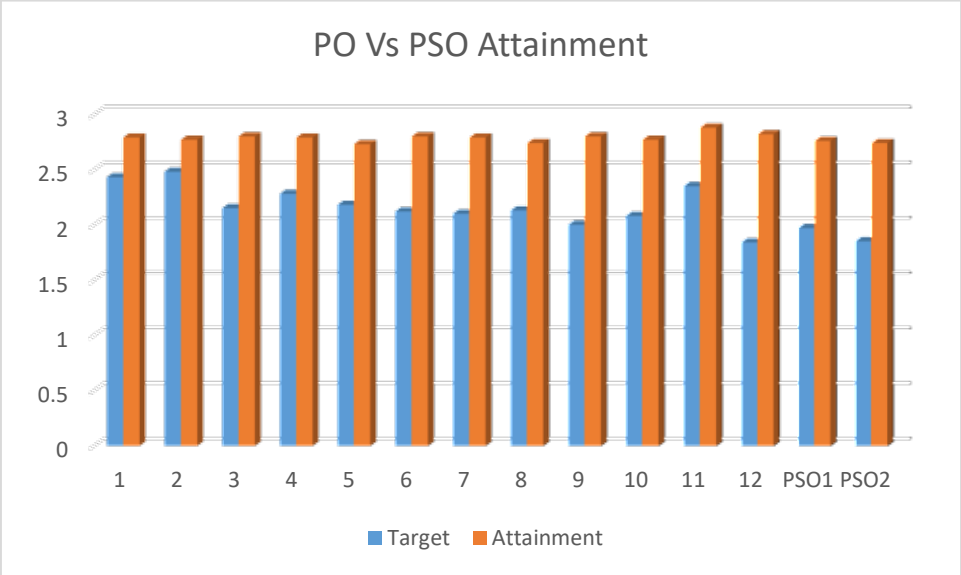


Figure.7.1a PO Target vs. PSO Attainment for year 2021-22

PO's	Target Level	Attainment Level	Observations
PO1: Engineering knowledge: Apply knowledge of mathematics, science and engineering to solve engineering problems			
PO1	2.43	2.79	• Target is achieved due to engineering knowledge and solving engineering problems.

Action 1: Separate class is arranged for all lateral entry direct second year admitted students to cover entire syllabus from starting with prerequisites.

Action 2: Department has been taken effort for slow and advance learner.

Action 3: More prominence given on assignment solving, discussed case studies and puzzles.

PO2: Problem analysis: Identify, formulate and analyze engineering problems

PO2	2.48	2.77	• Target achieved first and second year students secure problem solving and analyzing skills through various basic courses like Engineering Mathematics-III, Numerical Methods, programming, Network Analysis and Synthesis & Power System.

Action 1: To solve different level of numerical assignments to identify, formulate and analyze engineering problems students need to do.

Action 2: For slow learners remedial coaching class is provided for subject like Network Analysis & Mathematics-III.

Action3: Effort has been made for development of mini projects.

PO3: Design/development of solutions: Design and develop solution for systems or processes that meet the specified needs for health & safety, cultural, societal and environmental considerations

PO3	2.15	2.80	• Target achieved, Some of courses like Projects, Audit Courses (Engineering Economics, Basic Human Rights & Value Education, Human Rights and Legislative Procedures)

Action 1: Students are involved in various social events organized by electrical engineering department like vidyut suraksha abhiyan, tree plantation, no vehicle day, blood donation camp, swachta abhiyan

Action 2: NSS organizes regularly various events such as PUC camp, Women's Safety measure workshop, traffic awareness program. Geo tagging. etc.

Action 3: Road safety awareness events organized by college with the in association RTO.

PO4: Conduct investigations of problems: Design and Conduct experiments as well as to analyze and interpret data to provide valid conclusions

PO4	2.28	2.79	• Target achieved, university curriculum directly less contributing to attainment of this PO. • Indirect attainment is achieved .
Action 1 : Students are exposed to practical problems through project based learning and industry sponsor projects. **Action 2:** More attempt to do on planning and execution of internship has been carried out.			
PO5: Modern tool usage: Use the techniques, skills and modern engineering tools necessary practice			
PO5	2.18	2.73	• Target achieved, in most of subjects use of open source tool is online expert/industrial talks, spoken tutorial, virtual labs, MOOC courses like NPTEL, Course etc.
Action 1: Department has been initiated for faculty members to focusing on utilizing modern tools for effective teaching which includes online expert/industrial talks, spoken tutorial, virtual labs, NPTEL, Course etc. **Action 2:** Focuses on availability of modern equipment & tools like availability smart class room and projectors in classroom, industrial training, and industry supported labs the department will take care helped to achieved target.			
PO6: The engineer and society: Apply the broad education necessary to understand the impact of engineering solutions in a global, economic and societal context			
PO6	2.12	2.80	• Target achieved, it is observed that adding of responsibilities towards solving societal and health issues needs to be focused.

Action 1: Safety concerns and social aspects, open elective courses (Introduction to Non-Conventional energy sources & Electrical Mobility) selected for understanding.

Action 2: Projects oriented on Industry (Electrical Power System/ Electrical Machine), Renewable energy sources (Solar), security and social issues were importance is given.

Action 3: Industry expert talks are arranged & Industry visit, Field training/industry internship to make students aware about power sector problems related issues.

Action 4: Few students are going abroad for completing their post graduation (MS) in reputed universities in specific domain of their own choice.

PO7: Environment and sustainability: Understand the impact of engineering solutions in environmental contexts and demonstrate the need of sustainable development			
PO7	2.10	2.79	• Target is achieved, environment and sustainability related various activities.

Action 1: Different initiatives such as tree plantation, no vehicle day, PUC camp organized.

Action 2: Students are encouraged to select their projects to reduce environmental impact by conserving energy, environmental friendly fluids / processes for sustainable Environment.

Action 3: Promoted paperless work through online submission to MOODLE and use of one sided paper for notices on notices board etc.

PO8: Ethics: Carry out professional and ethical responsibility			
PO8	2.13	2.74	• Target is achieved through good margin. • University curriculum offered few courses like Value Education, Human Rights and Legislative Procedures.

Action 1: Individual GFM (Guardian Faculty Member) is appointed for batch of 20 students for personal issues address, for counseling, for teaching ethics.

Action 2: Different industry culture awareness programs are organized to make students aware about industrial ethics which includes session on paper publication, IPR, Plagiarism free content in seminar and project report.

Action 3: In institute student have proper uniform dress code which indirectly contribute to teach ethical values of uniformity.

PO9: Individual and Team work: Function effectively as an individual and as a member or leader in multidisciplinary activities

PO9	2.00	2.80	• Target is achieved; courses like seminar, project, business communication, project based learning courses involve individual and teamwork.

Action 1: Continues presentations are kept for seminar and project to enhance individual and team work.

Action 2: Encouragement to participate in various state/national, zonal, university level competition of project, sports. Participation in social activities. Various days/event origination and management.

Action 3: Students are participating in intercollegiate and university level sport competitions.

Action 4: Projects pertaining to the latest problems were analyzed with frequent interactions from .industrial experts and to distribute the work within the team towards its execution of through academic projects.

Action 5: Participation in various extra-curricular activities in other colleges and Promotion of various clubs and activities.

Action 6: Participation in Conferences/Seminars/Workshops/Symposiums.

<table>
<tr><td colspan="4">PO10: Communication: Communicate effectively with engineering community and society at large</td></tr>
<tr><td>PO10</td><td>2.08</td><td>2.77</td><td>• Target is achieved, Skills of documentation, communication, presentation during project and seminar is satisfactory but due to rural background there is scope for improvement.</td></tr>
<tr><td colspan="4">Action 1: Student participated in various online soft skill development courses offered by various MOOC platforms like NPTEL, Course etc.

Action 2: Different cultural events, sports, social activities, project competition, industrial visits, Industrial training contributed in students overall development.

Action 3: In academic time table separate time slot allotted for soft skill improvement session. Special couch is appointed for the same.</td></tr>
<tr><td colspan="4">PO11: Project management and finance: Demonstrate engineering and management principles to carry out projects in multidisciplinary environment, as a member/leader in a team</td></tr>
<tr><td>PO11</td><td>2.35</td><td>2.88</td><td>• Target is achieved; students are able to apply knowledge and understanding of the engineering and management principles to their project work, as a member and are able to work effectively in a team.</td></tr>
<tr><td colspan="4">Action 1: Electrical engineering students participated in various competition project competitions and secured prizes.

Action 2: Electrical engineering department is having MOUs with various industries. Numbers of projects are industry sponsored projects which helps student to learn project management and finance.</td></tr>
<tr><td colspan="4">PO12: Lifelong learning: Recognize the need for and an ability to engage in life-long learning</td></tr>
<tr><td>PO12</td><td>1.84</td><td>2.82</td><td>• Target is achieved, student have demonstrated their lifelong learning ability</td></tr>
</table>

<table>
<tr><td colspan="4">Action1: Department Intimated to Students to do MOOC courses like NPTEL, Course Mandatory.

Action 2: Students participation in various activities like extracurricular, project competition developed their lifelong learning ability.</td></tr>
<tr><td colspan="4">PSO1 Demonstrate knowledge and hands-on experience with electrical machines, power/energy systems, power electronics, and automation problems.</td></tr>
<tr><td>PSO1</td><td>1.97</td><td>2.76</td><td>• Target is achieved, student have to undergo domain based learning such as electrical power system, electrical machine etc.</td></tr>
<tr><td colspan="4">Action1: Guidance given to students and directed to apply knowledge of core Electrical Engineering subjects and recent modern technology in their projects.

Action2: Industry or Academic Expert’s lecturers from industry are organized for various subjects.

Action3: Weak students are supported through various activities like personal counseling, action plan as per there weakness, remedial classes, to solve questions of previous year’s university papers.

Action4: Department proved different facilities to encourage bright students which involves advanced courses of NPTEL, Course.</td></tr>
<tr><td colspan="4">PSO2 Develop the professionals and entrepreneurs in Renewable Energy system, electrical contracting and consultancy using modern tools and techniques.</td></tr>
<tr><td>PSO2</td><td>1.85</td><td>2.74</td><td>• Target is achieved, enhanced exposure on concepts and techniques adopted in power plants and industries, courses such as renewable energy resources, electrical consultancy related activities, power system and integrated circuits through NPTEL</td></tr>
</table>

Action1: More emphasis is given on student's exposer to industry culture through industrial visit, internship, industry mentorship for project, industry expert's sessions

Action2: Created awareness among student about environmental and societal needs through activities included in open elective national social services, core subject basic human rights & Value Education, Human Rights and Legislative Procedures.

Action3: Students are guided to use latest technology like PLC, SCADA, AUTOCAD, IOT and use them in their projects by considering societal and environmental need.

Action4: Awareness is provided among faculty and students to involve consultancy related activities such as renewable energy resources, department need to take initiative towards energy audit for industry/ organization and also if possible to take any contract for residential wiring etc.

7.2 Academic audit and actions taken there of during the period of assessment (10)

Academic audit is a one of the best practice to ascertain adequate and operative excellence assurance mechanisms in terms of procedures, their applicability, that ensures quality input and subsequently quality output. The main aim of conducting academic audit is to assess the academic performance of both individual faculty and the whole department. This practice develops accountability of the individual members with regards to their academic performance. By conducting academic audit, the strength and weakness of the department can be assessed. The quantification of the academic performance helps us to compare the academic performance of departments and members of faculty.

Academic Audit:

The institute has well defined process of academic audit to evaluate the performance of different departments of the Institute such as; teaching process, laboratory maintenance and various departmental activities. Following are the objectives of academic audit

1. To assess the academic performance of individual faculty in a department.
2. To assess the academic performance of the department as a whole.
3. To identify the strengths and limitations of the department.
4. To make the individual faculty and the department accountable
5. To assure quality working of laboratory.

In the implementation of this process, the Internal Quality Assurance Cell (IQAC) constitutes an Academic Audit Committee (AAC) to audit each department twice in a semester, i.e., one at just before the commencement of semester while the other is just before the end of that semester. The members of AAC are given below:

1. Chairperson of IQAC.
2. Coordinator of IQAC.
3. One Professor/Associate Professor from the respective department.
4. One Professor/Associate Professor from the other department

I. Academic Audit:

Departmental academic audit is conducted in every academic year-

Pre-semester audit is conducted at the department level by respective academic coordinator along with HOD before the commencement of new semester. Course files including session plan, notes, assignments, lab manual, question banks etc. are checked and academic monitoring check list is prepared. Recommendations are given to faculty members as per the checklist.

At the beginning of semester readiness is verified through following points:

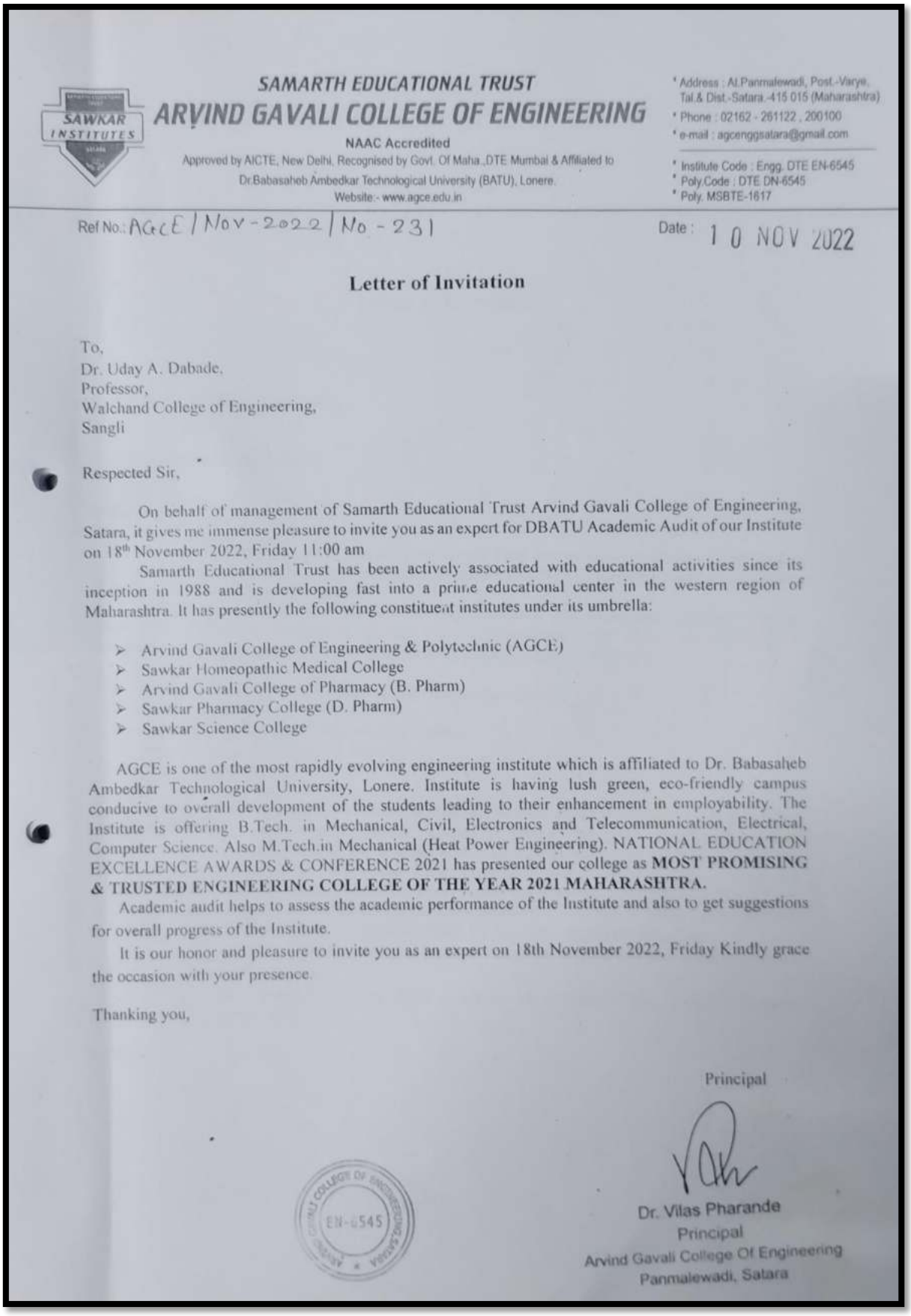
a. Theory Subjects:
   1. As per curriculum of D.B.A.T.U.
   2. Time Table
   3. Academic Calendar
   4. Course File:
      i. Course & Faculty Details
      ii. Vision, Mission of Institute
      iii. Vision, Mission of Department
      iv. Program Educational Objectives
      v. Program Outcomes
      vi. Program Specific Outcomes
      vii. Course Syllabus as per D.B.A.T.U.
      viii. Course Objectives and Outcomes
      ix. Course outcome and Program outcome mapping
      x. Teaching Plan
      xi. Laboratory Plan
      xii. Roll Call List of Students
      xiii. Course Material

b. Laboratory Subjects:
   i. Lab Manual
   ii. Lab Plan
   iii. List of Experiments as per University Curriculum
   iv. Software & Hardware requirements

End-Semester Audit:

End-semester audit is conducted at the end of semester by inviting external faculty member and following points are get audited.

i. Adherence to prepared teaching plan
ii. Student attendance record
iii. Unit test papers & their evaluation
iv. GFM Record
v. Practical Sessions record
vi. Viva record



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING
NAAC Accredited
Approved by AICTE, New Delhi, Recognised by Govt. Of Maha.,DTE Mumbai & Affiliated to Dr.Babasaheb Ambedkar Technological University (BATU), Lonere.
Website:- www.agce.edu.in

* Address : At.Panmalewadi, Post.-Varye, Tal.& Dist.-Satara.-415 015 (Maharashtra)
* Phone : 02162 - 261122 , 200100
* e-mail : agcenggsatara@gmail.com
* Institute Code : Engg. DTE EN-6545
* Poly.Code : DTE DN-6545
* Poly. MSBTE-1617

Ref No.: AGCE / Nov-2022 / No - 231 Date : 10 NOV 2022

Letter of Invitation

To,
Dr. Uday A. Dabade,
Professor,
Walchand College of Engineering,
Sangli

Respected Sir,

On behalf of management of Samarth Educational Trust Arvind Gavali College of Engineering, Satara, it gives me immense pleasure to invite you as an expert for DBATU Academic Audit of our Institute on 18th November 2022, Friday 11:00 am

Samarth Educational Trust has been actively associated with educational activities since its inception in 1988 and is developing fast into a prime educational center in the western region of Maharashtra. It has presently the following constituent institutes under its umbrella:

- Arvind Gavali College of Engineering & Polytechnic (AGCE)
- Sawkar Homeopathic Medical College
- Arvind Gavali College of Pharmacy (B. Pharm)
- Sawkar Pharmacy College (D. Pharm)
- Sawkar Science College

AGCE is one of the most rapidly evolving engineering institute which is affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere. Institute is having lush green, eco-friendly campus conducive to overall development of the students leading to their enhancement in employability. The Institute is offering B.Tech. in Mechanical, Civil, Electronics and Telecommunication, Electrical, Computer Science. Also M.Tech.in Mechanical (Heat Power Engineering). NATIONAL EDUCATION EXCELLENCE AWARDS & CONFERENCE 2021 has presented our college as **MOST PROMISING & TRUSTED ENGINEERING COLLEGE OF THE YEAR 2021 MAHARASHTRA.**

Academic audit helps to assess the academic performance of the Institute and also to get suggestions for overall progress of the Institute.

It is our honor and pleasure to invite you as an expert on 18th November 2022, Friday Kindly grace the occasion with your presence.

Thanking you,

Principal

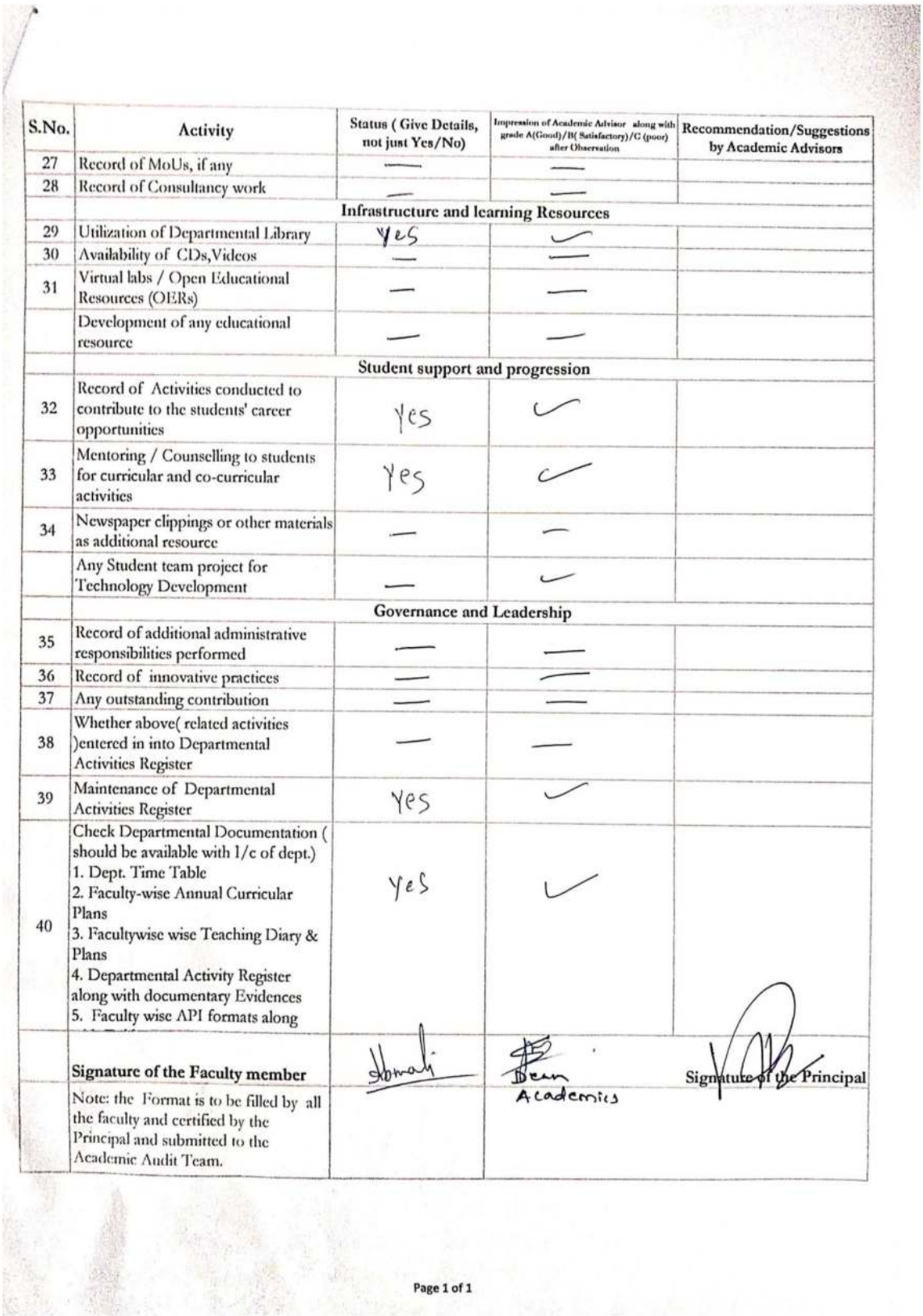
Dr. Vilas Pharande
Principal
Arvind Gavali College Of Engineering
Panmalewadi, Satara

Figure 7.2.a Sample Invitation Letter for External Academic Audit

Dr. Babasaheb Ambedkar Technological University
Academic Audit of Engineering Colleges
Format - II (To be filled individually by Faculty Member)

Centre/SubCentre: **District:** Satara

1	Name of the College and Address	Arvind Gavali College Of Engineering, **Address**:Gat No. 247,Panmalewadi, Varye, Satara, Maharashtra 415015, **Phone**: 02162 200 100		
2	Name of the Faculty Member	**Miss.Mali A B**		
3	Name of the Subject taught during academic year	Network Theory		
4	Date of Joining in Degree College/Date of Joining in the present Institution	**01-12-2021**	Date of Retirement:	
S.No.	**Activity**	**Status (Give Details, not just Yes/No)**	**Impression of Academic Advisor along with grade A(Good)/B(Satisfactory)/C (poor) after Observation**	**Recommendation/Suggestions by Academic Advisors**
	Curricular Aspects			
5	Annual Curricular plan	DBATU & AGCE Ac Attached.	✓	
6	Curriculum enrichment / Value addition	Industorial visit at vamedi dam.	—	
7	Whether conducting Add on Courses & role in conduct of course	NPTEL enroll-ment.	✓	
8	Feedback from students	collected & fieled	✓	
	Teaching, Learning and Evaluation			
9	Teaching Diary & Teaching Plan	course Teaching plans considered	✓	
10	Coverage of syllabus so far (%)	94 %	✓	
11	Record of students attendance	Maintained.	✓	
12	Use of ICT - PPT & Audio-video Aids	ICT use is mantoined in dep.	✓	
13	Record of students assignments	Assignment considered	✓	
14	Record of field trips	Ambesi & vamedi dam	✓	
15	Record of student seminars conducted	conducted.	✓	
16	Record of academic competitions conducted if any (Quiz, Role play)	Quiz conducted on moodle	✓	
17	Other Student centric learning Methods	Lab visits.	—	
18	Record of Extension Lectures given	—	—	
19	Record of invited lectures arranged	Expert lecture on NI.	✓	
20	Record of internal examinations and University Exams	CA-1 CA-2 & Mid sem Exam record.	✓	
21	Pass percentage of University Exams / Semester in respective subject for the last three years.(paper wise)	70 %	✓	
22	Record of remedial classes conducted for slow learners	Expert lecture series.	—	
	Research, Extension and consultancy			
23	Record of Research work (,Paper publication, Book publication, Articles)	—	—	
24	Record of Student Projects	Golded mini proj	✓	
25	Record of seminars / workshops attended / organized /Papers presented	1 workshop is attened.	✓	
26	Record of extension work undertaken	—	—	



S.No.	Activity	Status (Give Details, not just Yes/No)	Impression of Academic Advisor along with grade A(Good)/B(Satisfactory)/C (poor) after Observation	Recommendation/Suggestions by Academic Advisors
27	Record of MoUs, if any	—	—	
28	Record of Consultancy work	—	—	
	Infrastructure and learning Resources			
29	Utilization of Departmental Library	Yes	✓	
30	Availability of CDs,Videos	—	—	
31	Virtual labs / Open Educational Resources (OERs)	—	—	
	Development of any educational resource	—	—	
	Student support and progression			
32	Record of Activities conducted to contribute to the students' career opportunities	Yes	✓	
33	Mentoring / Counselling to students for curricular and co-curricular activities	Yes	✓	
34	Newspaper clippings or other materials as additional resource	—	—	
	Any Student team project for Technology Development	—	✓	
	Governance and Leadership			
35	Record of additional administrative responsibilities performed	—	—	
36	Record of innovative practices	—	—	
37	Any outstanding contribution	—	—	
38	Whether above(related activities)entered in into Departmental Activities Register	—	—	
39	Maintenance of Departmental Activities Register	Yes	✓	
40	Check Departmental Documentation (should be available with I/c of dept.) 1. Dept. Time Table 2. Faculty-wise Annual Curricular Plans 3. Facultywise wise Teaching Diary & Plans 4. Departmental Activity Register along with documentary Evidences 5. Faculty wise API formats along	Yes	✓	
	Signature of the Faculty member	Shomali	Dean Academics	Signature of the Principal
	Note: the Format is to be filled by all the faculty and certified by the Principal and submitted to the Academic Audit Team.			

Page 1 of 1

Figure 7.2.b Sample Audited Course File Record.

This audit ensures smooth conduction of academics as per targeted plan. Suggestions and corrective actions are given to faculty members as per the check lists. Academic summary report is prepared by departmental academic coordinator and discussed in HOD meeting for further corrective actions. Following are audit outcomes:

i. Quality assurance in academic monitoring system

ii. Uniformity in policy implementation through out the Institution

iii. Areas for improvement are identified and fulfilled

Academic Audit Summary Sheet 2021-22

Institution/University Department: **Arvind Gavali College of Engineering, Satara**

Program Title: **Engineering**

Degree Level: Undergraduate Academic Audit Status: ____ First Academic Audit ___ Second Academic Audit

Evaluation Results

		Met/not met	% achieved
1	**LEARNING OBJECTIVES AND RESOURCES**		
1.1	The Faculty member has prepared Course Files as per the learning objectives of the program	Met	74
1.2	The Faculty member has shared his course file with the students of the class through Intranet/ Social media or any other means	Met	70
1.3	The faculty member documented specific benchmarks of his course to account for learning objectives	Met	72
2.	**CURRICULUM AND CO-CURRICULUM**		
2.1	The faculty member collaborated with other faculty members for effective design, sequence of courses and delivery of course for improvements and documented these efforts appropriately	Met	69
2.2	The faculty member documented a plan for analyzing the course content in terms of achieving program objectives.	Met	67
2.3	The faculty member documented a plan for review of curriculum and co-curriculum comparing those with the best practices elsewhere or in best institutes	Met	64
3	**TEACHING AND LEARNING PROCESSES**		
3.1	The faculty member analysed his/her own methods for improving teaching and learning throughout the program and practiced them.	Met	76
3.2	The faculty member developed and promoted effective instructional methods, other than lecturing, so that student achieve the learning objectives.	Met	70
3.3	The faculty member developed materials for achieving student mastery of learning objectives.	Met	68
4.0	**STUDENT LEARNING ASSESSMENT**		
4.1	The Faculty member has announced the method of continuous assessment at the beginning of the course and followed it throughout.	Met	76
4.2	The faculty member developed techniques, other than written test, for the student learning assessments to improve the program.	Met	64
4.3	The faculty member has documented assessments of student learning	Met	76
4.4	The faculty member has developed measurable indicators of student learning success	Met	74
4.5	The faculty member has developed and documented a continuous improvement plan that incorporates multiple measures to assess student learning and program effectiveness.	Met	77
4.6	The Student has put in his/her own efforts in the learning process from resources outside the Institute.	Met	62
4.7	The students are challenged enough to use their knowledge creatively	Met	69

5.0	**QUALITY ASSURANCE**		
5.1	There is an existing process in the Institute to understand the parameters of quality of teaching and learning processes	Met	66
5.2	There is an initiative to understand the parameters of quality of teaching and learning processes, if not existing.	Met	70
5.3	There is commitment to making continuous quality improvements in the program a top priority	Met	72
5.4	The performance of students in Internal Assessment and University Examinations is comparable.	Met	78
5.5	There is sufficient feedback obtained from stakeholders in development of academic processes in the College.	Met	74
5.6	There is sufficient evidence of attempts to understand the industries/ Society's need in delivery of appropriate course content to the students	Met	64
6	**OVERALL ASSESSMENT**		
6.1	The Academic Audit process was Faculty driven.	Met	80
6.2	The Academic Audit process (self-study and visit) included descriptions of the program's quality processes including all five focal areas.	Met	80
6.3	The Audit resulted in a candid description of weaknesses in program processes and suggestions for improvements.	Met	80
6.4	There is openness and thoroughness of the faculty members in completing the academic audit of this program.	Met	75
6.5	The Academic Audit process included involvement of and inputs from stakeholder groups identified by the program's faculty members	Met	85
7	**FOLLOW-UP OF PREVIOUS AUDIT**		
7.1	An action plan was developed as a result of the previous Academic Audit.	Met	Yes
7.2	There is documented evidence that recommendations made by the previous Academic Audit Team have been considered and, when feasible and appropriate, implemented and tracked.	Met	Yes
7.3	There is documented evidence that the program has been implemented and tracked the progress of and use of results from improvement initiatives cited by the faculty its self-study.	Met	Yes
8	**SUPPORT**		
8.1	The program regularly evaluates its library, equipment and facilities, encouraging necessary improvements within the context of overall college resources.	Met	74
8.2	The program's operating budget is consistent with the needs of the program.	Met	76
8.3	The program has a history of enrolment rates sufficient to sustain high quality and cost-effectiveness.	Met	78
8.4	The program has a history of graduation rate sufficient to sustain the quality of the program.	Met	72
8.5	The program has a history of placement rate sufficient to sustain high quality of program outcome.	Met	67
8.6	The Program has a history of generating support from industries and alumni to sustain itself.	Met	69

Signatures of Academic Advisors

1. Dr. Uday A. Dabade,
   Professor,
   Walchand College of Engineering, Sangli----------
2. Dr. Kumthekar Madhav Bhalchandra,
   Retired Professor,
   Karad Government College, Karad----------

Figure 7.2.c Sample Academic Audit Summary Sheet.

Fig 7.2.d Academic Audit 2021-22 Committee interaction and document verification is being carried out.

Fig 7.2.e Academic Audit 2021-22 Committee visit to the laboratory and the experiments are demonstrated by students to the committee

7.4 Improvement in Placement, Higher Studies and Entrepreneurship (10)

- Institute has a Training and Placement cell, responsible for grooming the students to be industry ready and provide opportunities for placement.
- T&P cell organizes various programs for overall personality development of the students. Also Training placement coordinator helps students search Internship opportunities in Mechanical industries.
- Experienced industry professionals in the respective domain of job profiles are invited for guest lectures.
- Through these activities, the students are made aware of the opportunities in various fields along with the required job profile. At the same time, they get a chance to interact with these industry professionals to take advantage of their experience in respective field of expertise.
- Career guidance books such as GRE, GATE, TOFEL are available in the library.
- In addition, with T&P Cell, Institute has initiated Campus to Corporate activity to help students improve communication skills, interpersonal skills, societal awareness and inculcate ethics.
- Institute has initiated aptitude training sessions in order to train students for placement aptitude tests.
- The aim of entrepreneurship development cell is to improve and generate a culture of innovation amongst the students and budding entrepreneurs and start their own business. Under entrepreneur development cell (EDC), institute has organized sessions to motivate and guide students to work on ideas in commercial aspect.

Placement details for academic year 2019-20 to 2021-22 as shown in Table7.3a

Table7.3a Data for Placements

Items	**CAY (2021-22)**	**CAYm1 (2020-21)**	**CAYm2 (2019-20)**
No.of final year students(N)	61	56	28
No.of students placed(x)	57	46	23
% Placement	93.44	82.14	82.14

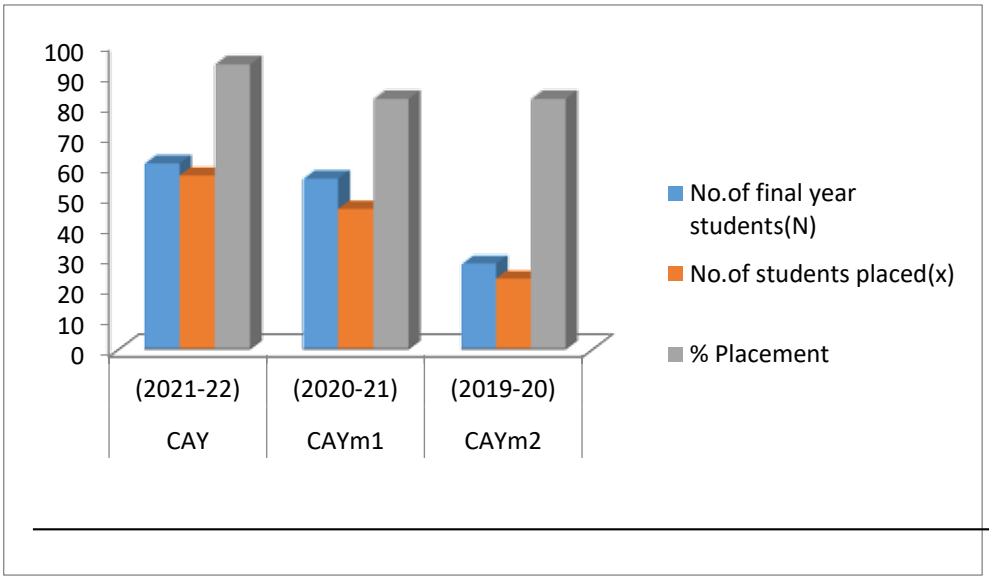


Fig.7.3a Placement data analysis

Table7.3.1: List of Companies in which students placed in 2021-22

Programs Name and Assessment Year (2021-22)				
S.No.	**Name of the student placed**	**Enrollment no.**	**Name of the Employer**	**Appointment letter reference no. with date**
1	1965451293021	SHINDE ROHIT KRUSHNA	T.A ENGINEERING	TPC/1293/2022/021
2	51654520181129310056	RAO ARCHANA RAVIKUMAR	WIPRO TECHNOLOGIES	TPC/1293/2022/005
3	1965451293056	AGAWANE APARNA SHRIKANT	TATA CUMMINS PVT LTD	TPC/1293/2022/056
4	1965451293042	PINGALE SOMESHWAR ANKUSH	MAHINDRA INTEGRATED BUSINESS SOLUTIONS PVT LTD	TPC/1293/2022/042
5	1965451293054	JAMDADE SHUBHAM RAJENDRA	AG ELECTRO SERVISES	TPC/1293/2022/054
6	51654520181129310067	KOMAL RAJARAM MONDE	CHEDDHA ELECTRICALS AND ELECTRONICS PVT LTD, SHIRVAL	TPC/1293/2022/10067
7	1965451293014	KOMAL BALKRISHNA DEVKAR	TVS LUCCAS PVT LTD	TPC/1293/2022/014
8	1965451293055	PAWAR MAYURI MACHHINDRA	MUTHA ENGINEERING PVT LTD	TPC/1293/2022/055
9	1965451293002	CHAVAN AMAR ANIL	M/S VISHAKHA ELECTRICALS AND ELECTRONICS	TPC/1293/2022/002
10	51654520181129310058	KHATTE AVISHKAR BALKRISHNA	WIPRO	TPC/1293/2022/005
11	1965451293001	GOSAVI ANITA EKNATH	COMPETITIVE CLASSES	TPC/1293/2022/001
12	1965451293015	KENJALE SHUBHAM NANDKUMAR	FORCE MOTORS LIMITED	TPC/1293/2022/015
13	1965451293026	NIKAM PRAJAKTA MANASING	PRARTHANA SERVICES	TPC/1293/2022/026

14	1965451293016	SONAVANE SHUBHAM DHANANJAY	PRAVIN ELECTRICALS	TPC/1293/2022 /016
15	1965451293053	UTKARSH RAMACHANDRA CHAVAN	RAVI ELECTRICALS SATARA	TPC/1293/2022 /053
16	1965451293039	SHINDE ROHITKUMAR PRABHAKAR	WIPRO	TPC/1293/2022 /039
17	1965451293032	RAUT AMRUTA DADASO	TVS LUCCAS PVT LTD, PUNE	TPC/1293/2022 /032
18	1965451293003	KADAM ANUP SANJAY	MAHAGENCO	TPC/1293/2022 /003
19	1965451293019	CHALKE SAURABH RAVINDRA	UL SYSTEM AND CONTROLS INDIA PVT.LTD	TPC/1293/2022 /019
20	1965451293033	PATIL PRATIK SHAMRAO	QSPIDER PVT. LTD	TPC/1293/2022 /033
21	1965451293006	KAMBLE SAGAR CHANDRAKANT	ACCURATE INDUSTRIAL CONTROLS PVT LTD	TPC/1293/2022 /006
22	1965451293011	GAIKWAD POOJA VIKRANT	REC (RURAL ELECTRIFICATION CORP,PVT,LTD)	TPC/1293/2022 /011
23	51654520181129310065	THORAT SHRADDHA VIJAYSINH	CHEDDHA ELECTRICALS AND ELECTRONICS PVT LTD, SHIRVAL	TPC/1293/2022 /006
24	1965451293004	JADHAV KAJAL SATISH	TATA MOTORS LTD.	TPC/1293/2022 /004
25	1965451293036	ABA BALU THORAT	MINDA CORPORATION PUNE	TPC/1293/2022 /036
26	51654520181129310059	BHOITE NILAM PRAKASH	PROFOUND EDUTECH	TPC/1293/2022 /056
27	1965451293009	KSHIRSAGAR RAVIKIRAN SHASHIKANT	RV LASHKAR ELECTRICAL & CONSULTANT	TPC/1293/2022 /009
28	1965451293029	KALE SHITAL CHANGDEV	QSPIDER PVT. LTD.	TPC/1293/2022 /029
29	1965451293037	JADHAV SHRIRAM BHANUDAS	CHHEDA ELECTRICALS & ELECTRONICS PVT. LTD.	TPC/1293/2022 /037
30	1965451293007	DHAIGUDE SANEE GULAB	PARESH PLAST INDIA	TPC/1293/2022 /007
31	1965451293051	PATIL KOMAL RANGRAO	TATA MOTORS LTD PUNE	TPC/1293/2022 /051

32	1965451293005	KALANGE POONAM ABASAHEB	TATA MOTORS LTD PUNE	TPC/1293/2022 /005
33	1965451293013	GHADGE MAYURESH PANDURANG	PREPARING FOR AIRFORCE AND INDIAN ARMY	TPC/1293/2022 /013
34	1965451293030	DESHMANE DIVYA SOMNATH	Q SPIDERS	TPC/1293/2022 /030
35	51654520181129310064	NIKAM PRATIK PRABHAKAR	INFOSYS PVT. LTD. PUNE	TPC/1293/2022 /064
36	1965451293050	PATIL POOJA NAMDEV	TATA MOTORS LTD PUNE	TPC/1293/2022 /050
37	1965451293040	JADHAV ASAVARI VIJAY	PRICOL LIMITED	TPC/1293/2022 /040
38	1965451293025	SHIVANKAR SALONI SANTOSH	GALACTIC ELECTRIC PRIVATE LIMITED	TPC/1293/2022 /025
39	1965451293022	MAHAMULKAR PRAJAKTA KALYAN	ATTRA INFOTECH PVT. LTD.	TPC/1293/2022 /022
40	1965451293027	SHINGATE SHITAL HANMANT	TATA MOTORS LTD PUNE	TPC/1293/2022 /027
41	1965451293044	CHAVAN PRANITA HANMANT	TATA MOTORS(JAGUAR & LAND ROVER)PVT. LTD. PUNE	TPC/1293/2022 /044
42	1965451293057	YADAV SNEHAL ASHOK	TATA MOTORS(JAGUAR & LAND ROVER)PVT. LTD. PUNE	TPC/1293/2022 /057
43	51654520181129310085	NISHANT KIRAN TAWATE	CHAITANYA ELECTRIC AL	TPC/1293/2022 /058
44	51654520181129310053	JEDHEDESHMUKH PIYUSH DUSHYANT	INDRAJEET POWER LINES	TPC/1293/2022 /053
45	1965451293017	SHINDE NIKHIL SURYABHAN	FINOLEX J POWER SYSTES LTD	TPC/1293/2022 /017
46	1965451293031	PAWAR SAURABH NARAYAN	TECHNOARTZ	TPC/1293/2022 /031
47	1965451293020	PATIL SHAHAJI DINKAR	DEEPTI ELECTRICAL ENGINEERING WORKS	TPC/1293/2022 /020
48	1965451293059	INGALE SUJATA BHAUSAHEB	STANTEC LTD.	TPC/1293/2022 /059

49	1965451293018	SHELAR AADITYA SURESH	CHAVARE ENGINEERING PVT.LTD	TPC/1293/2022 /018
50	1965451293046	KADAM DIVYA VINODKUMAR	TATA CUMMINS Pvt. Ltd.	TPC/1293/2022 /046
51	1965451293010	NALAWADE RUTUJA RAJENDRA	TATA MOTORS LTD.	TPC/1293/2022 /010
52	2065451293006	MANE PRASHANT CHANDRAKANT	KHODSHI POWER PVT.LTD. Karad	TPC/1293/2022 /006
53	51654520181129310066	PATIL SHUBHAM MOHAN	SAGITEC SOLUTION PVT. LTD	TPC/1293/2022 /066
54	51654520181129310068	CHAVAN AAKANKSHA JAYWANT	ATOS PVT. LTD	TPC/1293/2022 /068
55	51654520181129310009	KUMBHAR KIRAN SANJAY	M.S.E.D.C.L	TPC/1293/2022 /009
56	1965451293028	PATANE RUTURAJ ANANDA	DEEPTI ELECTRICAL ENGINEERING WORKS	TPC/1293/2022 /028
57	51654520181129310081	JAMDADE SHUBHAM RANGRAO	SHAMBHURAJ ELECTRICAL PVT LTD	TPC/1293/2022 /081

Table7.3.2 List of Companies in which students placed in 2020-21

S.No.	Enrollment No.	Name of the student placed	Name of the Employer	Appointment letter reference no. with date
1	516545201711293100 02	DHALE HARDIKA HEMANT	CEM ELECTROME CH PVT.LTD	TPC/1293/2021/002/19-11-21
2	516545201711293100 03	GAIKWAD ANIKET RAJU	HONEYWEL L	TPC/1293/2021/003/07-01-21
3	516545201711293100 04	KUMBHAR MEGHA SUNIL	ABHINAV EDUCATION SOCIETY'S COLLEGE OF ENGINEERIN G, WADWADI	TPC/1293/2021/004/14-11-20
4	516545201711293000 05'	DEDE PRADIP ANKUSH	PRICOL LMT, PLANT 5	TPC/1293/2021/005/27-9-21
5	516545201711293100 06	CHAITANYA SUNIL THIGALE	SAITRONIX PVT LTD SATARA	TPC/1293/2021/006/7-11-21
6	516545201711293100 07	AKHILESH SUBHASH JAMBHALE	TATA CONSULTAN CY SERVICES LIMITED (TCSL).	Ref: TCSL/DT20219030479/Luc know Date: 19-02-2022
7	516545201711293100 08	NIKITA MADHAV PIMPALKAR	BYJUS	TPC/1293/2021/008/19-11-21
8	516545201711293100 09	KADAM TEJASHRI SANJAY	SAITRONIX PVT LTD SATARA	TPC/1293/2021/008/24-01-21
9	516545201711293100 10	ASMITA ARVIND PATIL	SAITRONIX PVT LTD SATARA	TPC/1293/2021/010/26-08-21
10	516545201711293100 11	SANDESH BABASAHEB WADKAR	AJINKAY ELECTRO SYSTEM SATARA	TPC/1293/2021/011/16-12-21
11	516545201711293100 12	SHINDE ROHINI HANAMANT	SAITRONIX PVT LTD SATARA	TPC/1293/2021/012/27-08-221
12	516545201711293100 14	SHINDE PRATIMA DATTATRAY	CEM ELECTROME CH PVT.LTD	TPC/1293/2021/014/20-08-21

13	PRN:51654520181129310016	BAGAL POONAM ANANDRAO	RAVI ELECTRICALS, SATARA	TPC/1293/2021/016/25-09-21
14	PRN:51654520181129310030	MALI RUTUJA SHANKAR	YAZAKI INDIA PVT.LTD	TPC/1293/2021/030/21-10-21
15	PRN:51654520181129310013	KULKARNI OMKAR RAJENDRA	GE INDIA INDUSTRIAL PVT LTD PUNE	TPC/1293/2021/013/26-8-21
16	PRN:51654520181129310020	DESHMUKH PRIYANKA BHANUDAS	RAVI ELECTRICALS, SATARA	TPC/1293/2021/020/2—7-21
17	5165452018112931000 5	MAHESH ANANDA JADHAV	LEAR CORPORARATION	TPC/1293/2021/005/24-3-21
18	PRN:51654520181129310010	KUMBHARKAR VAIBHAV VILAS	GM FINANCE	TPC/1293/2021/010/10-9-21
19	PRN:51654520181129310011	CHOUGALE SHUBHANGI SANJAY	RAVI ELECTRICALS, SATARA	TPC/1293/2021/011/15-9-21
20	PRN:51654520181129310035	SANKPAL NAMRATA NETAJI	TATA MOTORS	TPC/1293/2021/035/1-09-21
21	PRN:51654520181129310018	PAWAR SANCHITA NANASO	RAVI ELECTRICALS, SATARA	TPC/1293/2021/018/20-11-21
22	PRN:51654520181129310049	CHAVAN GOURI ASHOK	MACHBBIZ MARKETERS PVT LTD	TPC/1293/2021/049/22-12-21
23	PRN:51654520181129310029	LAWAND AMRUTA SHIVAJI	SIDDHESHWAR ELECTRICALS	TPC/1293/2021/029/9/9/21
24	PRN:51654520181129310027	AISHWARYA SANJAY SALUNKHE	SIDDHESHWAR ELECTRICALS	TPC/1293/2021/027/24/09/21
25	5165452018112931000 40	GUJAR TEJAS SHARAD	AJNKAY ELECTRONICS	TPC/1293/2021/040/17-9-21
26	PRN:51654520181129310019	PATIL SWARANJALI VITTHALRAO	YAZAKI INDIA PVT LTD	TPC/1293/2021/019/5-2-21
27	PRN:51654520181129310045	GARUD ASHISH ADHIKRAO	DATTASUMAN ELECTRICAL SERVICES	TPC/1293/2021/13/6/21

28	PRN:51654520181129310062	DHOTRE DILIP DNYANDEV	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/062/16-10-21
29	PRN:51654520181129310052	JADHAV SHITAL SAMBHAJI	GROUPO ANTOLIN	TPC/1293/2021/052/27-10-21
30	PRN:51654520181129310002	POWAR SHIVRAJ SARJERAO	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/002/17-11-21
31	PRN:51654520181129310043	TIKUDAVE AKSHAY DHONDIRAM	KSB LTD, SHIRWAL	TPC/1293/2021/043/18/9-21
32	PRN:51654520181129310008	PAWAR SUSHANT VINAYAK	AMURA MARKETING TECHNOLOGIES PVT LTD	TPC/1293/2021/008/21-9-21
33	PRN:51654520181129310050	PISE MADHURI MADHUKAR	GE INDIA INDUSTRIAL PVT. LTD	TPC/1293/2021/0050/18-08-21
34	PRN:51654520181129310006	LOKHANDE AKSHAY HANMANT	AJINKYA ELECTRO SYSTEM SATARA	TPC/1293/2021/006/20-12-21
35	PRN:51654520181129310032	PAWAR PRATIK BALASAHEB	SUSTAINFOI ENERGY	TPC/1293/2021/032/18-02-21
36	PRN:51654520181129310003	SASANE RUSHIKESH ASHOK	VIROCH ENGG	TPC/1293/2021/003/29-07-21
37	516545201811293100036	KAKADE RUSHIRAJ RAJIV	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/036/18-11-21
38	PRN:51654520181129310021	GHADGE VIJAY SANJAY	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/021/23-08-21
39	PRN:51654520181129310063	MASAL SHANKAR MARUTI	DHOOT TRANSMISSION PVT.TLD	TPC/1293/2021/063/15-10-21
40	PRN:51654520181129310004	BHAGWAT DEVVRAT UMAKANT	BPCL WAI LPG PLANT,SATARA	TPC/1293/2021/004/01-11-21
41	PRN:51654520181129310051	PHADTARE VIKAS BALASO		TPC/1293/2021/051/29-04-21

42	PRN:51654520181129310038	PAWAR KIRAN VIJAY	NAMO NAMOKAR ENGINEERING PVT. LTD.	TPC/1293/2021/038/12-01-21
43	PRN:51654520181129310073	JANGAM PRITEE SANJAY	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/073/11-1-22
44	PRN:51654520181129310048	JADHAV ASHWINI SATAPPA	INNOVATIVE ENGINEERING SATARA	TPC/1293/2021/048/16-12-21
45	PRN:51654520181129310031	SAKATE RAHUL SIDDHARTH	KOHINOOR TECHNICAL INSTITUTE PVT.LTD	TPC/1293/2021/031/2-9-21
46	PRN:51654520181129310041	JADHAV KOMAL VILAS	SIGMA ENGG	TPC/1293/2021/041/05-12-21

7.4 Improvement in the quality of students admitted to the program (10)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Table7.4a Quality of students admitted to the program

ITEM		CAY (2022-23)	CAY m1 (2021-22)	CAYm2 (2020-21)
National level entrance examination (JEE)	No. of students admitted	4	0	4
	Opening score/rank	35498	0	25837
	Closing score/rank	126004	0	90200
State/University level examination /others(MH-CET)	No. of students admitted	27	9	19
	Opening score/rank	87800	60669	39370
	Closing score/rank	118002	89638	86634

Name of entrance examination for lateral entry (Direct Second Year: MSBTE Diploma Final Semester)	No. of students admitted	28	14	24
	Opening score/rank	6144	51094	11579
	Closing score/rank	44817	68790	54577
Average CBSE/Any other board result of admitted students(Physics, chemistry, Maths)		0	0	0

CRITERION 08	FIRST YEAR ACADEMICS	50

Please provide First year faculty information considering load for the particular program

Name of the faculty member	PANNo.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load(%)			Currently Associated (Yes /No)	Date Of leaving (In case Currently Associated is 'No')
							CAY (2022-23)	CAY (2021-22)	CAY (2020-21)		
Ashwini Deepak Kasture	BTSPK5524K	M.Sc	14-06-2017	Mathematics	Assistant Professor	15-06-2012	100	100	100	Yes	
Pooja Ramchandra Bhosale	ERAPB9485B	M.Sc, B.Ed	08-07-2019	Mathematics	Assistant Professor	01-07-2019	100	100	100	Yes	
Vidya Atul Salunkhe	CJJPS9748B	M.Sc	19-05-1999	Mathematics	Assistant Professor	01-08-2019	100	100	100	Yes	
Ms.Swapnali Shinde	PGTPS0243D	M.Sc	30-08-2021	Mathematics	Assistant Professor	01-07-2022	100	0	0	Yes	
Ms.Sonali S.More	EVMP4519P	M.Sc	24/3/2018	Mathematics	Assiatant Prof.	2/7/2022	100	0	0	No	31/06/2023
Madan Prabhakar Jagdale	BEGPJ8774P	M.Sc	08-07-2019	Mathematics	Assistant Professor	01-07-2019	0	100	100	No	31/05/2022
Ruksar Rajmohamad Sayyad	IWNPS7798C	M.Sc.	04-07-2017	Mathematics	Assistant Professor	01-08-2020	0	0	100	Yes	
Pranita Dadaso Pol	DHZPP7754R	M.Sc.	01-06-2018	Chemistry	Assistant Professor	15-07-2019	0	100	100	Yes	
Komal Rajendra Nikam	BIZPN4929H	M.Sc.	13-07-2015	Chemistry	Assistant Professor	01-06-2019	0	100	100	Yes	
Namita Pratik Mahajan	ETRPB8924A	M.Sc	06-06-2019	Chemistry	Assistant Professor	01-11-2020	0	0	0	Yes	
Priya Yashwant Kuthe	HPUPK3410K	B.E	21-08-2017	Chemical	Assistant Professor	12-10-2021	100	100	0	Yes	
Mrs.Rohini Bhosale	ENPPB2533D	M.Sc	30-07-2017	Chemistry	Assistant Professor	21-07-2022	100	0	0	Yes	
Tejaswini Dnyaneshwar Jadhav	BUIPJ1243D	M.Sc	24-10-2020	Physics	Assistant Professor	17-03-2021	0	100	0	No	31/06/2022
Kanchan Sanjay Mahamuni	EHFPM5540B	M.Sc	24-10-2020	Physics	Assistant Professor	17-03-2021	100	100	0	No	31/06/2023
AshwiniAnkush Babar	AQSPB8546L	M.Sc	11-06-2010	Physics	Assistant Professor	01-06-2019	0	0	100	No	31/10/2021
Dr. Nitin Ramchandra Jadhav	AGSPJ2278D	M.A	07-03-2020	ENGLISH	Assistant Professor	02-07-2020	100	100	100	Yes	
Nikita Sanjay Bhilare	FBDPB7735Q	M.A SET	09-07-2019	English	Assistant Professor	16-03-2021	100	100	0	Yes	

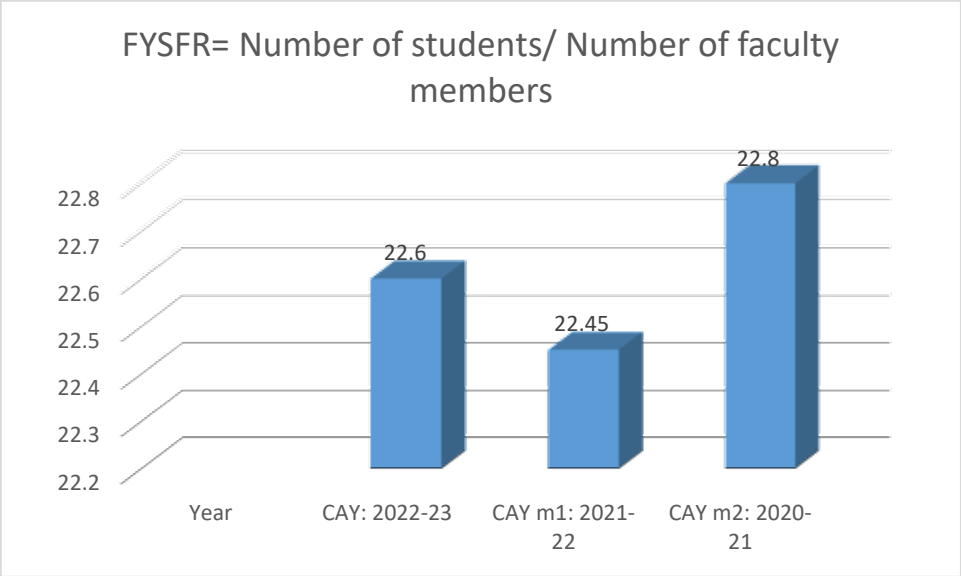
Thoravi Rahul Yadav	BLVPM6822M	MA	10-07-2008	ENGLISH	Assistant Professor	01-06-2019	0	0	100	No	30-04-2021
Aanand Sudhir Shivde	CCLPS6118J	M.E.	30-09-2014	Mechanical	Assistant Professor	06-01-2019	0	0	100	No	31-07-2021
Kamlesh Kumawat	ENEPK1812H	M.E.	20-10-2016	Mechanical	Assistant Prof.	03/07/2017	0	0	100	No	31/3/2021
Mr.Amol Ghorpade	BTDPG5946C	M.E.	10/10/2017	Mechanical	Assistant Prof	1/10/21	100	100	0	No	2/5/2023
Pratik Manohar Tambe	AXPPT2681Q	M.E	31-07-2017	Mechanical	Assistant Professor	01-07-2019	100	100	0	No	31-12-2022
Pranav Avinash Pathak	BFAPP7243G	M.E.	20-10-2016	CSE	Assistant Professor	22-08-2011	22	35	38	Yes	
Gujar Vijay Bhanudas	AMEPG4168K	M.E.	22/02/2011	CSE	Assistant Professor	1/11/2020	15	0	0	Yes	
Suraj Shivaji Shinde	EKQPS2010J M.E/M.Tech	M.E.	12-12-2018	Civil	Assistant Professor	02-12-2021	55	50	0	No	31/05/2023
Abhay V.gujar	ABPPG5152M	M.E.	26-06-1994	Civil	Assistant Prof.	25/06/2010	0	0	75	Yes	
Sapkal Rajendra	BNHPS3023E	M.E.	25/06/2013	Civil	Assistant Professor	1/06/2016	50	0	0	Yes	
Diksha Sanjay Jadhav	BGXPJ6890B	M.Tech	01-06-2019	Civil	Assistant Professor	22-07-2019	0	0	19	Yes	
Kolekar A.B.	GDSPK1558L	M.Tech	18/01/2019	Civil	Assistant Professor	1/06/2019	0	0	86	No	1/05/2021
Dr. Prashant Ramesh Bamane	BHXPB5112K	PhD, M.E.	24-12-2014	Civil	Associate Professor	01-09-2021	81	72	0	Yes	
Vishal Sharad Hingmire	AEBPH8372K	M.E.	23-11-2013	E & TC	Assistant Professor	12-02-2011	17	13	0	Yes	
Dr.Shinde Deepali	CBQPS4461N	PhD	24/09/2015	E & TC	Associate Professor	15/02/2023	20	0	0	Yes	
Rahul Prakash Sakhare	FCOPS8416K	MTech	05-06-2017	E & TC	Assistant Professor	07-01-2019	0	0	29	Yes	

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Assessment = (5 ×20)/Average FYSFR (Limited to Max. 5)

Year	Number of students (Approved intake strength)	Number of faculty members(considering fractional load)	FYSFR= Number of students/ Number of faculty members
CAY: 2022-23	330	14.60	22.60
CAY m1: 2021-22	330	14.70	22.45
CAY m2: 2020-21	330	14.47	22.80
Average Assessment			22.62
Assessment = (05 x 20)/Average FYSTR			4.42

Graphical Presentation of First Year Student Faculty Ratio



8.2. Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = $(5x + 3y)/RF$,

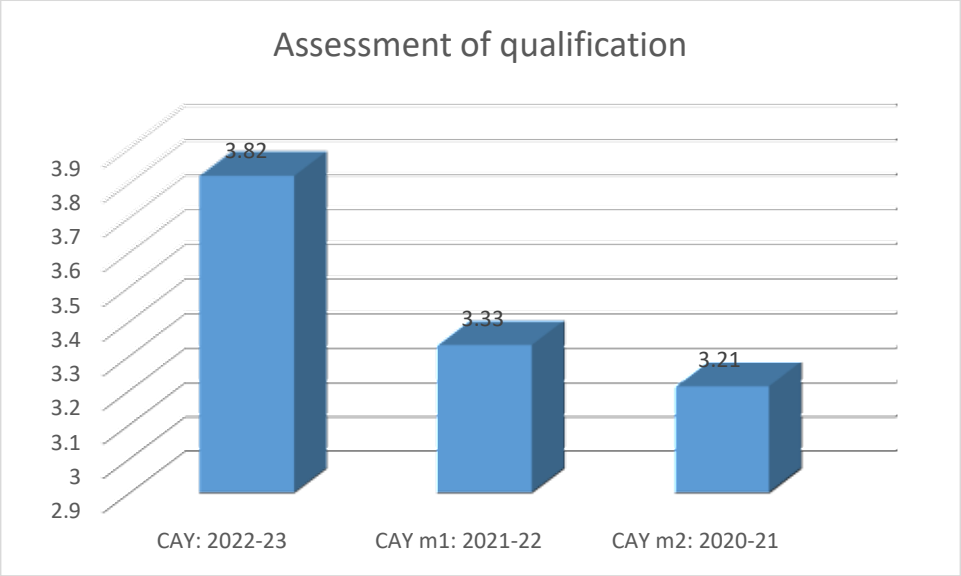
x= Number of Regular Faculty with Ph.D,

y = Number of Regular Faculty with Post-graduate qualification

RF= Number of faculty members required as per SFR of 20:1

Year	X	Y	RF	Assessment of qualification
CAY: 2022-23	3	16	16.5	3.82
CAY m1: 2021-22	2	15	16.5	3.33
CAY m2: 2020-21	1	16	16.5	3.21
Average Assessment of Qualification				3.45

Graphical Presentation of Assessment of Qualification:



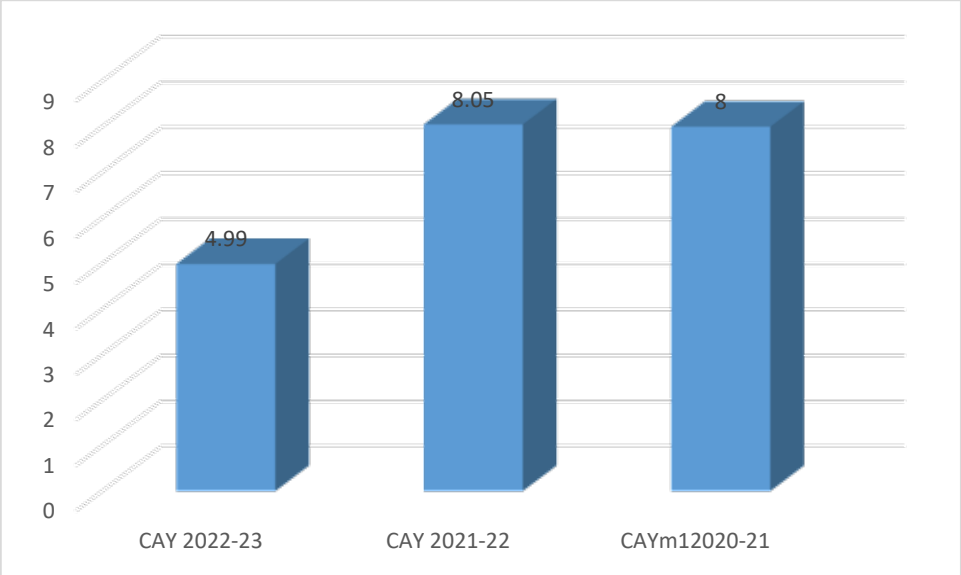
8.3. First Year Academic Performance (10)

Academic Performance (AP) = (Mean of the percentage of marks in First Year of all successful students/10) x (number of successful students/number of students appeared in the examination)

Year	Mean of the % marks of successful student X	X/10	Total Successful students y	Total Appeared Students Z	AP	AVE. API
CAY 2022-23	CSE	6.90	126	133	6.54	6.69
	E &TC	6.97	23	34	4.72	
	Mech	7.33	9	15	4.40	
	Civ	0	1	03	0	
	Elec	6.80	22	30	4.99	
CAY m1: 2021-22	CSE	8.35	69	69	8.35	
	E &TC	8.11	45	45	8.11	
	Mech	7.943	10	10	7.9	
	Civ	7.76	9	9	7.76	
	Elec	8.05	8	8	8.05	
CAY m2: 2020-21	CSE	8.6	52	52	8.6	
	E &TC	8.4	29	29	8.4	
	Mech	7.4	21	21	7.04	
	Civ	7.6	13	13	7.6	
	Elec	8.0	22	22	8.0	

Year (Ele)	Mean of the % marks of successful student X	X/10	Total Successful students y	Total Appeared Students Z	AP	AVE. API
CAY 2022-23	68	6.80	22	30	4.99	7.01
CAY 2021-22	80.5	8.05	8	8	8.05	
CAYm12020-21	80	8	22	22	8	

Graphical Presentation of Academic Performance



8.4. Attainment of Course Outcomes of first year courses (10)

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5) Data collection methods:

- Two Internal CA Tests of 10 marks and One MSE of 20 marks are conducted per semester and Question papers are set according to defined course outcomes.
- Final examination of 60 marks is conducted by the University.
- Evaluation of course outcome is based on Internal Tests and university examination with weighted average 40:60.
- Lab assessment is based on practical performance of students and two CA practical exam of 15 marks.

Sr.No.	Direct Assessment tools	Outcome
1	CA Internal Test -2 MSE -1	Attainment of course outcome and programme outcome
2	Assignments, Tutorials, quiz	Designed for course outcome
3	Laboratory work, Orals ,Lab CA exam	Practical knowledge

8.4.2. Record the attainment of Course Outcomes of all first year courses (5) for Mechanical Engineering students.

Attainment levels are set based on performance in Internal Semester Evaluation and University examinations.

Sr. No.	Assessment Tool	Attainment Level
1	University Examination	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student score

2	CA Test	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student scoredent score
3	MSE	Level 3->71 - 100% student score Level 2- 51 - 70% student score Level 1- 40 - 50% student score
4	LAB	Level 3->81 - 100% student score Level 2- 61 - 80% student score Level 1- 40 - 60% student score

8.5. Attainment of Program Outcomes from first year courses (20)

Following table shows the attainment of COs of first year courses yearwise

1. Indicate results of evaluation of each relevant PO and/or PSO, if applicable Indicate results of evaluation of each relevant PO and/or PSO, if applicable(15) CO-PO set level indicating Matrix

Academic year 2022-23

Course Code	Course	CO1	CO2	CO3	CO4
BTBS101	Engg. Mathematics-I	1.00	1.05	0.98	1.00
BTBS102	Engg.Physics	2.40	2.25	2.13	2.10
BTES203	Engg.Graphics	2.90	2.90	2.83	3.00
BTHM104	Communication Skill	2.10	2.20	2.07	2.20
BTES105	Energy and Environment Engg.	2.30	2.30	2.22	2.30
BTBS102L	Engineering Physics lab	2.00	2.00	2.60	2.00
BTES106	Basic Electrical and Electronics Engg. (Audit sub)	3.00	3.00	3.00	2.90
BTES108L	Engineering Mechanics Lab	2.40	2.40	2.40	2.40
BTES108L	Engineering Graphics Lab	2.00	2.60	2.00	2.60
BTHM109L	Communication Skills Lab	2.00	2.00	2.00	2.00
BTBS201	Engg. Mathematics-II	1.70	1.65	1.68	1.72
BTBS202	Engg.Chemistry	1.80	1.56	1.68	1.72
BTES203	Engg.Mechanics	2.40	2.40	2.35	2.30
BTES204	Computer Progrmming in C	1.70	1.62	1.70	1.30
BTES205	Workshop Practice	2.40	2.40	3.00	3.00
BTES206	Basic Civil and Mechanical Engineering(audit sub)	2.90	2.90	2.80	3.00
BTBS107L	Engineering Chemistry Lab	2.40	2.40	2.40	3.00
BTES210S	Seminar	2.40	2.40	2.40	2.40

Core Science and Engineering CO-PO Attainment 2022-23 (Electrical Engineering)

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
M1	0.66	1	0.89	0.87		0.43					0.88	0.67		
CHEM	2.01	1.81	1.45			1.81	2.01		2.01			1.45		
MECHANICS	2.34	2.34	1.37	1.55	2.35		1.75		1.58	1.55	1.56	0.98	2.34	0.78
Comp Prog In C	1.87	1.56	1.87	1.25	1.56							1.25		
BEEE	1.93					1.45	1.28						0.48	
Engg Chem Lab	2.8	2.55	2.07			2.55	2.8		2.8			2.07		
Engg Mech Lab	1.42	1.61	1.62				1.35					1.83	1.02	0.81
Workshop	1.22				2.16				0.81	0.41			0.2	
M2	0.91	1.37	1.24	1.2		0.6					1.23	0.92		
Phy	1.61	1.61	1.61	2.42		2.42	2.42					1.61	0.81	
Graphics	2.84	2.84	1.66	1.9	2.82		2.14		1.89	1.89	1.92	1.18	2.84	0.95
Comm skills					0.76			1.11	1.82	2.04		1.5		
EEE	1.84		1.96		1.54		2.35		1.56	1.57		1.97	0.79	
BCME	0.7	1.37	0.91	0.91	0.6		0		0	1.25	0.92	0.94	1.4	0.92
Phy lab	1.39	1.39	1.39	2.08		2.08	2.08					1.39	0.69	
Gaphics lab	0.61	1.57	0.78			0.22	0		0.7	0.86		0.79	1.22	0.78
Comm skills lab					0.71			1.09	1.82	1.99		1.44		
Seminar						0.81			2.16	2.16		1.42	0.81	0.81

PO levels set and achieved Attainment (2022-23):

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Target	2.00	2.20	2.14	2.44	1.44	1.43	2.25	1.40	2.29	2.26	2.00	2.00	1.26	1.14
AY 22-23	1.61	1.75	1.45	1.52	1.56	1.37	1.65	1.10	1.56	1.53	1.3	1.34	1.15	0.84

8.5.2. Actions taken based on the results of evaluation of relevant POs (5)

Academic Year-2022-23

POs Attainment Levels and Actions for Improvement- (2022-23)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	2.00	1.61	Target is not attained ● The students have a limited grasp of the core principles of engineering.
Action: 1. Greater emphasis will be placed on thoroughly comprehending the fundamentals of engineering.			
PO 2 : Problem Analysis			
PO 2	2.20	1.75	Target is not attained ● The students are experiencing a deficiency in their literature review outcomes and in identifying engineering-related issues.
Action: 1The goal for the upcoming academic year is to exert efforts in order to attain the predefined target 2. There will be an increased emphasis on generating fresh ideas to address these issues.			
PO 3 : Design/development of Solutions			
PO 3	2.14	1.45	Target is not attained ● In the realm of research and development, the students faced challenges in recognizing issues concerning public health and safety, as well as addressing cultural and societal needs.
Action: 1. The same target will be considered for the next academic year. **2.** More focus will be given to practicals, experiments, projects to improve their skills and not merely learning.			

PO 4 : Conduct Investigations of Complex Problems

PO 4	2.44	1.52	Target is not attained ● Students are facing challenges when it comes to conducting investigations into complex problems.
Action: 1. The goal for the upcoming academic year is to exert efforts in order to attain the predefined target 2. As teaching and learning is at an advanced level, more emphasis is given on the use of latest technology.			

PO 5 : Modern Tool Usage

PO 5	1.44	1.56	Target is not attained ● There is a need for greater utilization of the National Program of Technical Enhance Learning (NPTEL) as a teaching resource, with a focus on integrating more contemporary tools and technologies
Action: 1. The objective for the forthcoming academic year is to dedicate efforts toward achieving the predetermined goal. 2.More thrust will be given for the use of various modern tools like ICT panels, Moodle, PPTs, FTPs, and Digital Library.			

PO 6 : The Engineer and Society

PO 6	1.43	1.37	Target is not attained ● The students faced challenges in adequately evaluating societal, health, safety, legal, and cultural concerns.
Action: 1. The aim for the upcoming academic year is to focus efforts on reaching the established goal. 2 A strong bond will be forged with society by addressing their needs by conducting activities like exhibitions, and group discussions on societal needs related to engineering and professionalism, will be organised.			

PO 7 : Environment and Sustainability

PO 7	2.25	1.65	Target is not attained - The students' concerns regarding environmental issues lack depth, and there is a need for improvement in their approach to sustainable development.
Action: 1. The goal for the upcoming academic year is to commit efforts towards achieving the established objective. 2.The various environmental issues such as global warming, pollution, and e-waste will be highlighted by conducting various awareness programmes.			

PO 8 : Ethics

PO 8	1.40	1.10	Target is not attained - Students need improvement in their awareness of the importance of ethics and professional principles.
Action: 1. The aim for the upcoming academic year is to devote efforts to accomplish the set objective. 2. The importance of ethical behaviour in engineering students, will be emphasized and expert talks on ethics in engineering domain will be organized.			

PO 9 : Individual and Team Work

PO 9	2.29	1.56	Target is not attained - It has been observed that students need to enhance their ability to work both individually and as part of a team when working on projects
Action: 1. The goal for the approaching academic year is to allocate efforts towards achieving the predetermined aim. 2. The students will be motivated to participate in co curricular and extra curricular activities.			

PO 10 : Communication

PO 10	2.26	1.53	Target is not attained - It has been noted that students require a stronger focus on improving their proficiency in linguistic, public speaking, communication, and computing skills
Action: 1 We'll aim to achieve the same target in the upcoming academic year 2. Soft skills programmes and expert lecture will be arranged to highlight its importance and necessity in daily life and also the industry in particular.			

PO 11 : Project Management and Finance

PO 11	2.00	1.3	Target is not attained - The students' knowledge of project management is inadequate.
Action: 1. The same target will be considered for the next academic year. 2.Mini projects from the first year itself will help the students' to improve their understanding of the topic, cultivating team spirit, problem-solving ability, and managerial skills will be included.			

PO 12 : Life-long Learning

PO 12	2.00	1.34	Target is not attained - Greater emphasis will be placed on instilling the concept of lifelong learning among the students.
Action: 1. We will put in efforts to attain the identical target in the forthcoming academic year. 2. The students will be motivated to participate in co-curricular and extracurricular activities. 3. Expert lectures pertaining to various fields and career development programmes will be organized.			

CRITERION 09	STUDENT SUPPORT SYSTEMS	80

9.1 Mentoring system to help at individual level (5)

The role of the faculty as a Guardian Faculty mentor is one of nurturing support for a student during the transition period in academic, professional as well as personal augmentation. In all departments of the Institution, mentoring is a continuous process where Guardian faculty mentors serve as a resource who will respond to many questions, that the student might pose; support students in choosing course work that meets their needs and interests; encourage students to actively participate in seminars and laboratory work that are realistic in scope; and counsel the students on any other academic, professional, personal growth, etc., for necessary advice/guidance/help.

Guardian Faculty Mentor:

- For monitoring the overall development of students and encourage the students to participate in all grooming activities conducted by various cells, one faculty is assigned as Guardian Faculty Mentor to every batch consisting the 15 students.
- The guardian faculty mentor conducts periodical meeting with students in order to evaluate their academic performance and proper orientation towards the program, as well as guide them to rectify any shortcomings and to solve any problems.
- Every GFM is in contact with parents of respective students and communicates them about student performance, attendance and any other issues.
- GFM discuss the various policies conducted by the Institute with students and helps them take maximum benefits from them.
- Students are motivated and guided to participate in co-curricular and extra-curricular activities.
- GFM helps students for solving their personal issues such as psychological issues, confidence level, negative emotional management, leadership quality, time management, teamwork etc.
- **Following issues are discussed with students:**

i. Attendance
ii. Personal issues
iii. Behavior
iv. Understanding problems
v. Difficulty in writing/ speaking
vi. Confidence level

vii. Hostel/Food issues (Homesickness)

viii. Girl's/Women's issues

ix. In case of any other observations, it is noted and discussed.

1. Class Advisor:

A class Advisor is appointed to monitor & coordinate the activities of the respective class. Class Advisor maintains a record of defaulter list, roll call list, etc. and mentors the students related to academic performance, less attendance, etc.

2. Academic Guidance:

- Support to improve performance of students: Based on the previous year's result and Mid Semester Examination performance and overall behavior of students; weak and bright students are identified in each class and appropriate mentoring is done to improve the performance of weak students and motivate bright students.
- Remedial classes are conducted for students who have backlogs. Unit wise discussion is conducted in each remedial session.
- Program coordinator, course coordinators, class Advisors & GFMs continuously communicate with students and motivate them to perform well in academics and enhance their knowledge through various modes like Add on courses, internships, etc.
- Parents-Teacher Meeting is held once in semester to brief the progress of their wards to their parents. This process has improved students' academic performance, attendance and participation in co-curricular and extra-curricular activities.

3. Professional and Career Guidance:

- A dedicated **Training & Placement Coordinator (TPC)** is appointed by the institute to coordinate the placement related activities.
- Various career guidance sessions like higher education opportunities in India and abroad, latest trends in industries etc. are conducted throughout the year for students to enhance their vision and broaden their mindset to lead their lives on a successful career path.
- Apart from higher education opportunities, sessions like aptitude training, group discussion sessions, interview preparations, etc. are regularly conducted by TPCs to improve students' performance in placement activities for various companies.

- On the technical front, several technical training sessions are conducted by course coordinators and industry persons alike for students to keep them updated with latest technical knowledge.
- Students are encouraged to take part in various co-curricular & extra-curricular events to ensure their all-round development by participating and organizing such events at regular intervals.

Efficacy of Mentoring System:

- After mentoring and counseling it was observed that the academic performance of students improved.
- Also, some of abilities such as time management, teamwork, goal setting and soft-skills were improved.
- In some cases, it helped students to overcome in securities about their abilities as an engineering student and encouraged them to prepare for the next steps in their academic program and career.

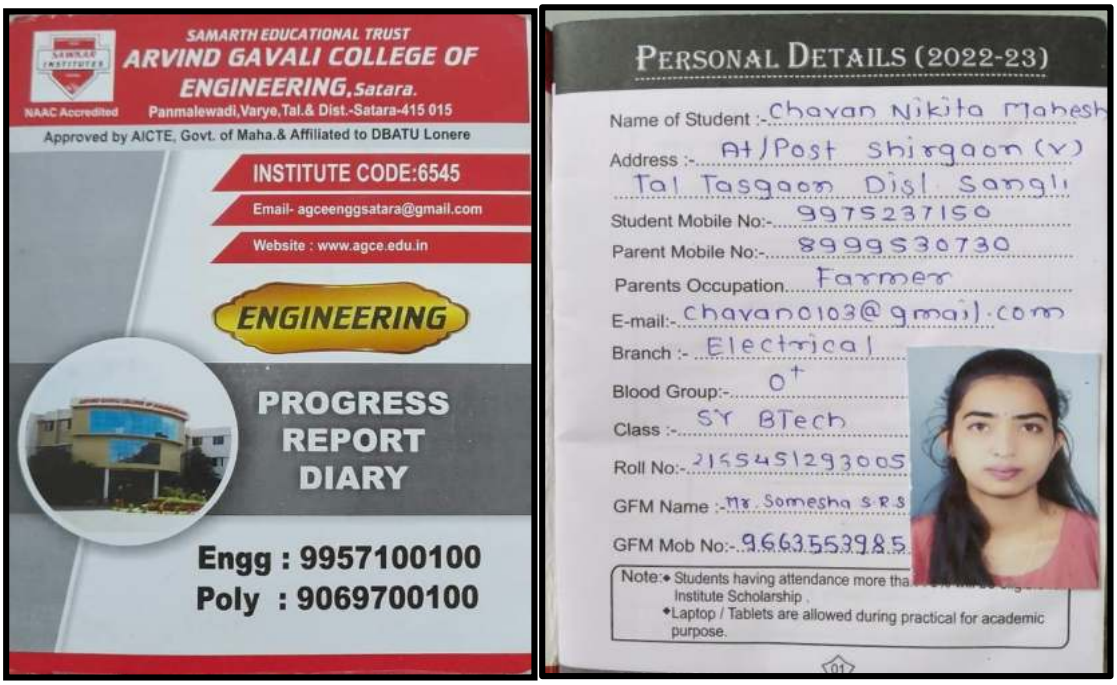
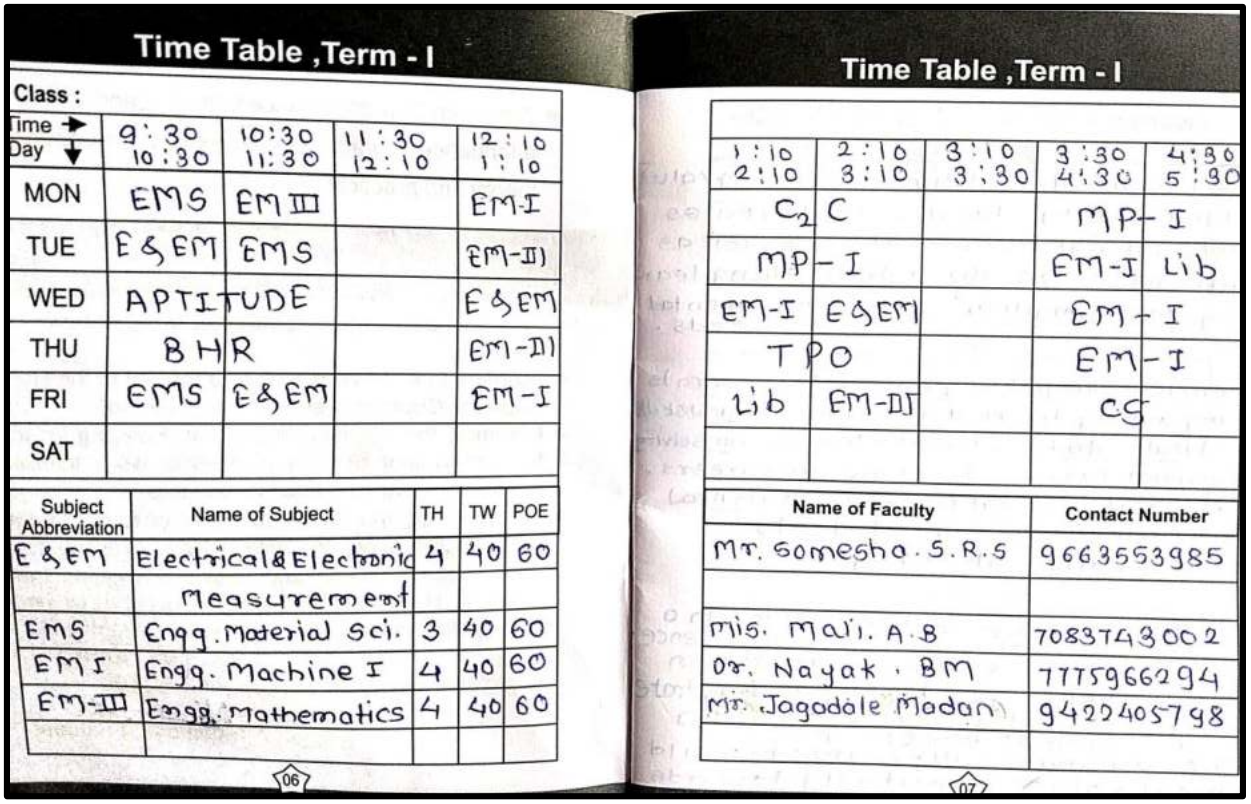


Fig. 9.1.a: GFM Diary (2022-23)

Fig. 9.1. b: GFM Diary



Time Table ,Term - I

Class :

Time → / Day ↓	9:30 10:30	10:30 11:30	11:30 12:10	12:10 1:10
MON	EMS	EM III		EM-I
TUE	E&EM	EMS		EM-II
WED	APTITUDE			E&EM
THU	BHR			EM-III
FRI	EMS	E&EM		EM-I
SAT				

Subject Abbreviation	Name of Subject	TH	TW	POE
E&EM	Electrical&Electronic Measurement	4	40	60
EMS	Engg. Material Sci.	3	40	60
EM I	Engg. Machine I	4	40	60
EM-III	Engg. Mathematics	4	40	60

06

Time Table ,Term - I

1:10 2:10	2:10 3:10	3:10 3:30	3:30 4:30	4:30 5:30
C_2	C		MP-I	
MP-I			EM-I	Lib
EM-I	E&EM		EM-I	
TPO			EM-I	
Lib	EM-III		CG	

Name of Faculty	Contact Number
Mr. Somesha. S.R.S	9663553985
Mis. Mali. A.B	7083743002
Dr. Nayak. BM	7775966294
Mr. Jagadale Madan	9422405798

07

SWOC Analysis

Strength
1) Fast learner
2) Creative
3) Flexible
4) Dedicated
5) Team player

Weakness
1) overthinking
2) Sensitive
3) Shy
4) Insecure
5) Presentation Skill

Opportunities
1) To become electrical engineer
2) To become maintainceengineer
3) To quality GATE Exam
4) To quality MAHA-TRANSCO Exam
5)

Challenges
1) To get a CGPA of 9.0
2) To take coaching on GATE Exam.
3) To build project & practical skills.
4) To actively participate in
5) electrical workshop training

GFM Remark: Sign.

03

Fig. 9.1 c: GFM Diary

9.2. Feedback analysis and reward/corrective measures taken, if any (10)

Feedback collected for all courses: Yes

The feedback process helps course coordinators understand the lacunas and scope for improvements. Also, it appreciates the hard work done by the course coordinators.

Feedback collection process:

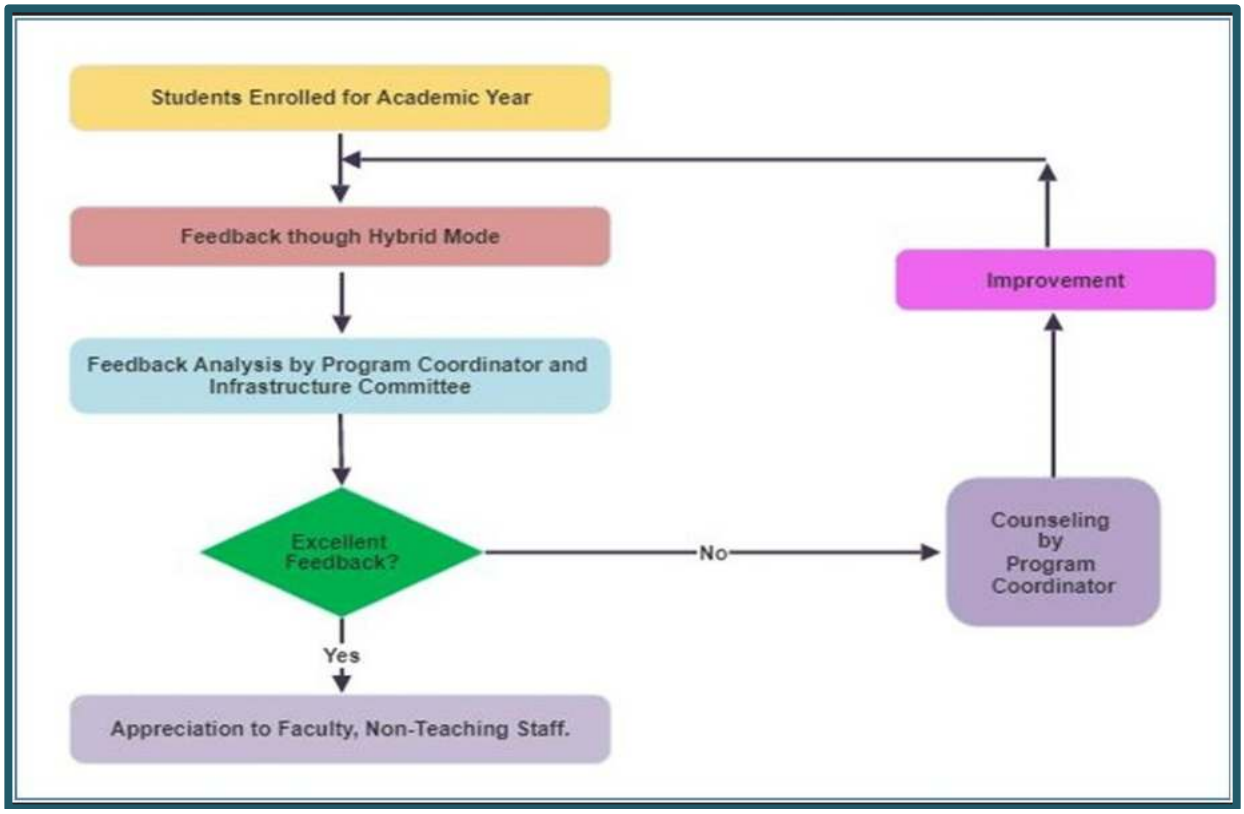


Fig.9.2. a: Feedback Collection and analysis Process

The teaching-learning system followed by any educational institution needs continuous refinement. To facilitate this process of continuous refinement, the institution has adopted a feedback system that takes suggestions from students of each program.

This eventually helps to fine-tune the teaching-learning process and the curriculum. The institution follows a well-defined feedback system. It has been identified as one of the important processes in our teaching learning system.

The students those who have attendance more than average are given an opportunity to express their opinion with regards to effectiveness in teaching by a teacher, which are detailed in the feedback format. The feedback from students regarding the quality of teaching is collected twice in a semester, using Google apps. This also helps the teachers in improving

their teaching methodology.

Feedback is collected online twice in a semester (either through Moodle / Google Form) from students with above average attendance. This feedback is completely anonymous and students are encouraged to give their honest feedback.

The feedback is collected on five-point scale

SAMARTH EDUCATIONAL TRUST

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA

DEPARTMENT OF ELECTRICAL ENGINEERING

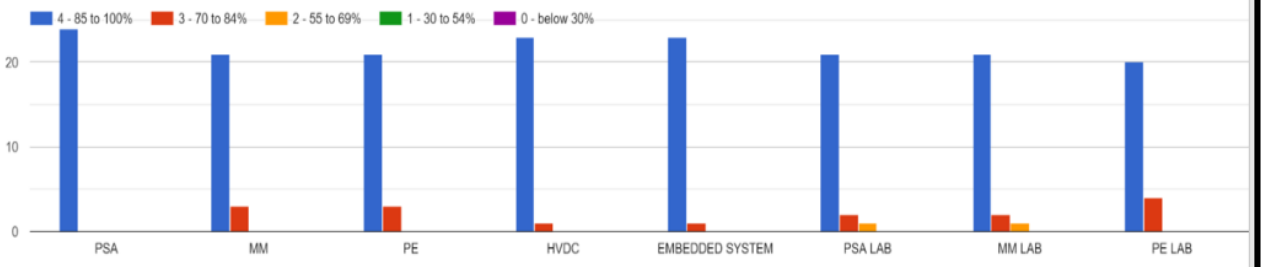
Third Year Student Feedback

Month : 01 September To 19 December 2022
Total Responses : 24
Total Class Strength : 33
Feedback Percentage : 72.72%

FACULTY – SUBJECT DISTRIBUTION

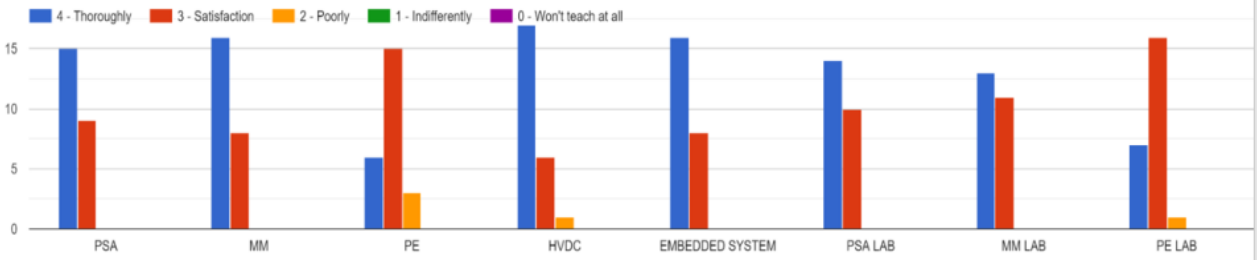
SL. NO.	SUBJECTS	Abr.	Name of Faculty	Abr.
01	Power System Analysis	PSA	Mr. Jivajee Bichkar	BJS
02	Microprocessor and Microcontroller	MM	Mr. Praveen H. Pawar	PHP
03	Power Electronics	PE	Mr. Somesha Naik S R	SRS
04	HVDC	HVDC	Ms. Ashlesha Mali	MAB
05	Embedded System	ES	Ms. Parvathi Islavath	PI

1. How much of the syllabus was covered in the class:



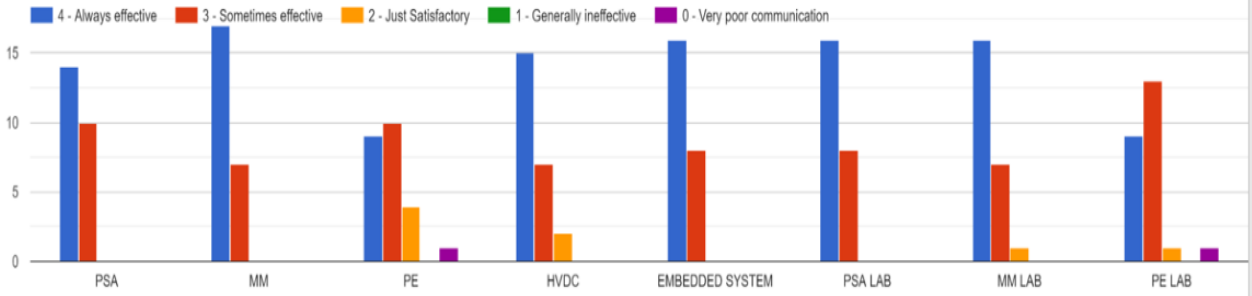
	PSA	MM	PE	HVDC	ES	%
85 -100 %	24	21	21	23	23	93%
70 - 84 %	0	3	3	1	1	7%
55 – 69 %	0	0	0	0	0	0%
30 – 54 %	0	0	0	0	0	0%
0- Below 30 %	0	0	0	0	0	0%

2. How well did the teachers prepare for the classes?



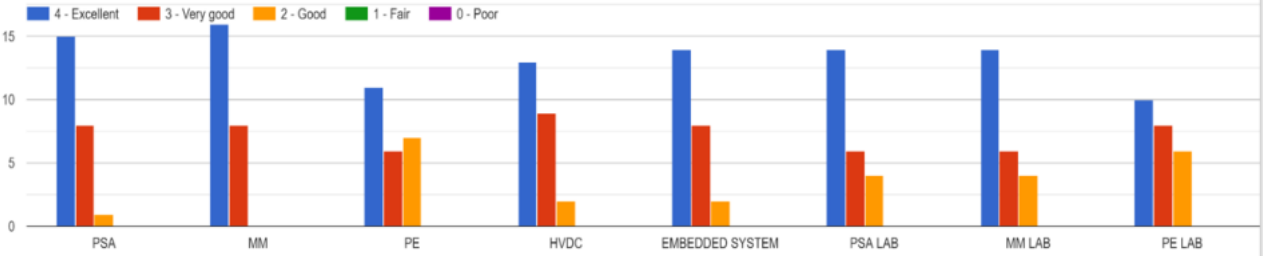
	PSA	MM	PE	HVDC	ES	%
Thoroughly	15	16	6	17	16	58%
Satisfaction	9	8	15	6	8	38%
Poorly	0	0	3	1	0	3%
Indifferently	0	0	0	0	0	0%
Wont Teach at all	0	0	0	0	0	0%

3. How well were the teachers able to communicate

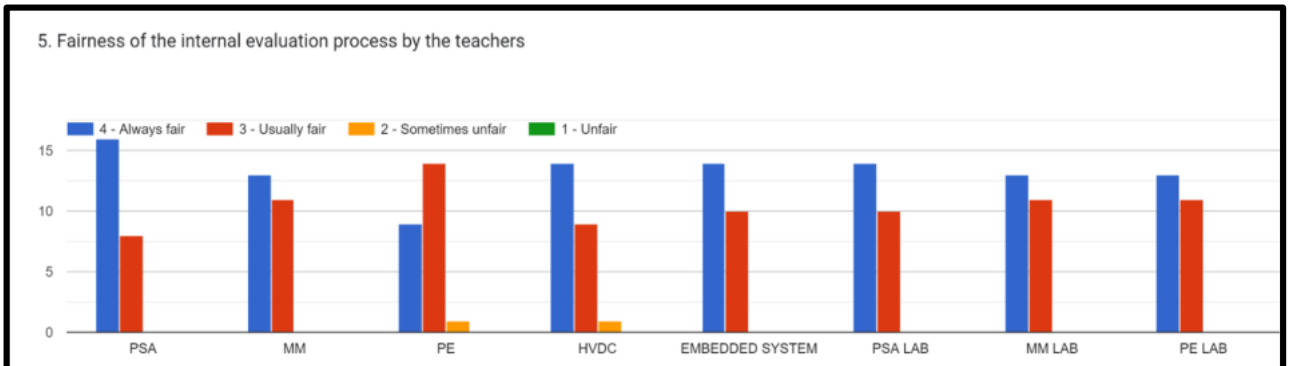


	PSA	MM	PE	HVDC	ES	%
Always Effective	14	17	9	15	16	59%
Sometime effective	10	7	10	7	8	35%
Just Satisfactory	0	0	4	2	0	5%
Generally Ineffective	0	0	0	0	0	0%
Very Poor Communication	0	0	1	0	0	1%

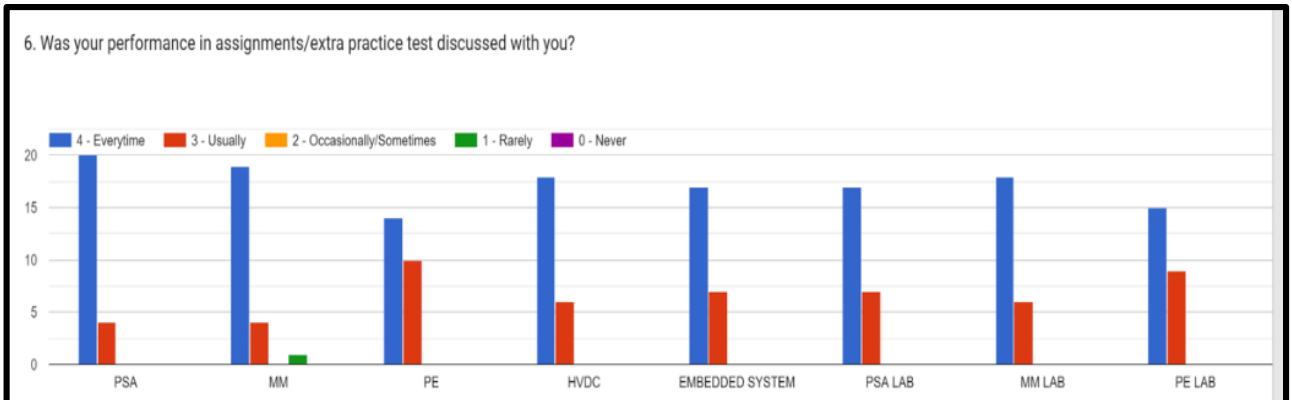
4. The teachers's approach to teaching can best be described as



	PSA	MM	PE	HVDC	ES	%
Excellent	15	16	11	13	14	58%
Very Good	8	8	6	9	8	33%
Good	1	0	7	2	2	10%
Fair	0	0	0	0	0	0%
Poor	0	0	0	0	0	0%

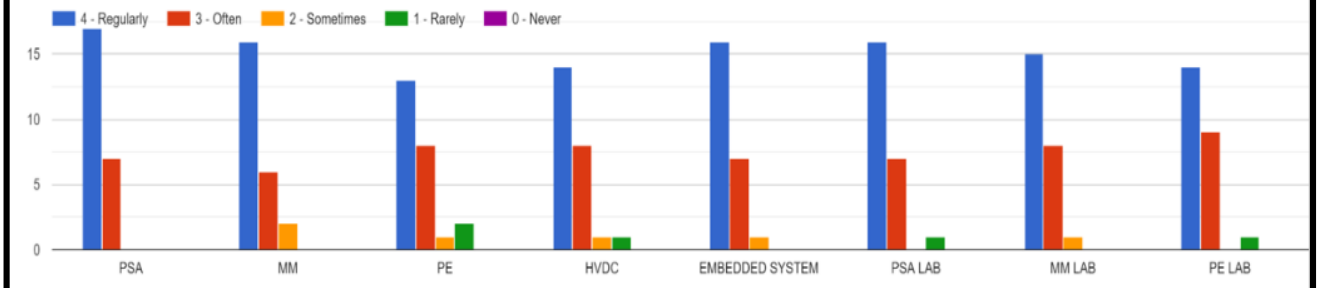


	PSA	MM	PE	HVDC	ES	%
Always fair	16	13	9	14	14	55%
Usually fair	8	11	14	9	10	43%
Sometimes unfair	0	0	1	1	0	2%
Unfair	0	0	0	0	0	0%
Poor	0	0	0	0	0	0%



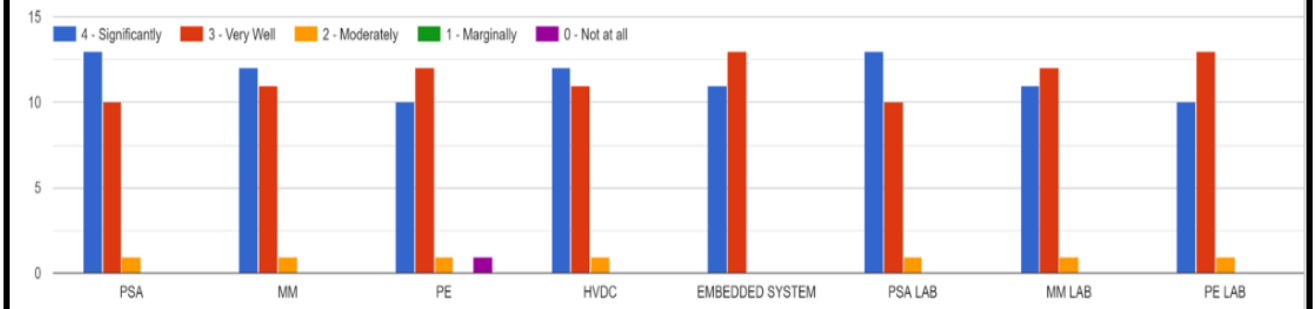
	PSA	MM	PE	HVDC	ES	%
Every time	20	10	19	18	17	70%
Usually	4	6	4	6	7	23%
Occasionally	0	0	0	0	0	0%
Rarely	0	0	1	0	0	1%
Never	0	0	0	0	0	0%

7. The faculty takes active interest in promoting internship, student exchange, field visit opportunities for students. *



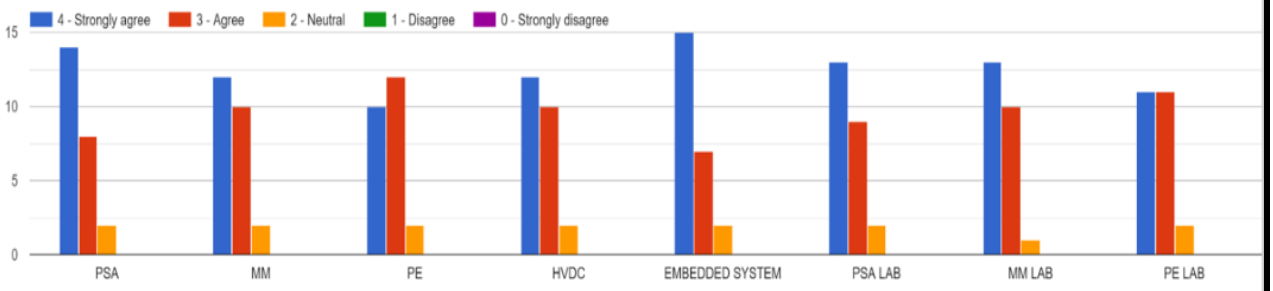
	PSA	MM	PE	HVDC	ES	%
Regularly	17	16	13	14	16	63%
Often	7	6	8	8	7	30%
Sometimes	0	2	1	1	1	4%
Rarely	0	0	2	1	0	3%
Never	0	0	0	0	0	0%

8. The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.



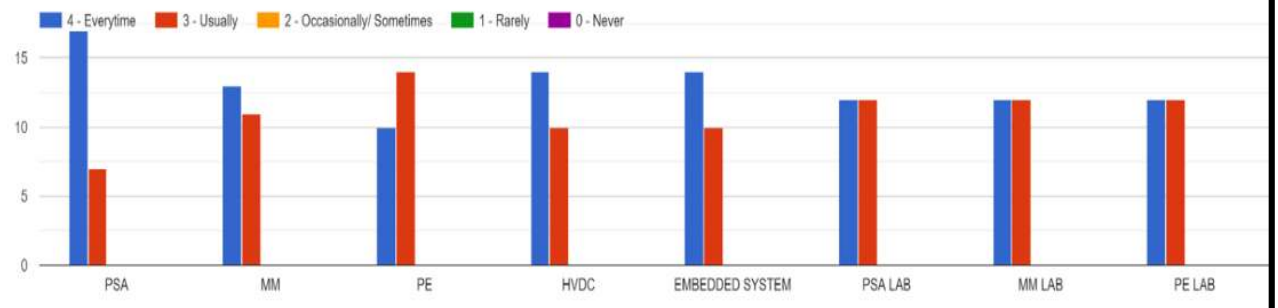
	PSA	MM	PE	HVDC	ES	%
Significantly	13	12	10	12	11	48%
Very Well	10	11	12	11	13	48%
Moderately	1	1	1	1	0	3%
Marginally	0	0	0	0	0	0%
Not at All	0	0	1	0	0	1%

9. The institute provides multiple opportunities to learn and grow



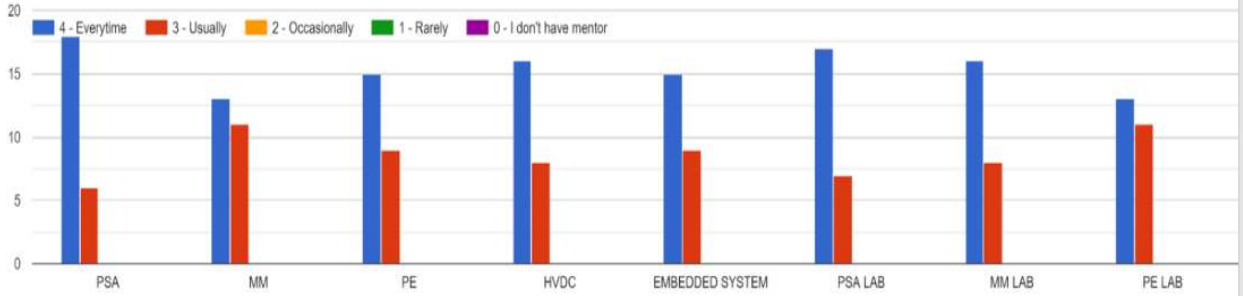
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	14	12	10	12	15	53%
Agree	8	10	12	10	7	39%
Neutral	2	2	2	2	2	8%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

10. Teachers inform you about your expected competencies, course outcomes, and program outcomes



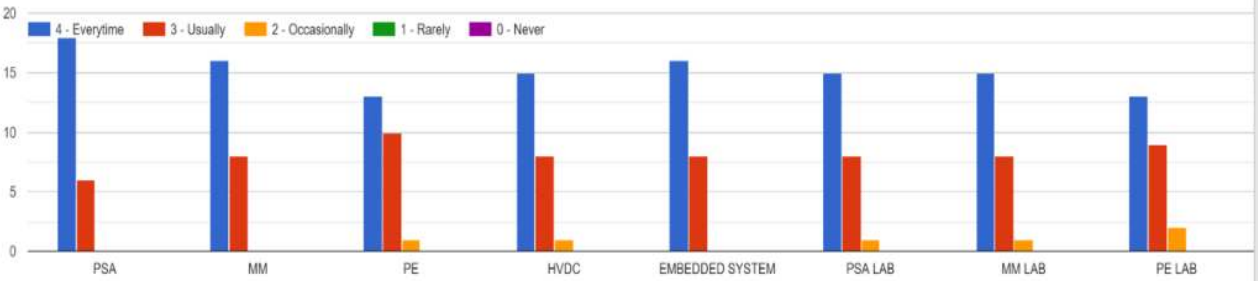
	PSA	MM	PE	HVDC	ES	%
Every time	17	13	10	14	14	57%
Usually	7	11	14	10	10	43%
Occasionally	0	0	0	0	0	0%
Rarely	0	0	0	0	0	0%
Never	0	0	0	0	0	0%

11. Your mentor does a necessary follow-up with as assigned task to you



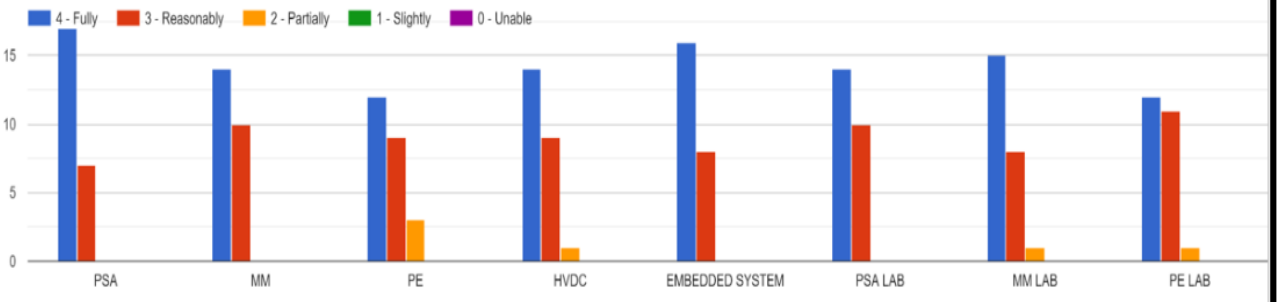
	PSA	MM	PE	HVDC	ES	%
Every time	18	13	15	16	15	64%
Usually	6	11	9	8	9	36%
Occasionally	0	0	1	0	0	1%
Rarely	0	0	0	0	0	0%
I don't have mentor	0	0	0	0	0	0%

12. The teacher illustrates the concepts through examples and applications



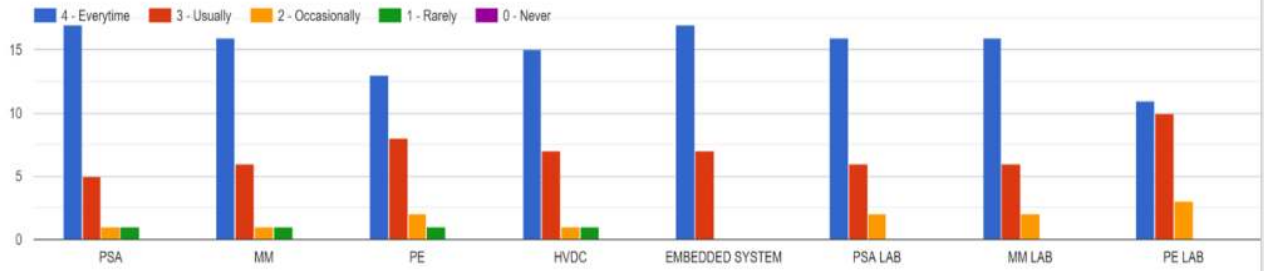
	PSA	MM	PE	HVDC	ES	%
Every time	18	16	13	15	16	65%
Usually	6	8	10	8	8	33%
Occasionally	0	0	1	1	0	2%
Rarely	0	0	0	0	0	0%
Never	0	0	0	0	0	0%

13. The teacher identifies your strengths and encourage you with providing right level of challenges



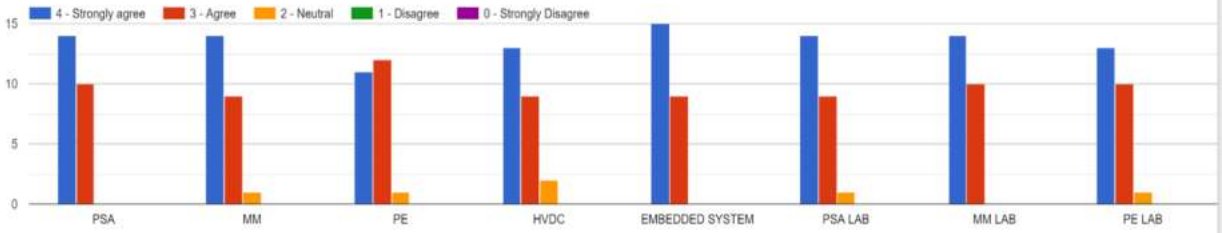
	PSA	MM	PE	HVDC	ES	%
Fully	17	14	12	14	16	61%
Reasonably	7	10	9	9	8	36%
Partially	0	0	3	1	0	3%
Slightly	0	0	0	0	0	0%
Unable	0	0	0	0	0	0%

14. Teachers are able to identify your weaknesses and help you to overcome them



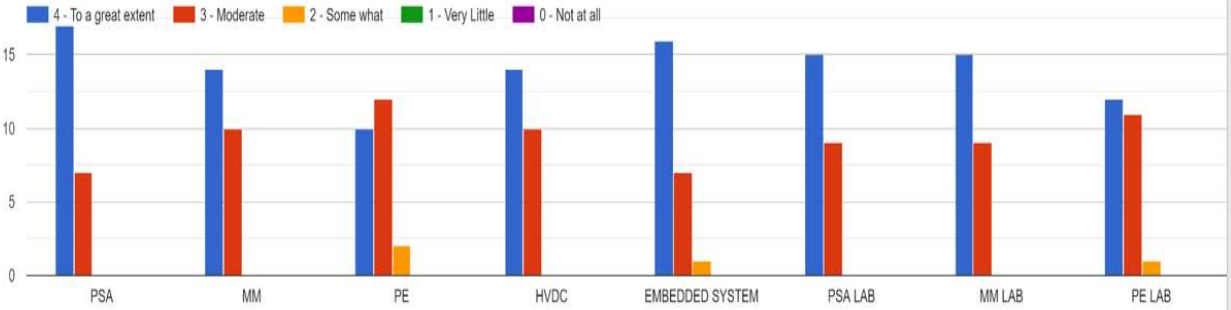
	PSA	MM	PE	HVDC	ES	%
Every time	17	16	13	15	17	65%
Usually	5	6	8	7	7	28%
Occasionally	1	1	2	1	0	4%
Rarely	1	1	1	1	0	3%
Never	0	0	0	0	0	0%

15. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.



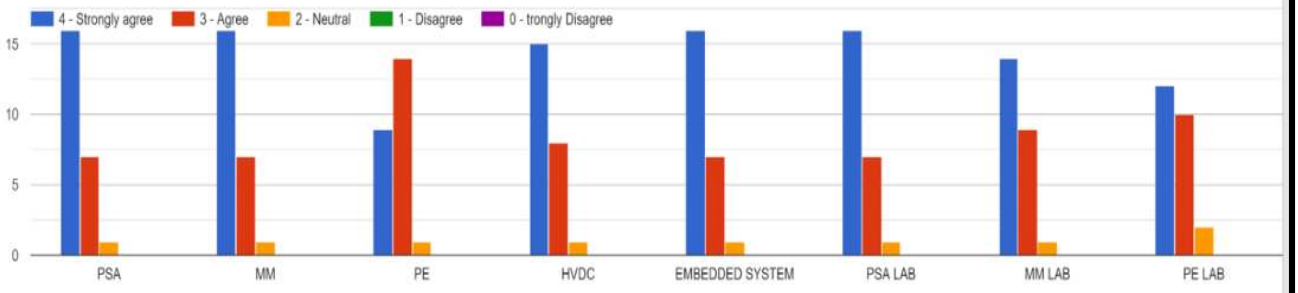
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	14	14	11	13	15	56%
Agree	10	9	12	9	9	41%
Neutral	0	1	1	2	0	3%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

16. The institute/ teachers use student-centric methods, such as experiential learning, participative learning and problem-solving methodologies for enhancing learning experiences



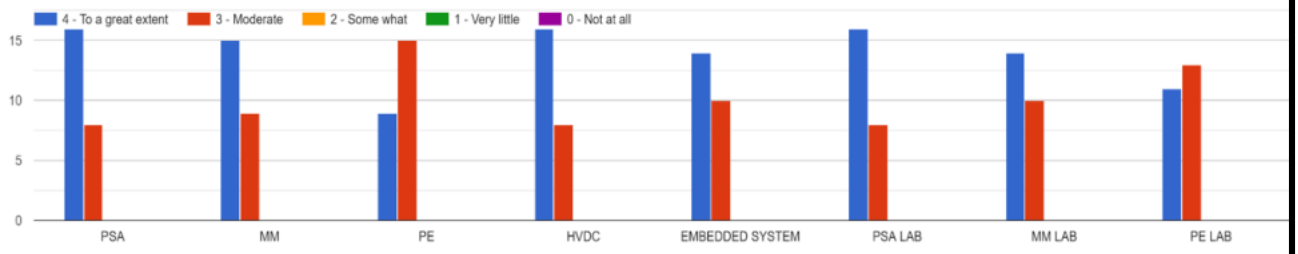
	PSA	MM	PE	HVDC	ES	%
To a great extent	17	14	10	14	16	59%
Moderate	7	10	12	10	7	38%
Some What	0	0	2	0	1	3%
Very Little	0	0	0	0	0	0%
Not at all	0	0	0	0	0	0%

17. Teachers encourage you to participate in extracurricular activities.

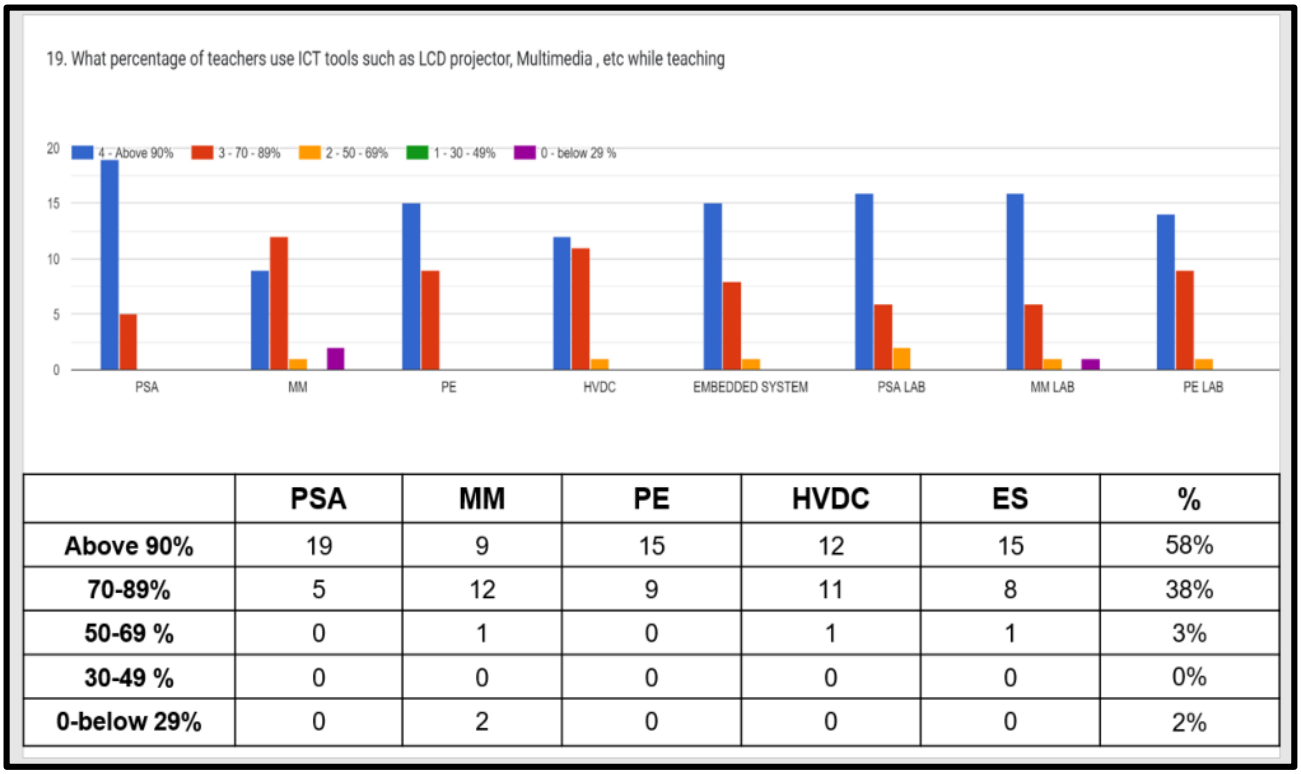


	PSA	MM	PE	HVDC	ES	%
Strongly Agree	16	16	9	15	16	60%
Agree	7	7	14	8	7	36%
Neutral	1	1	1	1	1	4%
Disagree	0	0	0	0	0	0%
Strongly Disagree	0	0	0	0	0	0%

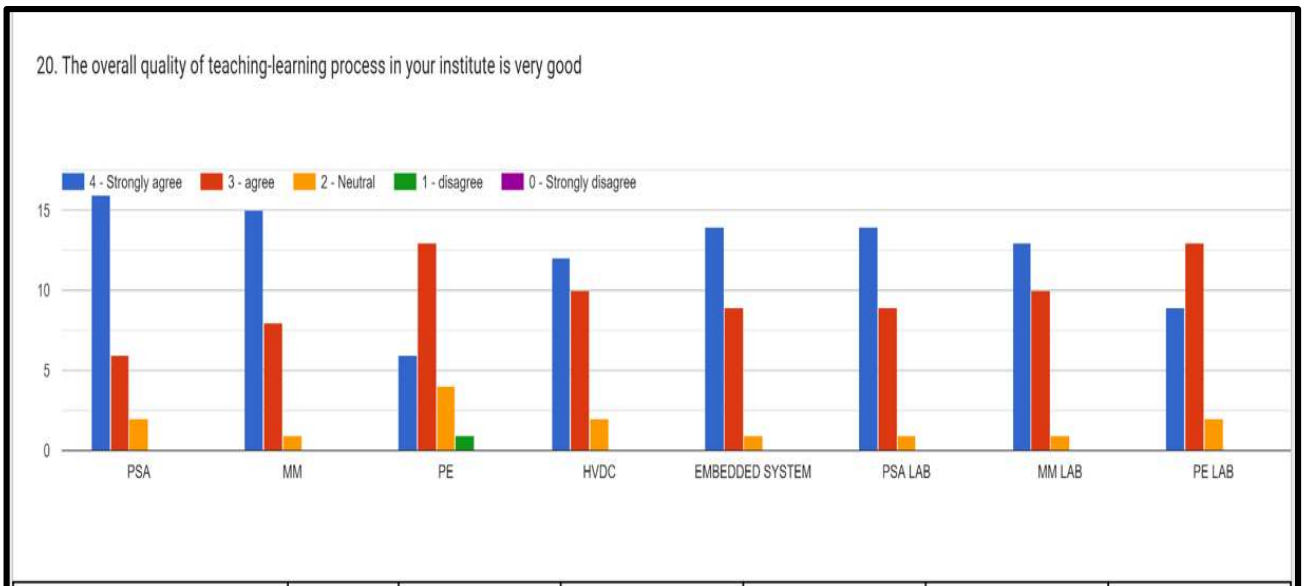
18. Efforts are made by teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work



	PSA	MM	PE	HVDC	ES	%
To a great extent	16	15	9	16	14	58%
Moderate	8	9	15	8	10	42%
Some What	0	0	0	0	0	0%
Very Little	0	0	0	0	0	0%
Not at all	0	0	0	0	0	0%



	PSA	MM	PE	HVDC	ES	%
Above 90%	19	9	15	12	15	58%
70-89%	5	12	9	11	8	38%
50-69 %	0	1	0	1	1	3%
30-49 %	0	0	0	0	0	0%
0-below 29%	0	2	0	0	0	2%



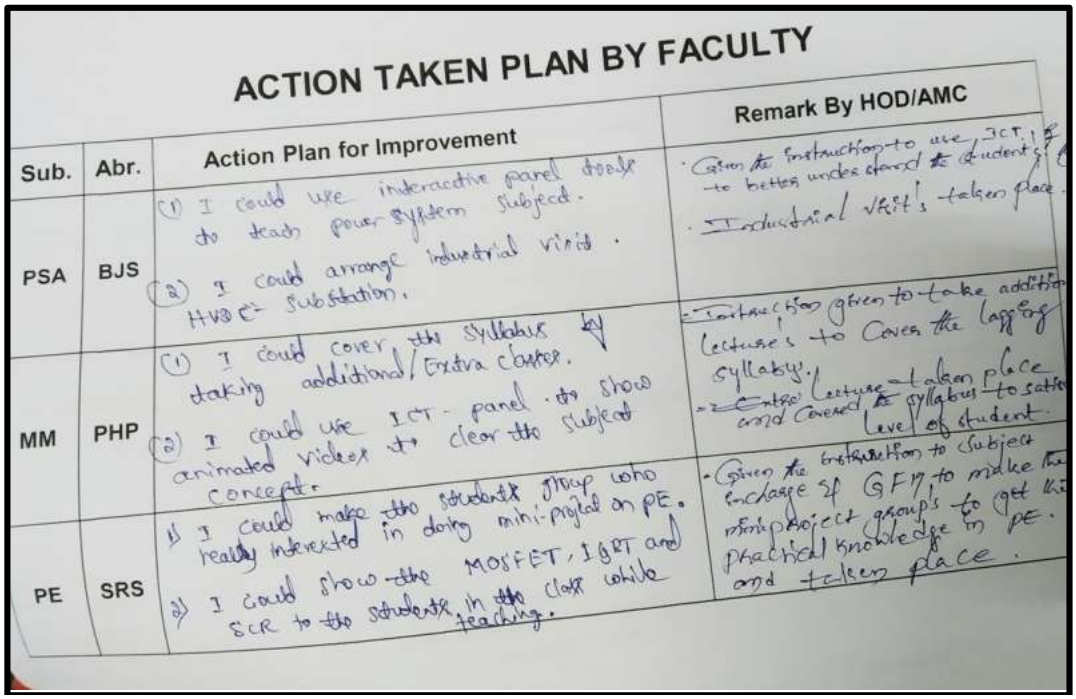
	PSA	MM	PE	HVDC	ES	%
Strongly Agree	16	15	6	12	14	53%
Agree	6	8	13	10	9	38%
Neutral	2	1	4	2	1	8%
Disagree	0	0	1	0	0	1%
Strongly Disagree	0	0	0	0	0	0%

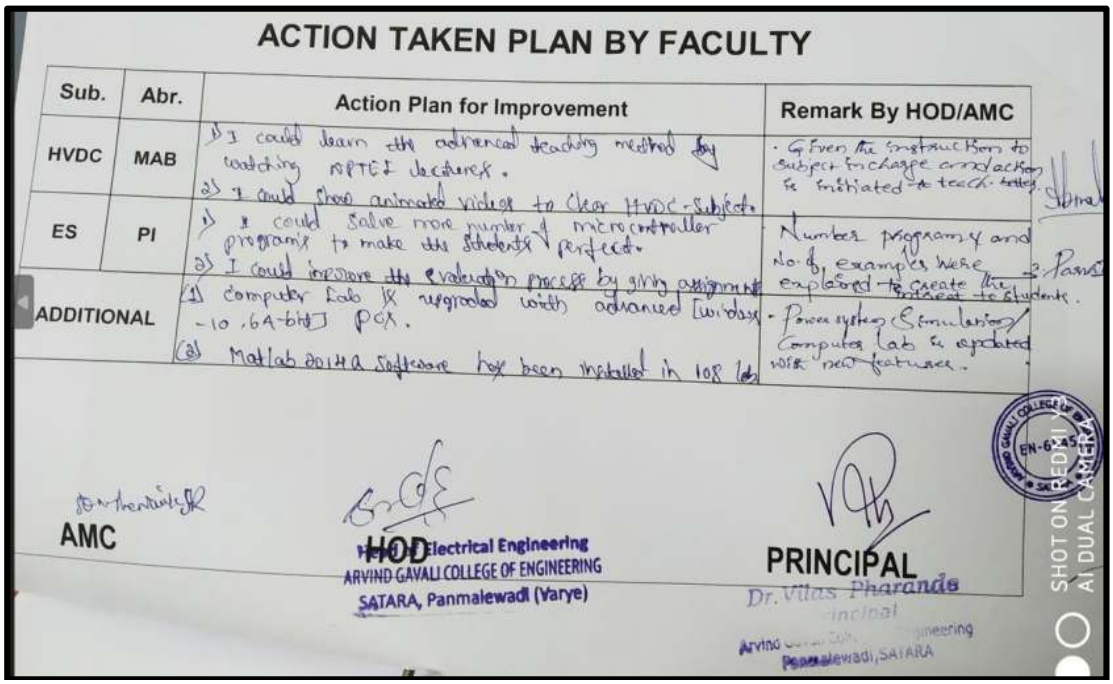
Fig. 9.2.b: Feedback Collection

OVERALL FEEDBACK ANALYSIS

Sub.	Abr.	Appreciation	Suggestions for improvement
PSA	BJS	1. Arrangement of Industrial visit. 2. Efforts on soft skill development of students.	1. Use ICT tools to clear the concept. 2. Arrange some more Industrial visits.
MM	PHP	1. Mentoring of activities is good. 2. Student centric activities to build teams.	1. Syllabus coverage need to be improved. 2. Use of ICT Tools for teaching.
PE	SRS	1. Encouragement to build project skills among students. 2. Student supportive.	1. Mini project need to be added in PE subject. 2. Show the power electronics components during lecture to the students physically for clearing the concept.
HVDC	MAB	1. Guidance on competitive examinations. 2. Encouragement for participation in Extra-curricular activities.	1. Teaching method need to be improved. 2. Animated videos are expected while teaching.
ES	PI	1. Student centric activities. 2. More number of programs has been solved in ES subject.	1. Solve more programs in ES subject. 2. Improve internal evaluation process.

Fig. 9.2.c: Feedback Analysis





ACTION TAKEN PLAN BY FACULTY

Sub.	Abr.	Action Plan for Improvement	Remark By HOD/AMC
HVDC	MAB	1) I could learn the advanced teaching method by watching NPTEL lectures. 2) I could show animated videos to clear HVDC-Subject.	· Given the instructions to subject incharge and action is initiated to teach.
ES	PI	1) I could solve more number of microcontroller programs to make the students perfect. 2) I could improve the evaluation process by giving assignments	Number programs and No. of examples where explained to create the interest to students.
ADDITIONAL		1) Computer Lab is upgraded with advanced [windows -10, 64-bit] pcs. 2) Matlab 2014a software has been installed in 108 lab.	· Power system Simulation Computer Lab is updated with new features.

AMC

HOD
Electrical Engineering
ARVIND GAVALI COLLEGE OF ENGINEERING
SATARA, Panmalewadi (Varye)

PRINCIPAL
Dr. Vilas Pharande
Principal
Arvind Gavali College of Engineering
Panmalewadi, SATARA

Fig. 9.2.d: Corrective Action Taken

Students Feedback Analysis procedure

The staff appraisal committee members at program level collects the online feedback and prepare the consolidated report. The staff appraisal committee members analyze feedback and discuss it with program coordinator and accordingly corrective and preventive measures are carried out if necessary. This feedback is communicated to the concerned faculty through program coordinator.

Effectiveness of Feedback System:

- Faculties having poor feedback in mid semester were counseled by program coordinator. During counseling program coordinator gave suggestions for the improvement to the concern faculty.
- It was observed that after counseling, end semester feedback of concern faculty was improved.

Corrective Measures:

Table9.2. a: Year-wise corrective measure data

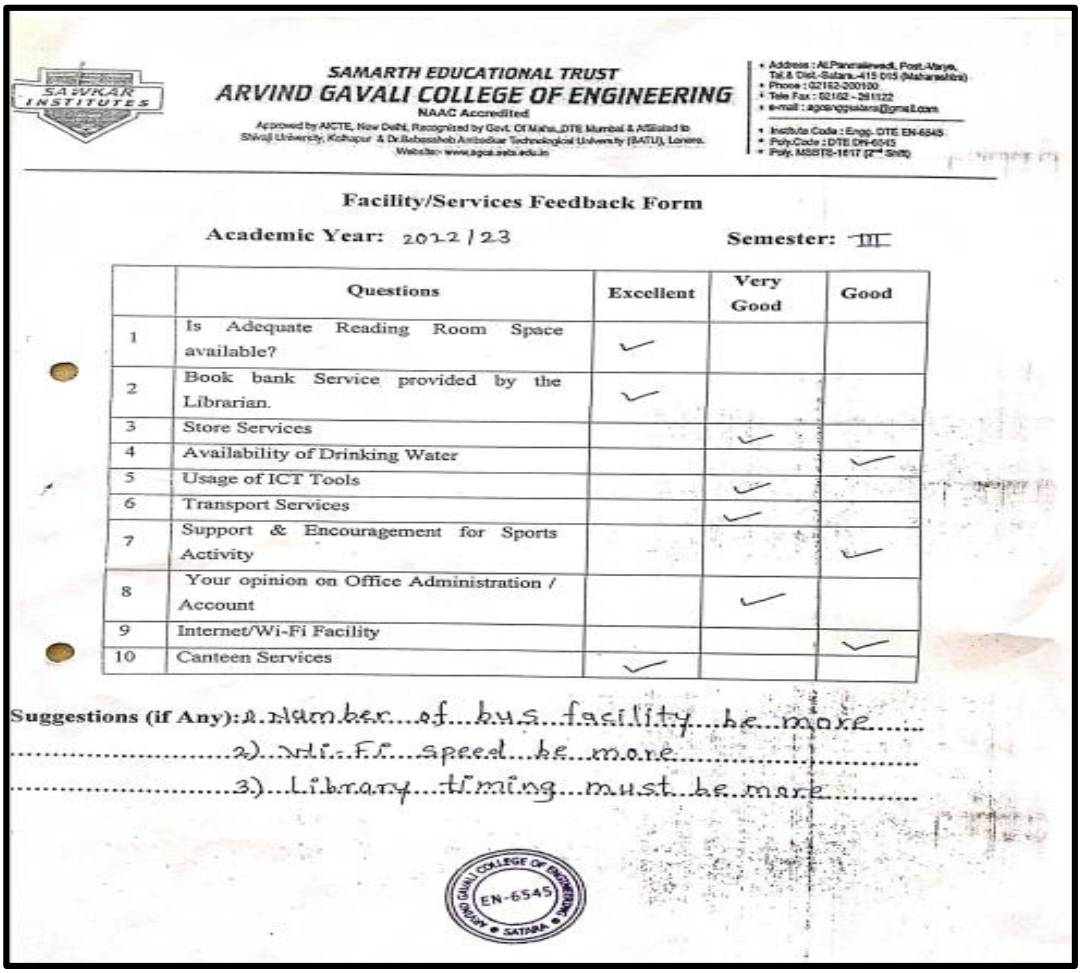
Academic Year	Suggestion recognized through Feedback Process	Corrective actions taken
2022-23	Soft-skill Training and Technical Training Sessions	• Soft-skill and Technical training sessions organized for C++, Web Development, Python
2021-22	Students demand for Practical based learning.	• Emphasis is given on Project Based Learning (IOT Projects + Projects involved for Seminar Course)
2020-21	Organize soft skill development program	• Separate Slot for Soft skill Session (Campus to Corporate) is allotted in Timetable.
2019-20	Technical Training Program should be organized.	• 4 Weeks Industry Training Program(Yugam Event) conducted for IOT, AI, Web Designing Domains.
2018-19	More Usage of ICT TOOLs for Teaching Learning Process.	• Students are encouraged to attempt Quizzes, MCQ Test on MOODLE. • Facility of Intelligent Interactive Panel is Provided in Classrooms.

The suggestions/complaints/appreciations from the students are shared with the concerned course coordinator through program coordinator. This process is useful to evaluate course coordinator performance.

9.3. Feedback on facilities (05)

Feedback collection procedure

The institute has set the process of facility feedback mechanism to improve the quality and performance. In every semester, feedback is collected from the students on the various facilities provided to them such as library, transport, internet, canteen, sports etc. The feedback from students regarding the facilities is collected in a semester.



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING
NAAC Accredited

Facility/Services Feedback Form

Academic Year: 2022 / 23 Semester: III

	Questions	Excellent	Very Good	Good
1	Is Adequate Reading Room Space available?	✓		
2	Book bank Service provided by the Librarian.	✓		
3	Store Services		✓	
4	Availability of Drinking Water			✓
5	Usage of ICT Tools		✓	
6	Transport Services		✓	
7	Support & Encouragement for Sports Activity			✓
8	Your opinion on Office Administration / Account		✓	
9	Internet/Wi-Fi Facility			✓
10	Canteen Services	✓		

Suggestions (if Any): 1. number of bus facility be more
2) Wi-Fi speed be more
3) Library timing must be mark

Fig 9.3.a: Facility Feedback Form

Feedback Analysis: The feedback is collected and analyzed based on the facilities provided like sports, canteen, library; etc .and corrective measures are taken as per the feedback (if required)

Corrective Action Taken:

Table9.3 a: Year-wise corrective measure data regarding facilities

Sr. No.	Academic Year	Comments given by student	➢ Action Taken/outcomes
1	2022-23	Gym Facility	➢ Institute Build open Gym facility for students Library Closing time is extended.
2	2021-22	Increase no. of buses for transportation for Rahimatpur, Medha Route.	➢ Two New buses started for Rahimatpur route and Medha Route
		Increase Wi-Fi Internet Speed	➢ Separate Network for Wi-Fi is established in order to receive higher frequency internet data.
3	2020-21	Store Services should be available after college hours or Saturday	➢ Store Services are available on Saturday.
4	2019-20	Extend Library Timing	➢ Library Closing time is extended. ➢ Reading Room is available for 12 hours.
		Decide and fix the menu of Canteen.	➢ Canteen Committee is formed.

9.4. Self-Learning (5) **(Institute Marks: 4)**

Scope for self-learning:

- Students are encouraged to register for online courses offered by world's leading MOOC Platforms like Coursera, NPTEL, Udemy.
- Exclusive Library Slot is assigned in timetable for self- learning.
- Digital Library available at institute level. (DELNET)
- Technical competitions, workshops, seminars, quiz competitions are being conducted where students actively participate.
- Students are also encouraged to register for national level competitions for overall development.

Facilities for self-learning:

- IIT Remote Center
- Open- Source Videos
- Digital Library
- Internet WI-FI
- Virtual Lab
- DELNET Library
- NPTEL Local Chapter
- MOODLE

Students are facilitated with a well-equipped library provided with latest edition of books, e-Books, online and printed journals and modern labs. The college central library is well equipped with technical magazines, journals and NPTEL lecture videos. The Institute facilities use the library resources to enhance the self-learning of students in following ways:

- The Institute library has a collection of reference books, handbooks on different courses.
- Internet and Wi-Fi facility is provided to all students and staff.
- To update themselves with the current news and latest technological developments, students and staff avail the facilities of News -papers and magazines in the library.
- Students are provided with the book bank facility for all students.
- Question paper sets of all subjects of previous University examination are available in the central library.

- Old project reports of students are maintained in departmental library which are referred regularly by students of the department.

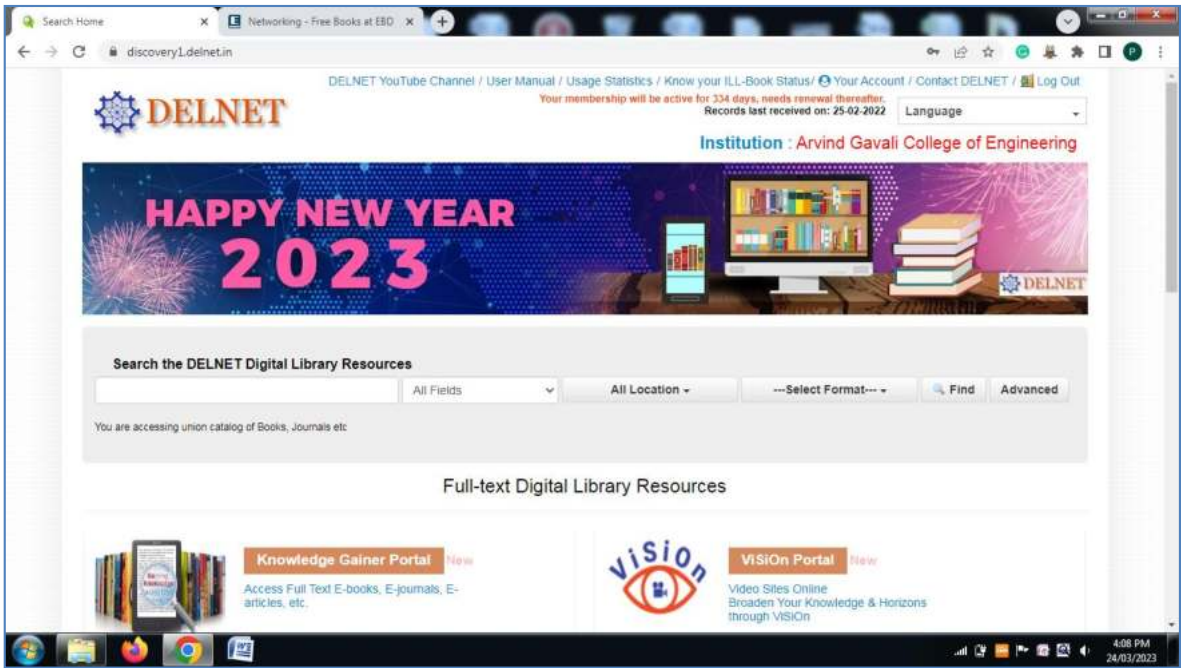


Fig. 9.4.a: DELNET Web portal

Fig. 9.4.b: Students Participating In Online Certification Courses

Effective Utilization:

- Students used various self-learning tools for their seminars, mini projects and final year projects.
- Every student has login ID and Password for accessing the internet.
- Students have been given access to library through KOHA software. This facilitates ease of access to library.
- Students have attended the Spoken English and Technical Skill Development sessions through IIT Remote Center.
- Students have been guided and encouraged to learn NPTEL courses through NPTEL Local Chapter.
- The college central library has NPTEL videos, educational CDs having lectures of renowned Professors.
- Students are provided DELNET library facility to refer online books, journals.
- Students have individual account on MOODLE and thereby they can attempt quizzes, read study materials uploaded by faculty members.

9.5. Career Guidance, Training, Placement (10)

The institution may specify the facility, its management and its effectiveness for career guidance including counseling for higher studies, campus placement support, industry interaction for training/ internship /placement etc.

Facility:

- Institute has a Training and Placement cell, responsible for grooming the students to be industry ready and provide opportunities for placement.
- T&P cell organizes various programs for overall personality development of the students.
- Experienced industry professionals in the respective domain of job profiles are invited for guest lectures.
- Through these activities, the students are made aware of the opportunities in various fields along with the required job profile. At the same time, they get a chance to interact with these industry professionals to take advantage of their experience in respective field of expertise.
- Career guidance books such as GRE, GATE are available in the library.

In addition, with T&P Cell, Institute has initiated Campus To Corporate Activity to help students improve communication skills, interpersonal skills, societal awareness and inculcate ethics.

Facility Management:

- The students are groomed through lectures on aspects of pre-requisites for facing interviews such as preparing an effective prototype resume and effective measures and presentation skills to face an interview.
- The students are also counseled for taking up higher studies in India as well as abroad.

Placement Procedure:

Institute training and placement cell procedure is as follows

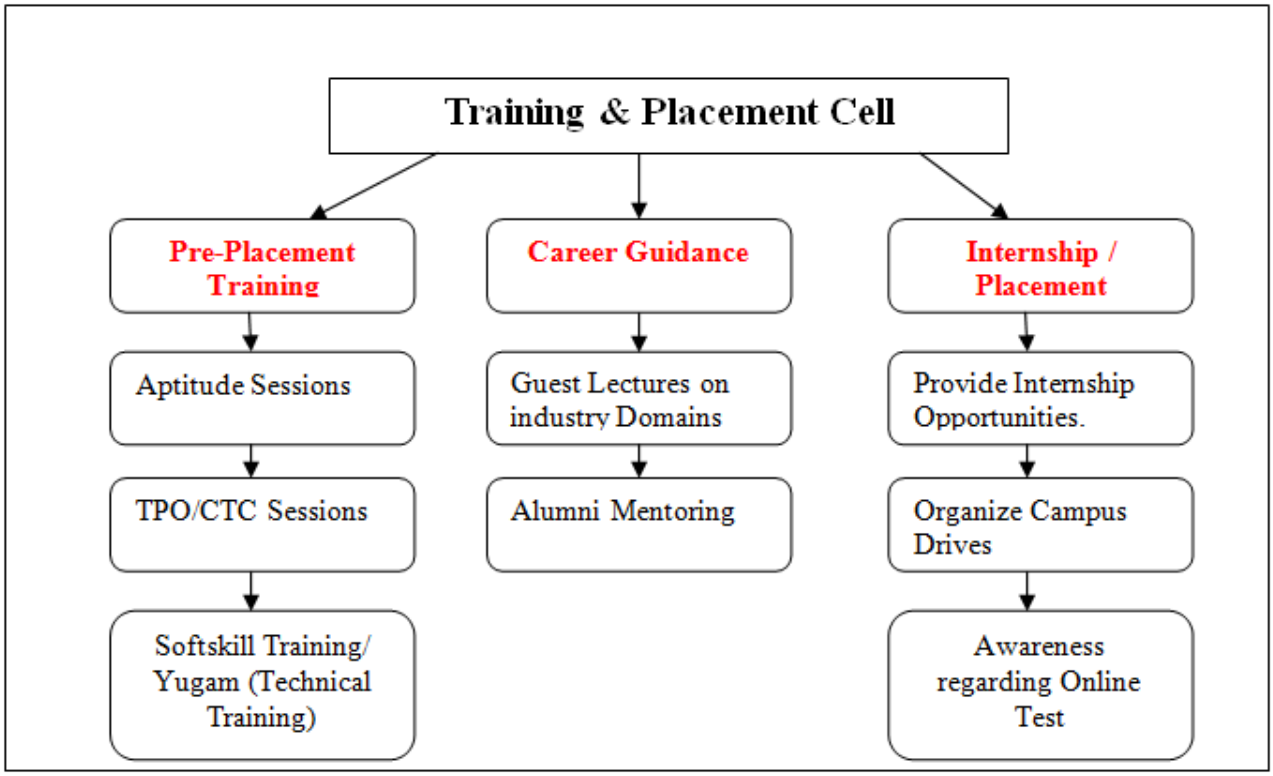


Fig. 9.5.a: Institute training and placement cell procedure

Counseling for Higher studies:

Following are the activities carried for higher studies counseling;

TableNo.9.5a Counseling for Higher Studies:

Academic Year	Details	Speaker/Expert	Date
2022-23	Opportunities is IT Industry and Japan	Mr. Bipin Kadam (Thinksmart Soft, Tokyo, Japan)	03/05/2023
2022-23	Guidance for GRE TOEFL	Mr. Amol Kawade	30/03/2023
2022-23	Guidance on Management Studies	Dr. Pranjali Ankule (I.S.B. &M., Pune)	14/12/2022
2021-22	German Language Training Program for promoting Students for M.S. opportunities in Germany.	Mrs. Sunita Shaligram (Trainer Chinmay Educational Consultancy, Pune)	1/03/2022 To 30/06/2022
2021-22	CDAC Preparation, Opportunities	Mr. Ashish Nalawade	31/05/2022
2021-22	EDUCON 2022 (Education Expo)	Pratyusha Employability Development (OPC) Pvt Ltd. In Association with Sawkar Institutes, Satara	14/05/2022 To 15/05/2022
2021-22	GATE Orientation Session	GATE Tutor, Pune	22/1/2022

Academic Year	Details	Speaker/Expert	Date
2020-21	Importance of Management Studies and Career Opportunities.	Mr. Omkar Tembe	16/05/2021
2020-21	How to Crack Gate Examination	Mr. Akash Pushkar (Gate Academy Pune)	5/12/2020
2020-21	Abroad career opportunities after engineering	Mr. Shubham Sasane (Elevitics, USA)	7/12/2020
2020-21	Prepare yourself for Abroad opportunities (M.S./ M.B.A) by	Mr. Shekhar Bidwai, Director Chinmay Educational Consultancy, Pune	26/11/20
2019-20	Higher Education Opportunities in Abroad	Mr. Nik Kowels EU Business School,Germany (In association with CEC, Pune)	9/02/2020
2019-20	Opportunities after M.B.A.	M.I.R.M., Pune	4/10/2021
2019-20	Orientation Program on GATE by ACE Academy	ACE Academy, Pune	19/09/2019
2018-19	MBA CET Entrance Orientation	K.B.P.I.M.S.R., Satara	11/03/2019
2018-19	GATE Orientation Program	R.I.T.,Sakharale	24/09/2018
2018-19	GATE Examination Awareness	Dr. Nayak B.M. (A.G.C.E., Satara)	21/09/2018

Pre-Placement Training Activities:

Following are the activities carried for Pre-placement training;

TableNo.9.5.b Pre-Placement training activities

Academic Year	Details	Speaker/Expert	Date
2022-23	University Level Project Competition- Avishkar	Mr. S.V Khobragade	18-11-2022
2022-23	Guest lecture on Management Studies	Dr. Pranjali Ankule	14-12-2022
2022-23	Skill Based Training Program	Symboisis Skills and Professional University (SSPU)	6-01-2023
2022-23	Corporate Grooming	Mr. George	21-02-2023 to 23-02-2023
2022-23	Workshop on C,C++ and HTML	Mr. Swapnil Mapari (Disha Computers, Satara)	1/08/2023 To 14/08/2023

2022-23	Workshop on C,C++ and Java	Mr. Nilesh Sonawane (Design Solution, karad)	7/08/2023 To 11/08/2023
2022-23	Workshop on Auto-Cad	Mr. Mahesh Sathe (Design Solution, karad)	10/08/2023 To 18/08/2023
2022-23	Workshop on PCB Designing and Manufacturing	Mr. Pravin Mohite (Aprontech, Satara)	7/08/2023 To 18/08/2023
2022-23	Workshop on C,C++ and Python	Mrs. Pranali Nalawade (Squirrel's Infotech)	7/08/2023 To 18/08/2023
2022-23	Workshop on Automation in IOT	Tushar Inamdar (Squarewave Automation Pvt Ltd, Satara)	1/08/2023 To 31/08/2023
2022-23	Five days Hands-on Workshop on Web Designing and Development using HTML, CSS, PHP, JavaScript and MySQL	Mr. Nikhil Kamble (Software Developer, Code Culture, Pune)	14/06/2023 To 19/06/2023
2022-23	Five-days Workshop on Introduction to Python, AI and ML	Mr. Abhiraj Ubale (Software Developer, Code Culture, Pune)	22/05/2023 To 26/05/2023
2022-23	Developing Softskills	Mr. Sourabh Bhosale	13/02/23 to 17/02/2023
2022-23	Soft Skills for Emerging	Mr. Santosh Nalawade (Trainer, Aspiring Careers, Pune)	10/4/2023 To 13/04/2023
2021-22	Internal Hackthon of Smart India Hackthon 2022	Dr. Mirajkar Gayatri	28-04-2022 to 29-04-2022
2021-22	AutoCAD Workshop	Nice Computer, Satara	18-04-2022 to 18-06-2022
2021-22	MET Lab Workshop	Dr.Banoth Nayak	1 Week of june
2021-22	German Language Training Program for promoting Students for M.S. opportunities in Germany.	Mrs. Sunita Shaligram (Trainer Chinmay Educational Consultancy, Pune	1-03-2022 to 30-06-2022
2021-22	English Speaking Session	Mr. Kale A.A. (A.G.C.E., Satara)	1/05/2022 To 30/06/2022
2021-22	Workshop on CATIA, CEO, SolidWorks for Mechanical Engineering Students.	Mr. Sathe Mahesh (Design Solution, Pune)	1/03/2022 To 31/05/2022
2021-22	Campus To Corporate Activity	Ms. Bhilare N.S. Mr. Kale A.A. (A.G.C.E., Satara)	1/05/2022 To 30/06/2022
2021-22	Aptitude Sessions	Mr. S.P.Patil Mrs. A.D. Kasture (A.G.C.E., Satara)	1/03/2022 To 30/05/2022

2021-22	Group Discussion: Etiquettes and Practice	Mr. Pathak P.A. Mr. Kale A.A. (A.G.C.E., Satara)	14/05/2022 21/05/2022 28/05/2022
2020-21	Development of Communication Skills	Prof. Pramod Dastoorkar (Professor, MIT Academy of Engg, Pune)	24/11/20
2020-21	Attitude Building for professional Excellence	Prof. Pramod Bhadakawade (Symbiosis International University Pune)	23/11/20
2020-21	Electrical Hands -on training System	Workshop	1 week on july2021
2020-21	Conducted guest lecture on How to Crack GATE Examination	Online Guest Lecture	5th December 2020
2020-21	Conducted guest lecture on Civil Services as a Career choice	Online Guest Lecture	5th Nov 2020
2020-21	Conducted guest lecture on Career in Software Testing, Prerequisites	Online Guest Lecture	9th May 2021
2019-20	Yugam – Four Week Training Program on PCB Design	Workshop	29-7-2020 to 24-8-2020
2019-20	Conducted alumni guest lecture on VMC and HMC machine working.	Guest Lecture	23 August 2019
2019-20	Conducted alumni guest lecture on M-G set and generator maintenance	Guest Lecture	2019
2019-20	Conducted guest lecture on PCB design & home automation products	Guest Lecture	6 February 2020
2019-20	Yugam – Four Week Training Program on Web Designing	1)Mr. Nikhil Korade (SplendorNet Technologies, Pune) 2) Ms. Ashwini Padwal (JA Solutions) 3) Mr. Shailesh Wagle (KPIT Hinjewadi) 4) Mr. Danish Shaikh (PHP & Java Programmer) 5) **Prof**. **Mr**. **Suhas Chava**n (Asst Professor, Sinhgad College Pune.) 6) Mr. Roakhande S.A. (Hefshine Pvt Ltd.) 7) Mr. Vikas Pomane (CEO, Utriva Pvt Ltd.)	29/7/2020 To 4/8/2020

2019-20	Yugam – Four Week Training Program on Internet of Things.	1)Mrs.Kirti Wanjale (VIIT,Pune) 2)Mrs.Varsha Patil (Lembhe) (JSPM, Hadapsar) 3)Mr.Pravin P. Mote (TATA Communicatios, Pune) 4)Mr.Ashish Kalambe (Modelcam Technologies Pvt. Ltd, Pune) 5)Mr.Nilesh Bhandare (Sloki Technologies Plt Ltd, Bangalore) 6)Mr.Akshay Jadhav (Space Automation, Pune) 7)Mr.Niraj Kapase (DKTE, Ichalkaranji) 8)Mr.Vaibhav V. Nalawade (Institute of Computer Science, Satara) 9)Mr.Pravin Koregave (Infinite Uptime India Pvt Ltd., Pune)	29/7/2020 To 4/8/2020
2019-20	Yugam – Four Week Training Program on Artificial Intelligence	1)Dr Pawar A.B (Sanjivani College of Engineering,Kopargaon) 2)MsPagar Yogita S. (Progressive ES,College of Aurangabad) 3)MrsBalshetwar S.V. (Government College of Engineering,Karad) 4)Dr Shelake Priya M. (VIIT,Kondhawa Pune) 5)Dr.Sarita Panwar (AISSMS COE, Pune) 6)MrDhamalTushar .B.	29/7/2020 To 4/8/2020

		(Tata Technology Pune) 7)Ms Shilpa Pimpalkar (AISSMS COE, Pune) 8)MrRajgudeDattatraya (CyabageTechnology,Pune) 9)Mr Gaikwad Vinod (Morning Star,Pune) 10)Mr Tiwari (Cognifront Technology Nashik) 11)Mr. Jagdish Kolhe (Cognifront Technology Nashik)	
2019-20	Personality Development Program by Rubicon Skill Development Pvt Ltd (10th Sept to 12th Sept, 2019)	Mr. Amar Shinde, Mr. Satya S.	10/9/19 to 12/9/19
2019-20	Workshop on Introduction to Arduino uno and Basic Electronics	Mr. Vishwajit Kulkarni, AGCE, Satara	9/9/19 To 14/9/19
2019-20	Aptitude Sessions (40 Sessions)	Asst. Prof. S. P. Patil Asst. Prof. S.D. Pawar Asst. Prof. A.D. kasture	1/9/2019 To 13/3/2020
2019-20	Yugam – Four Week Training Program for Civil Engineering	Dr.R.R.Sorate (J.S.P.M.Bawadhan) Prof.A.P.Khatri (J.S.P.M.Narhe) Prof.Kakade Sir (COE,Pune) Prof. Chafalkar Sir (J.S.P.M.Tathawade) Prof. Ban Sir (Raisoni, Nagpur) Prof.Mule Sir, (J.S.P.M.Narhe) Mr.Milind Vasudev (Lax Academy) Dr.Minde Sir (MIT,Kothrud) Mr. Jojo Mathew, (HIT,Nidasoshi)	29 June, 2020 to 24 July,2020

		Prof. Khandekar Sir (PVPIT, Pune) Dr. Wagh Sir (Zeal College, Pune) Prof. Vipul Naidu (PVPIT,Pune)	
2019-20	Yugam – Four Week Training Program on PCB Design (Electrical Engg. & E&TC Engg.)	Mr. Santosh Chavan (A S M Tracks, Shirwal) Prof. Venkatasai shreenath (BVSR,Ongol, AP) Prof. Sameer Bagwan (ADCET, Ashta) Dr. Dhanashree Gawali (Singhgad,Pune) Prof. Vishal Ambhore (VIIT, Pune) Mr. Shridhar Dudam (Smart Logic Technologies, Pune) Prof. Niraj Kapse (Electrowing Servies, Ichalkaranji) Mr.Prafull Bagade (AutoTech, Nashik) Mr.Tejas Shilamkar (Vertiv Engergy Pvt Ltd) Ms. Vinaya Kadam (Free Lancer)	29 June, 2020 to 24 July,2020
2018-19	Softskill Development Program (under lead College Activity.)	Mr.Pulkit Singh Ms. Sylviya Johnson (Eka Training)	11/03/2019 To 13/03/2019
2018-19	Group Discussion Practice Session Activity	Mr. Pathak P.A. Mr.Khade V.C. Mr. Nikam P.R. (A.G.C.E., Satara)	6/1/2019 To 27/1/2019

Fig.9.5 b: Yugam Web Designing Participant Certificate

Fig.9.5.c:English Speaking Session By Mr. A.A. Kale

Fig. 9.5.d: Five days Hands-on Workshop on Web Designing and Development in association with Code Culture, Pune

Effectiveness: These measures have proven to be effective as it is evident as show in below table.

TableNo.9.5.c Year-wise Placement Data

Student Progression	Placement Percentage			
	2021-22	2020-21	2019-20	2018-19
CSE	83%	95%	81%	63%
E&TC	81%	94%	94%	90%
Civil	80%	85%	88%	91%
Electrical	91%	82%	82%	80%
Mechanical	66%	70%	80%	72%

9.6. Entrepreneurship Cell (05)

The Entrepreneurship Development Cell (EDC) is started with the key objective of promoting and developing special knowledge of Entrepreneurship Development

The aim of entrepreneurship development cell is to improve and generate a culture of innovation amongst the students and budding entrepreneurs and start their own business.

Following activities are conducted by ED cell;

1. **Entrepreneurship Development Program** by MITCON Consultancy & Engineering Services on 18th and 19th January, 2019.
2. Organized **Industrial Motivation Campaign** for Youth by MSME,New Delhi and IGTR, Aurangabad on 18th & 19th October, 2019. (Resource person: Mr. Arnab Bhattacharya, Mr. Shebin Cheriyan, Mr. S.D. Salunkhe RSETI, BOI Sangli)
3. Participation in **Orientation Program on Promotion and Facilitation of Entrepreneurship** among the students of AICTE affiliated institutes on 1st &2nd February, 2020
4. Participation of Students in **One Day Workshop on Entrepreneurship Development** (8 Feb,2020) under Lead College Activity.
4. **Entrepreneurship Development Program** by MITCON Consultancy & Engineering Services on 18th and 19th January, 2019.
5. Talk on **Entrepreneurship Development** by Mr. Kiran Mane from Home Multi-trading Company and Technical Institute, Satara on 9th March, 2022
6. Organized session "**Udyojakata Vikas Yatra**" on 31th August 2023 for inculcating passion Passion for entrepreneurship among the students. A session was conducted before inauguration of **Udyojakata vikas yatra Dr. Dipak Shikrapurkar** has guided students regarding entrepreneurship.

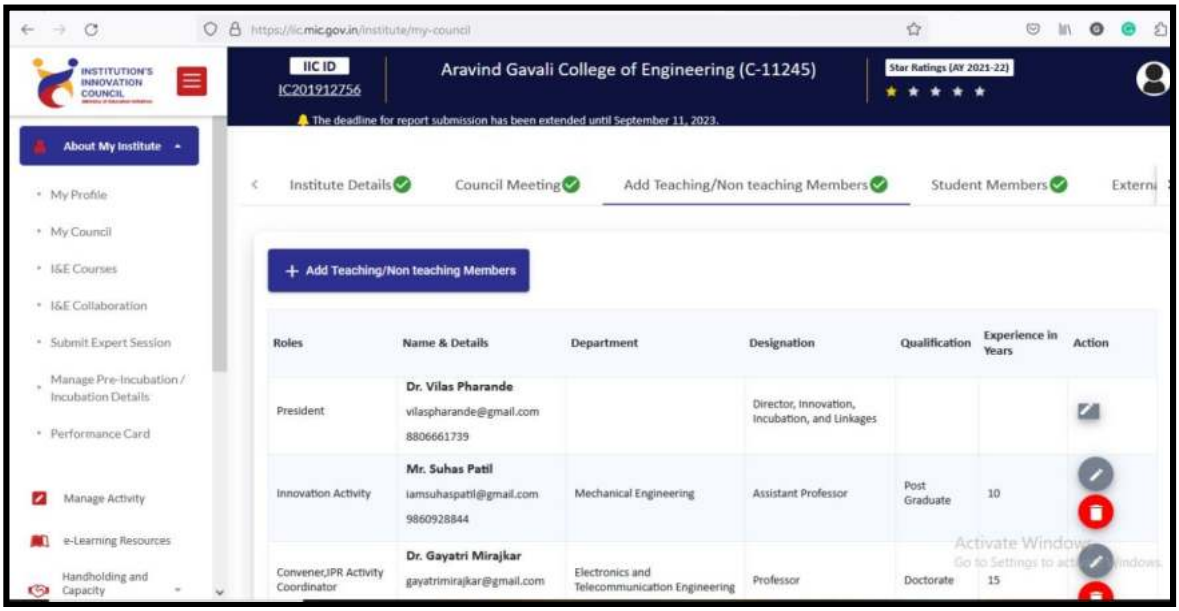


Fig.9.6 a: Under ED Cell, institute has registered for Institute Innovation Course

Fig. 9.6.b: Udyojakata Vikas Yatra organized at Institute.

Table No. 9.6 b List of Entrepreneurs

Sr.No	Name of Student	Program	Name of Organization
1	Randive Amol Sarjerao	CIVIL	A A Enterprizes, Ghatkopar
2	Kadam Arjun Suresh	CIVIL	Mahalakshmi Construction, Satara
3	Mane Sourabh Bajirao	CIVIL	Shree Datta Construction, Mhaswad
4	Shinde Anupsinh Virsing	CIVIL	Ratnaprabha Construction, Bhuinj
5	Patil Raj	CIVIL	M/S Raj Constro Corporation India
6	Lohar Rohit Namdev	CIVIL	The Engineer's Caffe
7	Jdhav Sanket Shashikant	CIVIL	Rajveer Builders Satara
8	Sutar Omkar Sanjay	CIVIL	Deeparch Construction, Umbraj
9	Mali Eknath Sadashiv	CIVIL	Mali Construction, Sangali
10	Thigale Chaitanya	ELECTRICAL	Vertical Electricals, Vita
11	Kalbhor Shivraj	ELECTRICAL	Gurudatta Electricals and Engineeers, Satara
12	Jambhale Sandesh Subhash	ELECTRICAL	M. Sani Sandesh Electricals, Satara
13	Karande Piyush	ELECTRICAL	Siddheshwar Electricals, Satara
14	Bhole Rohit	CSE	3 STAR IT Solutions, Satara (JIJAU IT Solutions)
15	Jagdale Akash	Mechanical	Four Square Engineering, Pune
16	Shaikh Sabar	Mechanical	CUBE Enterprise, Satara
17	Avinash Mankar	Mechanical	Solar Enterprises Satara

9.7. Co-curricular and Extra-curricular Activities (10)

Sports Facilities:

- The Institution has a separate sports ground for outdoor games like Cricket, Football, Volleyball, Kabaddi etc.
- Institute has indoor sports place for gymnasium, chess, and carom.
- Students are encouraged to participate in various zonal and inter-zonal tournaments. Students participate in inter and intra collegiate and University tournaments.
- The institution has multipurpose seminar hall which is utilized for Yoga & meditation purpose.
- Institute has contributed in **Satara Hill Marathon** Campaign. Students have volunteered in the preparation of campaign and set up the Water Stations.
- Every year Institute is organizing the "**Sawkar Trophy**" Intercollegiate Sports Event to provide platform for the students to showcase their ability, performance and professionalism. Cricket, Kabaddi, Kho-Kho, Bad Minton Competitions are organized under Sawkar Trophy.

Sports Achievements

TableNo.9.7. a Year-wise student's sport achievement

Academic Year 2022-23				
No	Name of the Student	Level	Event	Rank
1	Shubham dhane	University	Kho-Kho	Participant
2	Ayush Patil			
3	Shreyash Patil			
4	Pravinkumar Mahoor			
5	Akshay Galve			
6	Chaitanya Yadav			
7	Omkar Yadav			
8	Aniket Tikudave			
6	Atharv Dhane	University	Chess	Participant
7	Omkar Miraje			
8	Anniruddha Kadam			
9	Hasan Shaikh			
10	Omkar Miraje			

11	Mayuri Pawar	State	Kabbadi	Runner-up
12	Shravani Chavan			
13	Rutuja Katkar			
14	Shweta Kumbhar			
15	Akanksha Matkar	University		Participant
16	Aishwarya Panvelkar			
17	Arati Gaikwad			
18	Avishkar Kadam			
19	Sanjana Jadhav			
20	Vaishnavi Kamble			
21	Shreya Chavan			
22	Pragati Ghadge			
23	Amruta Deshmukh			
24	Sawant Omkar	District	Badminton (Men's Single)	Runner up
25	Surve Swaraj	University	Interzonal Wrestling	Winner
26	Ganesh Desai	State	Carrom	Participated
27	Mahesh Raut	State		
28	Divya kumbhar	State	Box Cricket	Participated
29	Namrata khomane			
30	Vishakha Desai			
31	Nikita Chavan			
Academic Year 2021-22				
1	Abhay Chorage	Institute	Tug of War	Participant
2	Akash Thorat			
3	Avdhut Mane			
4	Chaitanya Wagh			
5	Harshada Shinde			
6	Pratiksha Mandhare	Institute	kabbadi	Participant
7	Kshitija Dagade			
8	Aadharsh Kumbhar			
9	Abhishekh Kanse			
10	Akshada Patil			
11	Akshali Katkar			
12	Ankita Malusare			
13	Atharv Shirke			
14	Swaraj Surve	State	Wrestling	Participant
15	Vaishnavi Bhise	State	Satara hill marathon	Volunteer
16	Namrata Khomane			

17	Ankita Deshmukh			
18	Nikita chavan			
19	Shravani Chavan			
Academic Year 2020-21				
1	Ayush Jadhav	Institute	Chessmania 2k21	Participant
2	Mustan Attar			
3	Rushikesh Gaikwad			
4	Utkarsh Pustake			
5	Abhishekh Jadhav			
6	Kavita Shinde			
7	Vaibhav Kumbharkar	State	Satara hill marathon	Volunteer
8	Subhangi Chogule			
9	Namrata Sakpal			
10	Pallavi Bhaulkar			
11	Laxmi Wandare			
12	Akash Date			
Academic Year 2019-20				
1	Swaraj Surve	Intercollegiate	Wrestling-57kg (By KBPCOE, Satara)	Runner up
2	Omkar Mahadik	University	Kabbadi (By DBATU, Lonere)	Participant
3	Akshay Shinde			
4	Kishor Mali			
5	Aryan Bhoite			
6	Sani Shirke			
7	Sushant Gaikwad			
8	Pratik Sutar			
9	Rahul Kalkundrikar			
10	Rushikesh Pawar	University	Kho-Kho (By DBATU Lonere)	3rd prize
11	Mahesh Pawar			
12	Vaibhav Pawar			
13	Prathmesh Chavan			
14	Mahesh Anande			
15	Subham Korade			
16	Sachin Sawant			
17	Akash Mulik			
18	Kriskna nagargoje			
19	Vaibhav Kadam			
20	Atul Jadhav			
21	Avishkar khatte			
22	Rohit Waghamode			
23	Altaf Mulla			

24	Avishkar Khatte			
27	Namrata Chavan	University	Kho-Kho (By DBATU, Lonere)	3rd prize
28	Kanchan Gurav			
29	Shital Sawant			
30	Pranita Dalvi			
31	Arati Dalvi			
32	Poonam Vadpathak			
33	Pratiksha Ingavale			
34	Priyanka Yadav			
35	Rutuja Shinde			
36	Neha Salunkhe			
37	Mayuri Shingate			
38	Sakshi Chavan	University	Kabaddi	Winner
39	Snehal Patil			
40	Karishma Patil			
41	Pooja Chavan			
42	Shubhangi More			
43	Hrituja Pawale			
44	Divya Velapure			
45	Sayali Daphale			
46	Priyanka Bhosale			
47	Priyanka Tarade			
48	Abhishekh Katkar		Shot Foot (By DBATU, Lonere)	Participant
49	Akash Jadhav			
50	Abhishekh Katkar		Relay 4*100 meter (By DBATU, Lonere)	Participant
51	Omkar Jadhav			
52	Kishor Mali			
53	Omkar Mahadik			
54	Piyush Jedhedeshmukha	State	Satara hill marathon	Volunteer
55	Ganesh Godse			
56	Raviraj Mohite			
57	Rohitkumar Shinde			
Academic Year 2018-19				
1	Abhishek Katkar	University	Shot Foot (By DBATU, Lonere)	Winner
			Running 100m & 200m(By DBATU, Lonere)	Participant
2	Vaibhav kadam		Running 800m & 1500m (By DBATU, Lonere)	Participant
3	Avishkar khatte		Running 2000m (By DBATU, Lonere)	4rth Winner

Fig.9.7. 1: Swaraj Surve : Winner in Interzonal Wrestling Competition organized by DBATU

Fig.9.7.2: Annual Sports Event "SAWKAR TROPHY"

Contributions:

Satara Hill Half Marathon:

The SATARA HILL HALF MARATHON (SHHM) is held annually in the historic city of Satara, the erstwhile capital of the Maratha Kingdom founded by the legendary Warrior King Shrimant Chhatrapati Shivaji Raje Bhosale. The SATARA HALF HILL MARATHON is a proud member of the AIMS [Association of International Marathons and Distance Races] SHHM holds the Guinness World Record for the 'Most People in a Single Mountain Run'. Usually held in the month of September, the event attracts runners from all over India & running enthusiasts from all around the world.

TableNo.9.7.b: SATARA HILL MARATHON ACTIVITIES

No.	Name of the Event	Date	Contribution
1	SHM 2019 (Satara Hill Half Marathon 2019)	25/08/2019	Volunteers, Water Stations
2	SHM 2018 (Satara Hill Half Marathon 2018)	02/09/2018	Volunteers, Water Stations
3	SHM 2022(Satara Hill Half Marathon 2022)	18/09/2022	Volunteers, Food Stations
4	MAS Marathon 2022	02/10/2022	Volunteers, Food Stations

Fig.9.7.3: SHM 2019 Water Station Activity for Runners

Fig.9.7.4 : MAS Marathon Activity 2022

Cultural Facilities:

- Institute has dedicated cultural Club to facilitate various cultural Activities like Vaccination camp , Independence & Republican Day Celebration, Blood Donation Camp, Shivjayanti Celebration. To carry out above cultural activities separate space is provided in the Institute.
- Institute organizes Annual Social Gathering "**Tarunai**" every year.
- Students participates in various extra-curricular activities like Rangoli, along with celebration of various days like Rose Day, Chocolate Day, traditional day, Mismatch Day, Sari and Tie Blazer, Hollywood/Bollywood day etc.
- Variety entertainment programs including classical & western dance performances, singing & mimicry, fashion show etc. are organized in the institute for all the students.
- In this regard, institution has formed various committees for participating and organizing the cultural and sports activities. Every department has its own association through which various department symposiums, project presentation and other technical and non-technical events are being conducted.
- These association activities benefit in developing leadership skills and make them work in teams.

TableNo.9.7.c: Cultural Event participant data

Sr. No.	AcademicYear	Details of cultural event	Number of students participated
1	2022-23	Shivjayanti Celebration	350
2		Western day & Mis Match day (05/05/2023)	522
3		Tie Blazer,Saree & Rose Day (06/04/2023)	650
4		School Dress & Food stall (07/04/2023)_	467
5	2021-22	ShivSwarajya Din(6/6/2022)	160
6		Tarunai 2022 (4/05/2022)	620
7		Holi Celebration(22/03/2022)	367
8		Shivjayanti Celebration (19/02/2022)	268
9		Savitribai Phule Jayanti (3/01/2022)	552
10	2020-21	Shivjayanti Celebration (19/2/2021)	272
11		Marathi Rajyabhasha Divas (27/2/2021)	70
12		Women's Day and self defense Session(8/3/2021)	103
13		Traditional day(19/2/2021)	182
14		Sadi & Tie Blazer day(20/2/2021)	147
15		Hollywood / Bollywood day(21/02/2021)	146
16		Chocolate Day(23/02/2021)	160
17	2019-20	Independence Day Celebration(15/08/2019)	359
18		Dandia Cultural Event Celebration(4/10/2019)	575
19		Technical Rangoli Competition(25/01/2020)	144
20		Western Day ,Funky Day and Twins Day(14/02/2020)	233
21		Sadi Say and Tie blazer Day(15/02/2020)	280
22		Bollywood,Hollywood,Tollywood ,Mismatch Day(16/02/2020)	275
23		Scool Dress Day and Department Day(17/02/2020)	245
24		Shivjayanti Celebration(19/2/2020)	629
25		Traditional Day(19/02/2020)	168

26		Annual Day- (Tarunai-2020)	731
27		"NIRBHAYA" Walkathon by Nirbhaya Police Pathak (17/02/2020)	80
28	2018-19	Mahatma Gandhi Jayanti(02/10/2018)	50
29		Dandiya 2018(17/10/2018)	409
30		YOUTH Festival at D.P.Bhosale College, Koregaon (26/10/2018)	30
31		Presenting the Streetplay on"Acche Din wo Chaar Din" (11/11/2018)	10
32		Savitribai Phule Jayanti(03/01/2019)	104
33		Against Dowry Conference at Muktangan Satara (14/04/2019)	25
34		Mahatma Gandhi Jayanti(02/10/2018)	50

Fig.9.7.5 :Annual Cultural Event "TARUNAI"

Fig.9.7.6: Shivjayanti Celebration

Fig.9.7.7 : Student participated in Bollywood, Hollywood and Tollywood competition

National Service Scheme (NSS):

As per the guidelines of DBATU Lonere , the Institute has formed a NSS unit of students and staff. The NSS unit in the college provides a platform for various socially relevant services such as:

- Providing guidance to students studying in the rural areas
- Creating awareness about the natural disasters such as flood, earthquakes in the student community
- Arranging and Participating in Swatchhata Awareness Ralley and Swatchhata Camps in Villages.
- Organizing Camps in Villages for delivering services to society and creating social awareness among students
- Spreading awareness about traffic rules and safety measures among staff members and students
- Having discussions regarding the various challenges faced by the youth.

The NSS wing of the college encourages the students in community development activities which motivate the students for Social Service. The college NSS team regularly visits surrounding areas and villages where people are made aware about various social, moral and ethical issues.

NSS Activities

TableNo.9.7. d:Year-wiselist of NSS activities

Sr. No	Academic Year	Date	EventName
1	2022-23	15/08/2022	Independence Day
2		14/11/2022	Children Day
3		8/12/2022	Lek Ladki Abhiyan
4		12/01/2023	Jijau jyanti,Swami Vivekananda Jayanti
5		26/01/2023	Republic Day
6		19/02/2023	Shivjayanti
7		23/02/2023	Blood Donation
8		08/03/2023	Women's Day
9	2021-22	4/03/2022	Food Donation at Villages
10		4/03/2022	Swatchhata Abhiyan
11			Health Checkup Camp
12		5/3/2022	Blood Donation Camp
13			Tree plantation
14		6/03/2022	Dustbin Donation Activity
15		20/06/2022	No Vehicle Day
16	2020-21	15/08/2020	Arscenic Album Distribution Activity
17		21/03/2021	Tree Plantation

Sr. No	Academic Year	Date	Event Name
18	2019-20	22/07/2019	"Jal Divas" Celebration
19		12/08/2019	Activity for helping People of flood Affected Areas
20		2/10/2019	"Swatchata Hi Seva" Activity
21		2/10/2019	"Road Safety Week" (Session for Guidance on Road Safety and Rules by Mrs. Afreen Mulani (RTO Officer Satara)
22		26/01/2020	Participated and Guided regarding the "UNNAT BHARAT ABHIYAN" in GRAMSABHAs of 5 Villages (Panchwad, Kudal, Panmalewadi, Varye, Bhuinj)
23		2/2/2020 To 8/2/2020	NSS Camp at Anewadi, Satara
24	2018-19	14/1/2019 To 19/1/2019	NSS Camp at Bhaleghar, Sanpane, Satara
25		21/07/2018	Tree Plantation
26		02/10/2018	"Swatchhata Awareness Ralley"
27		25/01/2019	"National Voters' Day"
28		06/02/2019	Road Safety Guest Lecture
29		22/02/2019	"Swatchhata Camp"
30		23/02/2019	Blood Donation Camp

Fig.9.7.8: NSS Camp at Jalgaon Tal. Koregaon, Dist. Satara (2023)

Fig.9.7.9 :Swatchhata Activity during NSS CAMP at Bhaleghar, Sanpane, Satara

Fig.9.7.10: NSS CAMP at Bhaleghar, Sanpane, Satara

Fig.9.7.11: Arsenic Album Tablets Distribution

Unnat Bharat Abhiyan (Contribution in Rural Development)

Unnat Bharat Abhiyan (UBA) is a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India. The Institute is participating in Unnat Bharat Abhiyan and adopted villages for their development in collaboration with district administration. Institute has adopted following villages:

1. Panmalewadi 2.Varye 3.Bhuinj 4.Panchwad 5.Bamnoli T. Kudal

Fig. 9.7.12: Unnat Bharat Abhiyan **Fig. 9.7.13: Guidance in Gram Sabhas under UBA**

Co-curricular Activities:

Students are motivated to participate in National level Competitions related to Project Presentation, Paper/Poster Presentation, Debate, Idea Presentation. Every year students are encouraged and guided to participate **Smart India Hackathone**, **AVISHKAR, DiPEX.** Because of such initiatives a competitive spirit and passion towards innovations are developed among the students.

TableNo.9.7.e Project and other national level Competition participant data

Sr. No.	Academic Year	Name of the Competition	Number of students participated
1	2022-23	KJSIT-IET-INTECH-2K23 Poster cum Project Competition	15
2		ROTRAX 2023	02
3		DIGIT-2K23	02
4		Yasho-Tech- Fest- 2023	06
5		Tech-Fest 2k23 By Kisanveer College, Wai	01
6		PHN Advanced Technology Online Workshop on Android Development	04
7		TECHNOVATION-2023	03
8		Java Training by Besant Technology	02
9		Brain-it-On 1.0	03
10		DCODE 2k23	01
11		Technical Project Competition	12
12		Kurukshetra 2K23	02
13		MATPO Aptitude Idol-2023	35
14		AVISHKAR 2022	12
15	2021-22	National Level Project Competition (by KJ Somaiya Institute of Engineering and Information Technology Sion,Mumbai)16/04/2022	04
16		National Level Project Competition (by Bharati Vidypeeth College of Engineering Pune)21/05/2022	01
17		National Level Project Competition (by Yashodha Technical Campus Satara 9/05/2022)	05

18		Internal Hackthon of Smart India Hackthon 2022) 28/04/2022	06
19		Smart India Hackthon Finale at Bhilai Institute of Tech, Durg, Chhattisgarh. (26/08/2022)	06
20		Impact Lecture Session under KAPILA on Intellectual property, literacy and awareness campaign (24/6/2022)	05
21		Impact Lecture Session on Intellectual Property Rights and Startups (29/6/2022)	06
22		Impact Lecture Sessions sponsored by MoE's Innovation Cell, AICTE on Inception of a Startup. (28/7/2022)	05
23		TEQIP III Sponsored Two Days Online FDP on "Medical Imaging: Special Topics in Magnetic Resonance Imaging " (24/9/2021)	04
24	2020-21	Five Days online FDP on "Recent Advances in Health 5.0 In-line with NEP 2020" (22/3/2021)	04
25		DiPEX (Project Presentation By Tantra shikshan Vidyarthi Karya,Kolapur Division and Dipex) 20-23/05/2021	03
26	2019-20	AVISHKAR 2019-2020 Zonal Level Competition by DBATU	04
27		AVISHKAR Intercollegiate Poster Presentation Competition	80
28		PROTECH 2020 at Symbiosis International University, Pune	02

Fig.9.7.14 :SMART INDIA HACKTHON at Bhilai Institute of Technology Durg

Fig.9.7.15: ROTAREX 2023 (Project Exhibition & Competition) at Satara

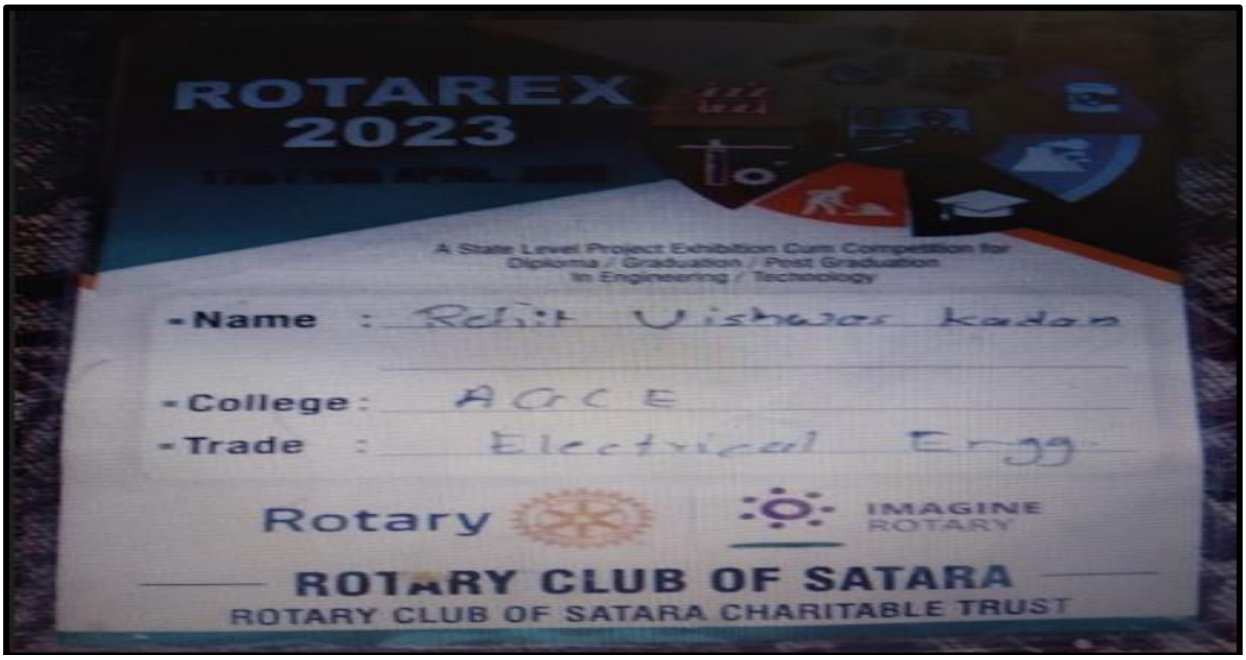


Fig.9.7 16 Student ID card participating in Rotary Club

Fig.9.7 17 Student participation certificate for project presentation (CRETECHNOVA 2k23)

Fig.9.7.18: MATPO Aptitude Idol Participation

Student Chapter Formed:

Indian Geotechnical Society:

Student Chapter is formed under Indian Geotechnical Society(I.G.S.), Pune by Department of Civil Engineering. Under the chapter, guest/expert Lectures Geotechnical Field, industrial visits, workshops are supposed to be conducted. This chapter helps students to explore different aspects of geotechnical Field. This chapter promotes activities to inculcates passion towards geotechnical field and guides career opportunities in geotechnical field.

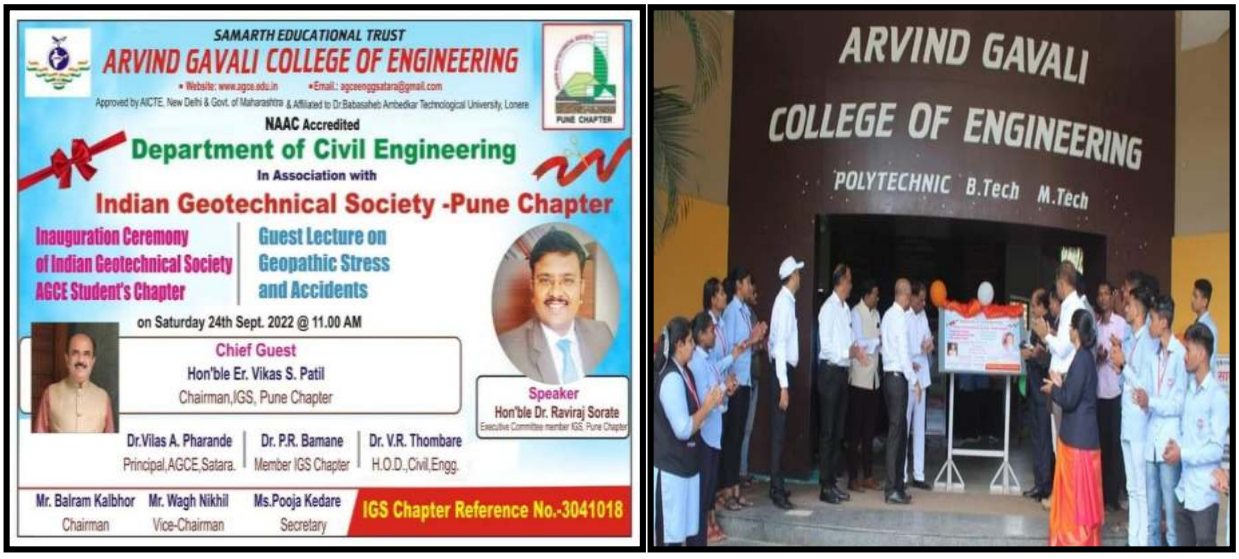
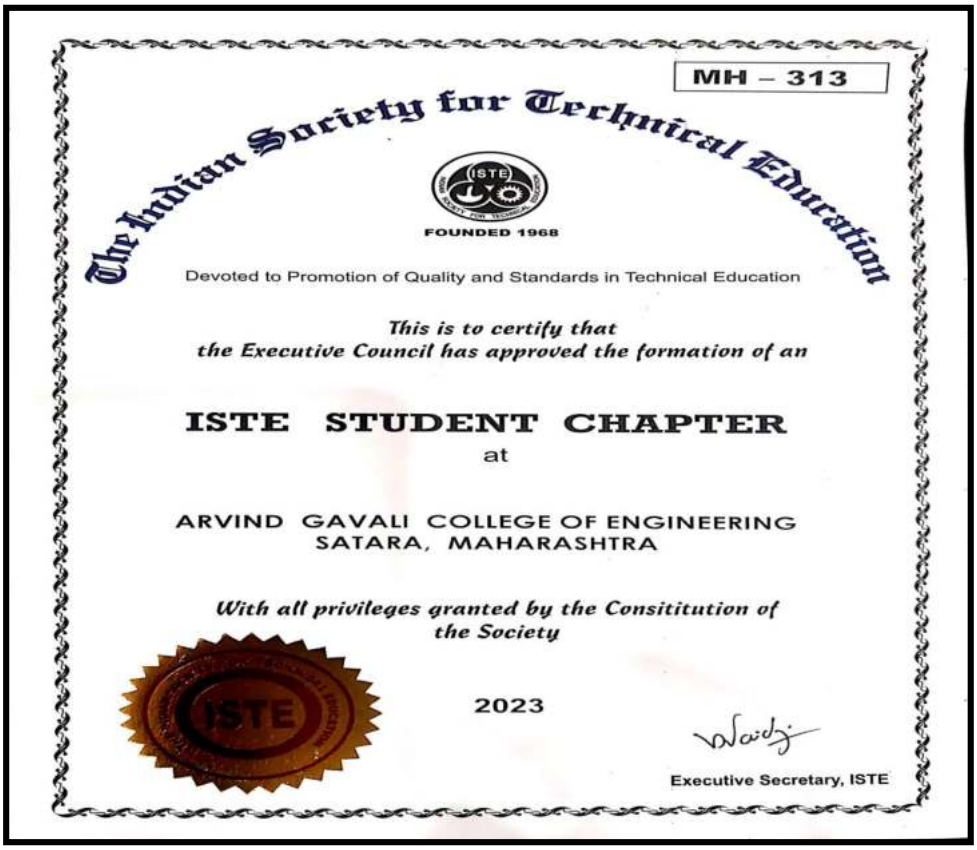


Fig.9.7.19: Inauguration of Indian Geotechnical Society-Pune Chapter

Institutional Member of Indian Society for Technical Education (ISTE):

The main goal of this membership is to provide the technical opportunity for students to broaden their knowledge of engineering and to interact with eminent faculties of the organization. An Institutional membership can allow students to cultivate their interest in engineering. It can introduce students to possibility of future study or employment in engineering.



9.7.20: ISTE student Chapter Formed

International Society for Research and Development, London Students chapter

The kinds of activities a student chapter can undertake are endless, depending on the creativity and interest of each group. But here are a few examples of academic, social, and professional activities that may be of interest to your group. Distinguished Speakers Program/ Lectures, posters, make a Website, Communication Workshop etc.

Manufacturers Association of Satara

The Institute has opted for MAS Membership in order to bridge the gap between institute and Industry.MAS have been playing a significant role in accelerating the industrial development of Satara region for more than three decades now. The major activity of MAS is arranging seminars & workshops for Students and members. Arrange & facilitate expert consultation to members. Try to promote industry friendly atmosphere in Satara region.

Photography Club:

Institute had formed Photography Club to encourage the students to showcase their photography skills and view towards the things around them. The Club is arranging the Photography Competition to promote the skills of students and develop their ability to participate and compete others. The Photography competition was conducted 10th September 2019. Students have participated with the photos they have taken and explained their views/opinion on the same.

Fig. 9.7.21: Prize distribution of Photography & Videography Competition organized by Photography Club

IoT Club:

Institute had formed IoT (Internet of Things Club) to explore the opportunities in the Internet of Things domain. The students from all department can participate in the activities related to Internet of Things. IoT Club had arranged industrial visit to C.O.E., Pune's BHAU Institute. During visit hours students were guided regarding the IoT, A.I.,M.L. by Mr. Nikhil Bhaskaran, and Ms. Sejal Gupta. Also IoT club guides and helps students regarding internet of Things projects.

9.7. 22: Visit to BHAU institute At C.O.E. Pune.

Robotics and Automation Club: This club is formed to inculcate passion towards the Automation, Robot Making, PCB Designing among the students. The objective of this club is to aware the students about future of Industrial Automation by Robotics. Under this club workshop is conducted to help students gain knowledge related to industrial automation. In this workshop students are learnt to operate and Programs the Kuka Robots, PLC Programming.

9.7.23: Training Program offered in association with

Cloud Computing Club: The major objective of our group is to raise technical awareness of cloud and develops on our campus. We are an interdisciplinary cloud club, so rather than concentrating on just one cloud provider like AWS or GCP, we will cover a wide range of providers including IBM, Alibaba, and many more. Instead of offering more theoretical lectures, we will concentrate on bringing practical events. We make an effort to give our trainees practical, industrial experience.

Competitive Exam Club:

This club helps students to get all information regarding the competitive examinations such as U.P.S.C., M.P.S.C., RRB, I.B.P.S., M.S.E.B. Guest lecturers from Experts are conducted to guide the students regarding the preparation and prerequisites of the examinations.

Special Batch:

This club is formed to encourage the students to prepare and pursue career in Arm Forces (Army, Navy, Air Force). Motivational sessions are conducted to bring patriotism among the students. Students are guided about various exams like Technical Graduate Entry, University Entrance Scheme, Short Service Commission. Students are trained for these examinations under the guidance of Dr. S.P.Lavand (Ex. Navy Officer).

Fig. 9.7.24: Students visited 22MAH BN NCC Camp at Mahagaon, Satara

Electro Club:

This club is formed to inculcate passion towards the Automation, Robot Making, PCB Designing among the students. This club arranges the sessions to guide the students to develop skills required for Industrial Automation, Robot making. This club arranges the training and competitions for providing the platform to showcase their skills and hard work.

Foreign Language Club:

Institute has taken initiative for promoting students to understand the importance of foreign languages and opportunities after learning them. Institute has started the German Language Training program for students. Here students are guided regarding the learning curve of the languages by organizing training sessions, guest lectures.

3D Printing Club:

The objective of this club is to aware students about 3D printing. This club is taking initiatives to help students understand how the designer's role has evolved over time and how it is likely to change as we move toward mass customization. Activities under 3D Printing club aware students to use the principles of Design and Identify opportunities to apply 3D printing technology for time and cost savings

9.7.25: Demonstration of 3D model creation

Lek LAdki Abhiyan:

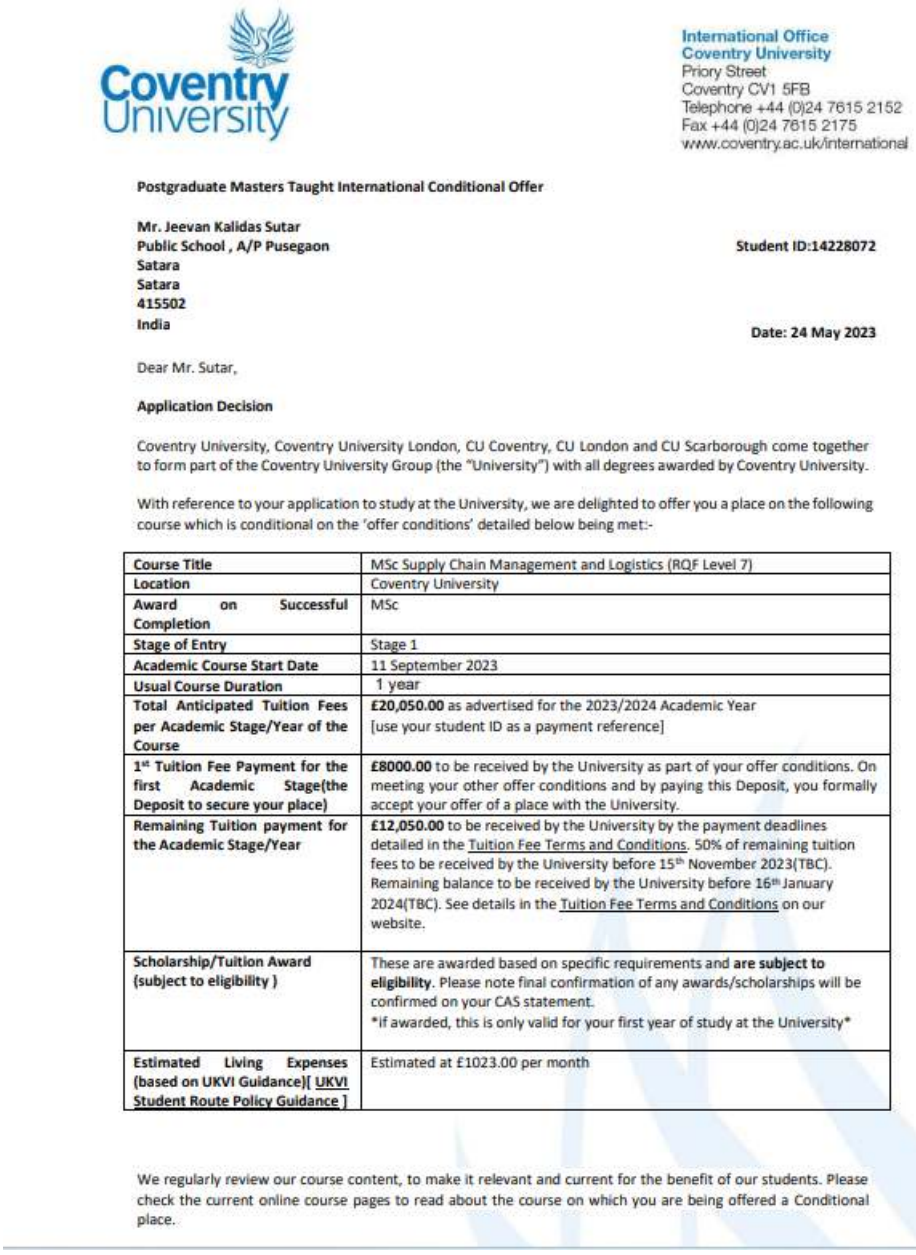
The Institute is proud to be associated with LEK LADKI ABHIYAN - A NGO working for development of Women. The "LEK LADKI ABHIYAN" under the leadership of Advocate Varsha Deshpande is organizing the events to develop awareness among the women. Institute is participating in all the program organized under LEK LADKI ABHIYAN such as LAGHUPAT MAHOTSAV.

9.7.26 : Participation in LAGHUPAT MAHOTSAV related to Woman Awareness

Table No.9.7.f: List of activities conducted

Sr. No.	Academic Year	Activities	Date
1	2022-23	Recent Trends and Opportunities in IT By Mr. Shivraj Gaikwad (Papportsoft Consultancy & Technology, Pune)	19/05/2023
2		IT Career in Digital Marketing by Mr. Ajinkya Pawar (AJDM India, Satara)	10/03/2023
3		Campaigning against violence about women	8/12/2023
4		Opportunities is IT Industry and Japan (Mr. Bipin Kadam, Thinksmart Soft, Tokyo, Japan)	03/05/2023
5		Workshop on Industrial Robotics and Automation	14/08/2023
6		Five days Hands-on Workshop on Web Designing and Development using HTML, CSS, PHP, JavaScript and MySQL	14/06/2023 to 19/06/2023
7	2021-22	Visit to NCC Camp at Mahagaon for Seminar	2/06/2022
8		Guidance on Competitive Examination by Mr. Akshay Jadhav (Infinity Academy, Pune)	6/04/2022
9		Awareness program about Girl Child.	3/01/2022
10		One day python programming workshop By Mrs. Snehal Kasurde	20/11/2021
11		One day Network security workshop By Mr. Prashant Patil	16/12/2021
12		Hands on data analytics using Tableau workshop by Ms. Pimpalkar Shilpa	27/12/2021
13		3D Printer installation	09/7/07/2021
14	2020-21	Career in Software Testing, Prerequisites and Opportunities by Mr. Sushant Sankpal	09/05/2021
15	2019-20	Resume Building and Interview Technique workshop By Mr. N.S. Juvekar	23/03/2020
16		Guest Lecture on Introduction to Career Opportunities in System Networking by Mr.Ajit Sutar	11/09/2019

Fig.9.7.27: Master Kishor Ghadge from Mechanical got opportunity to study in Germany



Coventry University

International Office
Coventry University
Priory Street
Coventry CV1 5FB
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Postgraduate Masters Taught International Conditional Offer

Mr. Jeevan Kalidas Sutar
Public School , A/P Pusegaon
Satara
Satara
415502
India

Student ID:14228072

Date: 24 May 2023

Dear Mr. Sutar,

Application Decision

Coventry University, Coventry University London, CU Coventry, CU London and CU Scarborough come together to form part of the Coventry University Group (the "University") with all degrees awarded by Coventry University.

With reference to your application to study at the University, we are delighted to offer you a place on the following course which is conditional on the 'offer conditions' detailed below being met:-

Course Title	MSc Supply Chain Management and Logistics (RQF Level 7)
Location	Coventry University
Award on Successful Completion	MSc
Stage of Entry	Stage 1
Academic Course Start Date	11 September 2023
Usual Course Duration	1 year
Total Anticipated Tuition Fees per Academic Stage/Year of the Course	**£20,050.00** as advertised for the 2023/2024 Academic Year [use your student ID as a payment reference]
1st Tuition Fee Payment for the first Academic Stage(the Deposit to secure your place)	**£8000.00** to be received by the University as part of your offer conditions. On meeting your other offer conditions and by paying this Deposit, you formally accept your offer of a place with the University.
Remaining Tuition payment for the Academic Stage/Year	**£12,050.00** to be received by the University by the payment deadlines detailed in the Tuition Fee Terms and Conditions. 50% of remaining tuition fees to be received by the University before 15th November 2023(TBC). Remaining balance to be received by the University before 16th January 2024(TBC). See details in the Tuition Fee Terms and Conditions on our website.
Scholarship/Tuition Award (subject to eligibility)	These are awarded based on specific requirements and **are subject to eligibility**. Please note final confirmation of any awards/scholarships will be confirmed on your CAS statement. *If awarded, this is only valid for your first year of study at the University*
Estimated Living Expenses (based on UKVI Guidance)[UKVI Student Route Policy Guidance]	Estimated at £1023.00 per month

We regularly review our course content, to make it relevant and current for the benefit of our students. Please check the current online course pages to read about the course on which you are being offered a Conditional place.

Fig.9.7.28: Master Jeevan Sutar from Mechanical got opportunity to study in UK

CRITERION 10	**GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES**	**120**

10.1 Organization, Governance and Transparency (40)

10.1.1 State the Vision and Mission of the Institute (05)

A. Availability of the Vision & Mission statements of the Institute (02)

B. Appropriateness/Relevance of the Statements (03)

A. Vision & Mission statements of the Institute

Vision:

To be an institute of excellence, developing skilled engineers to serve the industry and society.

Mission:

Our Mission is to

- M1: To provide quality education through effective teaching learning process.
- M2: To develop professional skills and promote innovation among students by providing a conducive atmosphere.
- M3: To inculcate ethical values, respect for the environment, and social responsibility.

B. Appropriateness/Relevance of the Statements (03)

Vision:

To be an institute of excellence, developing skilled engineers to serve the industry and society.

Through excellence in key terms and strategy, the institute informs development while also articulating its purpose to stakeholders. The aims and objectives are used to measure the institute's success. Excellence in engineering education system towards greater cause of society through the implementation of projects to address societal issues and commitment to readiness of industry-oriented skill to serve in industry as a professional engineer by incorporating expert lecture series through industrial experts and internships in line with National Education Policy 2023.

Mission:

M1: To provide quality education through effective teaching learning process.

We choose to offer students a top-notch education by embracing ICT technologies and project-based learning. We have been able to develop a variety of learning experiences through industrial expertise, real-world settings, and inquiry-based learning thanks to the use of innovative teaching techniques.

M2: To develop professional skills & promote innovation among students by providing conductive atmosphere.

The institute fosters an environment where students can develop their technical and soft skills through project competitions, creative ideas for "AVISHKAR," patent filing, NPTEL registration, expert-led soft skill workshops, execution of training and placement activities, internships, etc.

M3: To inculcate ethical values, respect for environment and social responsibility.

The institute has organized a workshop on ethical values to outline ethical workplace principles such adhering to institute policies and procedures, effective communication, accepting responsibility, professionalism, mutual respect, and trust. The institute has also planned and taken part in environmental and socially conscious events, such as tree planting, cleanliness campaigns, geo-tagging, no car days, distribution of dustbins, mask and tablet donations, vaccination camps, and self-defense workshops.

10.1.2 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

A. List the Governing Body Composition, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; participation details of external members and attendance therein (4)

B. The published service rules, policies and procedures with year of publication (3)

C. Minutes of the meetings and action-taken reports (3)

A. Administrative bodies

Governance of the institution is reflective and in tune with the vision and mission of the institute. The decentralisation of authorities and responsibilities is carried out through different committees which will be ensured by committee members of various committees under the governing body.

ROLE OF GOVERNING BODY

The Board of Governors is the governing body for the institution, collectively responsible for framing the policies, implementing the institution's activities, determining its future direction, fostering an environment in which the institutional mission is achieved according the developmental plan.

PRIMARY ACCOUNTABILITIES

- To approve the mission and strategic vision of the institution.
- To ensure the establishment and monitoring of proper effective and efficient systems of control and accountability.
- Monitor Institutional performance and quality assurance arrangements.
- To put in suitable arrangements for monitoring the Head of the institution's performance.

Governing Body of Institute

Table 10.1.2a Members of Governing Body of Institute

Sr. No	Name of the person	Designation
1	Mr. Gavali Nishant Arvind Hon. Secretory, Samarth Educational Trust, Satara	Chairman
2	Shri. Gavali Arvind Kondiram Hon. Chairman, Samarth Educational Trust, Satara	Secretary
3	Shri Shanbhag Ramesh Shamrao Member of Trustee, Samarth Educational Trust, Satara	Member
4	Dr. Sou. Shete MahanandaVishveshwar Member of Trustee, Samarth Educational Trust, Satara	Member
5	Mr. Gavali Dilip Kondiram Member of Trustee, Samarth Educational Trust, Satara	Member
6	Mr. Ramesh Unnikrishnan AICTE Western Regional Officer, Mumbai	Member
7	Dr. Nandanwar D.R. Joint Director,DTERO,Pune	Member
8	Mr. Narkar K.M. D.Y. Patil Engineering College Kasaba Bavada, Kolhapur	Member
9	Dr. Chitlange M.R. Joint Secretory, MSBTE RO, Pune	Member
10	Mr. Mali Milindkumar S. Associate Professor Singhad College of Engineering,Pune	Member
11	Mr.Waikar Omkar Supreme Slilconesans Trinity Enterprises Pune	Member
12	Mr. Bidwai Shailesh P. Chairman S.P. Packaging LTD	Member
13	Mr. Godbole Ashutosh Charted Accounted	Member
14	Col Mr. Kanase Pramod A. Ex. Serviceman & Professor	Member
15	Prof. Hingmire Vishal Sharad Assistant Professor ArvindGavali College of Engineering, Satar	Member
16	Mr. Pathak Pranav Avinash Assistant Professor Arvind Gavali College of Engineering, Satara	Member
17	Dr. Pharande Vilas Arjun Principal, Arvind Gavali College of Engineering, Satara	Member

Role and Functions of Governing Body

Good governance of the technical institution plays an important role in the growth and development of the Institution. Governing body acts professionally and approves the ultimate goal of the Institution. The governing body is unambiguously and collectively responsible for overseeing the institution's activities, determining its future direction and fostering an environment in which the institutional mission is achieved. The body meets twice a year and proceedings of the meetings should be maintained properly. The college is governed by the Governing body, which is constituted as per AICTE and trust norms. A governing body should perform all four types of functions, i.e. managerial, administrative, academic and financial. A governing body should perform the following functions in each category:

A) Managerial:

- **Provide Vision:** Governing body should initiate the process of crafting the vision statement and preparing vision documents of the institution.
- **Inculcate Values:** Governing body encourages the establishment of a value system to achieve vision, missions, and goals of the Institution.
- **Act as a buffer:** Governing body serves as a bridge and buffer between the institution and stakeholders.
- **Support the head of the Institution:** Governing body should support the head of the Institution to carry out the business of the Institution. There should be a good relationship between the head of the Institution and the governing body.
- **Oversee the functioning of the Institution:** Governing body should monitor and evaluate the Performance of the Institution on a regular basis against set goals.

B) Administrative:

- **Approval:** Governing body should approve annual reports of the Institute.
- **Approval of Policies:** Governing body should approve a recruitment policy. It should approve and review procedures for the selection, recruitment and transfer of faculty and staff members. It should approve service conditions, emoluments and travelling allowances for teaching and non-teaching staff of the Institute. It should approve the policy of appointing a consultant, visiting faculty, experts and other people based on need.

Evaluate the performance of head of the institution: Select, support and evaluate the performance of head of the Institution. The governing body manages the institution and its performance through the head of the institution. The head of the Institution should possess abilities to manage the institution according to the wish of the governing body.

C) Academic:

- **Approval:** Governing body should approve the new program of studies leading to a diploma, post-diploma, undergraduate, postgraduate and Ph.D.
- **Utilization of academic resources:** Governing body should ensure full use of the academic potential of the institution in various academic activities.

D) Financial:

- **Approval:** Governing body should approve the annual budget & expenditure.
- **Audit:** Governing body should appoint a qualified auditor every year to conduct the audit. Consider the issues raised by the auditors for improvement in finance utilization.
- **Financial health:** Governing body should ensure the good financial position of the institution through proper planning and utilization of funds.

C. College Development Committee of the Institute (formerly known as Local Managing **Committee)**

Table 10.1.2b Members of College Development Committee of Institute

Sr. No	Name of the person	Designation
1	Mr. Gavali Nishant Arvind	Chairman
2	Mr. Hingmire Vishal Sharad	Member
3	Mr. Patil Suhas Prakashrao	Member
4	Dr. NayakMeghya Banoth	Member
5	Dr. Thombare Vijay Ramchandra	Member
6	Adv. Ayachit Arundhati Sanman	Member
7	Sou. Mandhare Rajani Mahendra	Member
8	Sou. Kamble Rupali Ravi	Member
9	Mr. Kanase Nitin Uttam	Member
10	Mr. Patwardhan Amey Dipak	Member
11	Dr. Pharande Vilas Arjun	Secretary

Role and Functions of College Development Committee

As per the Maharashtra University Act, separate Local Managing Committee is constituted for the day to day functioning of the college. This committee should meet two times a year and proceedings of the meetings are maintained properly. Members elected or nominated shall have a term of five years. The committee comprises of the Chairman of the management, Secretary of the management, three local members nominated by the management, three teachers elected by the institution, one non-teaching employee and

Principal- Member Secretary.

The frequency of meeting: Twice in a year

The duties of the local managing committee are:

- Prepare the budget and forward it to the governing body.
- Determine the program of instruction and internal evaluation and to discuss the progress of studies in the college.
- Monitor the academic function of the college and extracurricular and co-curricular activities.
- Make recommendations to the management for the improvement of the standard of teaching in the college.
- Formulate proposals of new expenditure not provided for in the college budget if any.

Internal Quality Assurance Cell (IQAC)

To ensure quality in the teaching-learning process and maintain academic up gradation IQAC is formed. IQAC works towards the realization of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions.

Table 10.1.2c Members of Internal Quality Assurance Cell (IQAC)

Sr. No.	Name	Designation	Organization
1	Dr. Vilas Pharande	Chairman	Principal, AGCE, Satara
2	Mr. Vishal Hingmire	Coordinator	Assistant Professor, AGCE,
3	Mr. Nitin Kanse	Member	Registrar, AGCE, Satara

4	Mr. Chetan Nalawade	Member	MD, Shuddha Milk and Milk Products, Satara
5	Mr. Samadhan Jadhav	Member	MD, Satara Engineering Work, Satara
6	Mrs. Shakuntala Pawar	Member	HR Head, Mutha Foundry,
7	Mr. Omkar Waikar	Member	CEO, Supreme Silicones & Trinity Enterprises, Pune
8	Mr. Abhay Khanaure	Member	MD, Meretech, Pune
9	Mr. Sushant Gaikwad	Member	Social worker & Coordinator at Mhada, Pani Foundation
10	Mr. Rohit Bhole	Member	MD, 3 Star IT Solution, Satara
11	Mr. Abhay Gujar	Member	Assistant Professor, AGCE,
12	Mr. Suhas Patil	Member	Assistant Professor, AGCE,
13	Mr. Somesh N.S.R	Member	Assistant Professor, AGCE,
14	Ms. Ashwini Kasture	Member	Assistant Professor, AGCE,
15	Ms. Shital Ghate	Member	Assistant Professor, AGCE,
16	Mrs. Rajani Mandhare	Member	Assistant Professor, AGCE,

Role and Functions of Internal Quality Assurance Cell

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the Colleges.
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- Dissemination of information on the various quality parameters of higher education.
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles.
- Documentation of the various programmes/activities of the College, leading to quality improvement Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices.
- Development of the Annual Quality Assurance Report (AQAR) of the College based on the

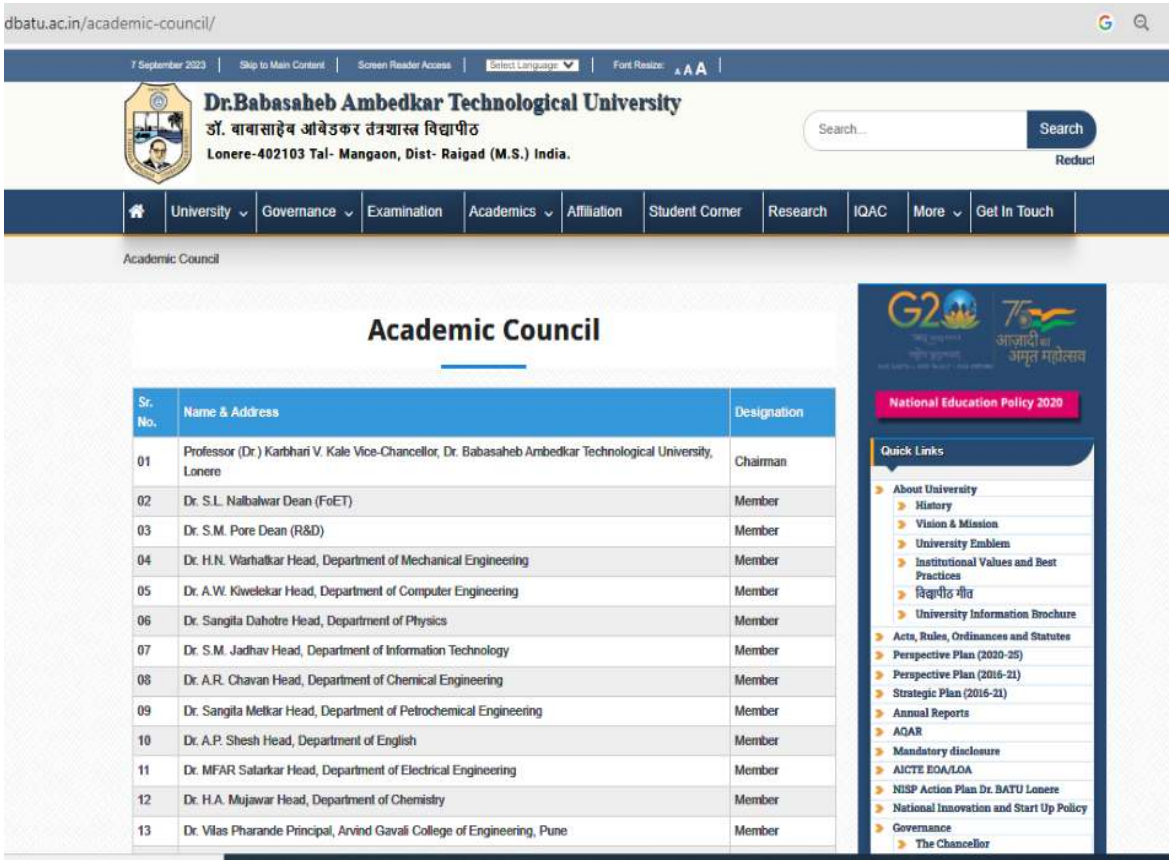
  quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA, AB) in the prescribed format.

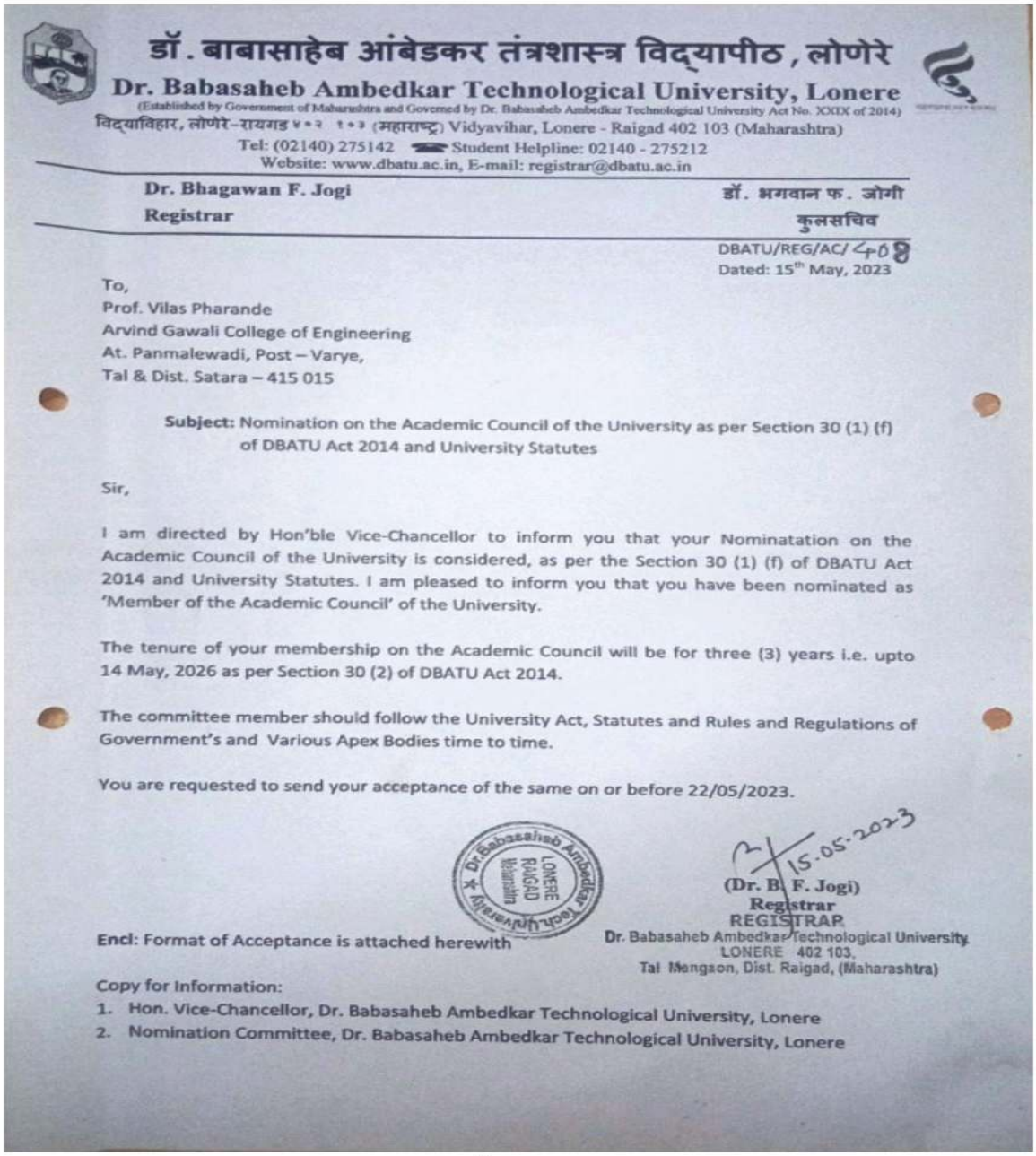
Above administrative bodies meetings are conducted minimum two times in year. Minutes of meetings are maintained in respective registers.

Table 10.1.2d Frequency of Administrative bodies meetings

Name of Committee	Frequency of Meeting	2018-19		2019-20		2020-21	
		Date of Meeting	No of Present Members	Date of Meeting	No of Present Members	Date of Meeting	No of Present Members
Governing Body	2	2/06/2018	11	15/08/2019	10	15/06/2020	11
		26/01/2019	10	26/01/2020	10	15/06/2021	11
College Development Committee	2	2/06/2018	07	14/06/2019	07	17/05/2021	11
		2/01/2019	07	16/05/2020	11	NA	NA
Internal Quality Assurance Cell	2	11/09/2018	10	26/01/2020	14	15/06/2020	14
		15/11/2019	16	NA	NA	23/02/2021	15

Name of Committee	Frequency of Meeting	2021-22		2022-23	
		Date of Meeting	No of Present Members	Date of Meeting	No of Present Members
Governing Body	2	15/06/2021	11	13/08/2022	12
		11/03/2022	12	04/03/2023	10
College Development Committee	2	17/05/2021	14	12/06/2023	10
		NA	NA	17/08/2023	10
Internal Quality Assurance Cell	2	14/06/2021	14	12/08/2022	14
		03/03/2022	13	03/03/2023	14





डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ, लोणेरे

Dr. Babasaheb Ambedkar Technological University, Lonere

(Established by Government of Maharashtra and Governed by Dr. Babasaheb Ambedkar Technological University Act No. XXIX of 2014)

विद्याविहार, लोणेरे-रायगड ४०२ १०३ (महाराष्ट्र) Vidyavihar, Lonere - Raigad 402 103 (Maharashtra)

Tel: (02140) 275142 Student Helpline: 02140 - 275212

Website: www.dbatu.ac.in, E-mail: registrar@dbatu.ac.in

Dr. Bhagawan F. Jogi
Registrar

डॉ. भगवान फ. जोगी
कुलसचिव

DBATU/REG/AC/ 408
Dated: 15th May, 2023

To,
Prof. Vilas Pharande
Arvind Gawali College of Engineering
At. Panmalewadi, Post – Varye,
Tal & Dist. Satara – 415 015

Subject: Nomination on the Academic Council of the University as per Section 30 (1) (f) of DBATU Act 2014 and University Statutes

Sir,

I am directed by Hon'ble Vice-Chancellor to inform you that your Nominatation on the Academic Council of the University is considered, as per the Section 30 (1) (f) of DBATU Act 2014 and University Statutes. I am pleased to inform you that you have been nominated as 'Member of the Academic Council' of the University.

The tenure of your membership on the Academic Council will be for three (3) years i.e. upto 14 May, 2026 as per Section 30 (2) of DBATU Act 2014.

The committee member should follow the University Act, Statutes and Rules and Regulations of Government's and Various Apex Bodies time to time.

You are requested to send your acceptance of the same on or before 22/05/2023.

Dr. Babasaheb Ambedkar Technological University LONERE RAIGAD Maharashtra

15.05.2023

(Dr. B. F. Jogi)
Registrar
REGISTRAR
Dr. Babasaheb Ambedkar Technological University
LONERE 402 103.
Tal Mangaon, Dist. Raigad, (Maharashtra)

Encl: Format of Acceptance is attached herewith

Copy for Information:
1. Hon. Vice-Chancellor, Dr. Babasaheb Ambedkar Technological University, Lonere
2. Nomination Committee, Dr. Babasaheb Ambedkar Technological University, Lonere

1

10.1.2a Principal Dr. Vilas Pharande is DBATU University Academic Council member

Dr. Babasaheb Ambedkar Technological University Lonere, Raigad

State Technical University, Maharashtra Act No. XXIX of 2014

डॉ. बाबासाहेब आंबेडकर तंत्रशास्त्र विद्यापीठ लोणेरे, रायगड

Avishkar 2019

Award of Appreciation

PROF. ARJUN KADAM

Dear Sir/Madam, we appreciate your valuable contribution as a Zonal Coordinator for Avishkar 2019.

Team Avishkar
Dr. BATU Lonere

Sanjay Khobragade
Coordinator

10.1.2b Staff member Mr. Arjun Kadam is university level Avishkar event coordinator

Administrative Setup

The key components of the organizational structure of the Institute are Secretary, Principal, HODs, Teaching, and Nonteaching staff. Various committees with well-defined functions give academic and administrative leadership to the Institution. Organizational Structure of institute depicted in figure below.

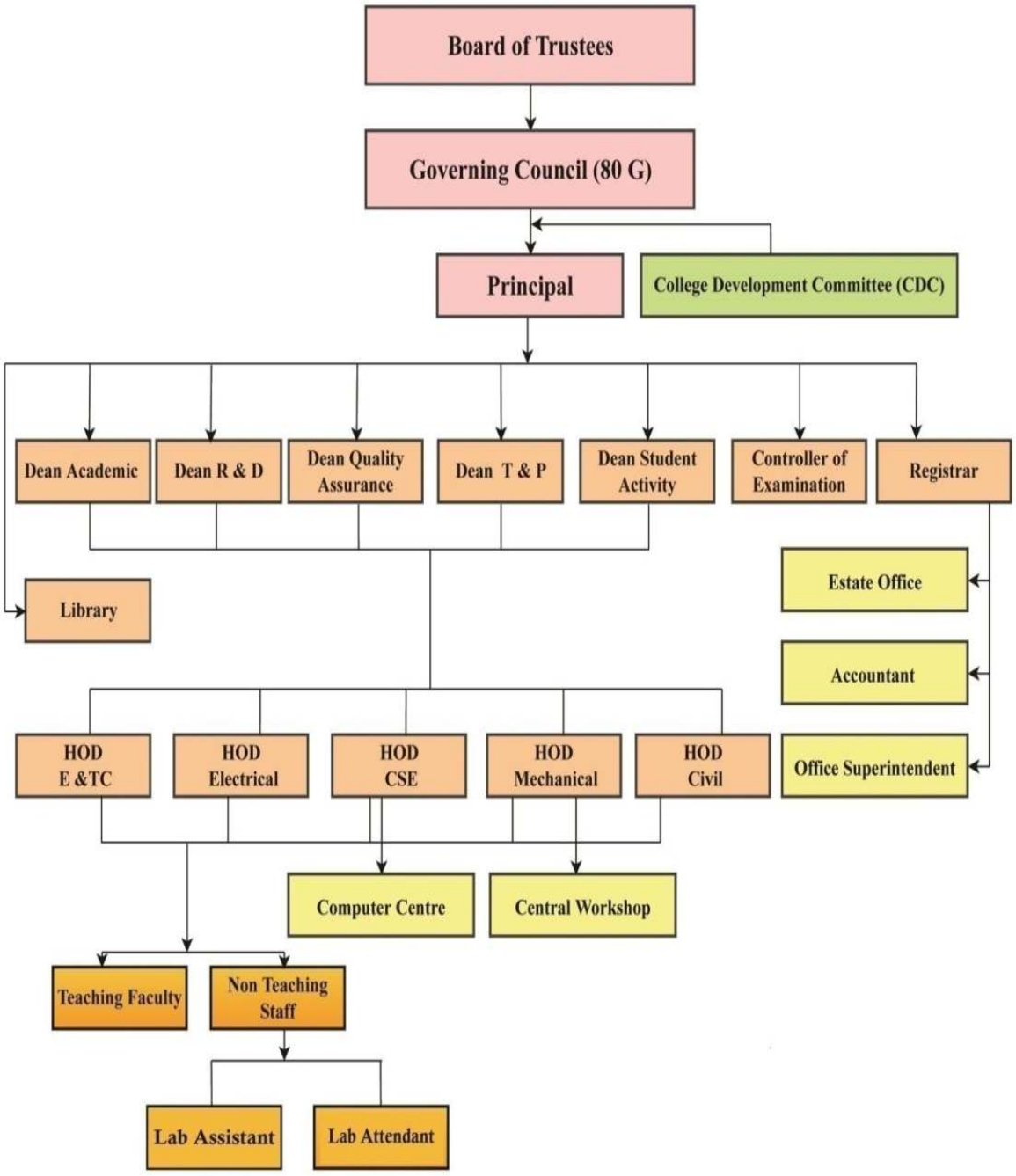


Fig 10.1.2c Organizational Structure

Duties & Responsibilities:

Each employee in the institute has some responsibilities and the employeeshould carry all the tasks assigned to him with the full of his ability.

1) **Principal:** As the head of the institute, the Principal should have the vision and leadership ability to keep a college developing.

- ✓ To monitor and conduct academic activities of the institute under the guidance of the management and assistance of the Deans and Head of Departments.
- ✓ To promote industry institution interaction and research & development activity.
- ✓ To conduct the periodical meetings of the faculties for the effective administration of thecollege.
- ✓ To make the employee and students aware of the rules, policies, and procedures laid downby the college and see to it that they are enforced.
- ✓ To sanction the leave of the staff as per the norms.
- ✓ To communicate with University, Directorate of Technical Education, All India Council forTechnical Education and University Grants Commission for compliance.
- ✓ Organize meetings of Governing Body and Local Managing Committees and maintain minutes of the meeting.
- ✓ To execute any other work assigned by the management.
- ✓ To monitor and promote technical and non-technical, co-curricular and extracurricular activities like seminars, workshops, cultural and sports events with the assistance of Dean & HOD.

2) Dean - Academics

- ✓ Responsible for preparing a timetable and Smooth execution of it in all departments with the help of Head of the Departments.
- ✓ To prepare the Institute academic calendar
- ✓ To maintain academic records as per the requirement under rules.
- ✓ To execute all Internal Examinations and declare their results.
- ✓ Communicating with parents and students about their academic progress and problems.
- ✓ To execute any other work assigned by the Principal and management.

3) Dean – R & D

- ✓ To formulate policy and facilitate the consultancy work in the institution.
- ✓ To encourage Industry Institute Linkages, Collaborative Research programs, and the formation of new incubation centers.
- ✓ To monitor Research projects on a periodical basis and effective utilization of grants ofresearch projects and timely completion of these projects.
- ✓ To apply for intellectual properties generated from research at college and to market these into patents in the industry.
- ✓ To execute any other work assigned by the Principal and management related to IIPC.

4) Dean-Quality Assurance

- ✓ Development of Quality Culture in the institution and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- ✓ Development and implementation of quality benchmarks/parameters for various academic and administrative activities of the institution.
- ✓ Development of Quality Culture in the institution and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.
- ✓ Conducting internal Academic as well as Administrative Audits.
- ✓ Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes.
- ✓ Dissemination of information on various quality parameters of higher education.
- ✓ Organization of inter and intra institutional workshops, seminars on quality related themes.
- ✓ Documentation of the various programmes /activities leading to quality improvement and maintenance of institutional database for the purpose of maintaining /enhancing the institutional quality.
- ✓ Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC.

5) Dean Training and Placement

- ✓ To maintain complete information regarding students appearing for placement activities.
- ✓ To conduct placement activities smoothly.
- ✓ To decide and arrange for personal development programs for student.
- ✓ To update and maintain the contact details of companies interested in recruitment activities.

- ✓ To send an invitation to industry and company for campus recruitment, to notify the studentsabout the events and take necessary action.
- ✓ To take feedback from the industry about the students recruited.

6) Dean Student Activities

- ✓ Responsible for maintaining the student's discipline within college premises with respect to attendance, college uniform, smoke and the alcohol-free environment with the help of Head of Departments.
- ✓ To assist students for effective organization of extracurricular & co-curricular activities in and outside the campus.
- ✓ To keep watch on hostel and campus for ragging free environment.
- ✓ To counsel students for any issue that may arise.
- ✓ To assist the Principal in all students related issues.
- ✓ To execute any other work assigned by principal & management.

7) Controller Of Examination (COE)

- ✓ All matters concerned with the conduction of examination.
- ✓ Preparation and display of final result notification (s) and sending the grade reports to students.
- ✓ Arrangement for the timely issuance/provision of the examination material, instructing the supervisory staff and holding their meetings as and when required.
- ✓ Bringing into the notice of the Principal all cases of infringement of rules of examinations with full report for disposal.
- ✓ Maintaining over all examinations record of the students.
- ✓ Ensuring and maintaining strict secrecy of all information regarding the examinations.
- ✓ To circulate &distribute magazines, literature, etc. to faculties & management and maintain records of the same.
- ✓ To execute any other work given by management.

8) Registrar

- ✓ To provide secretarial support to the Executive Director
- ✓ To handle day-to-day office activity smoothly.
- ✓ To execute the admission process and University Examination process of students.
- ✓ To handle student grievances and taking remedial action.
- ✓ To execute any other work given by management.

9) Librarian

- ✓ To implement all library rules as defined by the management.
- ✓ Responsible for the overall functioning of the library.
- ✓ Responsible for the procurement of recommended books, daily newspapers, journals, magazines, videos, CDs, audio cassettes, e-books, online resources, etc. and renewal of books/magazines.
- ✓ To display all technical articles, literature and new arrivals.
- ✓ To circulate & distribute magazines, literature, etc. to faculties & management and maintainrecords of the same.
- ✓ To execute any other work given by management.

10) Head of the Department

- ✓ To monitor and conduct academic activities of the department under the guidance of the Dean Academics.
- ✓ To take department and faculty feedback and accordingly take the remedial actions.
- ✓ To plan and take the necessary actions for the improvement of department results and academic performance.
- ✓ To coordinate term work assessment and conduction of practical /oral examinations as laid down by DBATU
- ✓ To maintain discipline and enforce rules as laid down by the institute, in the department.
- ✓ To monitor the day-to-day activities of the department.
- ✓ To plan for the semester and academic year, in terms of activities, guest lectures, workshops,etc. for the benefit of the student and faculty.
- ✓ To conduct regular meetings with teaching and non-teaching staff as well as the Class Representatives along with Class Teacher to sort out any issue and queries related to academics.

- ✓ To execute any other work assigned by the Principal and management.
- ✓ To prepare the department requirements and budget needed.
- ✓ To oversee the purchase and deployment of any resource allotted for the department.

11) Computer Centre

- ✓ Maintain Computer Centre
- ✓ To administer and maintain servers, firewalls, routers, manageable switches UPS and batteries.
- ✓ To initiate the purchasing of equipment.
- ✓ To provide support for various software servers.
- ✓ To ensure continuous internet during assigned hours.
- ✓ To give support to the On-line exam, Seminar, Workshop, technical training program.
- ✓ To update and maintain the institute website with institute data

12) Central Workshop

- ✓ Arranges all the machines/equipment required in the workshops.
- ✓ Responsible for repair and maintenance of all the machines and equipment in the workshops.
- ✓ Makes schedule for different groups of students for practice in their respective workshops.
- ✓ Responsible for maintenance of laboratories.
- ✓ Reports to Principal/HOD regarding damage/breakdown of machines/equipment.
- ✓ Responsible for safety measures of teaching / non-teaching staff.

13) Estate office

- ✓ Must be available in the campus and be on duty for 6 days/week; discharges the duties under directions of the principal.
- ✓ Supervises, executes the works in all civil, electrical, gardening and cleaning.
- ✓ Acts as the office in-charge of the security/sanitation of the institute.
- ✓ Inspects the buildings structures, roads, etc. under his charge as often as necessary and examine their condition from safety and maintenance point of view and take/suggest necessary action.
- ✓ Prepares progress reports on on-going work and report the same to the authorities of the institute on a monthly basis.
- ✓ Ensures the successful achievement of the targets fixed for completion of each project/works

with due consideration for speed and economy of scale and/or proper maintenance of building structures, water supply channels and regular maintenance of all the electric generators and ensuring proper use of the same.

- ✓ Executes any other works assigned from time to time.

14) Accountant

- ✓ Keeps account of financial transactions such as admission fees, examination fees, hostel fees etc.
- ✓ Keeps account of all the financial transactions related to repair, maintenance, purchase etc.
- ✓ Disburses salaries for the employees of the College.
- ✓ Prepares the annual account, get if audited.
- ✓ Deals with banks and other financial institutions regarding loans etc.
- ✓ Will be responsible for filling of annual returns.

15) Office Superintendent

- ✓ To receive any letter / notice and to put his/her initials and date of receipt and to record and pass on therein instructions wherever necessary for the guidance of staff working under him.
- ✓ To exercise check and follow up of letters received from the Government of India/Chancellor/State Government/U.G.C./ AICTE/ Office of the Director of Education/Universities etc.
- ✓ To supervise the work of subordinate staff in the form of periodic check of the work carried out by the staff.
- ✓ To inspect the racks and tables of assistants/and/or senior assistants working under him and satisfy himself that no papers of files have been overlooked and that there are no odd receipts or bills lying indisposed off.
- ✓ To attend to such other work as may be given to him with the approval of the Principal/Registrar/Head of the Department.
- ✓ To supply other relevant facts and figures and also papers pertaining to previous decisions or policy.
- ✓ Any other work assigned from time to time, with the approval of the Principal/Registrar.

16) Teaching Faculty

- ✓ All the Faculty Members are expected to follow the rules and regulations of the Institution as prevalent from time to time.
- ✓ The work load of all the staff shall be fixed by the Head of Department. The work load of the teacher should not be less than average 40 hours a week, of which teaching-contact hours shall be at least as per AICTE norms.
- ✓ Faculty Members are expected to update their knowledge by attending seminars/workshops/conference, with due permission from the HOD/Principal.
- ✓ Faculty Members should attempt to publish text books, research papers in reputed International / National Journals/Conferences.
- ✓ The Faculty Member must prepare him/ herself academically to meet all the challenges and requirements in the methodology of teaching so that the input may be useful for the student community at large. Every Faculty Member is expected to extend his/her beneficial influence in building up the personality of students and he/she should associate himself/herself actively with such extra-curricular activities which he / she is interested in or assigned to him/her from time to time.

17) Lab Assistant

- ✓ To maintain the Dead Stock Register and Consumable Registers.
- ✓ To find out the requirements for consumables for the laboratory and procure the same, before the start of every term.
- ✓ To plan for the procurement of equipment for the next term well in advance as per guidelines from university, by contacting teachers who are teaching or have taught similar subjects in our college or subject experts nominated by university, by considering syllabus revision etc.
- ✓ Requisition of consumables shall be submitted to the HOD, who in turn shall verify the same and forward to the Principal for necessary action.
- ✓ To see that the infrastructure facilities in the labs are adequate so that each batch has ample opportunity to complete practical satisfactorily.
- ✓ To organize the laboratory for oral and practical examinations.
- ✓ To take corrective action for any breakage / loss etc.
- ✓ To ensure the safety and cleanliness of the laboratory and switch off all equipments after use.
- ✓ The Lab Assistants are required to assist the respective laboratory in-Charge for smooth

functioning of the laboratories.

- ✓ All the Lab Assistants are required to report matters like maintenance/repairing requirement, theft, damage etc. within the respective labs, to the HOD through faculty in charge of lab.
- ✓ Lab Assistants in coordination with Lab In-charge should display (i) List of Equipment's/software with cost (ii) List of Experiments (iii) Lab Time Table (iv) Names of Lab In-charge / Lab Assistants etc. on the laboratory Notice board.
- ✓ All laboratory in charges are responsible for maintaining the laboratory utilization record Laboratory theft/damage prevention

18) Lab Attendant

- ✓ To open all the classrooms, laboratories, and staff rooms before starting time of classes.
- ✓ To close and lock all the classrooms, laboratories, and staff rooms after working hours with due checking of lights, fans, equipment's.
- ✓ To clean classrooms, laboratories, and staff rooms on every day.
- ✓ To clean benches in classroom and laboratory, equipment's in laboratory and staff tables.
- ✓ To clean a particular classroom, laboratory, or staff room if required on urgent basis.
- ✓ To assist the laboratory assistant while performing practical if required.
- ✓ To shift the equipment in/out of the laboratory whenever required.
- ✓ To circulate required documents to staff for signatures.
- ✓ To get the documents photocopies as required by HOD office/staff.
- ✓ To make arrangements of tables, chairs during the examination/functions in the department.
- ✓ To perform examination duties during internal as well DBATU examinations.
- ✓ To attend HOD office and perform duties assigned by HOD and staff from time to time.

B. Service rules

As institute is affiliated Dr. Babasaheb Ambedkar Technological University. In pipeline with the service rules framed by university, institute have prepared **PROCESS HANDBOOK** which contains service rules, policies, and procedures for the institution are in place and documented. Since 2019, the **PROCESS HANDBOOK** is made available in the departments and is available on the institute website. They are also made known to all newly recruited staff members through a HOD Meeting/induction program. Rules and regulations are modified as and when needed. Important information is regularly informed through circulars and during staff meetings

Procedures Recruitment

Recruitment

- Recruitment is done before commencement of Academic Year, and payment will be made as per AICTE scale.
- Recommendations of the selection committee comprising of Chairman, Administrator, Principal/Designated Authority, and respective HOD will be placed before the AGCE Governing council, along with details of sanctioned posts, for final approval.
- At the time of joining all appointees should submit original certificate, equivalence certificate.
- Every member of the staff shall agree to abide by all the conditions laid down by the Institution.

Promotional policies

1. All promotions shall be considered on the basis of merit- cum –seniority basis or as decided by the management from time to time
2. The Chairman shall appoint a committee for promotion, in which he shall be the Chairman, with administrator, principal and experts in the respective area.
3. The Committee shall consider promotion of teaching staff to the next higher position on the basis of the guidelines given in this chapter and as per AICTE norms, subject to the condition that there has not been any disciplinary action taken against such candidate for promotion, for any misconduct he/she has committed during the service.
4. The staff shall be considered for promotion to the next higher level position, subject however, he/she had completed the three years of service after probation in the present position and should have obtained AICTE prescribed qualification.
5. Special preference to the faculty who is undergoing PhD and completing the course work and comprehensive viva voce for PhD and on publication of 5 International Journal papers, being in the authors area of specialization for the promotion to the post of Associate professor with Minimum of 5 yrs experience in teaching/research/ industry or (Equivalence for PhD is based on publication of 5 International Journal papers, being in the authors‟ area of specialization) and subjected to condition that, they fulfill the AICTE requirement within four years from the date of promotion.

6. Minimum of 10 years teaching/research/ Industrial experience of which at least 5 years should be at the level of Associate Professor and possessing a Ph.D. degree in the relevant discipline or Minimum of 13 years' experience in teaching and/or Research and/or Industry with PhD shall be eligible to be appointed and designated as Professor, subject to other conditions of academic performance as laid down by the AICTE.

7. No teacher other than those with a Ph.D. shall be promoted, appointed or designated as Professor

8. A teacher who wishes to be considered for promotion under Career Advancement Scheme (CAS) may submit his application with necessary documents to the principal office.

9. The following Educational background information is required in the CV for reappointment and promotion of candidates:

- Academic and other relevant employment history
- Awards and appreciation if any
- Research and/or creative works, publications journal, conference proceeding, textbook publications etc.
- Teaching accomplishments: List classes taught with results, List any textbooks, study guides, manuals, workbooks, or electronic media, produced for student or class use, mentor list.

10. Those who are promoted shall be fitted in the Scale of Pay applicable to that category.

11. All decisions on promotions shall be taken up from the month of April / October every year

12. All cases of promotions satisfying the above norms and those prescribed by the AICTE will be considered, subject to the requirement of the department and discretion of the Management.

C. Minutes of the meetings and action-taken reports

- Governing Body Minutes of Meeting and action taken 2022-23: http://103.159.152.195/moodle/mod/folder/view.php?id=10184\
- IQAC Minutes of Meeting and action taken 2022-23: http://103.159.152.195/moodle/mod/folder/view.php?id=10185
- College Development Committee and action taken 2022-23: http://103.159.152.195/moodle/mod/folder/view.php?id=10187

10.1.3 Decentralization in working and grievance redressal mechanism (10)

A. List the names of the faculty members who have been delegated powers for taking administrative decisions (1)

B. Specify the mechanism and composition of grievance redressal cell (2)

C. Action taken report as per 'B' above (7)

A. Decentralization in working:

Arvind Gavali College of Engineering, Satara follows decentralized mechanism of working. Principal is the academic head of the institute; many of the powers are delegated to the core committees for effective functioning that comprises of Deans and Head of Departments.

Table 10.1.3.a Responsibilities

Sr. No	Name	Responsibility
1	Mr. Ghadge Suraj	Dean Academics
2	Mr. Hingmire Vishal	Dean IQAC
3	Dr. Mirajkar Gayatri	Dean R& D
4	Mr. Rajani Mandhare	Dean Student Council
5	Dr. Ananda Bhimrao Gholap	HoD Dept of Mechanical Engineering
6	Dr. Bamane Prashant Ramesh	HoD Dept of Civil Engineering
7	Dr. Nayak Meghay Banoth	HoD Dept of Electrical Engineering
8	Dr.Sagar Shinde	HoD Dept of Electronics & Telecommunication Engineering
9	Dr. Shaha Manali	HoD Dept of Computer Science & Engineering
10	Mr. Pathak P.A.	Training & Placement
11	Mrs. Yewale Vaishali	Librarian
12	Mr. Kamble Ankur	Director of Physical Education Coordinator NSS
13	Dr. Nayak Meghay Banoth	Coordinator Alumni Association
14	Mr. Kanase Nitin	Registrar

Involvement of each and everyone in the decision making at their respective levels is ensured through decentralization and delegation of powers. Hence there are various institutional committees consisting of faculty and staff members. Transparency associated therein also forms an important feature of the work culture.
Students have active representation on various academic and administrative bodies and committees of the Institute.

Students are given exposure to involve themselves in administrative, co-curricular and extracurricular activities as members of the committees. They actively participate in committee meetings. The following is the list of Committees having student representation and engagement.

Institute Level Committees:

1. Academic Monitoring
2. Internal Quality Assurance Cell
3. Examination Committee
4. University/AICTE/DTE Committee
5. Promotional Activity Committee
6. Training & Placement Committee
7. Alumni Committee
8. Research and Development and Intellectual Property Right
9. Infra administration & Maintenance
10. Information and Communication Technology Committee
11. Anti ragging Committee
12. Reservation Committee
13. Internal Complaints Committee
14. Extracurricular Activities Committee
15. Grievance & Redressal
16. Library

1. Academic Monitoring

In-line with DBATU academic calendar, Institute prepared its academic calendar and also respective departments prepared its calendar. Based on the Institute's academic calendar, every department carried out their work load distribution based on their domain of expertise and prepared the respective Time table and got it approved from AMC and the Head of Institute. As per the University guidelines lectures and practical were commenced. Internal academic monitoring was carried out and necessary action taken.

Guardian faculty mentoring system is implemented in the Institute wherein 15 to 20 students are assigned to a faculty member who acts as their mentor for the entire program. Mentor regularly interacts with the students and monitors their academic performance and attendance. Students are counselled by the mentors, class coordinator, faculty and HOD for improving their academic performance and attendance. Mentors and Class Advisors counsel the students regarding their performance and schedule additional lectures/practical. The students are given guidance for academic, career, and also on personal issues. The mentors discuss with each and every student on an individual basis and support them in all the possible ways to improve their academic performance. The mentors always keep a check on the attendance of the student, the marks/grades obtained in the internal and external examinations.

Table 10.1.3.b Academic Monitoring committee members

Sr. No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal, Arvind Gavali College of Engineering Satara
2	Mr. Ghadage Suraj	Coordinator	Assistant Professor, Mechanical Engineering
3	Dr. Nayak Meghya Banoth	Coordinator	Assistant Professor, Electrical Engineering
4	Mrs. Kasture Ashwini	Coordinator	HOD, Core Science Engineering
5	Mr. Somesha N.S.R	Member	Assistant Professor, Electrical Engineering
6	Mrs. Ghate shital	Member	Assistant Professor, Civil Engineering
7	Mr. Naik Somesha	Member	Assistant Professor, Electrical Engineering
8	Ms. Mulla Samina	Member	Assistant Professor, Computer Science & Engineering
9	Ms. Nalawade Sanskruti	Member	Assistant Professor, E&TC Engineering

2. Internal Quality Assurance Cell (IQAC)

The IQAC Committee includes all stakeholders of the Institute, i.e. students, alumni, all department and Section Heads, including the Library, Sports, Students Hostel, Examination & Evaluation, Co-curricular and Extra-curricular activity members, Management, Local community and Industry experts.

Table 10.1.3.c IQAC committee members

Sr. No.	Name	Designation	Designation Organization
1	Dr. Vilas Pharande	Chairman	Principal, Arvind Gavali College of Engineering Satara
2	Mr. Vishal Hingmire	Coordinator	Assistant Professor, E& TC Engineering
3	Mr. Nitin Kanse	Member	Registrar, AGCE, Satara
4	Mr. Chetan Nalawade	Member	MD, Shuddha Milk and Milk Products, Satara
5	Mr. Samadhan Jadhav	Member	MD, Satara Engineering Work, Satara
6	Mrs. Shakuntala Pawar	Member	HR Head, Mutha Foundry, Satara
7	Mr. Omkar Waikar	Member	CEO, Supreme Silicones & Trinity Enterprises, Pune
8	Mr. Abhay Khanaure	Member	MD, Meretech, Pune
9	Mr. Sushant Gaikwad	Member	Social worker & Coordinator at Mhada, Pani Foundation
10	Mr. Rohit Bhole	Member	MD, 3 Star IT Solution, Satara
11	Mr. Abhay Gujar	Member	Assistant Professor, AGCE, Satara
12	Mr. Suhas Patil	Member	Assistant Professor, AGCE, Satara
13	Mr. Somesh N.S.R	Member	Assistant Professor, AGCE, Satara
14	Ms. Ashwini Kasture	Member	Assistant Professor, AGCE, Satara
15	Ms. Shital Ghate	Member	Assistant Professor, AGCE, Satara
16	Mrs. Rajani Mandhare	Member	Assistant Professor, AGCE, Satara

3. Examination Committee

The Institute has a college level Exam committee. This committee works under the supervision of Head of the Institute. The Institute exam committee responsible for the preparation of Timetable, setting of question papers, evaluating the answer sheets, preparing the results and declaration of the same. The evaluated answer sheets are shown to the students for any grievances. The grievances of the students are considered and looked into. The main reforms initiated by the Exam Cell Committee are the timely declaration of results and moderation of the question papers. For continuous evaluation process, internal tests, assignments, quiz, presentations, lab work, seminars etc are taken into consideration. Term work marks are given to the student depending on the performance in the internal assessment. The rubrics for each practical and tutorial are based on the parameter which takes into consideration: the performance, lab ethics, self-learning initiative, conceptual understanding, punctuality and attendance. And also the Institute, Controller of Examination conduct the end semester examination in line with the time table received from University.

Table 10.1.3.d Examination committee members

Sr. No.	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Kadam Arjun	Coordinator	Assistant Professor, Mechanical Engineering
3	Mrs. Mandhare Rajani	Coordinator	Assistant Professor, CS & Engineering
4	Mr.Nikam Vikas	Member	Assistant Professor, Civil Engineering
5	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
6	Mr. Kadam Vijay	Member	Assistant Professor, E&TC Engineering
7	Ms.Pooja Bhosale	Member	Assistant Professor, Core Science Engineering

4. University/AICTE/DTE

This committee ensures University affiliation, Extension Of Approval (EOA) from AICTE, facilitation centre for centralised admission process from DTE.

Table 10.1.3.e University/AICTE/DTE committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mrs. Mandhare Rajani	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Kanase Nitin	Coordinator	Registrar, Office
4	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
6	Dr. Nayak Meghya Banoth	Member	Assistant Professor, Electrical Engineering
7	Ms. Mandhare Rajani	Member	Assistant Professor, CS & Engineering
8	Mr. Hingmire Vishal	Member	Assistant Professor, E&TC Engineering
9	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

5. Promotional Activity Committee

Parents and students are not aware of the various educational opportunities available in rural areas. We at AGCE, have a well developed mechanism where faculty members make it a point to meet the parents, students and also various schools and colleges to make them aware of the educational facilities we impart and also of the admission process. Due to this, all the people are made aware not only of the presence of our Institute but also of the different career opportunities. As per the DTE process School connect program is conducted by faculty members visiting different schools and students. Faculty members give information about various scholarships, transport facilities and also the accommodation facility made available to the students including girl's hostel.

Table 10.1.3.f Promotional Activity Committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Hingmire Vishal	Coordinator	Assistant Professor, E&TC Engineering
3	Mr. Shinde Mahesh	Coordinator	Clerk, Office
4	Mr. Kamble Ankur	Member	Assistant Professor, Mechanical Engineering
5	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
6	Dr. Nayak Meghya Banoth	Member	Assistant Professor, Electrical Engineering
7	Ms. Waghmare Shital	Member	Assistant Professor, CS & Engineering
9	Mrs. Kasture Ashwini	Member	Assistant Professor, Core Science Engineering

6. Training and Placement Committee

The Institute Provides Skill Improvement Program for Placements. That gives personal and career counselling to achieve desirable improvement in students. One of the major objectives is to help students to obtain internships and placement in companies across various industrial sectors. The students are encouraged to present technical papers at seminars in other Institutes with a view to improving their research and presentation skills. Faculty members from each department are co-opted as members of the Placement Cell.

Table 10.1.3.g Training & Placement committee members			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Pathak Pranav	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Kadam Arjun	Member	Assistant Professor, Mechanical Engineering
4	Mr. Sapkal Rajendra	Member	Assistant Professor, Civil Engineering
5	Mr. Chavan Santosh	Member	Assistant Professor, E&TC Engineering
6	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

7. Alumni Committee

Alumni Cell, the single point of contact between Alumni and Institute, offers our alumni a host of services that enables them keep in touch with their batch mates and also of the different activities conducted in the Institute.

Table 10.1.3.h Alumni Committee members			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Chavan Santosh.	Coordinator	Assistant Professor, E&TC Engineering
3	Dr. Nayak Meghya Banoth	Coordinator	Assistant Professor, Electrical Engineering

4	Mr. Kamble Ravi	Member	Assistant Professor, Mechanical Engineering,
5	Mr. Sapkal Rajendra	Member	Assistant Professor, Civil Engineering
6	Mrs. Kadam Anuradha	Member	Assistant Professor, CS & Engineering
7	Ms. Kuthe Priya	Member	Assistant Professor, Core Science Engineering

8. Research and Development and Intellectual Property Right

Research and Development cell designs annual research activity plan for all the departments, establish liaison with near and far industries and identify the technological challenges being faced by them. These problems of the industry are taken up as projects for finding solutions through R&D which are assigned to both faculty members and students. To initiate and promote MoUs with Industries for consultancy, collaborative research, sponsored projects, Industry and Institute interactions etc. To motivate students for presenting papers in National and International conferences, Demonstrate projects in various competitions.

Table 10.1.3.h R & D and IPR committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Assistant Professor, E&TC Engineering
3	Dr. Salman Waremani	Member	Assistant Professor, Mechanical Engineering
4	Mr.Shinde Suraj	Member	Assistant Professor, Civil Engineering
5	Mr. Gujar Vijay	Member	Assistant Professor, CS & Engineering
6	Mr. Chavan Santosh	Member	Assistant Professor, E&TC Engineering
7	Ms. Bhilare Nikita	Member	Assistant Professor, Core Science Engineering

9. Infra administration & Maintenance

The Committee a setup to look and take care of the maintenance of the overall infrastructure of the Institute. The Institute has well equipped infrastructural facilities for the efficient conduction various examinations.

Table 10.1.3.i Infra administration & Maintenance committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Ms. Mulla Samina	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Nikam Vikas	Coordinator	Assistant Professor, Civil Engineering
4	Mr. Naik Somesha	Coordinator	Assistant Professor, Electrical Engineering
5	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
6	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
7	Mrs. Kandarkar Sucharita	Member	Assistant Professor, E&TC Engineering
8	Ms.Shinde Swapnali	Member	Assistant Professor, Core Science Engineering

10. Information and Communication Technology Committee

ICT Committee is actively involved in the proper maintenance of the various digital working tools like an ICT panel which includes 3-Smart boards, 6-Overhead projectors, well equipped computer labs. For any maintenance the committee looks into the same and the problem is rectified.

The committee also encourages maximum students participation in various online programs available under NPTEL/MOOCS, for their overall development.

Table 10.1.3.j ICT committee members			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Ms. Mulla Samina	Coordinator	Assistant Professor, CS & Engineering
3	Mr. Nikam Vikas	Coordinator	Assistant Professor, Civil Engineering
4	Mr. Naik Somesha	Coordinator	Assistant Professor, Electrical Engineering
5	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
6	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
7	Mrs. Kandarkar Sucharita	Member	Assistant Professor, E&TC Engineering
8	Ms.Shinde Swapnali	Member	Assistant Professor, Core Science Engineering

11. Anti ragging Committee

These committees ensure that at least one faculty member will be present at any particular time at all the locations to curb ragging. Instructions are given to student volunteers to take precautionary measures to avoid ragging at locations like Canteen, bus stops and canvass about anti-ragging through the use of Flexes, Posters and Boards in the Institute premises and surrounding areas where there is a chance of ragging. Fresher's and parents are guided and counselled against ragging and affidavits duly signed the students and parents, against ragging are taken at the time of admission.

Table 10.1.3.k Anti ragging committee members			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Jagtap Dayanand	Coordinator	HOD E&TC Engineering
3	Miss. Bhosale Raupali H	Member	Social Worker

4	Adv. Dixit D.C.	Member	Advocate
5	Mr. Barge Abhijeet	Member	Local Media
6	Mr. Patil Suhas	Member	Assistant Professor Mechanical Engineering
7	Mr. Nayak Banoth Meghya	Member	HOD Electrical Engineering
8	Mrs.Sawant Ashwini	Member	CSE Department Engineering
9	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
10	Mr. Shinde Chandrashekhar	Member	Office Superintendent
11	Mr. Kadam Vijay	Member	Assistant Professor E & TC Engineering
12	Mr. Khairmode Omkar	Member	Assistant Professor Mechanical Engineering
13	Mr. Bhoite Aryan	Member	Student E&TC Engineering
14	Mr. Roman Aniket	Member	Student Civil Engineering
15	Mr. Chavan Aditya	Member	Student Electrical Engineering
16	Mr. Shinde Suyog	Member	Student Mechanical Engineering
17	Miss. Gawade Priti	Member	Student CSE Engineering
18	Ms.Kadam Dhanashree	Member	Student Core Science & Engineering

12. Reservation Committee

Reservation committee monitors awarding of scholarships to students belonging to various categories viz. Open. OBC, NT, SC and also guide the students of the various facilities available to them from State and Central government for their maximum benefit.

Table 10.1.3.l Reservation committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Thombare Vijay	Coordinator	HOD Civil Engineering
3	Mr. Jagtap Dayanand	Coordinator	Assistant Professor, E&TC Engineering
4	Mrs. Alatkar Manisha	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering
8	Dr. Nayak Meghay Banoth	Member	Assistant Professor, Electrical Engineering
9	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
10	Mrs. Sawant Ashwini	Member	Assistant Professor, CS & Engineering
11	Ms. Waghmare Shital	Member	Assistant Professor, CS & Engineering
12	Ms. Sawashe Ketaki	Member	Assistant Professor, E&TC Engineering
13	Mrs. Bhosale Rohini	Member	Assistant Professor, Core Science Engineering

13. Internal Complaints Committee

Women's Grievance Cell is guided by Principles of natural justice while redressing the grievances. The cell will consider grievances concerned with sexual harassment and other acts related to gender-based discrimination.

Table 10.1.3.m Internal Complaints Committee (ICC) members			
Sr. No.	Names of committee members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Professor, E&TC Engineering
3	Dr. Thombare Vijay	Member	Professor, Civil Engineering
4	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering
8	Miss. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
9	Mrs. Sawant Ashwini	Member	Assistant Professor ,Computer Science & Engineering
10	Mrs. Pawar Snehal	Member	Assistant Professor, Core Science Engineering
11	Mrs. Ghadge Rupali	Member	Clerk
12	Mrs. Shinde Jayashri	Member	Assistant Librarian
13	Miss. Lalge Prajkta	Member	Student, Mechanical Engineering
14	Miss. Jadhav Akanksha	Member	Student, Electrical Engineering
15	Miss. Yadav Bhagyashri	Member	Student, CSE Engineering

16	Miss. Pawar Akanksha	Member	Student, E&TC Engineering
17	Mr. Shelke Siddheshwar	Member	Student, Civil Engineering
18	Miss. Chavan Nikita	Member	Student, First Year Engineering
19	Miss. Jadhav Vrunda	Member	Student, Polytechnic Engineering

14. Extracurricular Activities Committee:

Students have strong representations in all cultural and sports committees. They help in organization and management of different events. Major events include annual Sports Competition and Cultural event. Organize intra-college competitions at the Institute level. Assist and encourage the students to participate actively in organizing and conducting various indoor, outdoor sporting games. Maintain records of the sporting events attended by students held in the Institute. Submit annual report of the sports/ events conducted, budget allocations and expenditure incurred during the year. Encouraging students to participate in the intra or inter-collegiate events. Students are part of organizing committees all the engineering activities at departmental/Institute level. Some of these activities include conferences, coding, project contests, technical events, quiz competitions, student club activities etc.

Table 10.1.3.m Extracurricular Activities Committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Ghadge Nikhil	Coordinator	Assistant Professor, Mechanical Engineering
3	Mr. Kamble Ankur	Coordinator	Assistant Professor, Mechanical Engineering
4	Ms. Waghmare Shital	Coordinator	Assistant Professor, CS & Engineering
5	Mr. Salunkhe Rakesh	Member	Assistant Professor, Civil Engineering
6	Ms. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering

7	Ms. Nalawade Sanskriti.	Member	Assistant Professor, E&TC Engineering
8	Ms. Bhosale Pooja	Member	Assistant Professor, Core Science Engineering,

15. Grievances Redressal Committee

A grievance cell is established in this Institute to resolve any types of disputes among the students. Grievance boxes are made available in the Institute. Stakeholders can drop the grievances mentioned on the paper in the box provided. Resolve grievances which develop in Institute premises, maintaining confidentiality, impartiality, transparency. Establish grievance free Institute environment. To resolve the disputes and any other issues arising amongst the students. To create a professional environment for sustainable development. Encourage the students to show responsible approach. To enhance effective communication to state the grievance verbally or through the use of grievance box. Encourage the students to practice courteous communication behaviour which will be useful in their entire life.

Table 10.1.3.n Grievance Redressal Cell committee members

Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Thombare Vijay Ramchandra	Coordinator	HOD Civil Engineering
3	Mr. Jagtap Dayanand Bajirao	Coordinator	HOD E&TC Engineering
4	Mrs. Alatkar Manisha Nilkanth	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Kanse Nitin	Member	Registrar
6	Mr. Patil Suhas Prakash	Member	Assistant Professor, Mechanical Engineering
7	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering

8	Ms. Waghmare Shital	Member	Assistant Professor, Computer Science Engineering
9	Ms.Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
11	Mrs. Mandhare Rajani	Member	Assistant Professor, Computer Science Engineering
12	Miss. Pawar Snehal	Member	Assistant Professor, Core Science & Engineering
13	Mr. Gaikawd Sushant	Member	Student Civil Engineering
14	Mr. Sawant Prajwal	Member	Student Computer Science & Engineering
15	Mr. Karavale Chetan	Member	Student Core Science Engineering
16	Mr. Kadam Rohit	Member	Student Electrical Engineering
17	Miss. Pawar Akaksha	Member	Student E&TC Engineering
18	Mr. Masal Dadasaheb	Member	Student Mechanical Engineering

16. Library Committee

Library committee is involved in collecting the requirements of the text books, reference books, journals and ensuring adequate number of copies are made available in the library. Planning and implementing the library automation, procedures, digital library development and usage. Finalizing the list of books, journals, magazines and equipment in the central library as well as departmental libraries and propose budgetary estimates to the administrative department and also conducting verification of annual stock. The Institute library has a vast collection of texts books and general books, International and National journals, online databases to cater to the needs of both UG and PG students. Separate sections for General, Reference books, Journals and Periodicals, Magazines are provided along with free Net browsing (DelNet).

Table 10.1.3.o Library Committee members			
Sr.No	Names of members	Designation	Department
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mrs. Yewale Vaishali	Coordinator	Librarian, Central Library
3	Mr. Salunkhe Sushant	Member	Assistant Professor, Mechanical Engineering
4	Mr. Salunkhe Rakesh	Member	Assistant Professor, Civil Engineering
5	Mr. Naik Somesha	Member	Assistant Professor, Electrical Engineering
6	Mr. Gujar Vijay	Member	Assistant Professor, CS & Engineering
7	Mr. Hingmire Vishal	Member	Assistant Professor, E&TC Engineering
8	Mrs.More Sonali	Member	Assistant Professor, Core Science Engineering

B. Grievances Redressal Mechanism

Grievances are taken through following committees. Suggestion boxes are kept for the students

Grievances Redressal Committee

Internal Complaint Committee

Anti-ragging Committee

Grievance Redressal Mechanism: -

The institute has constituted Grievance Redressal cell (GRC), Internal Complaints Committee (ICC) and Antiragging Committee as per the guidelines by the competent authority. Online Grievance Redressal system is purchased and installed.

1.0 Grievance Redressal cell (GRC): - Dr. Thombare Vijay Ramchandra

Grievance Redressal Cell is formed to provide a safe, fair and harmonious learning and work environment, for handling day-to-day grievances related to students, parents and employees. Grievance Redressal Cell facilitates the resolution of grievances in a fair and impartial manner maintaining necessary confidentiality.

Objectives of Grievance Redressal Cell:

- To ensure a fair, impartial and consistent mechanism for Redressal of varied issues faced by the students, parents and employees. To promote cordial Student-Student relationship, Student-teacher relationship, teacher-teacher relationship.
- To develop a responsive and accountable attitude amongst all to maintain a harmonious environment in the college campus. To ensure that grievances are resolved timely with complete confidentiality

Table 10.1.3p Grievance Redressal Cell

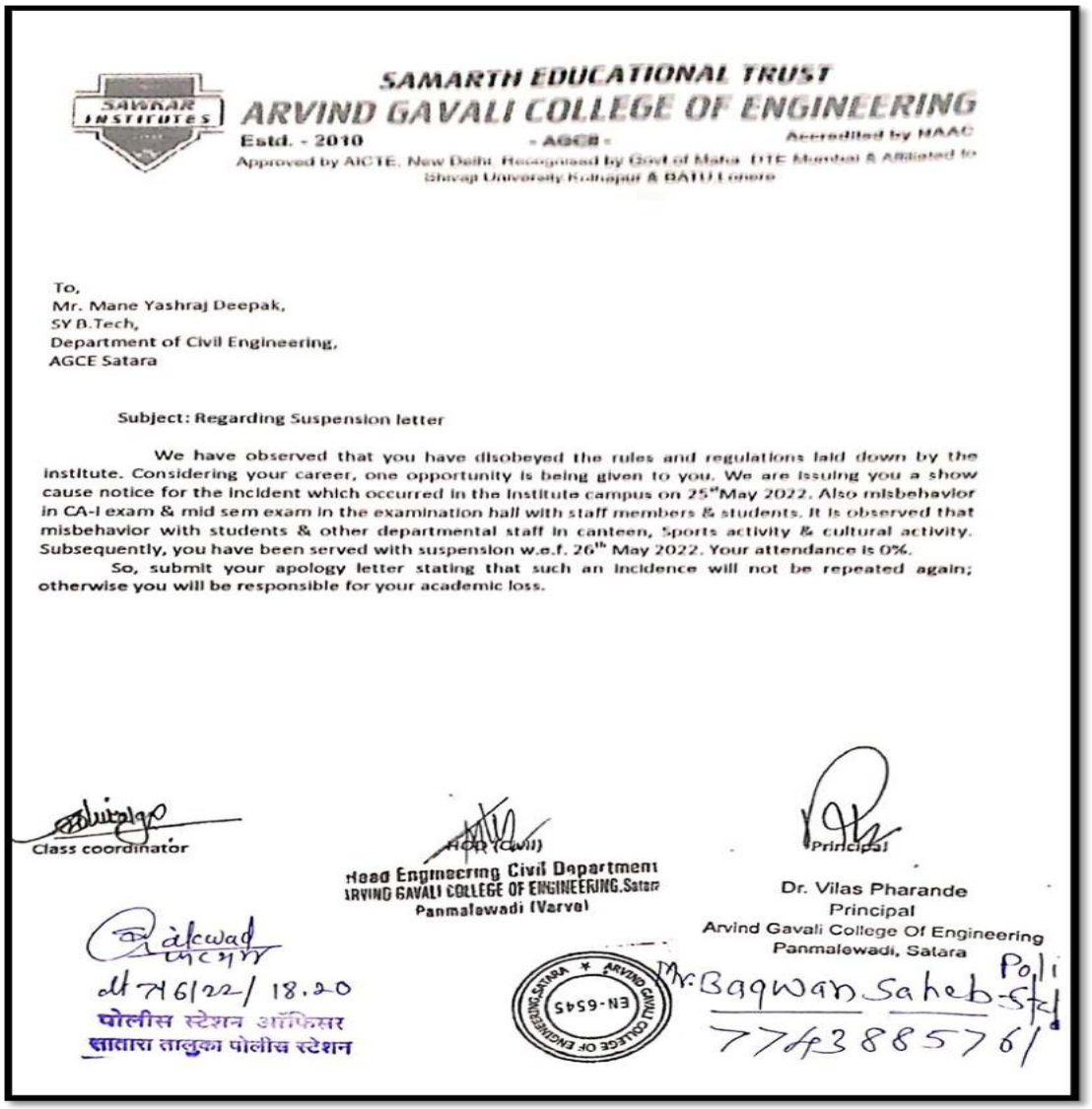
Grievance Redressal Cell committee			
Sr.No	**Names of members**	**Designation**	**Department**
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Thombare Vijay Ramchandra	Coordinator	HOD Civil Engineering
3	Mr. Jagtap Dayanand Bajirao	Coordinator	HOD E&TC Engineering
4	Mrs. Alatkar Manisha Nilkanth	Coordinator	Assistant Professor, Mechanical Engineering
5	Mr. Kanse Nitin	Member	Registrar
6	Mr. Patil Suhas Prakash	Member	Assistant Professor, Mechanical Engineering
7	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
8	Ms. Waghmare Shital	Member	Assistant Professor, Computer Science Engineering

9	Ms.Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
11	Mrs. Mandhare Rajani	Member	Assistant Professor, Computer Science Engineering
12	Miss. Pawar Snehal	Member	Assistant Professor, Core Science & Engineering
13	Mr. Gaikawd Sushant	Member	Student Civil Engineering
14	Mr. Sawant Prajwal	Member	Student Computer Science & Engineering
15	Mr. Karavale Chetan	Member	Student Core Science Engineering
16	Mr. Kadam Rohit	Member	Student Electrical Engineering
17	Miss. Pawar Akaksha	Member	Student E&TC Engineering
18	Mr. Masal Dadasaheb	Member	Student Mechanical Engineering

Standard Operating Procedure (SOP):

- Any student or parent or staff member who want to initiate a grievance may in the first instance bring the issue to the notice of the Head of the respective department, who will address the issue and try to resolve.
- If there is no response within the stipulated time from the respective department or grievant is dissatisfied with response/resolution to his/her grievance, then the grievant is free to represent his/her grievance to the College Grievance Redressal Cell in formal manner.
- Scrutiny: Grievance Redressal Cell will make a thorough review of the Redressal process.
- Call for hearing: If the Grievance Redressal Cell is not satisfied with the resolution provided by the respective department /individual or upon the grievant written request, the committee shall fix a date for hearing and intimate the same to the respective department /individual as well as the grievant.
- Investigation: If a resolution is not achieved through hearing, then it will take necessary steps to conduct an investigation of the facts. Grievance Redressal Cell will have the right to interview witnesses, if it is required. On the basis of investigation by Grievance Redressal Cell, report will be submitted to the Head of Institution. The grievance Redressal cell shall use its best efforts to work out resolutions of the issue.

Sample of Grievance Redressal mechanism:



SAMARTH EDUCATIONAL TRUST
ARVIND GAVALI COLLEGE OF ENGINEERING
Estd. - 2010 - AGCE - Accredited by NAAC
Approved by AICTE, New Delhi. Recognised by Govt of Maha. DTE Mumbai & Affiliated to Shivaji University Kolhapur & BATU Lonere

To,
Mr. Mane Yashraj Deepak,
SY B.Tech,
Department of Civil Engineering,
AGCE Satara

Subject: Regarding Suspension letter

We have observed that you have disobeyed the rules and regulations laid down by the institute. Considering your career, one opportunity is being given to you. We are issuing you a show cause notice for the incident which occurred in the Institute campus on 25th May 2022. Also misbehavior in CA-I exam & mid sem exam in the examination hall with staff members & students. It is observed that misbehavior with students & other departmental staff in canteen, Sports activity & cultural activity. Subsequently, you have been served with suspension w.e.f. 26th May 2022. Your attendance is 0%.

So, submit your apology letter stating that such an incidence will not be repeated again; otherwise you will be responsible for your academic loss.

Class coordinator

HOD (Civil)
Head Engineering Civil Department
ARVIND GAVALI COLLEGE OF ENGINEERING, Satara
Panmalewadi (Varve)

Principal
Dr. Vilas Pharande
Principal
Arvind Gavali College Of Engineering
Panmalewadi, Satara

ARVIND GAVALI COLLEGE OF ENGINEERING, SATARA * EN-6545

Mr. Bagwan Saheb Patil
7743885761

dt 7/6/22/ 18.20
पोलीस स्टेशन ऑफिसर
सातारा तालुका पोलीस स्टेशन

2.0 Internal Complaints Committee (ICC) - Women's Grievance Cell – Sexual Harassment Committee

The institution believes in gender equality & gender justice in all of its practices. Organizational environment is free from discrimination & harassment with a particular focus on sexual harassment. For this Women's Grievance Cell is established in the college. The cell is responsible for looking into any complaints filed by students & staff about woman grievances at the college.

Objectives of ICC:

- To full fill the directives of the Hon. Supreme court of India (Guide lines of Vishakha Judgment) and concerns expressed by the University grand commission about ensuring safe environment for women student & employees. To promote an environment free of sexual harassment & other acts of gender-based discrimination at the institution that ensures gender equality & equal opportunities.
- To prevent sexual harassment and to promote the general well-being of female
- Students and employees.

Internal Complaints Committee:

Women's Grievance Cell is guided by Principles of natural justice while redressing the grievances. The cell will consider grievances concerned with sexual harassment and other acts related to gender-based discrimination.

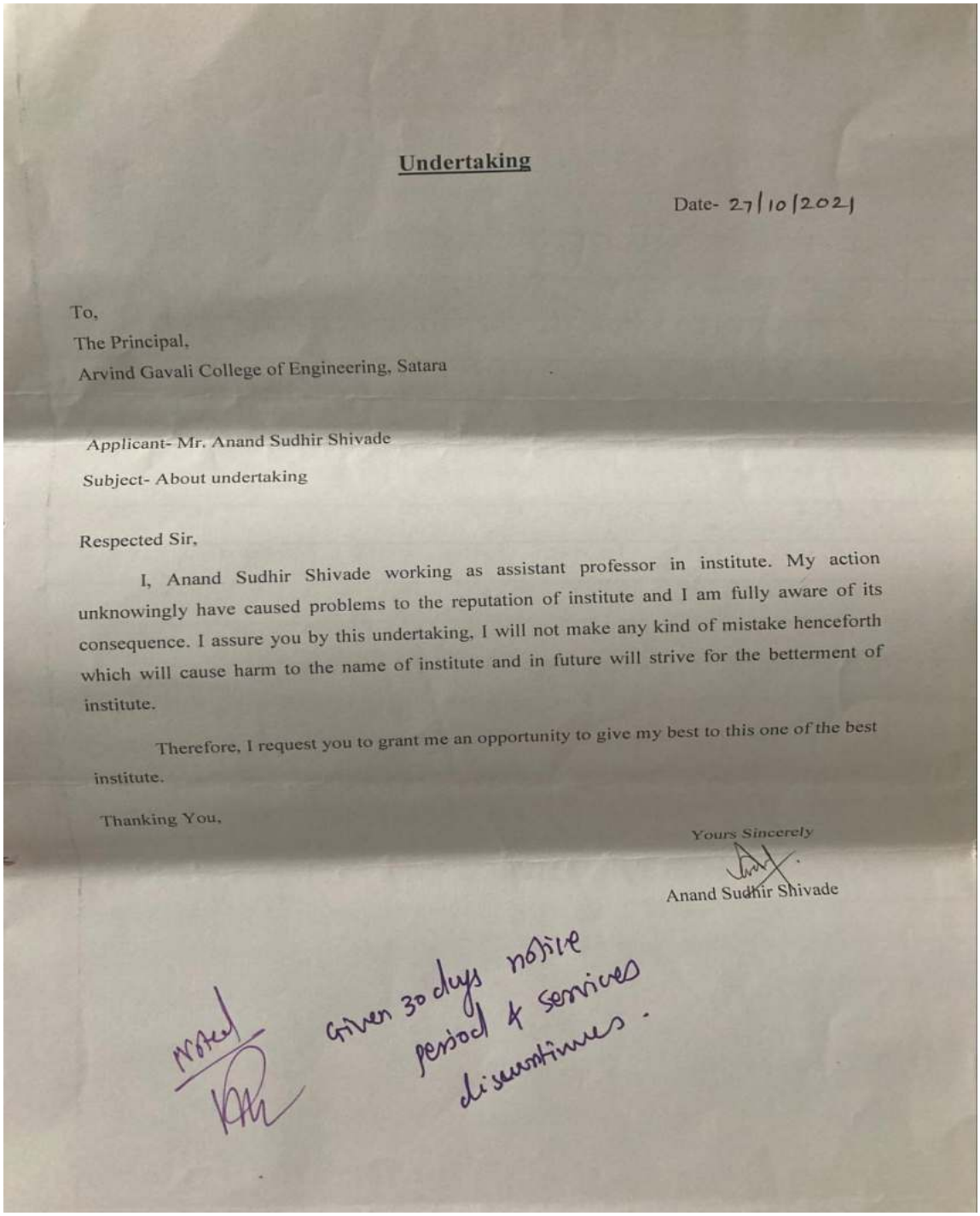
Table 10.1.3q Internal Complaints Committee (ICC) / Women's Grievance Cell

Internal Complaints Committee (ICC) / Women's Grievance Cell			
Sr. No.	**Names of committee members**	**Designation**	**Department**
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Dr. Mirajkar Gayatri	Coordinator	Professor, E&TC Engineering
3	Dr. Thombare Vijay	Member	Professor, Civil Engineering
4	Mrs. Alatkar Manisha	Member	Assistant Professor, Mechanical Engineering
5	Mr. Patil Suhas	Member	Assistant Professor, Mechanical Engineering
6	Mr. Khairmode Omkar	Member	Assistant Professor, Mechanical Engineering
7	Mrs. Ghate Shital	Member	Assistant Professor, Civil Engineering

8	Miss. Mali Ashlesha	Member	Assistant Professor, Electrical Engineering
9	Mrs. Sawant Ashwini	Member	Assistant Professor ,Computer Science & Engineering
10	Mrs. Pawar Snehal	Member	Assistant Professor, Core Science Engineering
11	Mrs. Ghadge Rupali	Member	Clerk
12	Mrs. Shinde Jayashri	Member	Assistant Librarian
13	Miss. Lalge Prajkta	Member	Student, Mechanical Engineering
14	Miss. Jadhav Akanksha	Member	Student, Electrical Engineering
15	Miss. Yadav Bhagyashri	Member	Student, CSE Engineering
16	Miss. Pawar Akanksha	Member	Student, E&TC Engineering
17	Mr. Shelke Siddheshwar	Member	Student, Civil Engineering
18	Miss. Chavan Nikita	Member	Student, First Year Engineering
19	Miss. Jadhav Vrunda	Member	Student, Polytechnic Engineering

Standard Operating Procedure (SOP) of ICC:

- Any female student or employee wants to initiate a grievance may in the first instance bring the issue to the notice of the Head of the respective department, who will forward the matter to Women's Grievance Cell Scrutiny: Women's Grievance Cell will make a thorough review of the Redressal process.
- Call for hearing: Women's Grievance Cell shall fix a date for hearing and intimate the same to the grievant.
- Investigation: If a resolution is not achieved through hearing, then it will take necessary steps to conduct an investigation of the facts. Women's Grievance Cell will have the right to interview witnesses, if it is required. On the basis of investigation by Women's Grievance Cell, report will be submitted to the Head of Institution. The Women's Grievance Cell shall use its best efforts to work out resolutions of the issue.
- Communication the decision: Upon completion of proceedings, the Head of Institution and Women's Grievance Cell shall communicate the final decision to both parties.
- The proceeding concerning each grievance will be documented in a systematic manner. The information relating to the proceedings shall be treated as confidential and can be viewed only by the members of Women's Grievance Cell, for the purpose of investigation



Undertaking

Date- 27/10/2021

To,
The Principal,
Arvind Gavali College of Engineering, Satara

Applicant- Mr. Anand Sudhir Shivade
Subject- About undertaking

Respected Sir,

I, Anand Sudhir Shivade working as assistant professor in institute. My action unknowingly have caused problems to the reputation of institute and I am fully aware of its consequence. I assure you by this undertaking, I will not make any kind of mistake henceforth which will cause harm to the name of institute and in future will strive for the betterment of institute.

Therefore, I request you to grant me an opportunity to give my best to this one of the best institute.

Thanking You,

Yours Sincerely

Anand Sudhir Shivade

noted

Given 30 days notice period & services discontinues.

Fig 10.1.3.b. Internal Complaints Committee has taken action and suspended faculty

3.0 Anti-Ragging Committee:

Ragging is a very common problem faced by students in the campus during and after college hours. The consequences of students who faced ragging are very serious and shocking. Thus, this committee was constituted to control ragging and provide relief to students who come under this shadow. The committee has the powers to take stringent action on students involving in such activities. Committee comprises of the following members.

Table 10.1.3r Anti ragging Committee

Anti ragging Committee			
Sr. No.	**Names of committee members**	**Designation**	**Department**
1	Dr. Pharande Vilas Arjun	Chairman	Principal
2	Mr. Jagtap Dayanand	Coordinator	HOD E&TC Engineering
3	Miss. Bhosale Raupali H	Member	Social Worker
4	Adv. Dixit D.C.	Member	Advocate
5	Mr. Barge Abhijeet	Member	Local Media
6	Mr. Patil Suhas	Member	Assistant Professor Mechanical Engineering
7	Mr. Nayak Banoth Meghya	Member	HOD Electrical Engineering
8	Mrs.Sawant Ashwini	Member	CSE Department Engineering
9	Dr. Bamane Prashant	Member	Assistant Professor, Civil Engineering
10	Mr. Shinde Chandrashekhar	Member	Office Superintendent
11	Mr. Kadam Vijay	Member	Assistant Professor E & TC Engineering
12	Mr. Khairmode Omkar	Member	Assistant Professor Mechanical Engineering
13	Mr. Bhoite Aryan	Member	Student E&TC Engineering

14	Mr. Roman Aniket	Member	Student Civil Engineering
15	Mr. Chavan Aditya	Member	Student Electrical Engineering
16	Mr. Shinde Suyog	Member	Student Mechanical Engineering
17	Miss. Gawade Priti	Member	Student CSE Engineering
18	Ms.Kadam Dhanashree	Member	Student Core Science & Engineering

10.1.4 Delegation of financial powers (10)

A. Financial powers delegated to the Principal, Heads of Departments and relevant in-charges (3)

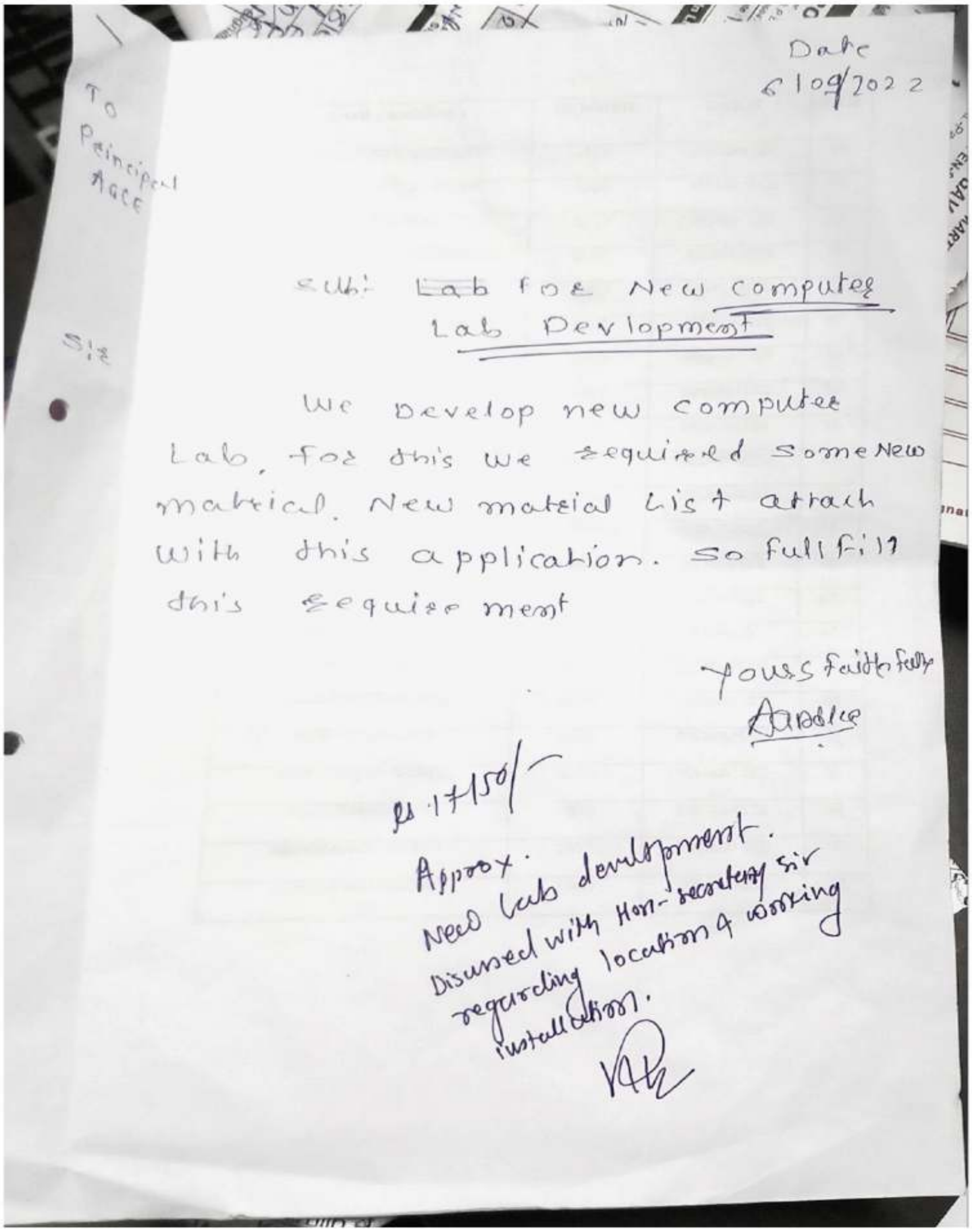
B. Demonstrate the utilization of financial powers for each of the assessment years (7)

In order to discharge the day-to-day functions and activities of the Institute in smooth manner, the financial powers are delegated of the Principal, HODs and Deans by the Management. HODs and Deans also prepare budget of the Department and their relevant functional committees. Total budget of the college is prepared by Administrative Office under guidelines of Principal and Management.

Table 10.1.4a Delegation of Financial Power

Sr. No.	Designation	Financial Power
1	Principal	Authorized to sanction up to Rs. 50,000/-
2	HODs and Deans	Authorized to sanction up to Rs. 5,000/-

Following are the some examples where financial powers are delegated of the Principal & staff members



Date
6/09/2022

To
Principal
AGCE

Sub: Lab for New computer
Lab Devlopment

Sir

We Develop new computer Lab, for this we required some New matrial. New mateial List attach with this application. so fullfill this requirement

Yours faithfully
[signature]

Rs. 17150/-
Approx.
New lab development.
Disussed with Hon- secretary sir regarding location & working installation.
[signature]

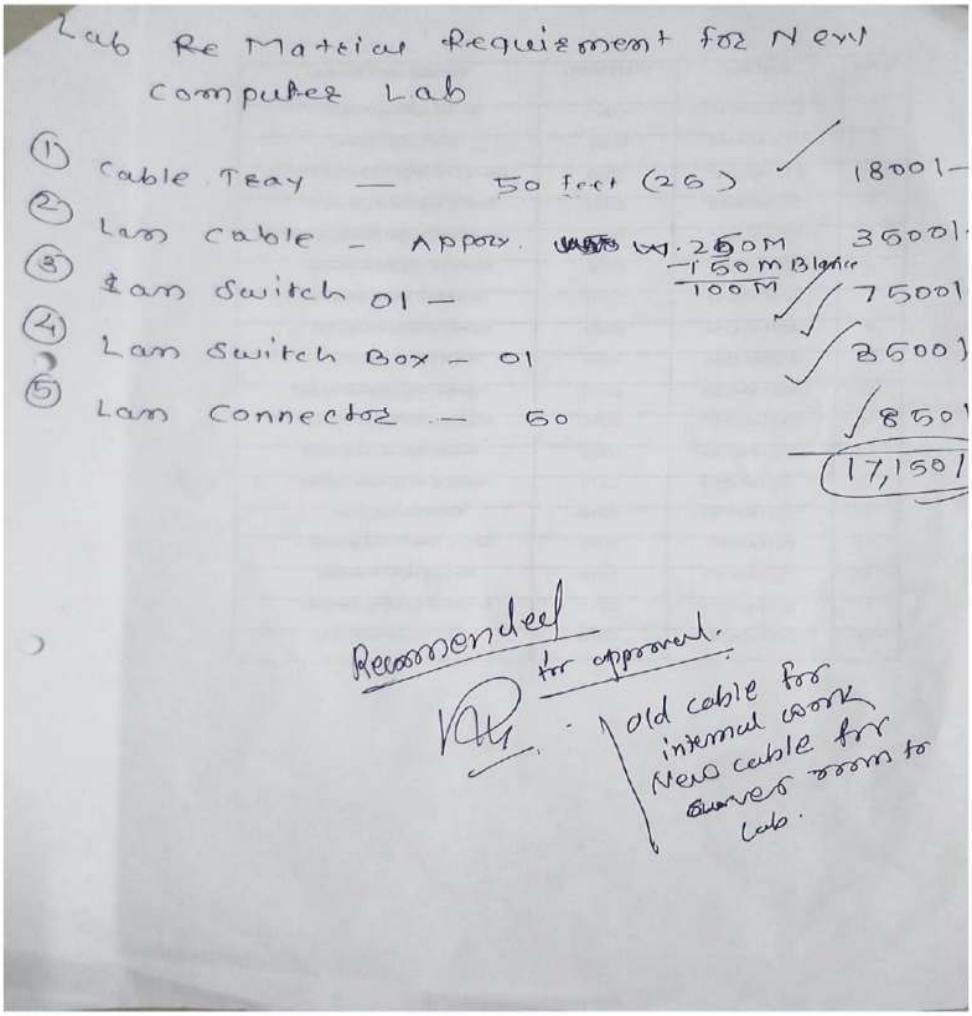
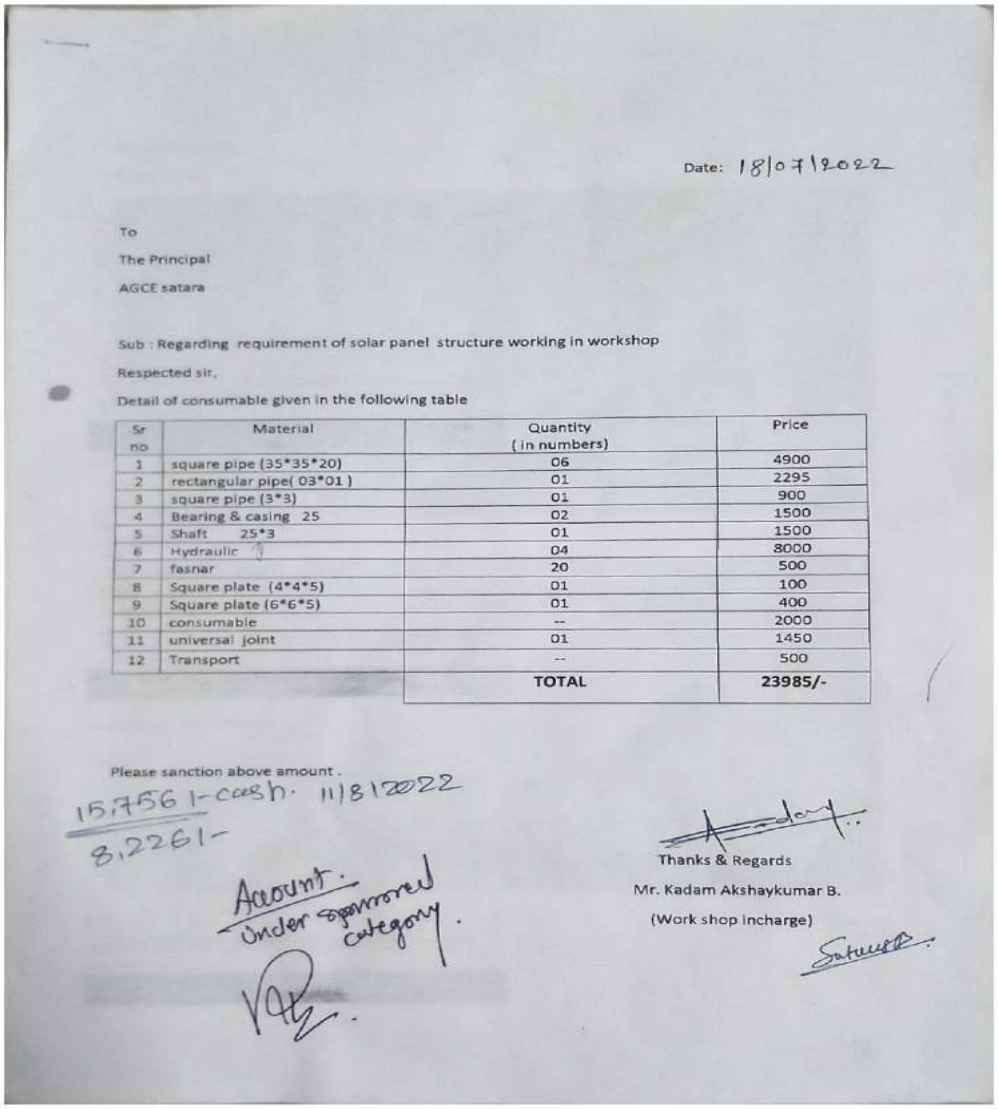


Fig 10.1.4.a Principal has approved Rs.17150/- for libratory development



Date: 18/07/2022

To

The Principal

AGCE satara

Sub : Regarding requirement of solar panel structure working in workshop

Respected sir,

Detail of consumable given in the following table

Sr no	Material	Quantity (in numbers)	Price
1	square pipe (35*35*20)	06	4900
2	rectangular pipe(03*01)	01	2295
3	square pipe (3*3)	01	900
4	Bearing & casing 25	02	1500
5	Shaft 25*3	01	1500
6	Hydraulic	04	8000
7	fasnar	20	500
8	Square plate (4*4*5)	01	100
9	Square plate (6*6*5)	01	400
10	consumable	--	2000
11	universal joint	01	1450
12	Transport	--	500
		TOTAL	**23985/-**

Please sanction above amount .

15,756 I-cash. 11/8/2022

8,226 I-

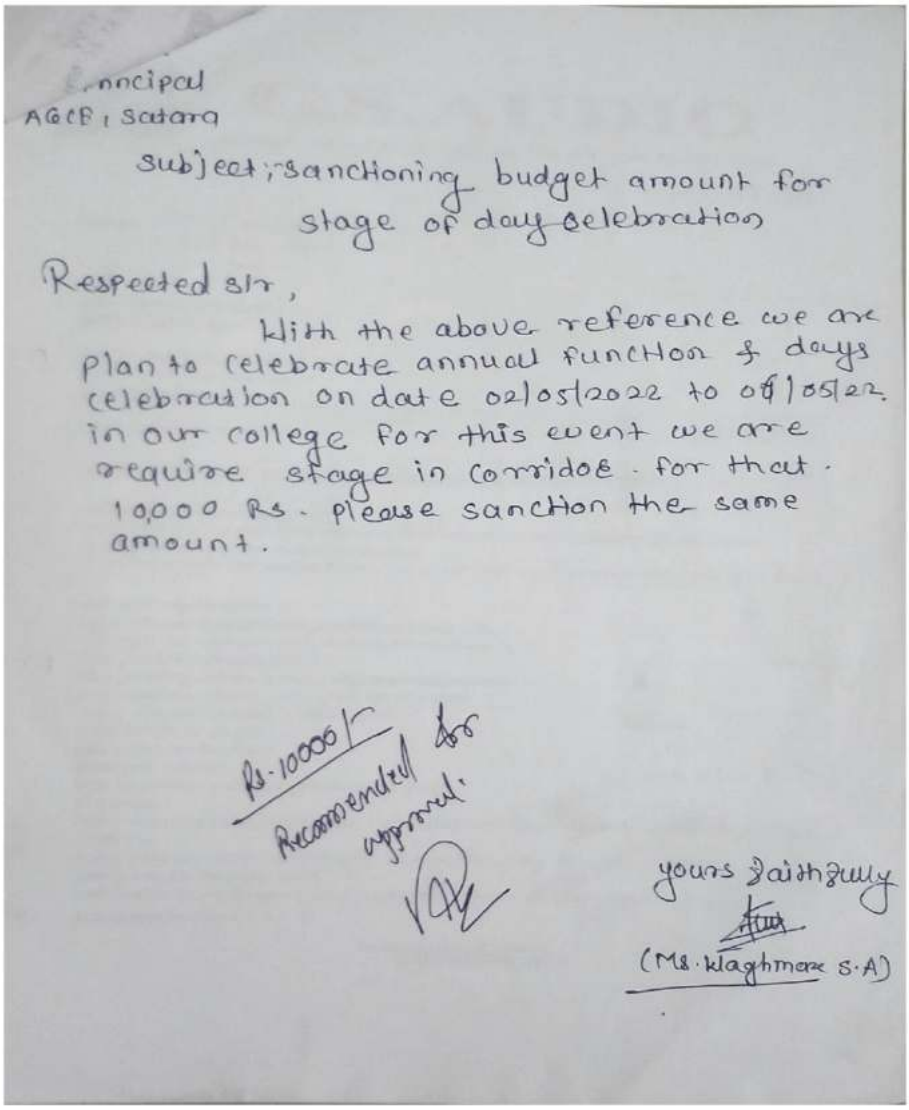
Account. under approved category.

Thanks & Regards

Mr. Kadam Akshaykumar B.

(Work shop incharge)

Fig 10.1.4.b. Principal has approved Rs.23985/- for solar panel structure working.



Principal
AGCE, Satara

Subject; sanctioning budget amount for stage of day celebration

Respected sir,

With the above reference we are plan to celebrate annual function & days celebration on date 02/05/2022 to 04/05/22. in our college for this event we are require stage in corridor. for that. 10,000 Rs. please sanction the same amount.

Rs. 10000/-
Recommended for approval.

yours faithfully

(Ms. Waghmare S.A)

Fig 10.1.4.c Principal has approved Rs.10000/- for extracurricular activities

Date - 14-03-2020.

To,
The Principal,
AGCE Satara

Sub - Maintenance of POWER ELECTRONIC Lab. at Tejodeep Elect. PUNE.
T.E (Elx) Sem-VI + ETN usage.

R/Sir,

With refer to above subject kindly inform you that following mentioned POWER ELECTRONICS instrument not working. kindly allow to repair it at Tejodeep Electrical. (Vender) pune.

Sr no	Date of purchase	Name of instruments	DSR No	Remark
01	11-2-2013	1ϕ fully controlled Bridge converter (singlephase) Rs. cost (26055)	AGCE/2012-13/DPC-03(113)/ET-16/01-01	Under maintenance
02	11.2.13	study of SCR firing ckt Rs. (8325)	AGCE/2012-13/SFC-03(111)/ET-13/01-01	Not working under maintenance
03.	11.2.13	3ϕ fully controlled converter Rs. (17055)	AGCE/2012-13/FCC-03(112)/ET-22/01-01	Not working
04	11.2.13.	3ϕ Half controlled converter (Rs. 24355)	AGCE/2012-13/HCC-03(115)/ET-19/01-01	-"-

Received
[illegible]
TEJODEEP TECHNICAL SERVICES
...Nagar,
...033.

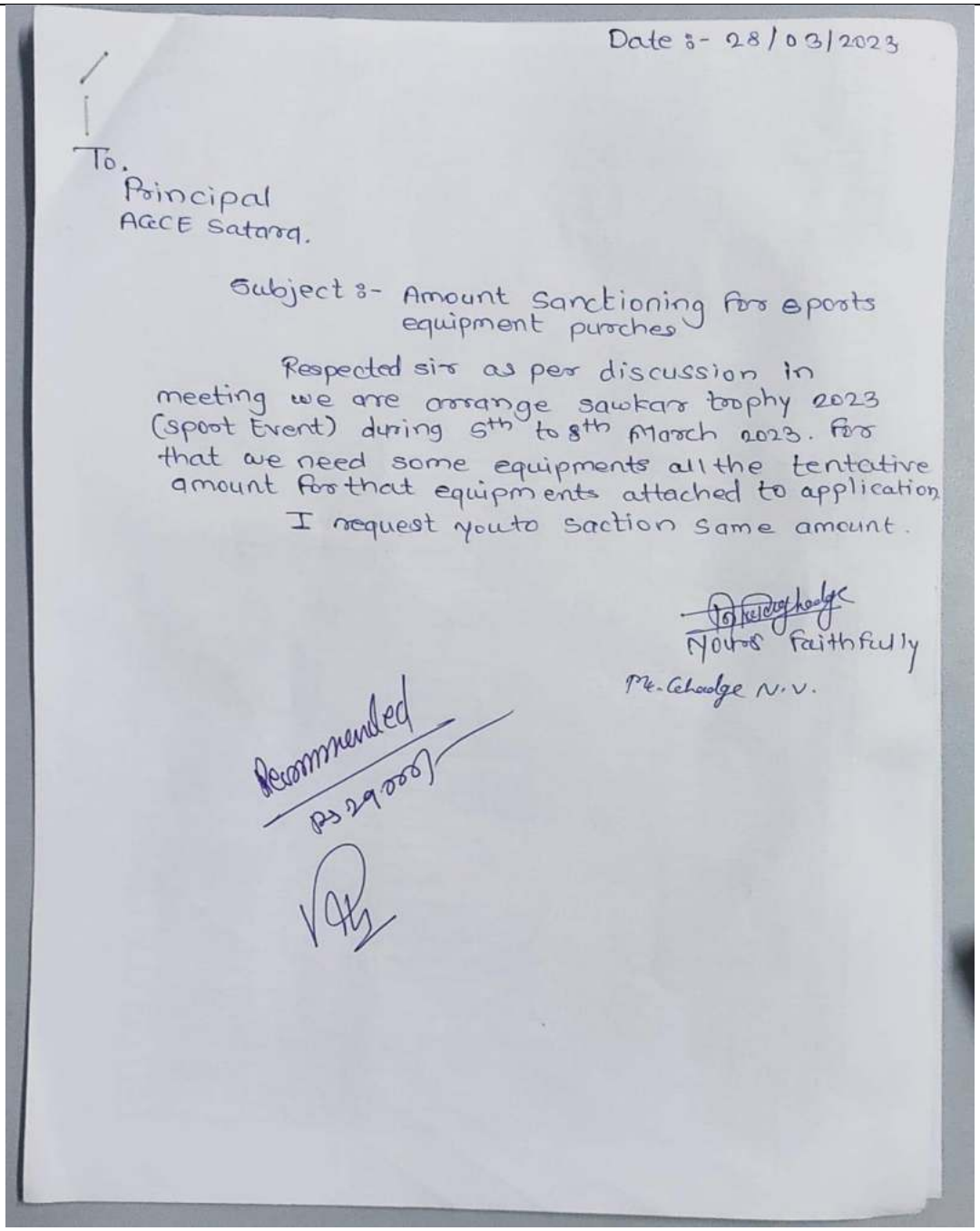
[illegible] 14.3.20
Lab Asst

(P)
In presence of Mr. Shaikh maintenance carried out.

[signature]
H.O.D 14/3/2020

1

Fig 10.1.4.d. Principal has approved maintenance budget for Power Electronics Lab



Date :- 28/03/2023

To.
Principal
AGCE Satara.

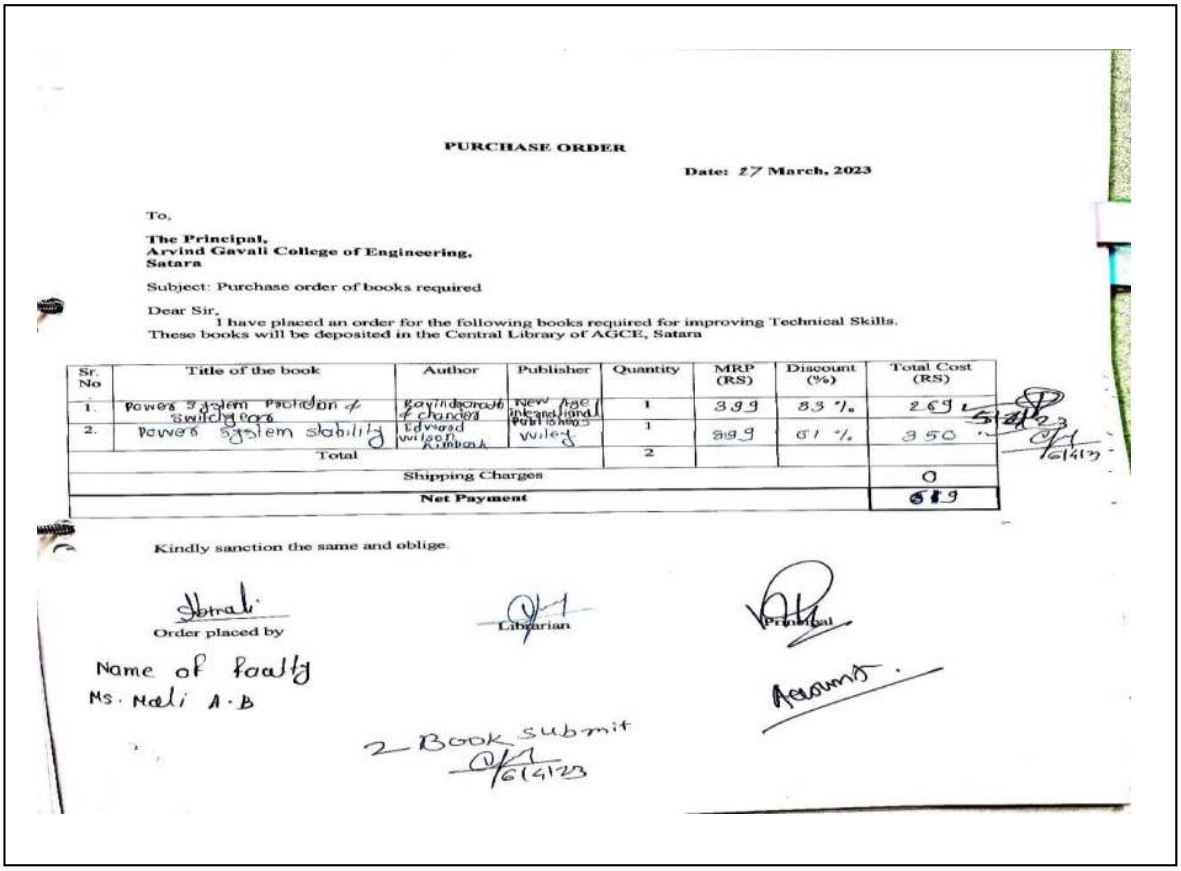
Subject :- Amount Sanctioning for sports equipment purches

Respected sir as per discussion in meeting we are arrange sawkar trophy 2023 (sport Event) during 5th to 8th March 2023. For that we need some equipments all the tentative amount for that equipments attached to application I request you to saction same amount.

Yours faithfully
Mr. Chaudge N.V.

Recommended
Rs 29000/-

Fig 10.1.4.e Principal has approved Rs.15000/- for Sports activities



PURCHASE ORDER

Date: 27 March, 2023

To,

The Principal,
Arvind Gavali College of Engineering,
Satara

Subject: Purchase order of books required

Dear Sir,
I have placed an order for the following books required for improving Technical Skills.
These books will be deposited in the Central Library of AGCE, Satara

Sr. No	Title of the book	Author	Publisher	Quantity	MRP (RS)	Discount (%)	Total Cost (RS)
1.	Power System Protection & Switchgear	Ravindranath & Chander	New Age International Publishers	1	399	33 %	269
2.	Power System Stability	Edward Wilson Kimbark	Wiley	1	399	61 %	350
	Total			2			
	Shipping Charges						0
	Net Payment						619

Kindly sanction the same and oblige.

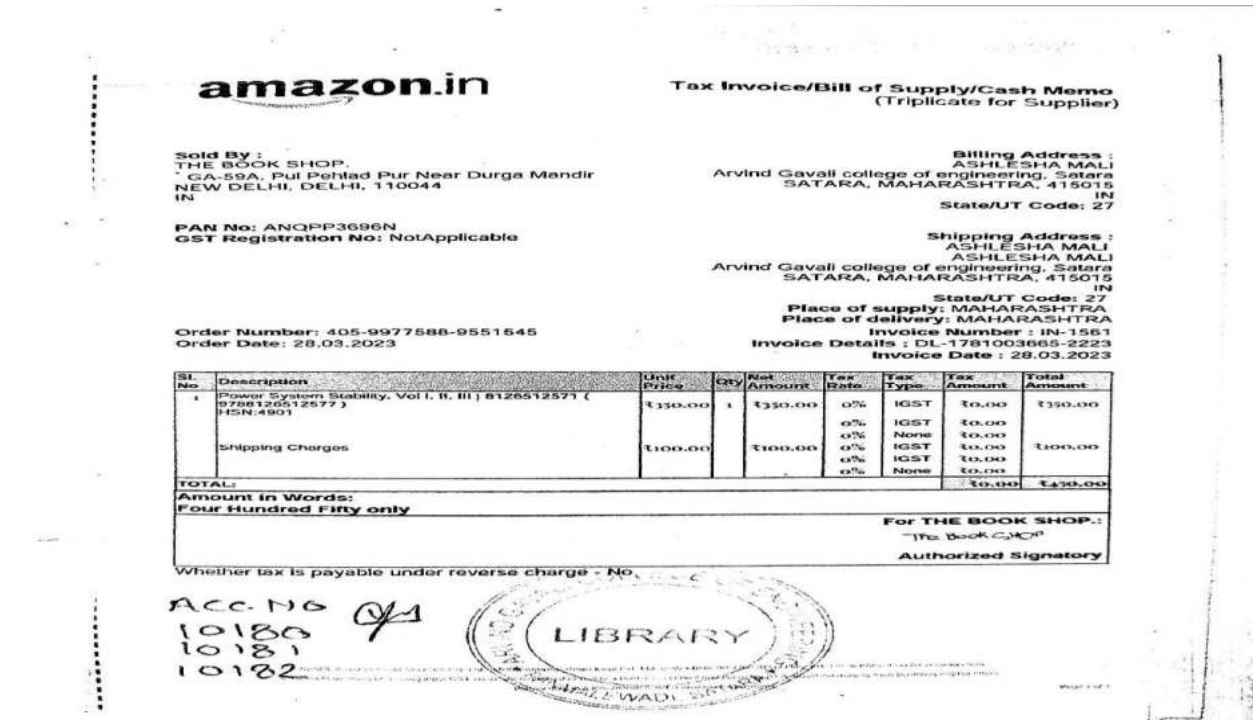
Order placed by

Librarian

Principal

Name of Faculty
Ms. Mali A.B

2 Book submit
6/4/23



amazon.in

Tax Invoice/Bill of Supply/Cash Memo
(Triplicate for Supplier)

Sold By :
THE BOOK SHOP,
GA-59A, Pul Pehlad Pur Near Durga Mandir
NEW DELHI, DELHI, 110044
IN

PAN No: ANQPP3696N
GST Registration No: NotApplicable

Billing Address :
ASHLESHA MALI
Arvind Gavali college of engineering, Satara
SATARA, MAHARASHTRA, 415015
IN
State/UT Code: 27

Shipping Address :
ASHLESHA MALI
ASHLESHA MALI
Arvind Gavali college of engineering, Satara
SATARA, MAHARASHTRA, 415015
IN
State/UT Code: 27

Place of supply: MAHARASHTRA
Place of delivery: MAHARASHTRA

Order Number: 405-9977588-9551545
Order Date: 28.03.2023

Invoice Number : IN-1561
Invoice Details : DL-1781003665-2223
Invoice Date : 28.03.2023

Sl. No	Description	Unit Price	Qty	Net Amount	Tax Rate	Tax Type	Tax Amount	Total Amount
1	Power System Stability, Vol I, II, III | 8126512571 (9788126512577) HSN:4901	₹350.00	1	₹350.00	0%	IGST	₹0.00	₹350.00
					0%	IGST	₹0.00	
					0%	None	₹0.00	
	Shipping Charges	₹100.00		₹100.00	0%	IGST	₹0.00	₹100.00
					0%	IGST	₹0.00	
					0%	None	₹0.00	
TOTAL:							₹0.00	₹450.00

Amount in Words:
Four Hundred Fifty only

For THE BOOK SHOP.:
The Book Shop
Authorized Signatory

Whether tax is payable under reverse charge - No

ACC. NO
10180
10181
10182

LIBRARY

Fig 10.1.4.f1. Faculty member has purchase order of book required from their account

Fig 10.1.4.f2. Faculty member has purchase book from their account for library.

10.1.5 Transparency and availability of correct/unambiguous information in public domain.

a. Information on the policies, rules, process is to be made available on website

b. Dissemination of the information about students, faculty and staff.

The college maintains transparency in all its operations and working. At the beginning of every academic year, the college brings out a calendar, which contains all the information, required by a student and faculty to carry out his/her studies in the college. Information such as internal marks scored by students, shortage of attendance, if any, availability of scholarships, opportunities for students, etc. are promptly displayed on notice boards. Information about every activity in the college is sent to all staff and students through circulars. The institute has its own website: https://agce.edu.in/, which is updated as and when required. The institute and Program-specific information are made available to all stakeholders through the website.

All the required information on policies, rules, and processes are mention in Process Handbook and is made available on the college website for proper dissemination of this information to stakeholders.

Link: https://agce.edu.in/processhandbook

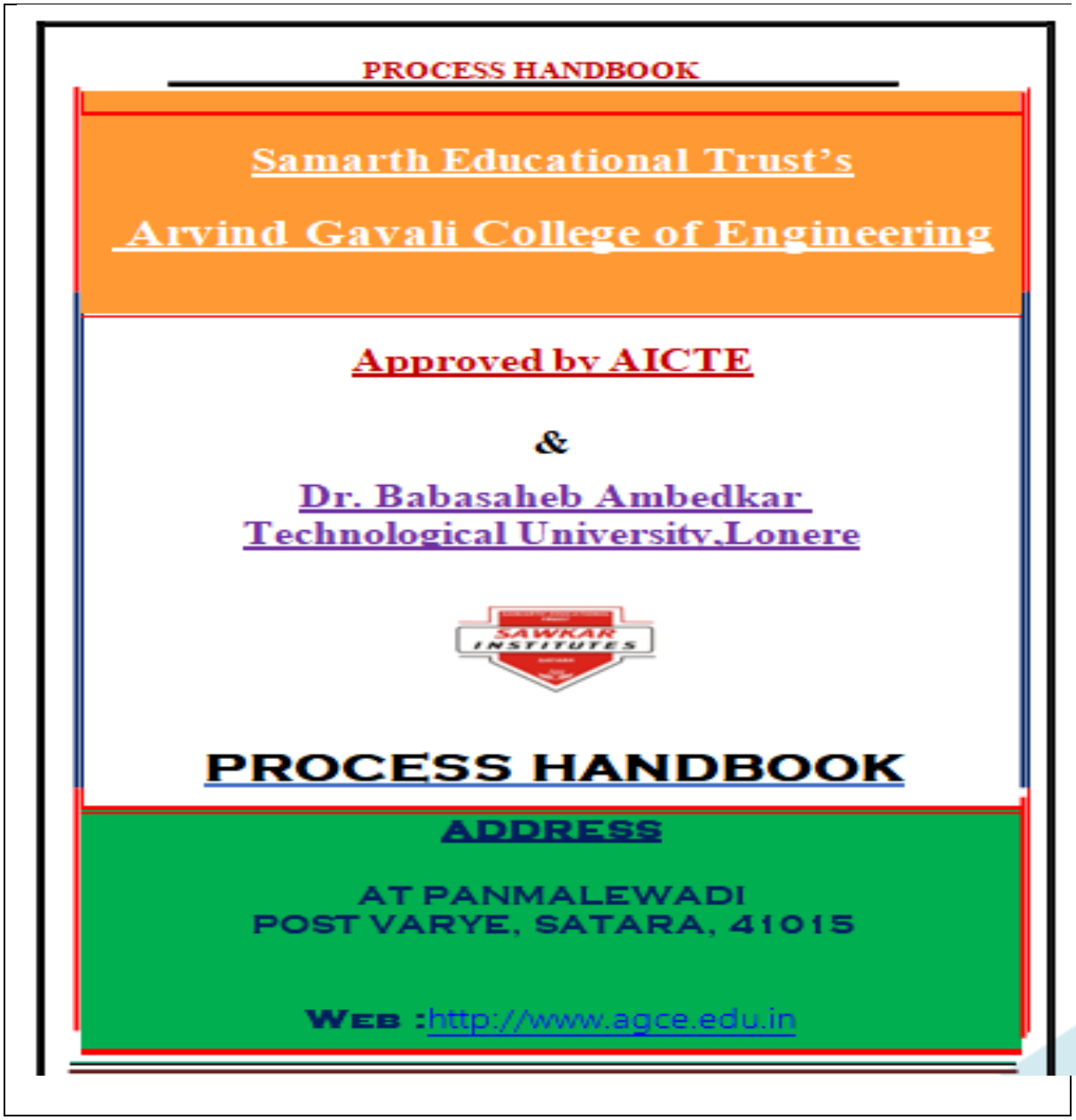


Fig 10.1.5 a Screen shot of Process Handbook first page

b. Dissemination of the information about students, faculty and staff.

Institute disseminate information through promotional activities, website, social media and print media.

i) Promotional Activities

Every year institute propagates information through faculty members in society through various promotional activities.

Fig 10.1.5 b1 Promotion activity to SSC Students

ii) Website

All necessary information including intake, latest news, events and update are made available on institute website.

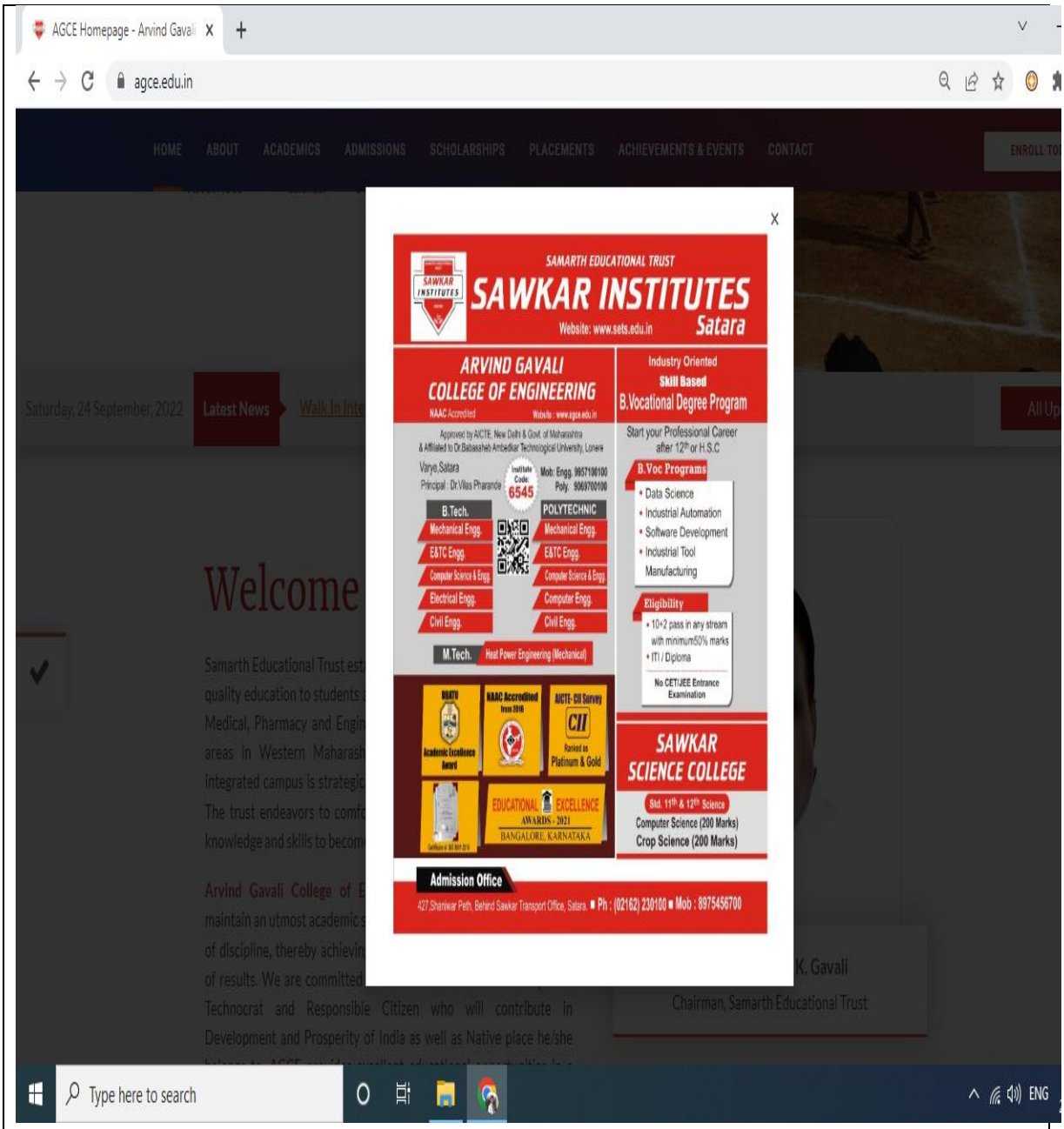


Fig 10.1.5 b2 Information about Admissioon ans intake on website

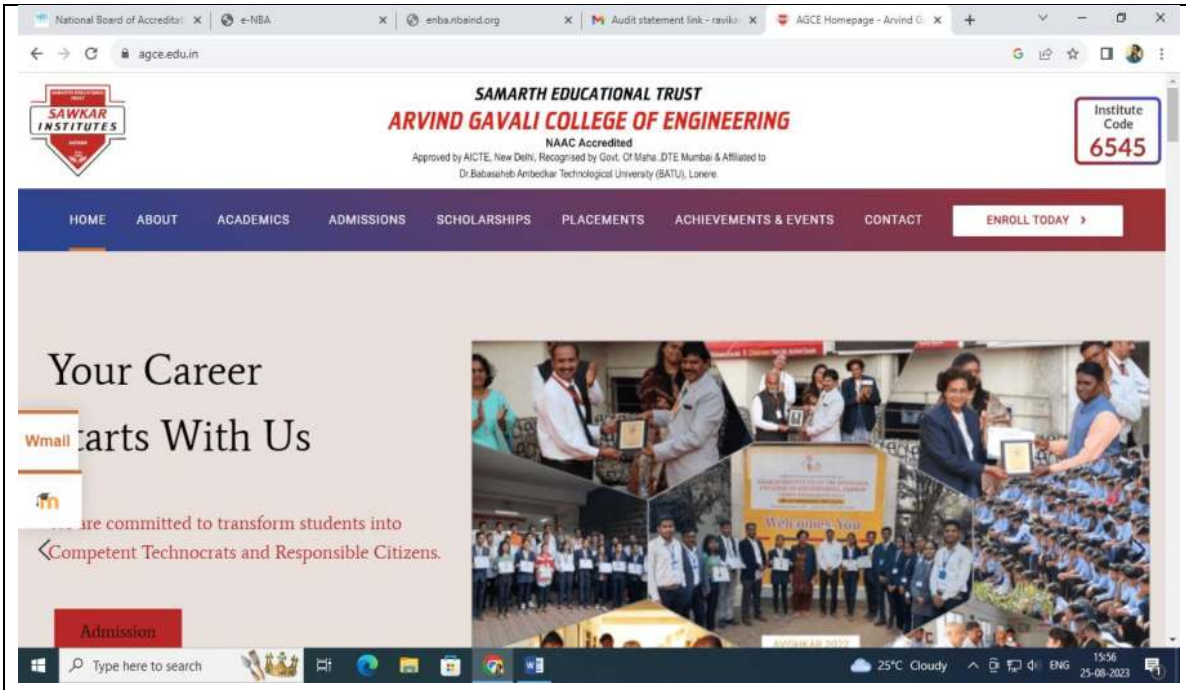


Fig 10.1.5 b3 Information about latest news and updates on website

iii) Social media

Institute disseminate information through social media like Facebook, Instagram among the stakeholders.

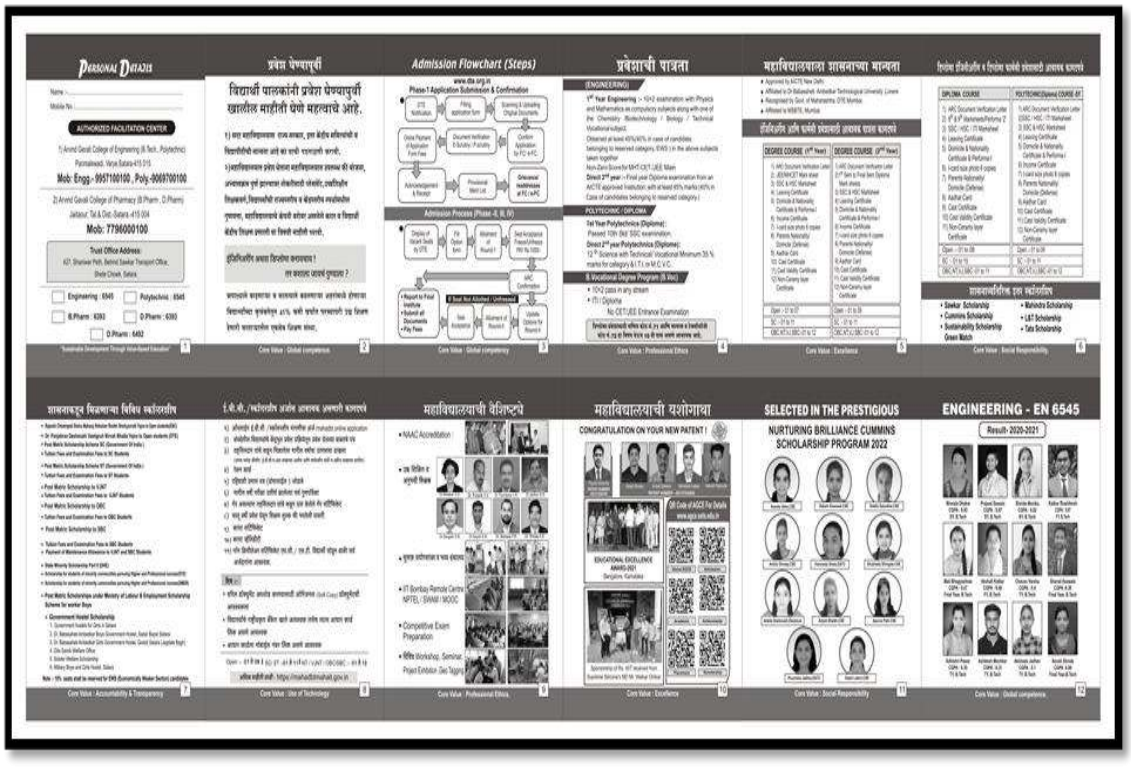
Fig 10.1.5 b4 Instagram page of Institute

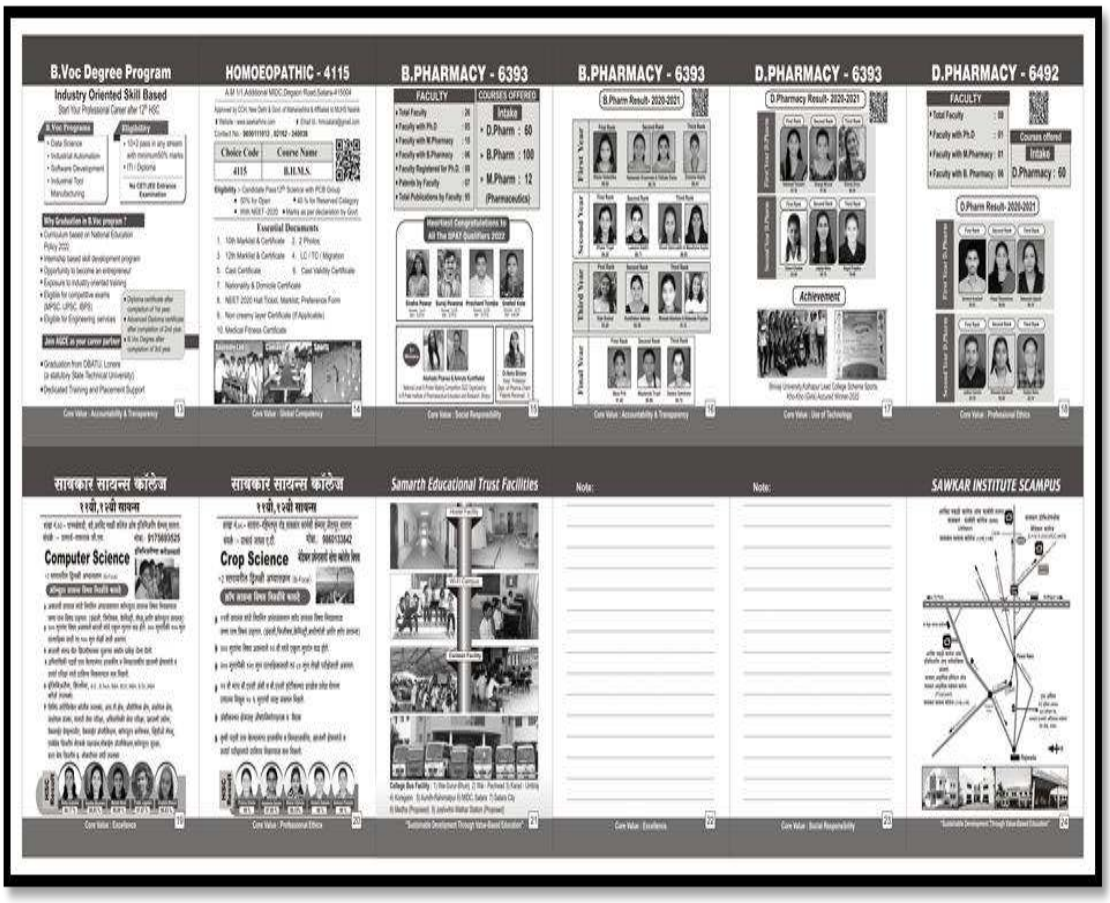
Fig 10.1.5 b5 Facebook page of Institute

iv) Print media

Every year institute publish Admission information diary that includes all institute information like intake, admission process, documents required, faculty members, activities, placement etc.

Fig 10.1.5 b6 Admission information diary


PERSONAL DETAILS
प्रवेश पेण्यापूर्वी
Admission Flowchart (Steps)
प्रवेशाची पात्रता
महाविद्यालयाच्या शासनाच्या मान्यता
शासनाकडून विद्यार्थ्यांना विविध स्कॉलरशिप
महाविद्यालयाची वैशिष्ट्ये
महाविद्यालयाची यशोगाथा
SELECTED IN THE PRESTIGIOUS
NURTURING BRILLIANCE CUMMINS SCHOLARSHIP PROGRAM 2022
ENGINEERING - EN 6545
Result- 2020-2021


B.Voc Degree Program
Industry Oriented Skill Based
HOMOEOPATHIC - 4115
B.PHARMACY - 6393
B.PHARMACY - 6393
D.PHARMACY - 6393
D.PHARMACY - 6492
D.Pharm Result- 2020-2021
Achievement
सावकार साय्वन्स कॉलेज
सावकार साय्वन्स कॉलेज
Computer Science
Crop Science
Samarth Educational Trust Facilities
SAWKAR INSTITUTE SCAMPUS


SAMARTH EDUCATIONAL TRUST
SAWKAR INSTITUTES
Website: www.sets.edu.in
Satara
ARVIND GAVALI COLLEGE OF ENGINEERING
NAAC Accredited
Website : www.agce.edu.in
Approved by AICTE, New Delhi & Govt. of Maharashtra
& Affiliated to Dr.Babasaheb Ambedkar Technological University, Lonere
Varye,Satara
Principal : Dr.Vilas Pharande
Institute Code: 6545
Mob : 9957100100
9069700100
B.Tech.
Mechanical Engg.
E&TC Engg.
Computer Science & Engg.
Electrical Engg.
Civil Engg.
POLYTECHNIC
Mechanical Engg.
E&TC Engg.
Computer Science & Engg.
Computer Engg.
Civil Engg.
M.Tech.
Heat Power Engineering (Mechanical)
DBATU
Academic Excellence Award
NAAC Accredited from 2016
AICTE- CII Survey
CII
Ranked as Platinum & Gold
Certificate of ISO 9001:2015
EDUCATIONAL EXCELLENCE AWARDS - 2021
BANGALORE, KARNATAKA
Industry Oriented
Skill Based
B.Vocational Degree Program
Start your Professional Career after 12th or H.S.C
B.Voc Programs
Data Science
Industrial Automation
Software Development
Industrial Tool Manufacturing
Eligibility
10+2 pass in any stream with minimum50% marks
ITI / Diploma
No CET/JEE Entrance Examination
SAWKAR SCIENCE COLLEGE
Std. 11th & 12th Science
Computer Science (200 Marks)
Crop Science (200 Marks)
Our Placement
Samiksha Vanjole
COGNIZANT
(Programmer Analyst)
Pratiksha Sutar
TATA Consultancy Services
(System Engineer)
Anushka Deshmukh
Infostretch
Corporation India LTD.
Tanuja Chavan
WIPRO LTD,Pune
(Project Engineer)
Prajakta Nikam
INFOSYS LTD.
(Systems Engineer)
Akash Desai
TATA Communication
Transformation Services
Admission Office
427,Shaniwar Peth, Behind Sawkar Transport Office, Satara. ■ Ph : (02162) 230100 ■ Mob : 8975456700

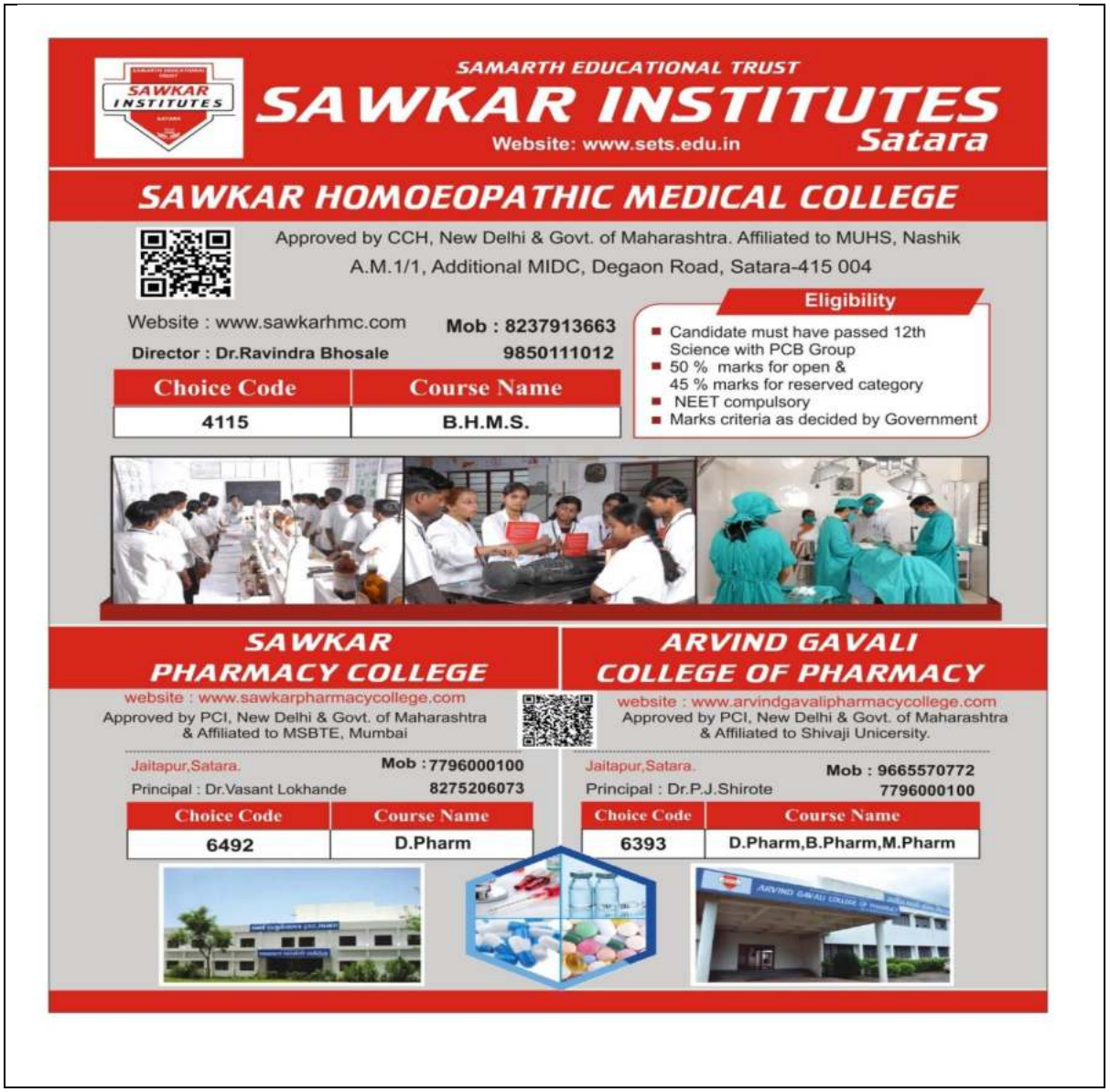


Fig 10.1.5 b7 Admission information brochure

v) Hoardings

Institute disseminate institute information through hoardings at prominent location in the district viz. Koregaon, Karad, Wai, Rahimatpur, and Medha.

Fig 10.1.5 b8 Admission information Hoardings

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Institute has a well-defined financial policy which ensures optimal utilization of finances for academic, administrative and research activities. The Institute is being run with self sufficient funds generated from tuition fees and from Samarth Education Trust. In case of activities like expansion and renovation of the building, the management always supports by providing required finance. Financial planning is done efficiently at the beginning of the academic year and the budget is approved by the Governing Body.

Optimum utilization of funds is ensured through: -

Adequate funds are allocated for effective teaching learning practices that include Orientation Programmes, Workshops, Interdisciplinary activities, Training programmes, Refresher Courses that ensures quality education.

Budget is utilized to meet day to day operational and administrative expenses and maintenance of fixed assets. Enhancement of library facilities needs to augment learning practices and accordingly requisite funds are utilized every year.

Adequate funds are utilized for development and maintenance of infrastructure of the Institute.

Partial funds are allocated for social service activities as part of social responsibilities through NSS and NCC. Institute provides financial assistance for mini projects.

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years

Total Income at Institute level: For

CFY, CFYm1, CFYm2 & CFYm3 CFY: (Current Financial Year),

CFYm1: (Current Financial Year minus 1),

CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table B.10.2a – CFY (2022-23)

Total Income (Amount)				Actual expenditure (till…): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
74954259	0	0	133450	75973631	12625864.8	8900	80553.09

Table B.10.2a - CFY (2021-22)

Total Income (Amount)				Actual expenditure (till…): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
79606611	0	0	367635	68270674	10630726	78700	62982.54

Table B.10.2a - CFYm1 (2020-21)

Total Income (Amount)				Actual expenditure (till…): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
81414627	0	0	462923	61816533	10297456	74700	53197

Table B.10.2a -CFYm2(2019-20)

Total Income (Amount)				Actual expenditure (till…): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
64740364	0	0	734740	63512329	10009259	288619	63904.94

Table B.10.2a- CFYm3(2018-19)

Total Income (Amount)				Actual expenditure (till…): (Amount)			Total No. of Students (Student nos.)
Fee	Govt.	Grants	Other Sources (specify) Prizes and Awards	Recurring including salaries	Non Recurring	Special Projects/Any other, specify BCUD, R&D and grants	Expenditure per student
62384164	0	0	337745	57557774	14197280	151600	65132.84

Table B.10.2b

Items	**Budgeted in 2022- 2023**	**Actual Expenses in 2022-2023 till**	**Budgeted in 2021-2022**	**Actual Expenses in 2021-2022 till**	**Budgeted in 2020-2021**	**Actual Expenses in 2020-2021 till**
Infrastructure Built-Up	1100000	1028673	3300000	3104976	0	0
Library	80000	70845	23000	30445	35000	13570
Laboratory equipment	1100000	1060990	1080000	1014157	655000	594030
Laboratory consumables	1775000	1647092	1120000	1023030	1055000	674170

Teaching and nonteaching staff salary	69112000	65298451	65100000	61189875	63560000	57326373
Maintenance and spares	2875000	2700109	3190000	2992063	1350000	1224440
R&D	350000	314190	290000	259388	90000	74700
Training and Travel	2618000	2416915	1710000	1659560	1600000	1474093
Miscellaneous expenses *(All remaining recurring exp., excl. Depreciation)	255000	214685	159500	148374	135000	113427
Others, specify (All remaining Capital exp.)	31356000	16428774	15177000	11686365	27540000	11287915
Total	**110621000**	**91180725**	**91149500**	**83108233**	**96020000**	**72782718**

Items	Budgeted in 2019-2020	Actual Expenses in 2019- 2020 till	Budgeted in 2018- 2019	Actual Expenses in 2018- 2019 till
Infrastructure Built-Up	0	0	0	0
Library	167000	156491	400000	138375
Laboratory equipment	850000	797104	430000	277400
Laboratory consumables	1640000	1479508	1536000	2051900
Teaching and nonteaching staff salary	63560000	57623428	69300000	50222741
Maintenance and spares	1985000	1850670.43	1882000	1812399.17
R&D	320000	288619	180000	151600
Training and Travel	1705000	1496097	1077000	2106971
Miscellaneous expenses *(All remaining recurring exp., excl. Depreciation)	91000	77900	173000	293916
Others, specify (All remaining Capital exp.)	25374000	10953838	28496520	15267127
Total	**95692000**	**74723655.43**	**103474520**	**72322429.17**

10.2.1 Adequacy of budget allocation (10)

During the assessment years, the institute allocated an adequate budget. Budget requirements under 'recurring' and 'non-recurring' heads are collected from all the departments and sanctions before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. The institution carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution. The management has been very efficient in doing this over the past several years.

Adequacy of budget allocation:

10.2.1 Adequate budget allocation for institute

Sr. No	Assessment Year	Allocated Budget	Adequate/ Non-Adequate
1	2022-23	110,621,000.00	Adequate
2	2021-22	9,11,49,500.00	Adequate
3	2020-21	9,60,20,000.00	Adequate
4	2019-20	9,56,92,000.00	Adequate
5	2018-19	10,34,74,520.00	Adequate

10.2.2 Utilization of allocated Funds (15)

Utilization of allocated Funds:

The Principal of the College allocates funds. Department Heads / Section-In charge is informed to utilize the extent of funds allocated against their proposed budget. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, housekeeping, procurement of furniture, etc. are controlled directly by the Principal. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables, etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Principal. During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel, etc.

Recurring and non-recurring expenditure is made in the following manner.-

- The requirement of purchase initiated by functional heads.
- It is further verified by the principal.
- On the basis of priority requirement quotations invited from a reputed supplier.
- Comparative statements are prepared and presented before the purchase committee.
- By considering the urgency of requirement and amount involved negotiations are called either before

  management or principal.
- After negotiations purchase is initiated by placing a purchase order or work order.
- When equipment or product is received the same is verified for quality and fulfilment of the requirement. Also if training or testing is required then the same is done by the respective functional head.
- On receipt of a satisfactory remark from the respective department, it is recorded in the inward register at the central store. The same is given to the respective department.

- After that bill along with material inward note is submitted to the account section for the payment purpose.
- Account section does the scrutiny of the document and on receiving the sanction of principal or management actual payment is made.

Table 10.2.2 Utilization of allocated Funds of Institute

Sr. No	Assessment Year	Allocated Budget	Utilized Budget	Utilized Percentage
1	2022-23	110,621,000.00	91,180,725.65	82.43
2	2021-22	9,11,49,500.00	8,31,08,233.00	91.18
3	2020-21	9,60,20,000.00	7,27,82,718.00	75.80
4	2019-20	9,56,92,000.00	7,47,23,655.43	78.09
5	2018-19	10,34,74,520.00	7,23,22,429.17	69.89

Note: Difference in allocated and utilised budget is more, since the institute prepares budget by considering bank loan instalment (Principle+ interest).But, in profit & loss statement only interest amount is reflected.

10.2.3 Availability of the audited statements on the institute's website (05)

Audited statements of financial years (2022-23, 2021-22, 2020-21, 2019-20, and 2018-19) are available on institute website.

Weblinks:

Audit report 2022-23 https://agce.edu.in/auditreport2022-23

Audit report 2021-22 https://agce.edu.in/auditreport2021-22

Audit report 2020-21 https://agce.edu.in/auditreport2020-21

Audit report 2019-20 https://agce.edu.in/auditreport2019-20

Audit report 2018-19 https://agce.edu.in/auditreport2018-19

10.3 Program Specific Budget Allocation, Utilization (30)

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3 CFY: (Current Financial Year),

CFYm1: (Current Financial Year minus 1),

CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table B.10.3a: CFY (2022-23)

(Amount) (2233406/-)		Actual expenditure (till…): (Amount) (2078601/-)		Total No. Of Students (269)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
308128	1925278	295125	1783476	7727.14

Table B.10.3a: CFY (2021-22)

(Amount) (1775147)		Actual expenditure (till…): (Amount) (1670686)		Total No. Of Students (273)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
288561	1516586	244872	1425814	6119.73

Table B.10.3a: CFYm1(2020-21)

(Amount) (1207600)		Actual expenditure (till…): (Amount) (1032700)		Total No. Of Students (257)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
170600	1037000	150560	882140	4018.29

Table B.10.3a: CFYm2(2019-20)

(Amount) (1821500)		Actual expenditure (till…): (Amount) (1661100)		Total No. Of Students (226)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student
360500	1461000	338900	1322200	7350

Table B.10.3a: CFYm3(2018-19)

(Amount) (1959700)		Actual expenditure (till…): (Amount) (1873500)		Total No. Of Students (271)
Non-Recurring	Recurring	Non-Recurring	Recurring	Expenditure per student

631000	1328700	113900	1759600	6913

Table B.10.3b

Items	Budgeted in 2022- 2023	Actual Expenses in 2022- 2023 till	Budgeted in 2021- 2022	Actual Expenses in 2021- 2022 till	Budgeted in 2020- 2021	Actual Expenses in 2020- 2021 till
Laboratory equipment	269000	259460	253169	237735	162000	147200
Software	19564	18340	0	0	0	0
Laboratory consumables	434068	402790	262546	239814	261000	167000
Maintenance and spares	703070	660300	747790	701390	335000	303340
R&D	85590	76830	68000	60800	22500	18500
Training and Travel	640200	591056	400850	389030	385000	365200
Miscellaneous expenses	62350	52500	37400	34780	33500	28100
Total	2213842	2061276	1769755	1663549	1199000	1029340

Items	Budgeted in 2019- 2020	Actual Expenses in 2019- 2020 till	Budgeted in 2018- 2019	Actual Expenses in 2018- 2019 till
Laboratory equipment	216000	202900	118000	76000
Software	102000	96200	403000	0
Laboratory consumables	418000	377000	421000	562800
Maintenance and spares	505000	471100	516000	497100
R&D	81000	73400	49300	41600
Training and Travel	434000	380800	295000	577500
Miscellaneous expenses	23000	20900	47400	80600
Total	1779000	1622300	1849700	1835600

10.3.1 Adequacy of budget allocation (10)

During the assessment years, the institute allocated an adequate budget. Budget requirements under ‘recurring’ and ‘non-recurring’ heads are collected from all the departments and sanctions before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. The institution carefully monitors the expenses so that the necessities are met without affecting the smooth working of the institution. The management has been very efficient in doing this over the past several years.

Table 10.3.1 Adequate budget allocation Electrical Engineering Department

Sr. No	Assessment Year	Allocated Budget	Adequate/ Non-Adequate
1	2022-23	2233406	Adequate
2	2021-22	1775147	Adequate
3	2020-21	1207600	Adequate
4	2019-20	1821500	Adequate
5	2018-19	1959700	Adequate

10.3.2 Utilization of Allocated Funds

Utilization of allocated Funds:

The Principal of the College allocates funds. Department Heads / Section-In charge is informed to utilize the extent of funds allocated against their proposed budget. Major works like construction, up-gradation of existing infrastructure, procurement and maintenance of common utilities, housekeeping, procurement of furniture, etc. are controlled directly by the Principal. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables, etc. are initiated from the respective departments and the funds are released on a case by case basis from the accounts office of the college on approval by the Principal. During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel, etc.

Recurring and non-recurring expenditure is made in the following manner.-

- The requirement of purchase initiated by functional heads.
- It is further verified by the principal.
- On the basis of priority requirement quotations invited from a reputed supplier.
- Comparative statements are prepared and presented before the purchase committee.
- By considering the urgency of requirement and amount involved negotiations are called either before management or principal.
- After negotiations purchase is initiated by placing a purchase order or work order.
- When equipment or product is received the same is verified for quality and fulfilment of the requirement. Also if training or testing is required then the same is done by the respective functional head.
- On receipt of a satisfactory remark from the respective department, it is recorded in the inward register at the central store. The same is given to the respective department.
- After that bill along with material inward note is submitted to the account section for the payment purpose.

Account section does the scrutiny of the document and on receiving the sanction of principal or management actual payment is made.

Table 10.3.2 Utilization of allocated Funds of Electrical Engineering Department.

Sr. No	Assessment Year	Allocated Budget	Utilized Budget	Utilized Percentage
1	2022-23	1087693	1012248	93.06
2	2021-22	983954	926064	94.12
3	2020-21	805900	682720	84.72
4	2019-20	1334500	1215431	91.08
5	2018-19	1446600	1383800	95.66

10.4 Library and Internet (20)

10.4.1 Quality of learning resources (hard/soft) (10)

A. Relevance of available learning resources including e-resources

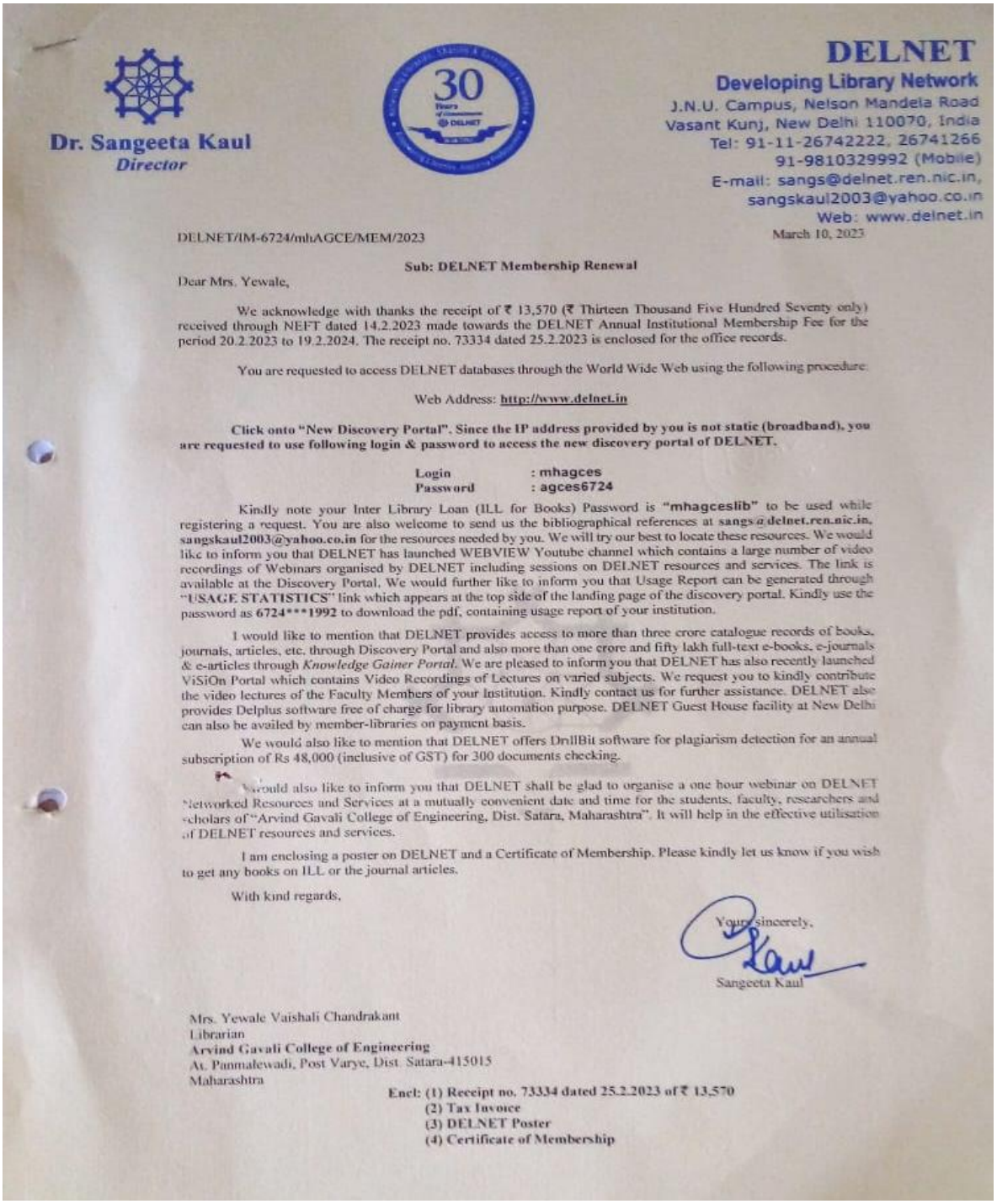
Institute's central Library is one of the main support services of institute. The main aim of central library is to fulfil the information need of the institute community by providing them necessary information, knowledge, various services and access to e-resources. The Central Library is well equipped with unique collection of encyclopedia, handbooks, text books, reference books and journals as well as eBooks. It supports computerized operations and services. It has a collection of more than …documents which include books and bound volumes of periodicals. The collection is mainly strong in science & technology. Following is summary of books & journal.

Table B 10.4.1.a Summary of Books and Journals

Sr. No	Branch	Titles	Volumes	National Journals	International Journals(online)
1	Computer Science & Engineering.	832	3506	16	160
2	Electronics & Telecommunication Engineering.	754	3869	13	162
3	Civil Engineering	601	3265	13	273
4	Electrical Engineering	669	3107	5	61
5	Mechanical Engineering	693	4525	16	190
6	Core Science	238	2828	3	65
Total		**3787**	**21100**	**66**	**911**

Table B: 10.4.b Purchase records of E-Resources

Year of Purchase	Particulars
2022-23	DELNET
2021-22	DELNET
2020-21	DELNET
2019-20	DELNET
2018-19	DELNET



Dr. Sangeeta Kaul
Director

30 Years of DELNET

DELNET
Developing Library Network
J.N.U. Campus, Nelson Mandela Road
Vasant Kunj, New Delhi 110070, India
Tel: 91-11-26742222, 26741266
91-9810329992 (Mobile)
E-mail: sangs@delnet.ren.nic.in,
sangskaul2003@yahoo.co.in
Web: www.delnet.in

DELNET/IM-6724/mhAGCE/MEM/2023

March 10, 2023

Sub: DELNET Membership Renewal

Dear Mrs. Yewale,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 14.2.2023 made towards the DELNET Annual Institutional Membership Fee for the period 20.2.2023 to 19.2.2024. The receipt no. 73334 dated 25.2.2023 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto "New Discovery Portal". Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

Login : mhagces
Password : agces6724

Kindly note your Inter Library Loan (ILL for Books) Password is **"mhagceslib"** to be used while registering a request. You are also welcome to send us the bibliographical references at **sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in** for the resources needed by you. We will try our best to locate these resources. We would like to inform you that DELNET has launched WEBVIEW Youtube channel which contains a large number of video recordings of Webinars organised by DELNET including sessions on DELNET resources and services. The link is available at the Discovery Portal. We would further like to inform you that Usage Report can be generated through **"USAGE STATISTICS"** link which appears at the top side of the landing page of the discovery portal. Kindly use the password as **6724***1992** to download the pdf, containing usage report of your institution.

I would like to mention that DELNET provides access to more than three crore catalogue records of books, journals, articles, etc. through Discovery Portal and also more than one crore and fifty lakh full-text e-books, e-journals & e-articles through *Knowledge Gainer Portal*. We are pleased to inform you that DELNET has also recently launched ViSiOn Portal which contains Video Recordings of Lectures on varied subjects. We request you to kindly contribute the video lectures of the Faculty Members of your Institution. Kindly contact us for further assistance. DELNET also provides Delplus software free of charge for library automation purpose. DELNET Guest House facility at New Delhi can also be availed by member-libraries on payment basis.

We would also like to mention that DELNET offers DrillBit software for plagiarism detection for an annual subscription of Rs 48,000 (inclusive of GST) for 300 documents checking.

We would also like to inform you that DELNET shall be glad to organise a one hour webinar on DELNET Networked Resources and Services at a mutually convenient date and time for the students, faculty, researchers and scholars of "Arvind Gavali College of Engineering, Dist. Satara, Maharashtra". It will help in the effective utilisation of DELNET resources and services.

I am enclosing a poster on DELNET and a Certificate of Membership. Please kindly let us know if you wish to get any books on ILL or the journal articles.

With kind regards,

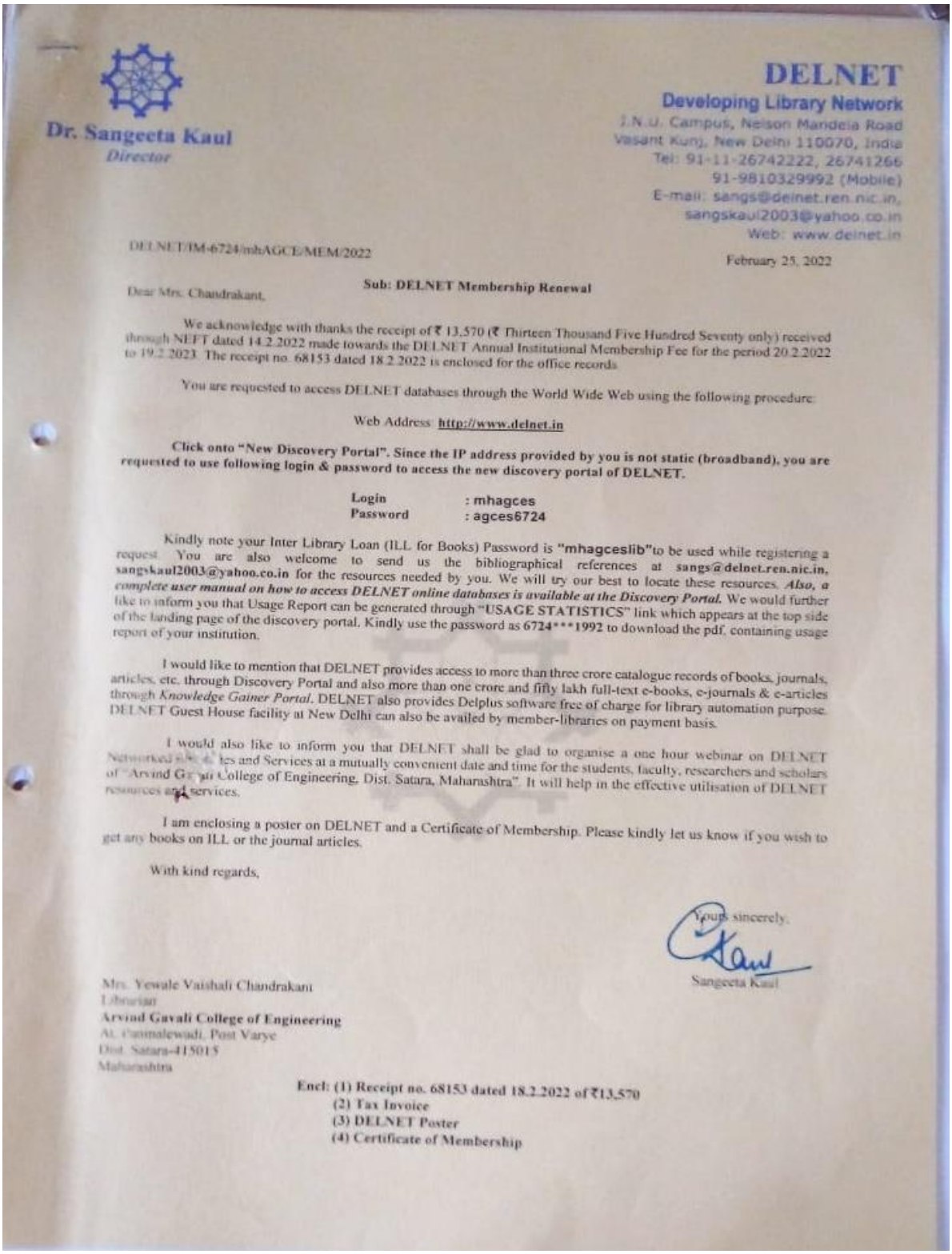
Yours sincerely,

Sangeeta Kaul

Mrs. Yewale Vaishali Chandrakant
Librarian
Arvind Gavali College of Engineering
At. Panmalewadi, Post Varye, Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 73334 dated 25.2.2023 of ₹ 13,570
(2) Tax Invoice
(3) DELNET Poster
(4) Certificate of Membership

Fig10.4.1.a. DELNET e- Resource subscription 2023-24.



Dr. Sangeeta Kaul
Director

DELNET
Developing Library Network
J.N.U. Campus, Nelson Mandela Road
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Tel: 91-11-26742222, 26741266
91-9810329992 (Mobile)
E-mail: sangs@delnet.ren.nic.in,
sangskaul2003@yahoo.co.in
Web: www.delnet.in

DELNET/IM-6724/mhAGCE/MEM/2022

February 25, 2022

Sub: DELNET Membership Renewal

Dear Mrs. Chandrakant,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 14.2.2022 made towards the DELNET Annual Institutional Membership Fee for the period 20.2.2022 to 19.2.2023. The receipt no. 68153 dated 18.2.2022 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto "New Discovery Portal". Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

Login : mhagces
Password : agces6724

Kindly note your Inter Library Loan (ILL for Books) Password is **"mhagceslib"** to be used while registering a request. You are also welcome to send us the bibliographical references at **sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in** for the resources needed by you. We will try our best to locate these resources. ***Also, a complete user manual on how to access DELNET online databases is available at the Discovery Portal.*** We would further like to inform you that Usage Report can be generated through **"USAGE STATISTICS"** link which appears at the top side of the landing page of the discovery portal. Kindly use the password as **6724***1992** to download the pdf, containing usage report of your institution.

I would like to mention that DELNET provides access to more than three crore catalogue records of books, journals, articles, etc. through Discovery Portal and also more than one crore and fifty lakh full-text e-books, e-journals & e-articles through *Knowledge Gainer Portal*. DELNET also provides Delplus software free of charge for library automation purpose. DELNET Guest House facility at New Delhi can also be availed by member-libraries on payment basis.

I would also like to inform you that DELNET shall be glad to organise a one hour webinar on DELNET Networked Sites & Services at a mutually convenient date and time for the students, faculty, researchers and scholars of "Arvind Gavali College of Engineering, Dist. Satara, Maharashtra". It will help in the effective utilisation of DELNET resources and services.

I am enclosing a poster on DELNET and a Certificate of Membership. Please kindly let us know if you wish to get any books on ILL or the journal articles.

With kind regards,

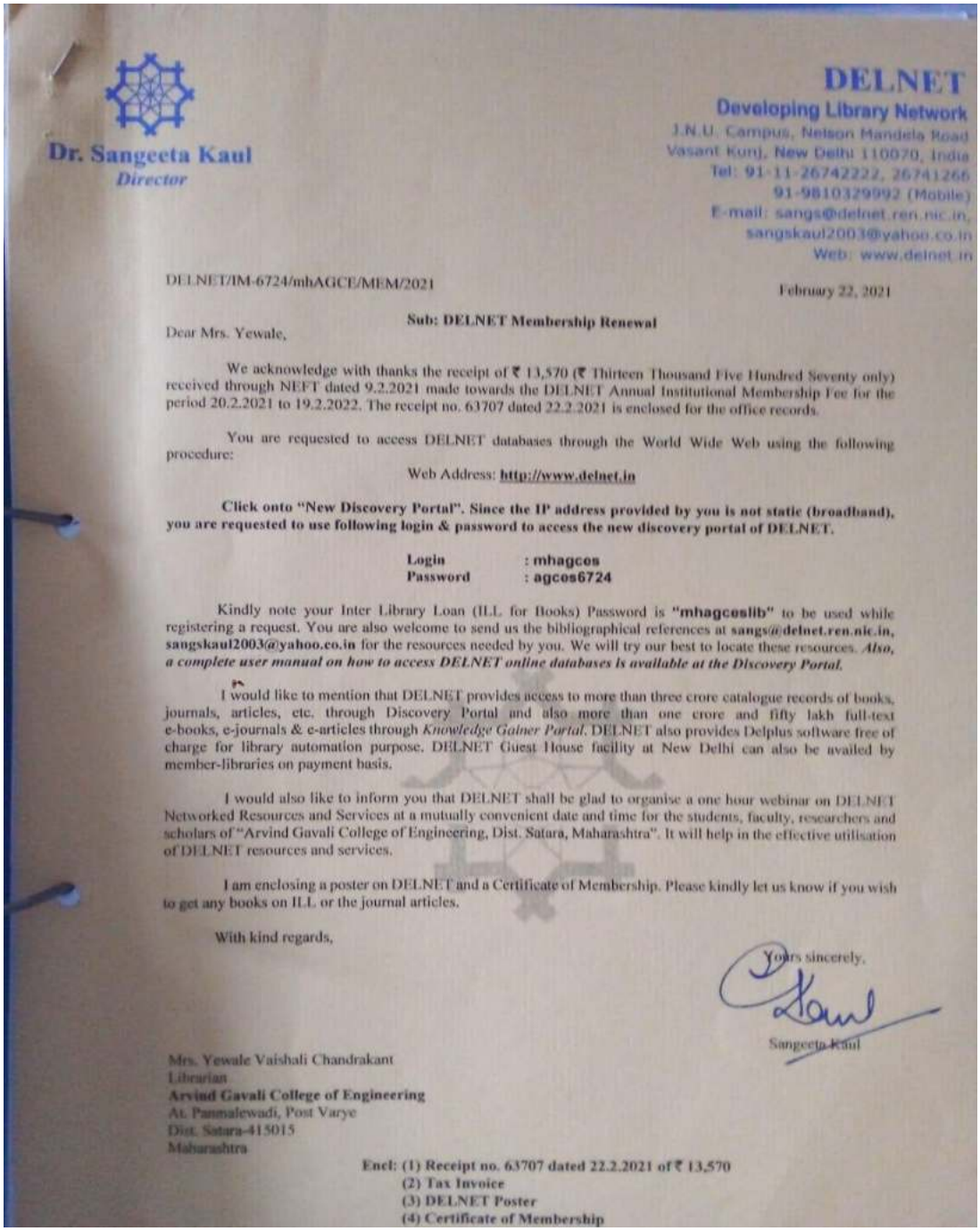
Yours sincerely,

Sangeeta Kaul

Mrs. Yewale Vaishali Chandrakant
Librarian
Arvind Gavali College of Engineering
At. Chimalewadi, Post Varye
Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 68153 dated 18.2.2022 of ₹13,570
(2) Tax Invoice
(3) DELNET Poster
(4) Certificate of Membership

Fig10.4.1.b. DELNET e- Resource subscription 2022-23.



Dr. Sangeeta Kaul
Director

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Tel: 91-11-26742222, 26741266
91-9810329992 (Mobile)
E-mail: sangs@delnet.ren.nic.in,
sangskaul2003@yahoo.co.in
Web: www.delnet.in

DELNET/IM-6724/mhAGCE/MEM/2021 February 22, 2021

Sub: DELNET Membership Renewal

Dear Mrs. Yewale,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 9.2.2021 made towards the DELNET Annual Institutional Membership Fee for the period 20.2.2021 to 19.2.2022. The receipt no. 63707 dated 22.2.2021 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto "New Discovery Portal". Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

Login : mhagces
Password : agces6724

Kindly note your Inter Library Loan (ILL for Books) Password is **"mhagceslib"** to be used while registering a request. You are also welcome to send us the bibliographical references at **sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in** for the resources needed by you. We will try our best to locate these resources. ***Also, a complete user manual on how to access DELNET online databases is available at the Discovery Portal.***

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With kind regards,

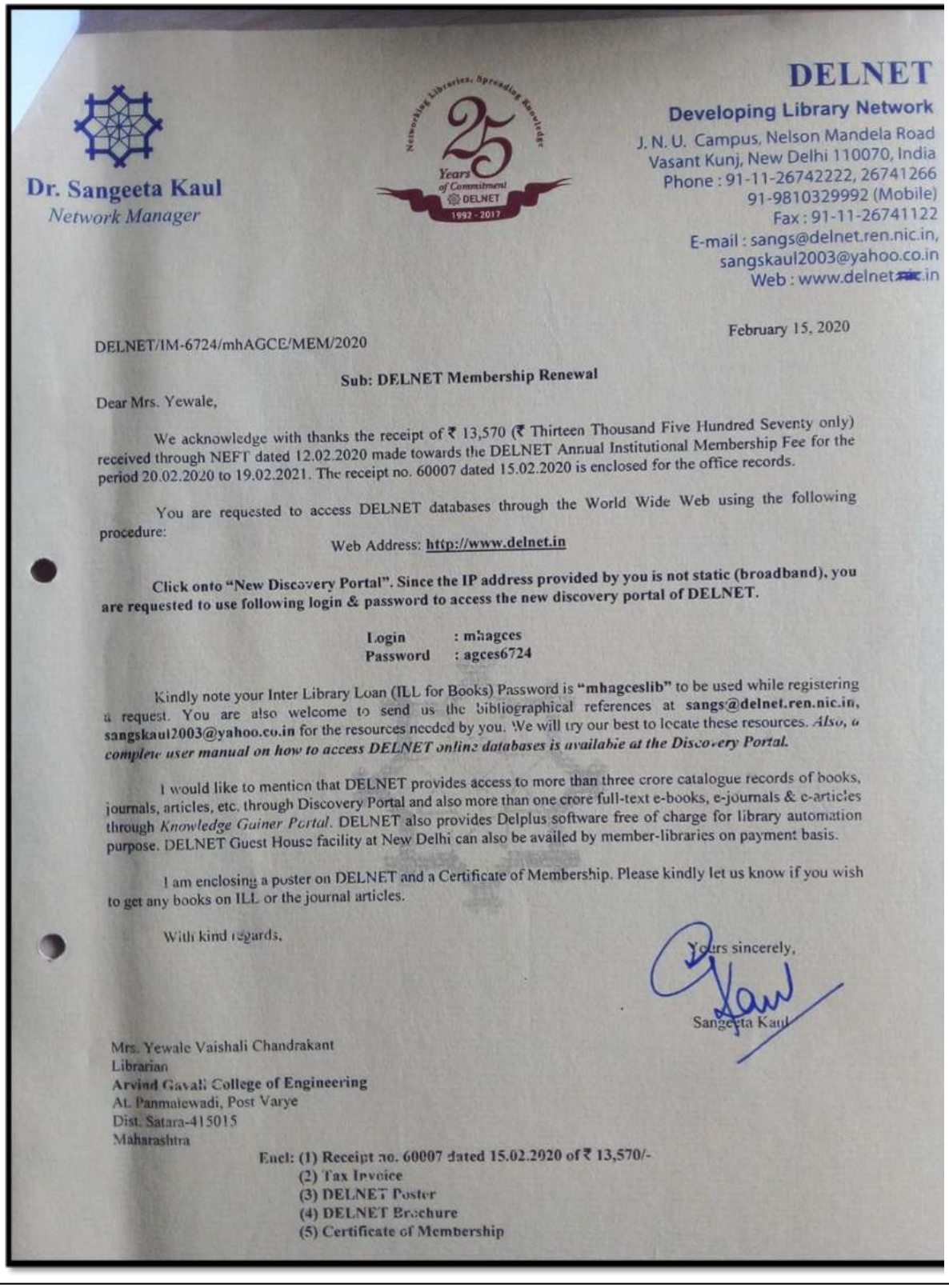
Yours sincerely,

Sangeeta Kaul

Mrs. Yewale Vaishali Chandrakant
Librarian
Arvind Gavali College of Engineering
At. Pasmalewadi, Post Varye
Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 63707 dated 22.2.2021 of ₹ 13,570
(2) Tax Invoice
(3) DELNET Poster
(4) Certificate of Membership

Fig10.4.1.c. DELNET e- Resource subscription 2021-22.



Dr. Sangeeta Kaul
Network Manager

Networking Libraries, Spreading Knowledge
25 Years of Commitment DELNET 1992 - 2017

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sangskaul2003@yahoo.co.in
Web : www.delnet.nic.in

DELNET/IM-6724/mhAGCE/MEM/2020

February 15, 2020

Sub: DELNET Membership Renewal

Dear Mrs. Yewale,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 12.02.2020 made towards the DELNET Annual Institutional Membership Fee for the period 20.02.2020 to 19.02.2021. The receipt no. 60007 dated 15.02.2020 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto "New Discovery Portal". Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

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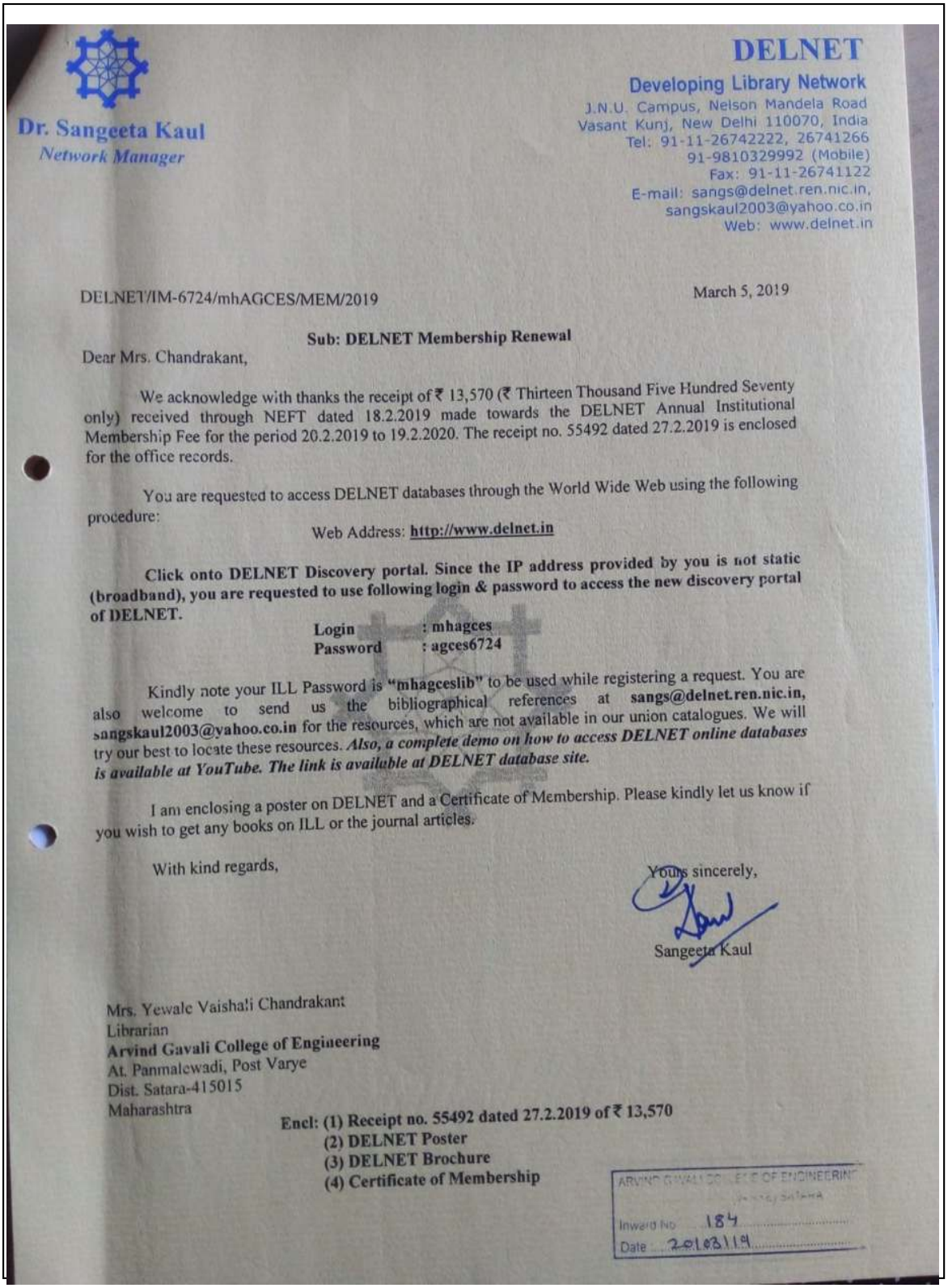
Encl: (1) Receipt no. 60007 dated 15.02.2020 of ₹ 13,570/-
(2) Tax Invoice
(3) DELNET Poster
(4) DELNET Brochure
(5) Certificate of Membership

Fig10.4.1.d. DELNET e-Resource subscription 2020-21.



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E-mail: sangs@delnet.ren.nic.in,
sangskaul2003@yahoo.co.in
Web: www.delnet.in

DELNET/IM-6724/mhAGCES/MEM/2019 March 5, 2019

Sub: DELNET Membership Renewal

Dear Mrs. Chandrakant,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 18.2.2019 made towards the DELNET Annual Institutional Membership Fee for the period 20.2.2019 to 19.2.2020. The receipt no. 55492 dated 27.2.2019 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto DELNET Discovery portal. Since the IP address provided by you is not static (broadband), you are requested to use following login & password to access the new discovery portal of DELNET.

Login : mhagces
Password : agces6724

Kindly note your ILL Password is **"mhageslib"** to be used while registering a request. You are also welcome to send us the bibliographical references at **sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in** for the resources, which are not available in our union catalogues. We will try our best to locate these resources. ***Also, a complete demo on how to access DELNET online databases is available at YouTube. The link is available at DELNET database site.***

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With kind regards,

Yours sincerely,

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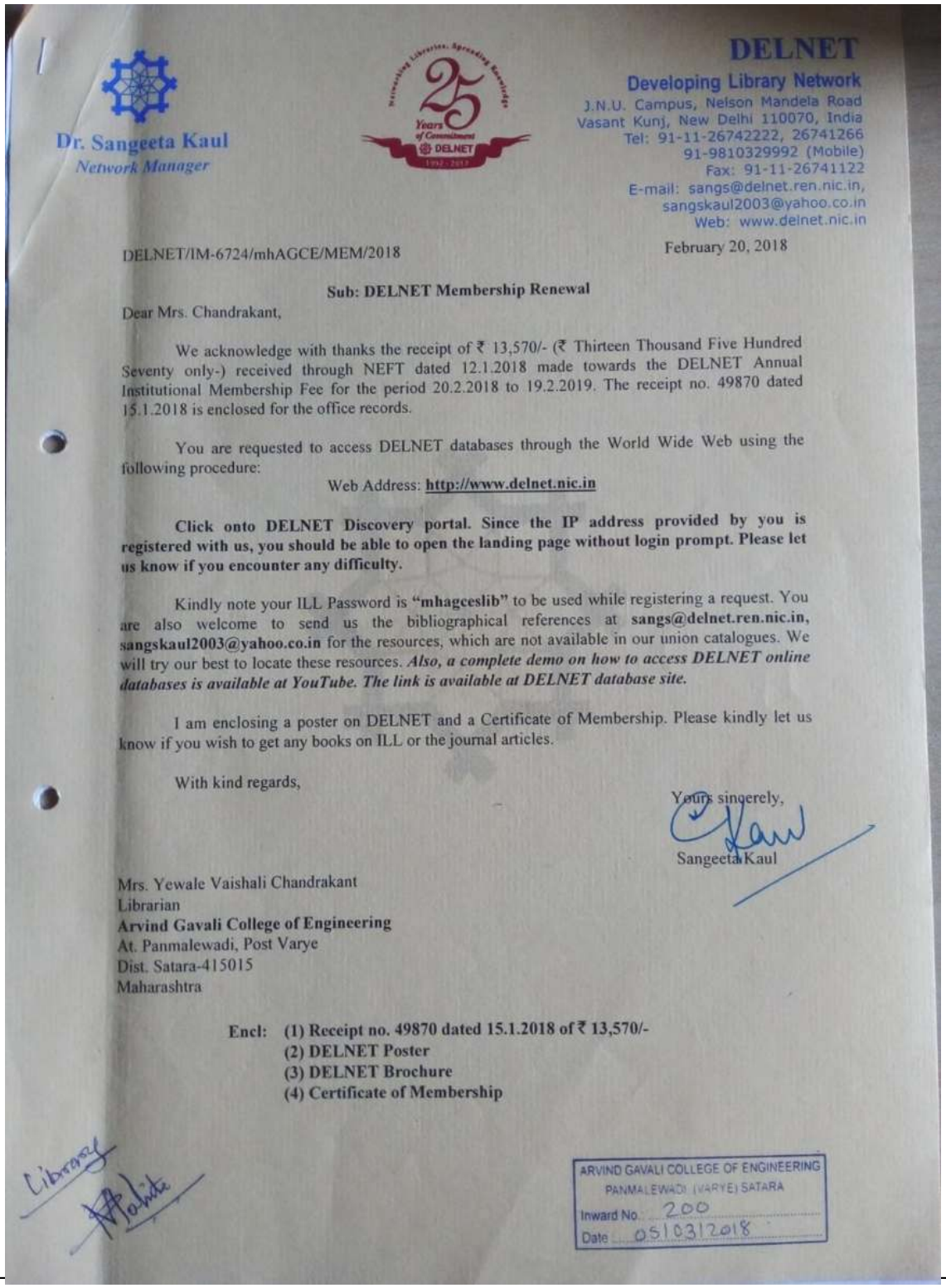
Arvind Gavali College of Engineering
At. Panmalewadi, Post Varye
Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 55492 dated 27.2.2019 of ₹ 13,570
(2) DELNET Poster
(3) DELNET Brochure
(4) Certificate of Membership

ARVIND GAVALI COLLEGE OF ENGINEERING
Inward No 184
Date 20/03/19

Fig10.4.1.e. DELNET e- Resource subscription 2019-20.



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sangskaul2003@yahoo.co.in
Web: www.delnet.nic.in

DELNET/IM-6724/mhAGCE/MEM/2018

February 20, 2018

Sub: DELNET Membership Renewal

Dear Mrs. Chandrakant,

We acknowledge with thanks the receipt of ₹ 13,570/- (₹ Thirteen Thousand Five Hundred Seventy only-) received through NEFT dated 12.1.2018 made towards the DELNET Annual Institutional Membership Fee for the period 20.2.2018 to 19.2.2019. The receipt no. 49870 dated 15.1.2018 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.nic.in**

Click onto DELNET Discovery portal. Since the IP address provided by you is registered with us, you should be able to open the landing page without login prompt. Please let us know if you encounter any difficulty.

Kindly note your ILL Password is **"mhageslib"** to be used while registering a request. You are also welcome to send us the bibliographical references at **sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in** for the resources, which are not available in our union catalogues. We will try our best to locate these resources. ***Also, a complete demo on how to access DELNET online databases is available at YouTube. The link is available at DELNET database site.***

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Dist. Satara-415015
Maharashtra

Encl: (1) Receipt no. 49870 dated 15.1.2018 of ₹ 13,570/-
(2) DELNET Poster
(3) DELNET Brochure
(4) Certificate of Membership

ARVIND GAVALI COLLEGE OF ENGINEERING
PANMALEWADI (VARYE) SATARA
Inward No. 200
Date 05/03/2018

Fig10.4 e DELNETe Resource Fig10.4 d Fig10.4.1.f.
DELNETe -Resource subscription 2018-19.

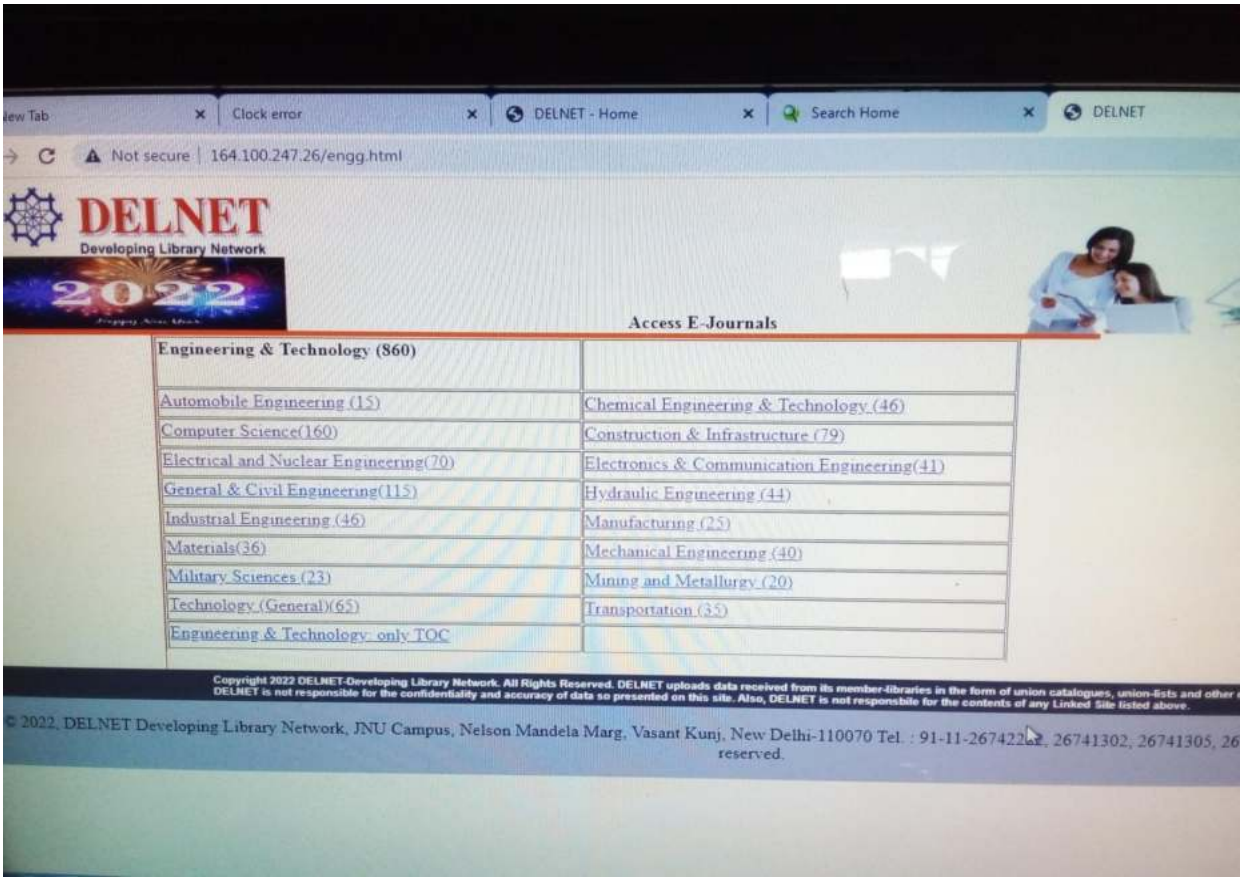

Fig 10.4.1.g. DELNET e -Resource e Journal details.

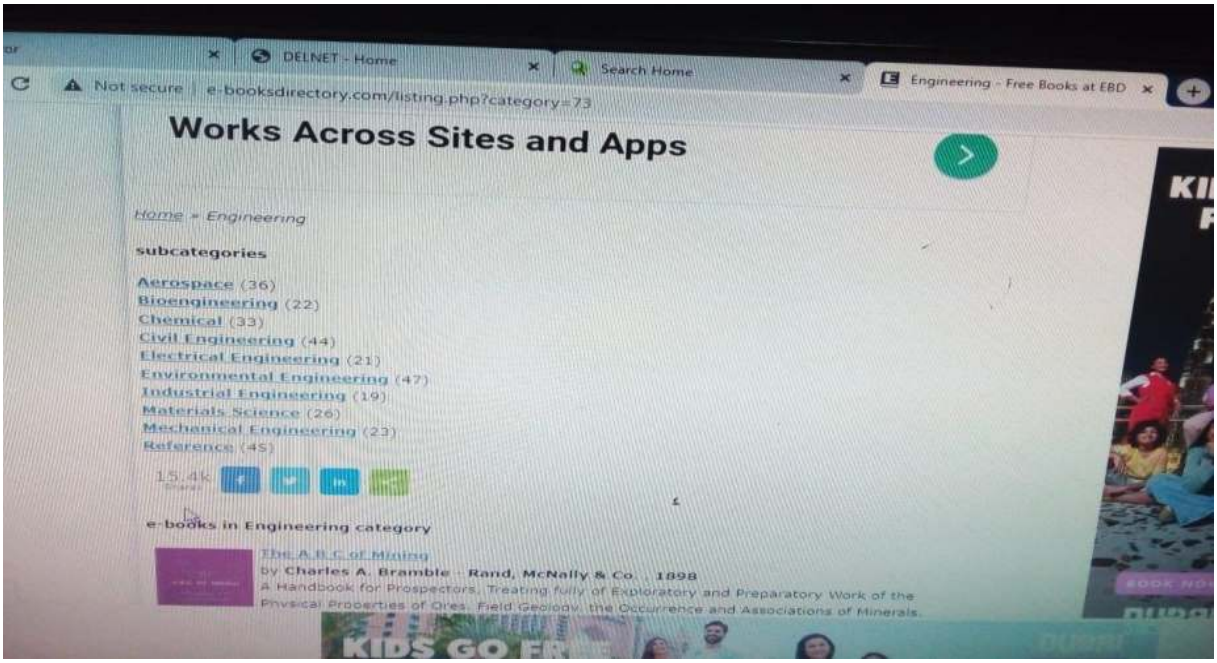

Fig10.4.1.h. DELNET e- Book details.

Fig10.4.1.i. Students using DELNET e- Resource and e- Journal.

Table 10.4.1. C Summary of E resources.

Sr. No.	Other E-Recourses& Particulars
1	DELNET
2	NDL
3	Spoken Tutorials
4	Swayam NPTEL Local Chapter

B. Accessibility to students:

AGCE is committed to providing equal access to library resources, services, and facilities for all library users. It is a priority for the AGCE Library staff to assist with the retrieval of books and with the use of electronic and e resources. All the students and staff members can assess their library account through KOHA Software, avail e-books through their individual ID and password provided to them, through a static IP address 103.159.152.198:8080.

Table B 10.4.1.d Library service details

Library Services	**Yes**
Carpet area of library (in sq. mtr)	443 sqm
Number of seats in	159
Number of users (issue book) per day	25 to 30 averages
Number of users (reading space) per day	76
Timings: On working day On holiday	8.00 am to 7.30 pm.
Number of library staff	3
Number of library staff with degree in Library Management	2
Library Management Computerization for search, indexing, issue/return records	KOHA
Bar coding used	YES
Library additional services	Internet, Journals, Technical Magazine, Conference Proceedings, Newspaper, Photocopy, Printing & Scanning Soft copies of University Question papers & Syllabus shared through email Extended reading room facility during exam period Orientation to newly admitted students. Online public access catalogue.

C. Support to students for self- learning activities:

AGCE library helps its students in self-learning activities in following way:

1. By providing facilities likes computers, internet and e-resources. The library has separate section where 20 computers with high speed internet are available to provide e-resources facilities to the student & faculty members. Users may access, read or download the e-resources e.g. e-books, e-journals, e-magazine, e-newspaper etc.
2. In addition to this, users may watch NPTEL video lectures of their interest here, which have been prepared by eminent professors of IITs &IISc. MIT library.
3. The SWAYAM PRABHA is a group of 32 DTH channels devoted to telecasting of high quality educational programmes on 24X7 basis using the GSAT 15 satellite. Every day, there are new content for at least (4) hours which would be repeated 5 more times in a day, allowing the students to choose the time of their convenience. The channels are uplinked from BISAG, Gandhinagar. The contents are provided by NPTEL, IITs, UGC, CEC, IGNOU, NCERT and NIOS.
4. One more important thing here is OPAC (Online Public Access Catalogue). It allows to the users to know about the library holding their account such as dues on his/her account, due date for returning material etc. The users may also access institutional repository. In this centre where they can found project report, old question papers, institute magazines/ journals, syllabus, and many more institute publications.

In addition to above, users can access the NDL (National Digital Library of India), which is very useful for students, faculty members and researchers. Here, they can search e-books, article, audio lecture video lecture, question paper and many more materials.

10.4.2 Internet (10)

Table 10.4.2 Internet information of institute

Name of the Internet provider	Neha Infonet, Satara
Available band width	300 Mbps
Wi-Fi availability	Yes, All College Campus & Hostel Bill and Specification is attached
Internet access in labs, classrooms, library and offices of all Departments	Yes, Internet access is available in every laboratory and department Network diagram is attached
Security arrangements (Firewall)	Microtec layer 3 Manageable Switch is used to control every Internet user

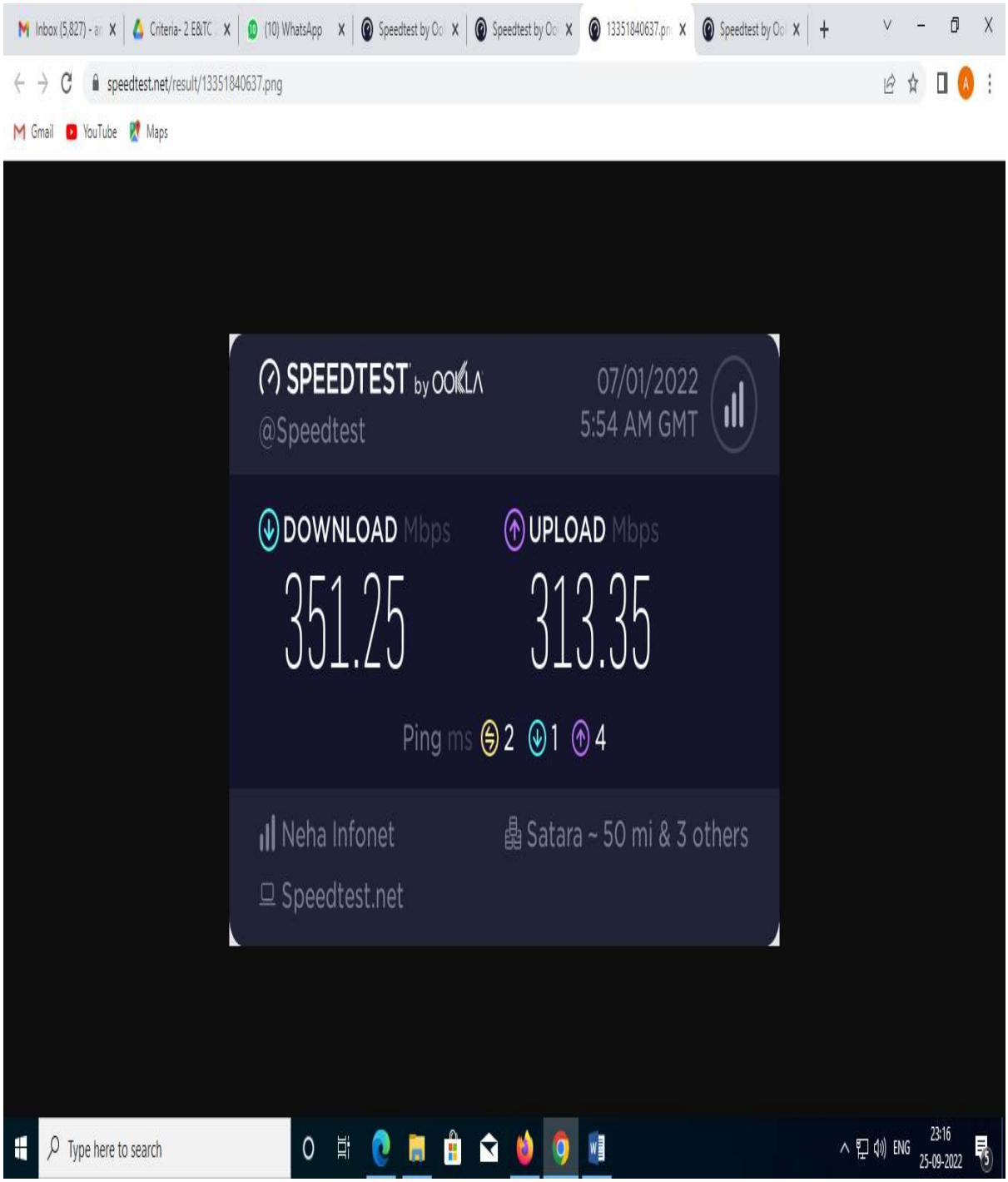

Fig 10.4.2.a Available band width: Speed Test 300 MBPS

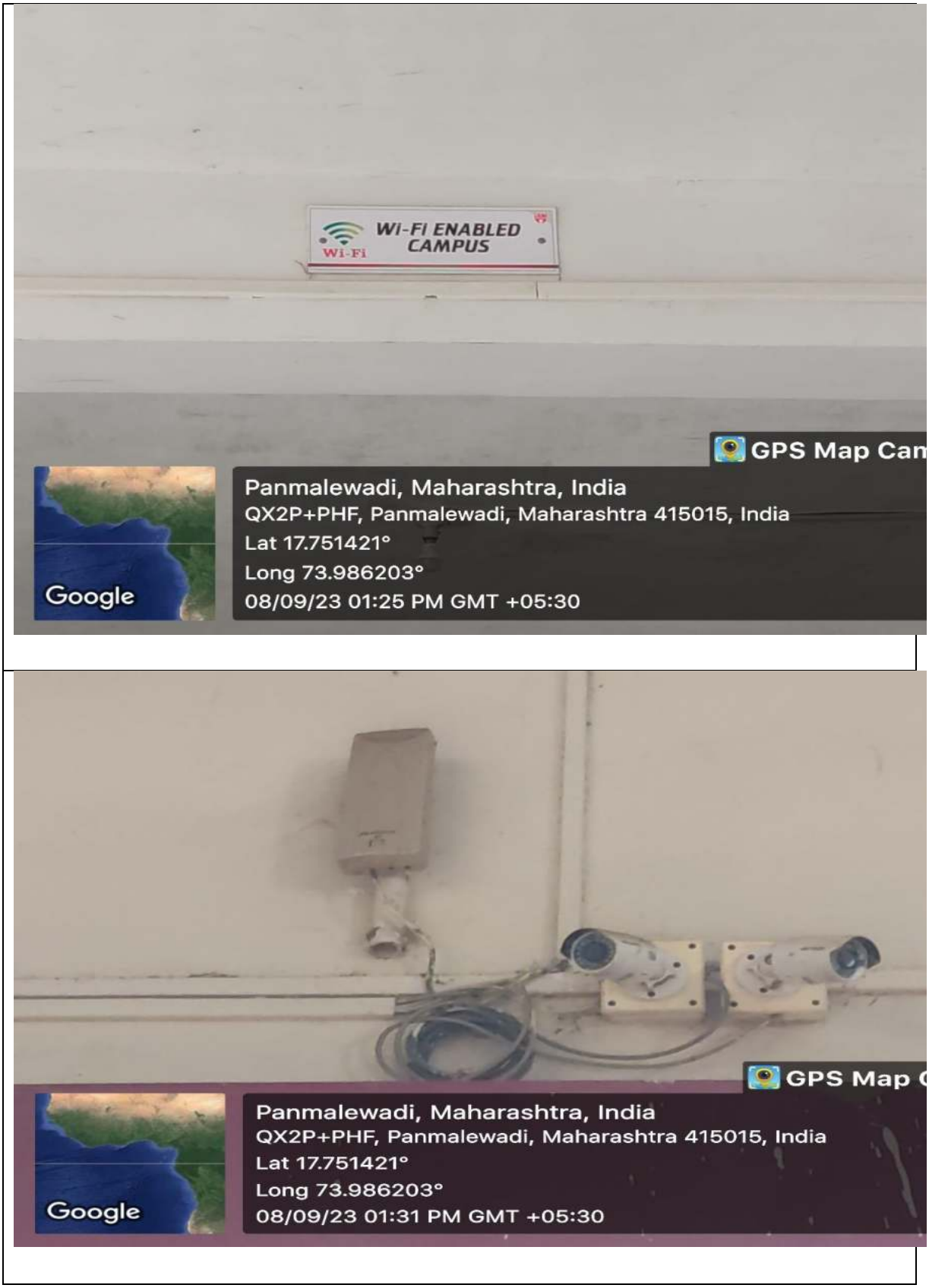

Fig 10.4.2.b Wi-fi facility available at institute

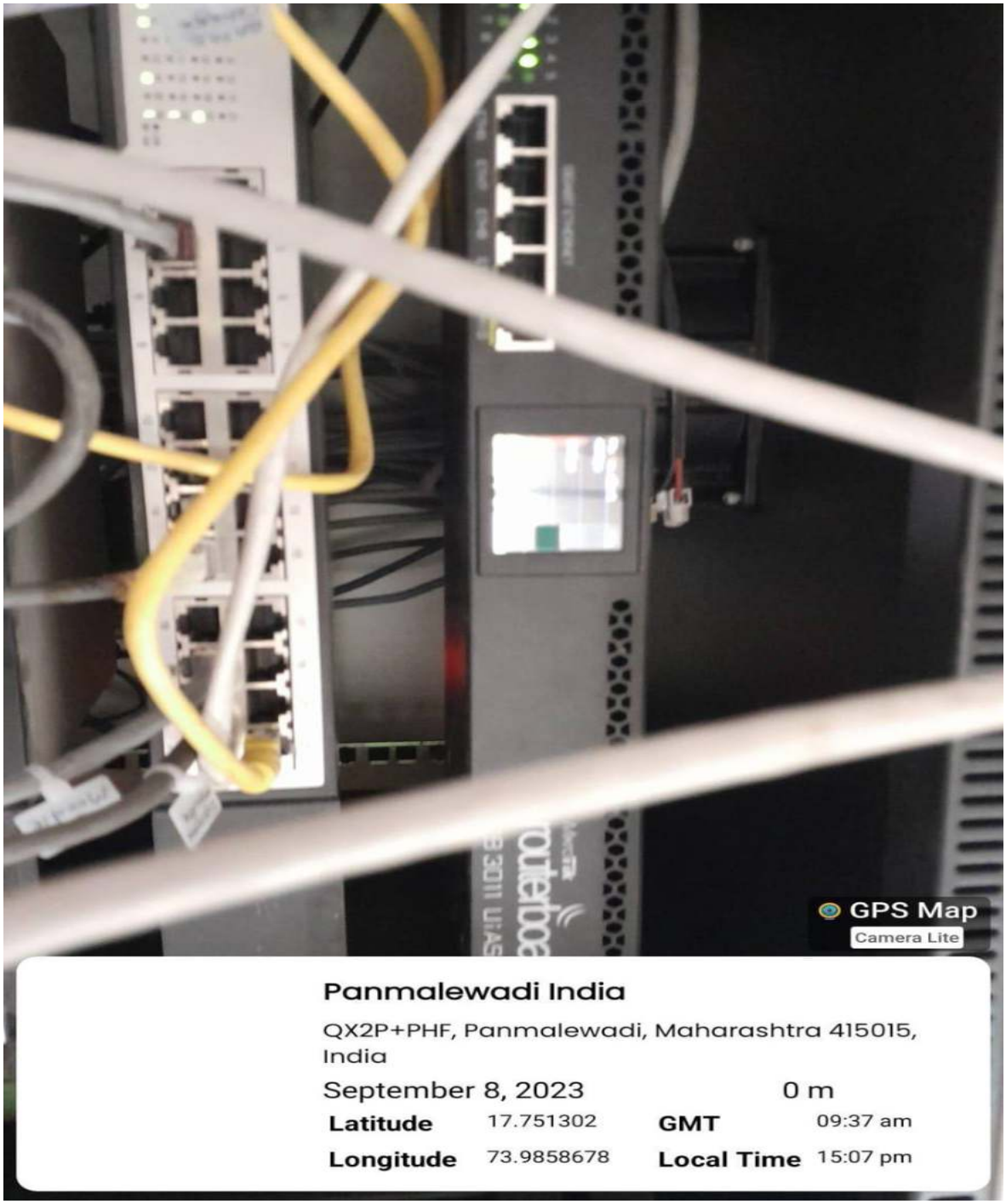

Fig 10.4.2.c Microtec layer 3 Manageable Switch