

# FOR 3<sup>rd</sup> CYCLE OF ACCREDITATION

# PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY

PERIYAR NAGAR, VALLAM 613403 www.pmu.edu

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

March 2021

### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Periyar Maniammai Institute of Science & Technology (PMIST) has its origin from Periyar Maniammai College of Technology for Women (PMCTW) established in 1988. It was the culmination of the foresighted thoughts and vision of the great social reformer E V Ramasamy widely known as 'Thanthai Periyar' and his philanthropic wife Annai Maniammaiar, who fought for the upliftment of the oppressed and liberation of women.

A Public Trust was formed to manage the institution under the able stewardship of the Esteemed Chancellor, Dr.K.Veeramani, who had developed it into a co-educational and multi-disciplinary higher educational institution. The Deemed to be University status was conferred on 17th August 2007 by MHRD, Government of India, vide letter No.F 9-28/2001-U.3.

After attaining Deemed to be University status in 2007, the institution was accredited by NAAC in January 2009 with CGPA of 2.49 (B Grade) during Cycle -I and accredited with CGPA of 2.66 (B Grade) in November 2015 during Cycle -II.

PMIST is offering programmes in Engineering, Architecture, Management, Education, Arts and Science disciplines. All the programmes are accredited and approved by the respective statutory regulatory authorities such as AICTE, CoA, NCTE etc.,

The institution is situated at 10 Km towards west of Thanjavur and 45 Km on the east of Tiruchirappalli, Tamil Nadu. It is located on a prime land area of 114.64 acres which once were barren and dry land with a scarce population in rural area. Such land has been transformed into a land of thick foliages and green vegetation. Now, it has been transformed into energy efficient, pollution free, Zero waste and well laid campus with an ambience for learning. The entire campus is a spectacle of green meadow shady trees and canopies and creepers. Students from rural and agricultural families of Cauvery River Delta Region are the prime and major sources for admission.

The institution implements its socially relevant objectives through its nationally acclaimed outreach programme Periyar PURA (**P**roviding **U**rban Amenities to **R**ural **A**rea), which has adopted 67 villages in and around Thanjavur and neighboring districts.

#### Vision

"To be a University of global dynamism with excellence in knowledge and innovation, ensuring social responsibility for creating an egalitarian society"

#### Mission

1. Offering well balanced programmes with scholarly faculty and state-of-art facilities to impart high level of knowledge.

- 2. Providing student-centered education and foster their growth in critical thinking, creativity, entrepreneurship, problem solving and collaborative work
- 3. Involving progressive and meaningful research with concern for sustainable development
- 4. Enabling the students to acquire the skills for global competencies
- 5. Inculcating Universal values, Self-respect, Gender equality, Dignity and Ethics

#### **CORE VALUES**

- 1. Student centric vocation
- 2. Academic excellence
- 3. Social Justice, gender justice, equity, and equality
- 4. Skills and use of technology for global competency
- 5. Continual improvement
- 6. Leadership qualities
- 7. Societal needs towards sustainability
- 8. Learning: a life long process
- 9. Team work
- 10. Entrepreneurship for all
- 11. Rural development
- 12. Basic, Societal, and applied research on Energy, Environment, and Empowerment

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

- Highly qualified, experienced, competent and committed team of faculty members
- State of Art Infrastructure facilities for teaching and learning
- ICT enabled classrooms for effective teaching and effective use of e-learning resources
- Well equipped laboratories, libraries and studios
- Implementation of Outcome Based Education and Choice Based Credit System (CBCS) for more academic flexibility
- Inculcating Research culture amongst faculty and students
- Presence of Periyar Technology Business Incubator (TBI) within the campus promoting innovation and entrepreneurship among students
- Institution Innovation Council (IIC) encourages students for innovation and entrepreneurship
- Social Outreach Programmes for carrying out research and extension activities
- Adopting Green practices to reduce carbon emission and maintaining as Eco-friendly Campus

#### **Institutional Weakness**

- Lack of Awareness / limited aspiration to excel among parents and students due to the rural socioeconomic background in the region where the institute is located
- Limited Inter-disciplinary and collaborative research
- Limited Ph.D. full time scholars results in retardation of research activities
- Insignificant Student Diversification
- Inadequate External funding for infrastructure development and research

#### **Institutional Opportunity**

- Introduction of new programmes in the emerging thrust areas
- Expansion of consultancy and research activities
- o Increasing the student and faculty diversity
- Industry partnership
- o Engaging Alumni for mentoring the students
- Academic industrial collaborations

#### **Institutional Challenge**

- Fund generation through research projects and consultancy
- Extramural fund for Publication of Research Papers and patents
- Improving institution ranking
- Industry collaborative programmes
- Students exchange programmes
- Attracting tier-one companies for students placements
- Increasing student & faculty diversity

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

The curricula and syllabi of various academic programmes are developed based on the recommendations of different regulatory and statutory bodies as well as on the inputs of parents, teachers, students and other stakeholders.

- 77 Programmes are offered by the Institution
- Outcome Based Education (OBE) has been implemented from the academic year 2015-16
- 97% of programmes were implemented with Choice Based Credit System (CBCS)
- 59 Programmes under went syllabus revision during the last five years
- 81.43% of courses on employability, entrepreneurship and soft skill development
- 130 value added courses offered to the students
- Students are free to choose courses from Swayam, MOOC and NPTEL
- About 2716 New courses were introduced during the last five years
- Mandatory IPT for all Engineering students (six weeks)
- Feedbacks from all stakeholders have been collected, analyzed and action taken
- Open Electives to enable students for horizontal mobility
- UGC mandatory courses like Environmental Studies, Human Ethics and Cyber Security, Disaster Management are the part of Curriculum
- Soft Skills are introduced as Language Laboratory components to enhance their communication skills
- Option for students to choose Honours Degree in Engineering

#### **Teaching-learning and Evaluation**

Student centric Teaching Learning is always the focus in PMIST. Faculty members are motivated in using the ICT tools for enabling student centric teaching.

#### **Significant outcomes:**

- · Currently, the institute has a total of 205 faculty members and maintains 1:19 faculty student ratio. Out of 205 faculty members, 66 are Ph.D. holders. Average experience of the faculty members is 8 years
- · ICT enabled teaching is being practiced in the institute. The entire campus is Wi-Fi enabled which helps the students to access the e-contents
- · All faculty members use ICT tools including e-resources for student centric teaching learning. Google Classroom is the learning management system used by the institution Google Meet and Zoom platforms are used for handling online classes.
- · Mentoring system is being practiced in the campus for many decades. Mentor-Mentee ratio of 1:19 is maintained in the campus. Moreover, the institute has a trained professional counselor to take care of students psychological wellbeing
- Students are classified into advanced learners, medium learners and slow learners. Each category of students is provided with opportunity to improve their capabilities in different activities
- Student centric learning method is practiced by incorporating experiential learning like laboratory practices, field visit, in-plant training, model presentations, etc.
- · Participative learning is accomplished by formative tools like group discussion, assignments, seminar, quiz, Jigsaw, flipped classroom *etc*.
- Indigenously developed software **B**rilliant **R**esource for **A**cademic **IN**stitution (BRAIN) is used for taking care of e-governance of the institution including examination. The Office of the Controller of Examination publishes results within 19 days on an average from the last date of examinations.
- The institution follows Outcome Based Education (OBE) from the 2015-16 academic year. Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) are well defined. Course Outcomes are designed to attain the POs and PSOs. Attainment of COs and POs are measured using appropriate evaluation schemes.
- The students pass percentage for the 2019-20 academic year is 97%.

#### Research, Innovations and Extension

The research activities at PMIST is quite vibrant with inter-disciplinary studies and research concentrating on the social need outreach and innovation.

#### Major highlights during the last five years:

- Well defined Research Policy for the promotion of research
- Providing seed money to faculty members to carry out basic research

- Providing infrastructure facilities, on-duty for researchers to carry out their research in other institutes
- Encouraging students to collaborative out research projects in the research institutes and companies
- Urkund Plagiarism Checking software is made available for finding the text similarities in the research materials
- o 5 patents have been published by faculty members, research scholars and undergraduate students
- o Out of 15 design applications filed, 6 have been published
- 31 research projects are funded by various Government and Non-Government Agencies
- Revenue generated from consultancy & corporate training programmes is Rs. 199.64 lakhs
- 13.5 h-index of the institute
- 307 research publications are indexed in Scopus/Web of Science/ CARE list Journals
- o Conducted 92 extension and outreach programmes with students participation
- 37 functional MoUs with institutions, industries and Universities in India and abroad
- 100 Books published with ISBN

#### **Infrastructure and Learning Resources**

Periyar Maniammai Institute of Science & Technology (PMIST) is spread over an area of 114.85 acres with built up area of 9,09,017 sq.m which accommodates well furnished teaching facilities, residential facilities, sports complex, administrative divisions and allied services. The campus is eco and environment friendly.

- Physical infrastructure includes 104 class rooms, 82 learning labs, 11 research labs, 15 seminar halls
- The play facilities including indoor and outdoor spreads over 46171.35 sq.m.
- 100% ICT enabled class rooms
- Average Annual infrastructure augmentation is 10.96 % with Rs. 95.12 lakhs annual average expenditure
- Average Annual Maintenance augmentation is 89.03% which is Rs. 765.54 lakhs annual average expenditure
- Central library and department libraries are improved by spending an annual average of Rs. 12.43 lakhs for purchase of books
- The Institution has integrated Library management system with RFID
- Total number of titles: 42834, Total number of Volumes: 93107, Total number of national & international Journals (Hard and Soft):123 Total number of Magazines: 205.
- Library subscribes to: J-Gate for 4000+ journals and Pro Quest for 3500+ journals
- E-Resources like e-journals, e-books, etc are purchased for an annual average of Rs. 9.53 lakhs
- Library has membership with leading libraries in the state viz British Council Library, Tamil University and DELNET
- The institute has robust internet (1GBPS bandwidth and Optical Fiber Connection for 5300 meters throughout the campus) facility
- Wi-Fi facility in the campus provides 77 access points and 6000 users capacity
- Totally 104 number of laser printers with A4 and A3 size printing facility, Inkjet colour printer with A4 to A0 size printing capability and colour plotter with A1 size printing facility are available
- Well established maintenance policy for academic, residential and computing facilities
- The campus is having Bank, Post office, Hospital and other basic amenities.
- Well furnished hostels Three for Women and One for Men are situated inside the campus
- Electrical power backup, Surveillance cameras, RO water treatment plant, etc are provided with required quantities

#### **Student Support and Progression**

PMIST provides necessary support and encourages all the students for their successful progression through robust support system. This objective was met by various sections such as Centre for Students and Administrative Services (CSAS), Student Academic Affairs Section, Centre for Institution Industry Interaction (CIII), Physical Education Division, Student's Clubs & Societies, Grievance Redressal committee and Registered Periyar Maniammai Alumni Association (PMAA)

#### **Significant outcomes:**

- Scholarships and Freeships for 17.77% (2642) students for the worth of Rs.5.66 crores provided from Institutional fund
- 70% of students benefited through career counselling, guidance and skill enhancement programmes conducted by CIII/CSAS
- Organized 187 Capacity Building and Skill Enhancement Programmes
- Student's grievances and other issues are addressed through Grievances and Redressal Cell, Anti Ragging Committee and Internal Compliant Committee
- 40% of students have been placed through Institution Placement Cell
- 95 awards / medals were secured by students participation in various region / state/ national level sports, cultural events and competitions
- 22 sports and cultural events were organized by the Institution in the last five years
- As per the recommendations of Lyngdoh Committee, the Students Council has been elected and carries out various events in the campus like Periyar Annual Cultural Events (PEACE), Annual sports meet, Open House expos, Science Day, Students symposium etc
- Registered Periyar Maniammai Alumni Association (PMAA) has international chapters
- Students Council members represent in various statutory bodies of the institution

#### Governance, Leadership and Management

Vision and mission is reflected in academic and administrative governance. The policies and procedures are intertwined with vision and mission.

- The flow of power and decision making is done through 'bottom to top approach'
- The strategic plan is to improve the research and innovation culture among the Faculty and Students
- All the institutional bodies are constituted as per the norms of the respective Statutory Regulatory Authorities (SRA) accordance to PMIST by-laws and statutory boards
- The BRAIN software designed by PMIST is used for Administration, Finance Accounts, Student Admission and Supports Examination
- PMIST uses the Performance Appraisal System (PAS) as recommended by UGC to assess the teaching and non-teaching staff annually
- Financial support for attending National & International conferences, workshops and membership fees were provided to 50 faculty members
- Institute has organized 79 Professional & Administrative training programmes and 1460 Teaching & Non Teaching Staff benefited from the Programme
- A total of 213 faculty members attended FDP, orientation etc via online/face-to-face mode

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#### **Institutional Values and Best Practices**

The institution is committed to a Green Policy which promotes sustainable development activities such as landscaping, water conservation, energy conservation and waste management. Keeping in view of the founding father philosophy the institution gives more attention on the promotion of gender equity and diversity. Significant initiatives taken by the institution are listed below:

- 49 programmes have been organized with emphasis to promotion of gender equity and 94 programmes for counseling during the last five years
- Common room facilities for girl's students
- Separate counselor appointed for counseling
- Facilities for alternative sources of energy and energy conservation measures:
  - Installed Biomethanation plant with a capacity of 500 m3
  - Usage of energy efficient LED bulbs
  - Installed 4 kW solar panels
- Waste management practices
  - Implementation of 4R concept Reduce, Reuse, Recycle and Recover in the campus
  - Recovery and reuse of Grey water for gardening
  - Vermicomposting practice
  - Paper recycling into paper bags and files
- Water conservation through rain water harvesting
- Green campus continuous increase in green cover through tree plantation
- Conduct of Quality audits on environment and energy
- o Barrier free environment through pedestal friendly pathways, lifts, ramps, disabled friendly toilets
- Restricted entry of motor vehicles inside the campus. Usage of bi-cycles encouraged for Carbon Neutralization
- 44 awareness programmes conducted for sensitizing students and employees of the institution on constitutional obligations
- Code of conduct for students, teachers and administrators
- Organizing National and International festivals, commemorative days of great Indian leaders.
- A Few Best practices followed are:
  - (a) Promotion of innovative eco system in the campus
  - (b) Extensive adoption of MOOC courses for the students
- Environment consciousness is the unique character of PMIST

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the University					
Name	PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY				
Address	Periyar Nagar, Vallam				
City	Thanjavur				
State	Tamil Nadu				
Pin	613403				
Website	www.pmu.edu				

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Vice Chancellor	S.VELUSAM I	04362-264600	9944495667	04362-26466	iqac@pmu.edu				
Dean	P.K.Srividhya	04362-264700	9442346158	04362-26480	deanacademic@pm u.edu				

Nature of University	
Nature of University	Deemed University

Type of University	
Type of University	Unitary

Establishment Details					
Establishment Date of the University	22-11-1988				
Status Prior to Establishment,If applicable					

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Recognition Details							
Date of Recognition as a University by UGC or Any Other National Agency :							
Under Section Date View Document							
2f of UGC							
12B of UGC							

<b>University with Potential for Excellence</b>	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location, Area and Activity of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Program mes Offered	Date of Establishment	Date of Recognition by UGC/MHRD		
Main campus	Periyar Nagar, Vallam	Rural	114.85	909017	Seventy Seven				

# 2.2 ACADEMIC INFORMATION

# Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA)

 SRA program
 Document

 AICTE
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 NCTE
 104897\_5806\_4\_1612154391.pd f

 COA
 104897\_5806\_18\_1608803648.p df

: Yes

### **Details Of Teaching & Non-Teaching Staff Of University**

Teaching Faculty												
	Professor				Associate Professor			<b>Assistant Professor</b>				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				32				45				201
Recruited	12	5	0	17	9	16	0	25	72	88	0	160
Yet to Recruit				15				20				41
On Contract	0	0	0	0	0	0	0	0	0	0	0	0

Non-Teaching Staff						
	Male	Female	Others	Total		
Sanctioned				219		
Recruited	63	43	0	106		
Yet to Recruit				113		
On Contract	26	37	0	63		

Technical Staff							
	Male	Female	Others	Total			
Sanctioned				80			
Recruited	35	18	0	53			
Yet to Recruit				27			
On Contract	8	3	0	11			

# Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n			Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	9	4	0	8	14	0	24	16	0	75
M.Phil.	0	0	0	0	0	0	4	20	0	24
PG	2	0	0	1	2	0	43	48	0	96

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	1	0	0	0	0	0	0	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	0	0	0	0	0	0	1

Part Time Teachers										
Highest Qualificatio n	Qualificatio			Associate Professor		Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	1	1	0	1	0	0	3

### Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	0	0	0	0
Adjunct Professor	1	0	0	1
Visiting Professor	1	0	0	1

# **Chairs Instituted by the University**

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Centre of Excellence for Periyar Thought	Periyar Chair	Periyar Maniammai Alumni Association
2	Periyar PURA Centre for Rural Development	Dr.A.P.J.Abdul Kalam Chair	Endowment from Philanthropist

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1848	25	2	1	1876
	Female	940	20	1	2	963
	Others	0	0	0	0	0
PG	Male	127	0	0	0	127
	Female	160	2	0	0	162
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	5	0	0	0	5
	Female	9	1	0	0	10
	Others	0	0	0	0	0
Pre Doctoral (M.Phil)	Male	0	0	0	0	0
	Female	5	0	0	0	5
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	Yes
<b>Total Number of Integrated Programme</b>	4

Integrated Programme	From the State where university is located	From other States of India	NRI students	Foreign Students	Total
Male	72	0	0	0	72
Female	148	0	0	0	148
Others	0	0	0	0	0

# **Details of UGC Human Resource Development Centre, If applicable**

Year of Establishment	Nill
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

# **Accreditation Details**

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team
				Report
Cycle 1	Accreditation	В	2.49	
				2009 Peer Team R
				eport.pdf
Cycle 2	Accreditation	В	2.66	
				2015 Peer Team R
				eport.pdf

# 2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Department Of Aerospace Engineering	<u>View Document</u>
Department Of Architecture	View Document
Department Of Biotechnology	View Document
Department Of Chemistry	View Document
Department Of Civil Engineering	View Document
Department Of Commerce	View Document
Department Of Computer Science And Applications	View Document
Department Of Computer Science And Engineering	View Document
Department Of Education	<u>View Document</u>
Department Of Electrical And Electronics Engineering	View Document
Department Of Electronics And Communication Engineering	View Document
Department Of English And Foreign Languages	View Document
Department Of Management Studies	View Document
Department Of Mathematics	<u>View Document</u>
Department Of Mechanical Engineering	View Document
Department Of Physics	View Document
Department Of Political Science	View Document
Department Of Social Work	View Document
Department Of Software Engineering	View Document

# **Extended Profile**

# 1 Program

#### 1.1

### Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
39	40	37	35	34

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 1.2

### Number of departments offering academic programmes

Response: 19

### 2 Students

#### 2.1

### Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
3363	3177	3100	3165	3488

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 2.2

#### Number of outgoing / final year students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
892	745	712	806	995

File Description		Docun	nent	
Institutional data in prescribed form	at	View 1	<u>Document</u>	

#### 2.3

### Number of students appeared in the University examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
3285	2811	2646	2589	2863

File Description	Document
Institutional data in prescribed format	View Document

#### 2.4

### Number of revaluation applications year-wise during the last 5 years

2019-20	2018-19	2017-18	2016-17	2015-16
1	6	20	27	64

### 3 Teachers

#### 3.1

### Number of courses in all programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1296	1235	1155	1177	1209

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 3.2

### Number of full time teachers year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
175	174	197	223	229	

File Description		Document		
Institutional data in prescribed format	View	<u>Document</u>		

#### 3.3

### Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
274	201	225	215	294	

File Description	Document
Institutional data in prescribed format	View Document

### 4 Institution

#### 4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1853	1570	1204	2196	1908

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1223	882	917	873	810

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 4.3

Total number of classrooms and seminar halls

Response: 119

#### 4.4

Total number of computers in the campus for academic purpose

Response: 945

Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)

4.5

2019-20	2018-19	2017-18	2016-17	2015-16
883.01	957.75	576.00	809.47	653.53



# 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

#### 1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

#### **Response:**

Periyar Maniammai Institute of Science and Technology offers diversified academic and socially relevant programmes across Arts, Sciences, Humanities, Education, Management, Engineering and Architecture intended at providing holistic education, aligning with local, national, and global needs.

The curricula largely combine academic skills, fundamental knowledge, communication skills, societal equality, etc. towards fulfilling vision, mission of the institution.

All undergraduate and a majority of graduate programmes designed since academic year 2015-16 follow Outcome Based Education (OBE), and each programme has Programme Educational Objectives (PEO). In turn, each course has a set of Course Outcomes (Cos), charted with Pos, PSOs, to work in tandem with PEOs.

Each department's curriculafocus on triggering scientific thinking, absolute logic and rationale, importance of integrating various sections of society for collective growth, besides gaining grip over academic, professional excellence.

The curricula are developed by respective departments, after detailed discussions with Board of Studies (BoS) and Department Advisory Committee (DAC) with faculty from other reputed institutions, industry, alumni, parents and students as its members, whobrains torm intense academic topics and the need to sensitize students on rural development, energy conservation and sustainability, in line with values of the institute.

Here are the programmes that were created for ensuring local, regional, national and global developmental needs.

- Rural development
- Basic Societal and applied research on Energy, Environment and Empowerment
- Entrepreneurship for all
- Skills and use of technology for global competency

#### **Local and Regional Needs:**

PMU is in the heritage and smart city Thanjavur, where Municipal Corporation executes projects like moat survey, application of smart materials in design and construction in which students actively take part, after mastering the topics in classroom environment.

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#### **Courses with An Emphasis On Local Needs:**

- Historical, Contemporary and South Indian architecture
- Heritage conservation and planning
- Advanced studies in regional and vernacular architecture
- Human settlements planning
- Urban design
- Culture and architecture
- Contemporary theories and trends

#### Courses Based OnSocio-Economic Issues

- Introduction to society, social work
- Cultural change, lag
- Social problems in India
- Poverty, unemployment, population, cybercrime, anti-dowry, suicide
- Specific social issues in Tamil Nadu
- Mental health problems and education
- Field survey, project in assessing the socio economic status

#### **National and Global Needs:**

The courses are imparted in English, with focus on sensitizing the students about national and global issues. The programmes highlight the importance of being a self-reliant nation and of international standards at the same time, by inculcating courses on Renewable Energy, Environmental studies, GIS remote sensing, Disaster Management, Basics of Earthquake, Energy efficient architecture, Climate & Architecture for better understanding of the global issues.

Students are exposed to emerging areas through various courses on Artificial Intelligence, Internet of Things, Machine Learning, Cyber Security etc. In order to encourage the startup culture and hone the entrepreneurship skills of the students, a course on Entrepreneurship is also offered.

File Description	Document
Upload Additional information	<u>View Document</u>

#### 1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

**Response:** 76.62

# 1.1.2.1 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 59

#### 1.1.2.2 Number of all Programmes offered by the institution during the last five years.

Response: 77

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Institutional data in prescribed format	<u>View Document</u>
Details of Programme syllabus revision in last 5 years	View Document
Any additional information	<u>View Document</u>

# 1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 83.5

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1096	1061	973	957	985

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Institutional data in prescribed format	View Document

## 1.2 Academic Flexibility

#### 1.2.1 Percentage of new courses introduced of the total number of courses across all programs

offered during the last five years.

#### Response: 0

1.2.1.1 How many new courses were introduced within the last five years.

#### 1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 6072

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

# 1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

#### 1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 39

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 1.3 Curriculum Enrichment

# 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

#### **Response:**

This institution offers programmes by integrating various cross cutting issues related to Gender Equality, Environment and Sustainability, Human Values, Professional Ethicsinto the curriculum for sensitizing students andhelp them in emerging into socially responsible citizens. The courses address Social Justice, Gender Justice, Societal Needs and Equality for sustainability, aided by research and environment specific topics in the curriculum and to fulfill the core values of PMIST, fifty different courses are offered by various programmes.

#### Mission Statement of PMIST with emphasis on its core values:

- 1. Involving progressive and productive research for a sustainable development.
- 2. Inculcating Universal values, Self-respect, Gender equality, Dignity and Ethics.

#### Professional Ethics, Gender, Human Values:

The following courses are made mandatory across all disciplines as per the guidelines of UGC:

- "Human Ethics, Values, Rights and Gender Equality" is offered by all programmes covering on the topics such as Human Ethics and Values, Gender Equality, Women Issues & Challenges, Human Rights and Social issues.
- "Professional Practice and Ethics" and "Business Ethics and Corporate Social Responsibility" are offeredto inspire students for the lifetime.
- "Cyber Security" is offered foreducating the digital, legal norms.
- Theory course on Animal Biotechnology to sensitize students on ethical action towards animals.

Students are encouraged to participate in various programmes conducted by the Gender club for learning topics related to gender issues, equality through various case studies and literature.

PMIST has formed a team to implement UGC quality mandate "Mulyapravah - inculcation of Human Values and Professionals Ethics in Higher Educational Institutions". As per the recommendation of AICTE, introductory inputin *Universal Human Values (UHV-I)* course is included in the Student Induction Programme from academic year 2018-19 onwards. Similarcourses such as *Indian Constitution* and *Essence of Indian traditional knowledge* is added to B.Tech curriculum for appreciatingIndian values.

#### **Environment**

The courseon "Environmental Studies" is made mandatory for all Under-Graduate programmes as it covers Green Environment, Ecosystems and Biodiversity, Environmental Pollution, Renewable Energy sources, its impact on Human Population. This creates awareness among students for preserving natural resources. The course on Basics of Earthquake Engineering provides knowledge on Natural Disasters. Students are also involved during the environment and Energy Audit of the Campus and are focused on energy conservation principles.

During the recent 'Gaja' Cyclone calamities, students and faculty members actively volunteered and involved in providing relief materials to the affected people from neighbourhood localities and in continuation with rehabilitation services.

#### **Sustainability**

The practice of planting trees to enhance Green cover of the institute is done regularly by involving the students. The topography of the campus itself enables Rainwater Harvesting naturally and this aids students in acquiring practical knowledge on conservation of water resources. Students are encouraged to participate in NSS, NCC and YRC to learn the importance of human values, sustainable environment and gender equality. Display of models, posters and competitions related to waste management are periodically practiced at the campus.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	

# 1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 130

#### 1.3.2.1 How many new value-added courses are added within the last five years.

Response: 130

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

### 1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 49.8

# 1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
2026	1410	1488	1541	1663

# 1.3.4 Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).

Response: 51.44

#### 1.3.4.1 Number of students undertaking field projects or research projects or internships.

Response: 1730

File Description	Document
List of Programmes and number of students undertaking field projects research projects//internships (Data Template)	View Document
Any additional information	View Document

### 1.4 Feedback System

# 1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

**Response:** A. All 4 of the above

File Description	Document
URL for stakeholder feedback report	<u>View Document</u>
Institutional data in prescribed format	View Document
Any additional information	View Document
Action taken report of the University on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document

#### 1.4.2 Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
URL for feedback report	View Document
Institutional data in prescribed format	View Document

# **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1 Demand Ratio (Average of last five years)

Response: 0.84

#### 2.1.1.1 Number of seats available year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
2006	1936	1906	1708	3478

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	View Document
Any additional information	View Document

# 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the last five years (Excluding Supernumerary Seats)

Response: 100

# 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1223	882	917	873	810

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	View Document
Any additional information	View Document

#### 2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

#### **Response:**

PMIST conducts foundation programmes for bridging the gap between school and higher/professional education levels, as students from various backgrounds - especially the new entrants would require few courses, for preparing them to excel in their respective programmes.

Soon after joining the department of their choice, each student is assigned with a mentor, for monitoring the performance of students along with the class in-charges. The mentor system helps the students to overcome any difficulty / issues faced in academic and non-academic matters.

### **Student Diversity**

Based on the academic performance in the first semester examinations, the students are categorized into advanced learners, medium learners and slow learners.

**Advanced Learners:** Students who secure CGPA 7.5 and above are classified as advanced learners and are provided with the following opportunities.

- 1. **Honours Degree:** Among advanced learners, the engineering students who secure CGPA 9.0 and above after completing the second year are given an opportunity to take up honours degree. The student who opts for honours degree need to earn additional 10 credits by taking additional courses including SWAYAM/MOOC courses and research activities.
- 2. **Vertical Mobility:**Students are given the opportunity to take up the eighth semester courses in the V, VI and VII semesters. This enables them to focus and utilize all their time only for their project

- work and facilitate taking up industry-oriented projects. This further enables them to acquire research skills and publish research papers in journals and conferences.
- 3. **Research Publications:** Advanced learners are provided with opportunities for working with the faculty members in their research activities and to co-author the publications.
- 4.**SWAYAM and MOOC Courses**: Advanced learners are encouraged to take up courses from SWAYAM/MOOC, besides getting trained in other soft skill and value-added courses. Provision is given to earn 20% of the total credit through SWAYAM/MOOC courses.
- 5. **Co-curricular Activities** Students are encouraged to actively take part in conferences, symposia and project exhibitions to showcase their talents.

**Slow Learners:**Students who have secured a CGPA less than 6.0 are classified as slow learners.Mentors and class teachers monitor, guide and counsel the slow learners constantly and take extra care in their studies, reviewing progress at regular intervals.

- 1. **Remedial Classes**: The slow learners are provided with Remedial Classes after regular class hours to catch up with the current semester courses and the backlog courses.
  - 1. After the Continuous Assessment 1 (CA 1), students who secured low marks are taught in with Remedial Classes for improving their performance in regular courses.
  - 2. For backlog courses separate Remedial Classes are conducted.
- 2. **Involving Parents**: Class in-charge and mentors regularly update the parents regarding the student's performance. This helps to ensure the corrective measures from the parents' end as well.

In group activities, teams are formed with a combination of Advanced Learners, Medium Learners and Slow Learners to enable peer learning. The students who secured CGPA 6.0 & above and below 7.5 are considered as medium learners. The performance of the students is monitored and recategorised subsequently.

File Description	Document
Upload Any additional information	View Document

#### 2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 19.22

#### 2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

#### **Response:**

The learning process at PMIST is student-centric, enriching and is aimed at enhancing the learning experience of each student. The student centric methods practiced are Experiential, Participative, in-plant, and internship based that not only provide hands-on training but also logic-based and problem-solving techniques.

Lectures coupled with demonstrations, experiments, audio-visual methods, ICT tool usage, field works are a part of daily learning for triggering the interest of students in the curriculum.

#### **Experiential learning:**

- Most of the programmes include laboratory practices as part of the curriculum in each semester, for practical understanding of the topics.
- Each laboratory session includes a mini project for practicing the theory that was taught in classroom environment.
- Apart from the mini project, students are also involved in group projects in the final semester as a part of the curriculum.
- Students take up in-plant training/industrial visits/field studies/surveys *etc.*, for deriving firsthand information, enhancing their analytical, practical knowledge besides mastering the ability to face and solve real-life problems.
- Student's involvement in real-life assignments, project competitions, and other technical contests supplement the experimental learning to a great extent.
- Guest Lectures, interactions with eminent personalities from the industry provide insights about

- various job skills that need to be nurtured before stepping into the work environment.
- Students are permitted, guided and encouraged to visit various industries for pursuing their project works.
- The faculty discuss the details of industry projects with the students and assess on how it would benefit for their career growth, at a later stage.

#### **Participative Learning:**

Participative learning encourages students to voice their ideas, and it is done through regular group discussions, seminar, poster presentation, model exhibitions, brainstorming sessions as part of the Continuous Assessments.

- Tutorial classes help the students to get a grip over the courses.
- Active learning like think share pair, one minute paper, jig-saw etc., are conducted to improve the student's participation in learning.
- Flipped classrooms are used to enhance the students' participative learning.
- Association meetings and Students' Chapters of professional bodies enhance the participative learning.
- NCC, NSS, YRC, RRC and Periyar PURA provide immense opportunity to joint-learning, i.e., learning from unlearned the rural society and to imbibe a sense of responsibility and accountability to the society.
- PMIST has 12 student clubs and societies (Athletic club, Games club, Citizen Consumer club, Drama club, Energy club, Humanist club, Rationalist club, Painters club, Photography club, etc.) which provide great learning opportunities.
- Polling, discussion forum, online quiz are conducted through online mode.

#### **Problem Solving Methodologies:**

- Case studies are used as one of the tools in continuous assessments in Architecture, Engineering, Management and Commerce programmes.
- Engineering students are encouraged to undertake real time projects.

#### Others:

The mentors and counselors provide continuous assistance to the students to overcome any learning difficulty. Mind building and yoga classes are conducted regularly. Financial worries of economically poor students are to some extent mitigated by offering scholarships and "Earn while Learn" scheme.

File Description	Document
Upload any additional information	View Document

# 2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

#### **Response:**

PMIST uses ICT in education as a regular practice, while conducting classes, webinars, seminars, conferences and other interactive sessions. The entire campus is Wi-Fi enabled, facilitating the faculty members and students to use learning material at any place in the campus, round-the-clock. All the faculty members are well versed in using ICT tools in teaching and learning practices.

**ICT Tools** – Faculty members use the following tools in the lecture halls/ seminar halls for teaching.

- LCD Projectors
- Laptops
- Speakers
- Headphones
- Tablets
- Audio-visual equipment
- Interactive Boards

**E-resources-** Faculty members use the following e-resources while delivering lectures and interacting with students in the classroom.

• Faculty membersinclude learning material from YouTube, NPTEL, SWAYAM, Coursers, Udemy,

Slide share *etc.*, in the regular classroom sessions and for flipped classrooms.

- Virtual Labs are organized for conducting practice sessions, and to explain the concepts in detail.
- To create e-contents Microsoft Office Suite, Word Press, Google Docs and other advanced tools are used.
- Students have the provision to accessing the e-contents through digital library which houses theses, audio-visual content, books on various topics including competitive exams etc.

#### **Learning Management System**

- PMIST has an intranet platform (BRAIN- indigenously developed software) to upload the e-content created by the faculty members.
- Students and faculty members can access the same.
- Faculty members use multiple Learning Management platforms for sharing the course material and for conducting formative assessment, which are accessed through internet. Google Classrooms, Edmodo, and Moodle are some of the platforms used as LMS platforms. Formative assessment like quizzes, assignments, and tests are conducted using these LMS. Google Forms, Class marker, Kahoot and Edmodo are used to conduct online tests.
- Faculty members create educational videos, video lectures and upload in LMS platform. Screen cast O'matic is used by faculty members for recording the lectures, which can later be streamed online for the benefit of students.

**Others** - Institution organizes webinars for students and faculty members on various topics. Students are encouraged to attend webinars organized by others as well for getting more knowledge.

The COVID-19 pandemic threw various challenges for the faculty and students in running the classes. We have overcome these by extensively using LMS platforms as faculty members used synchronous and asynchronous mode of teaching via Zoom and Google Meet.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide link for webpage describing the "LMS/ Academic management system"	View Document

# ${\bf 2.3.3}$ Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

Response: 19.44

#### 2.3.3.1 Number of mentors

Response: 173

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

### 2.4 Teacher Profile and Quality

#### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 83.92

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

# 2.4.2 Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

**Response:** 30.01

# 2.4.2.1 Number of full time teachers with $Ph.\ D.\ /\ D.M.\ /\ M.Ch.\ /\ D.N.B$ Superspeciality $/\ D.Sc.\ /\ D.Litt.$ year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
66	53	54	62	61

File Description	Document
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	View Document
Any additional information	View Document

# 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 8.67

#### 2.4.3.1 Total experience of full-time teachers

Response: 1517

File Description	Document
List of Teachers including their PAN, designation, dept and experience details	View Document
Any additional information	View Document

# 2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years

Response: 2.51

# 2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
2	1	0	2	0

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	<u>View Document</u>

#### 2.5 Evaluation Process and Reforms

# 2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

**Response:** 18

# 2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
5.73	7.5	14.5	24.67	37.61

File Description	Document
List of Programmes and date of last semester and date of declaration of results	View Document
Any additional information	View Document

### 2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

**Response:** 0.95

#### 2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1	6	20	28	76

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

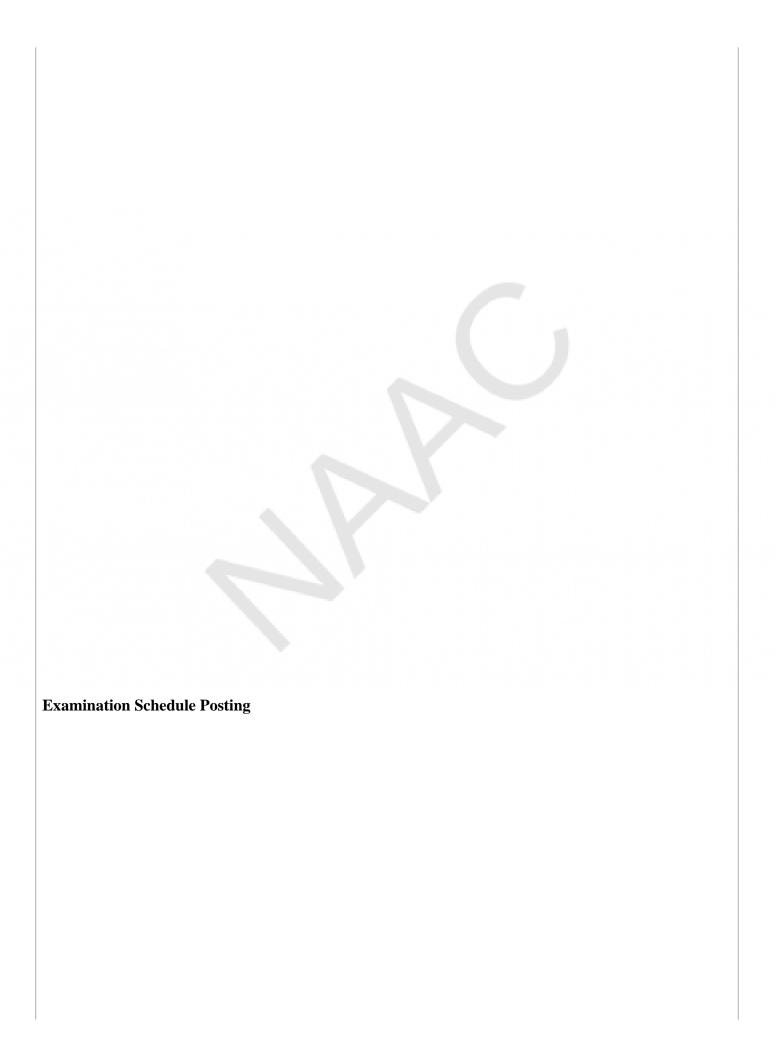
# 2.5.3 IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

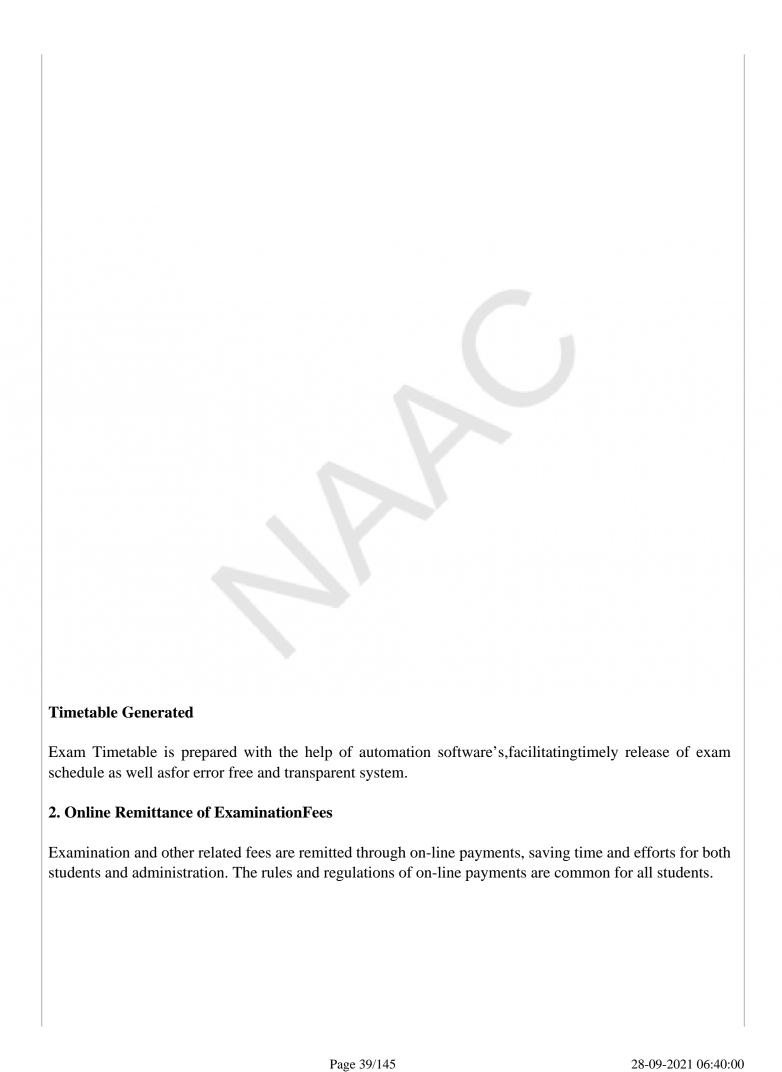
#### **Response:**

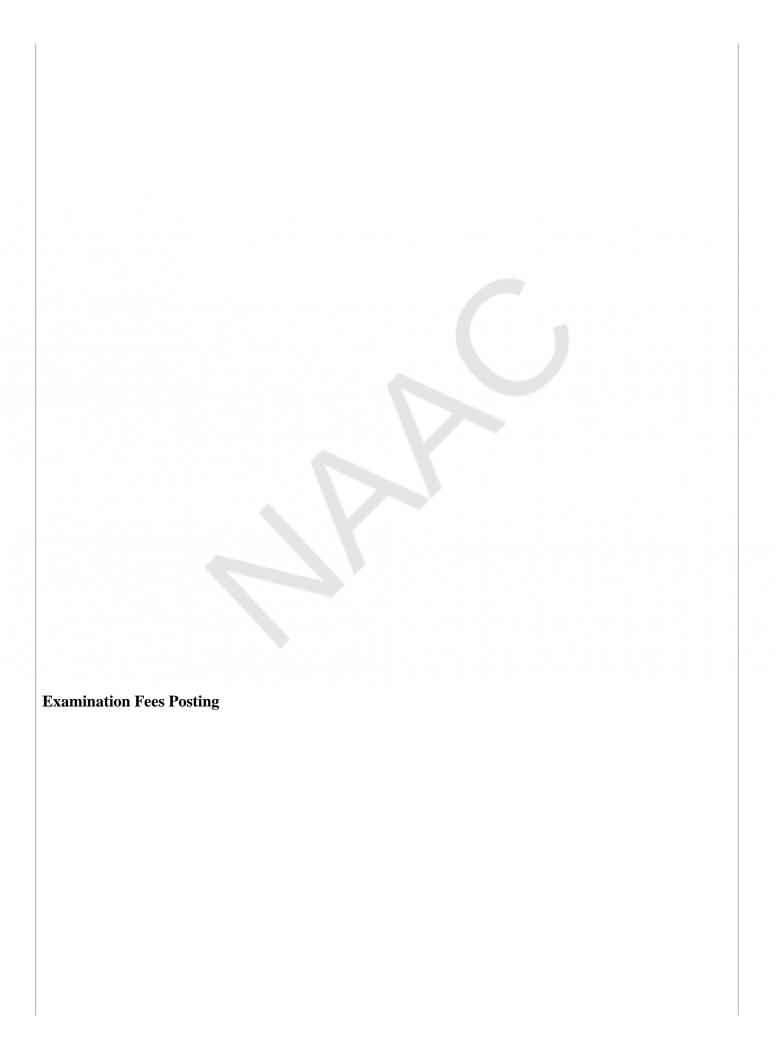
PMIST has been using indigenous software named BRAIN - Brilliant Resource for Academic Institutions for more than a decade, for conducting examinations with more transparency. Software is used in the following processes.

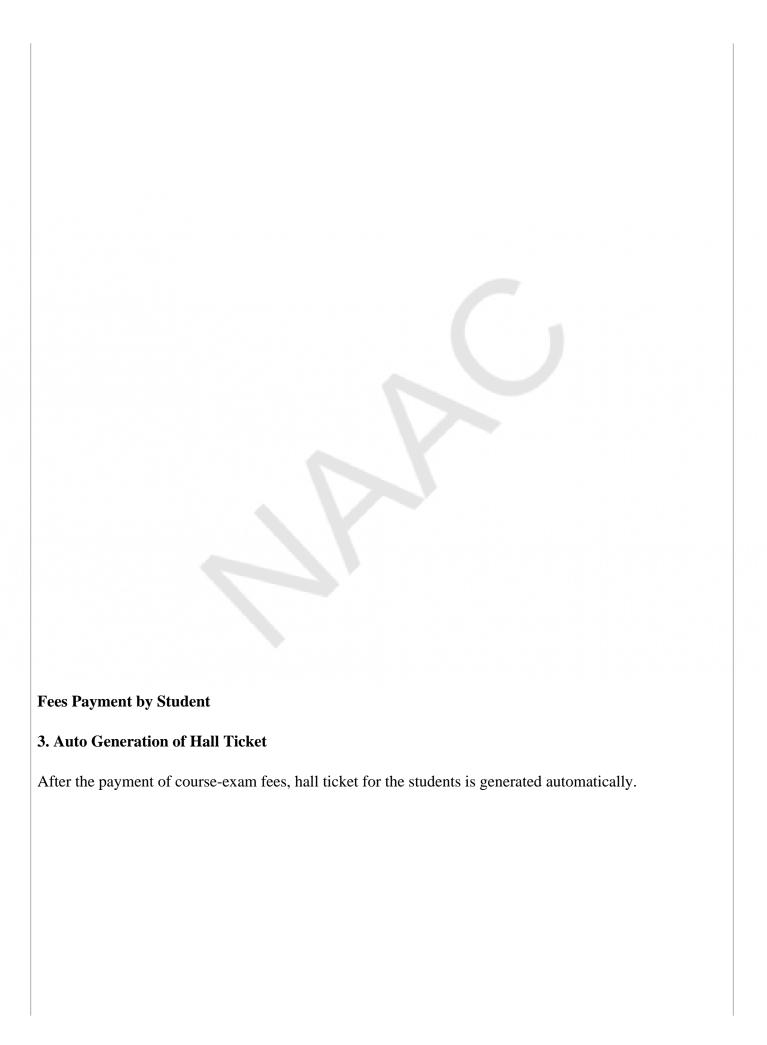
#### 1. Examination Schedule:

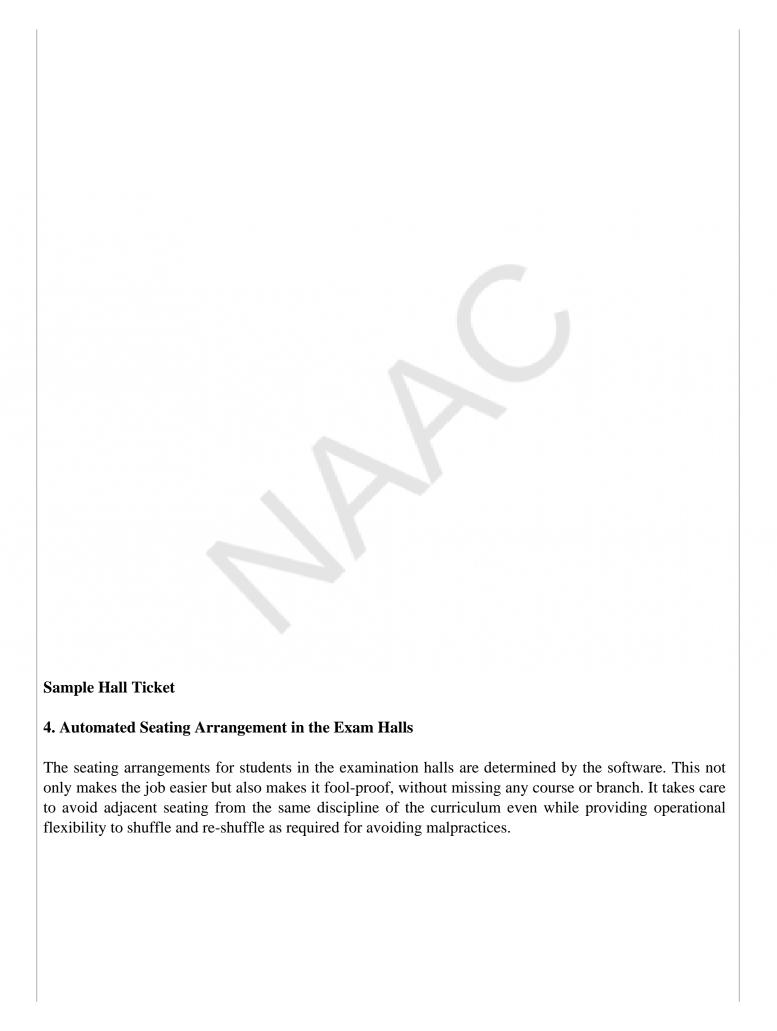
As envisaged in OBE Curriculum, the Formative and Summative Assessments are being conducted according to the Academic Schedule published. Summative Assessment is conducted after 90 days.

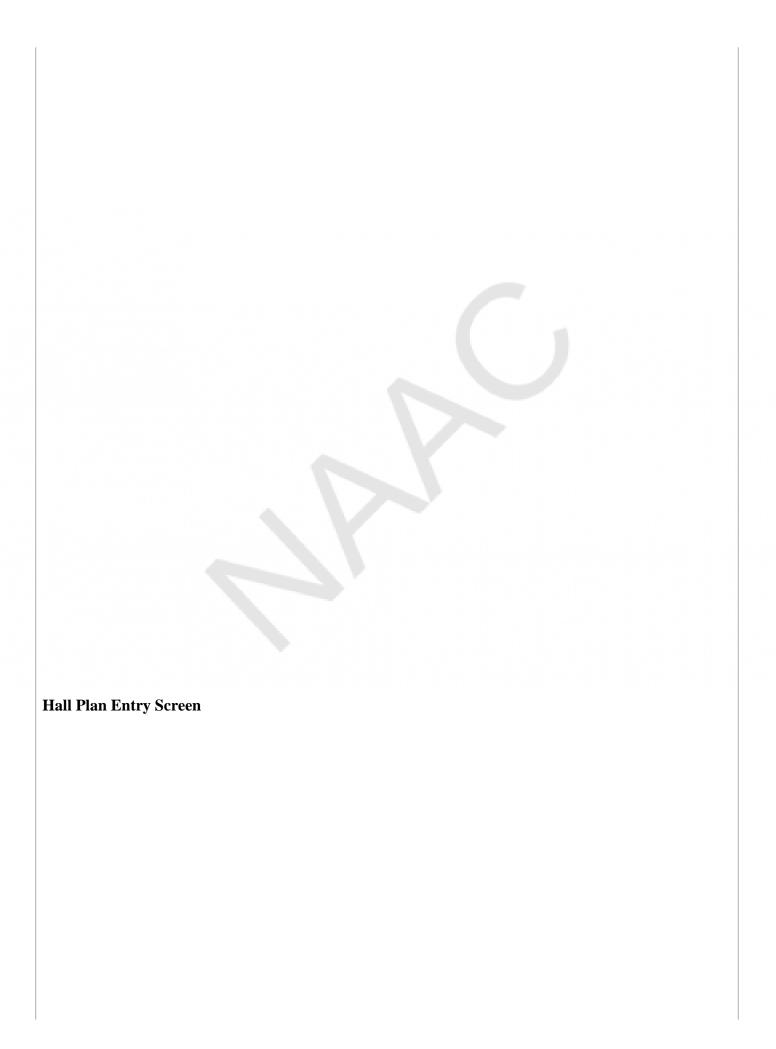






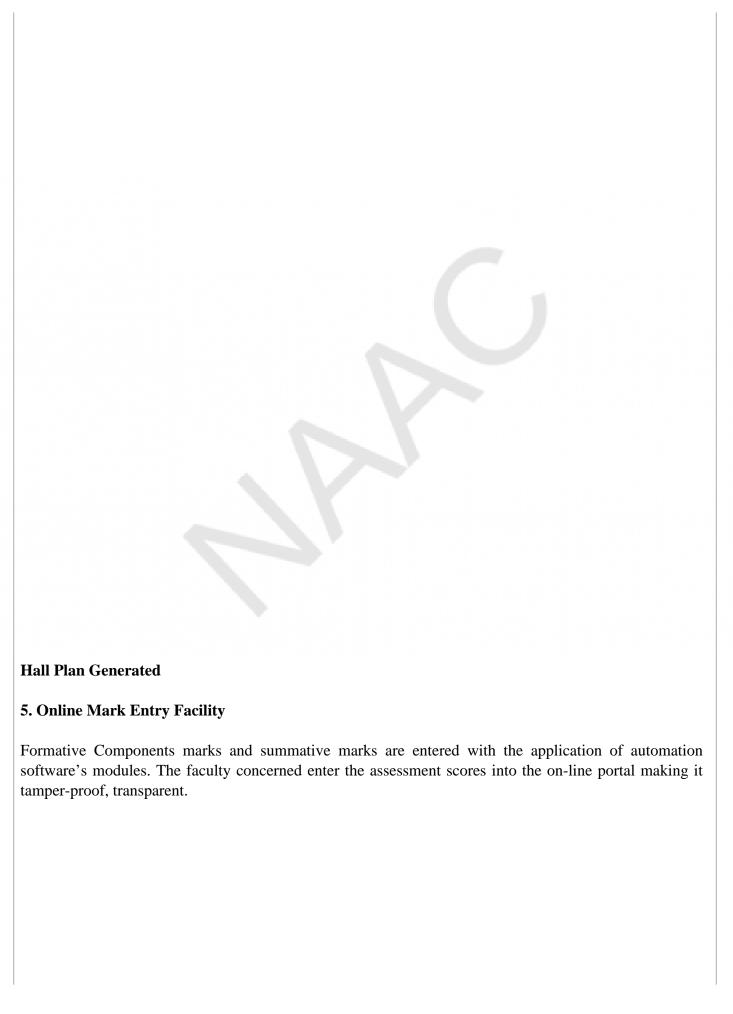


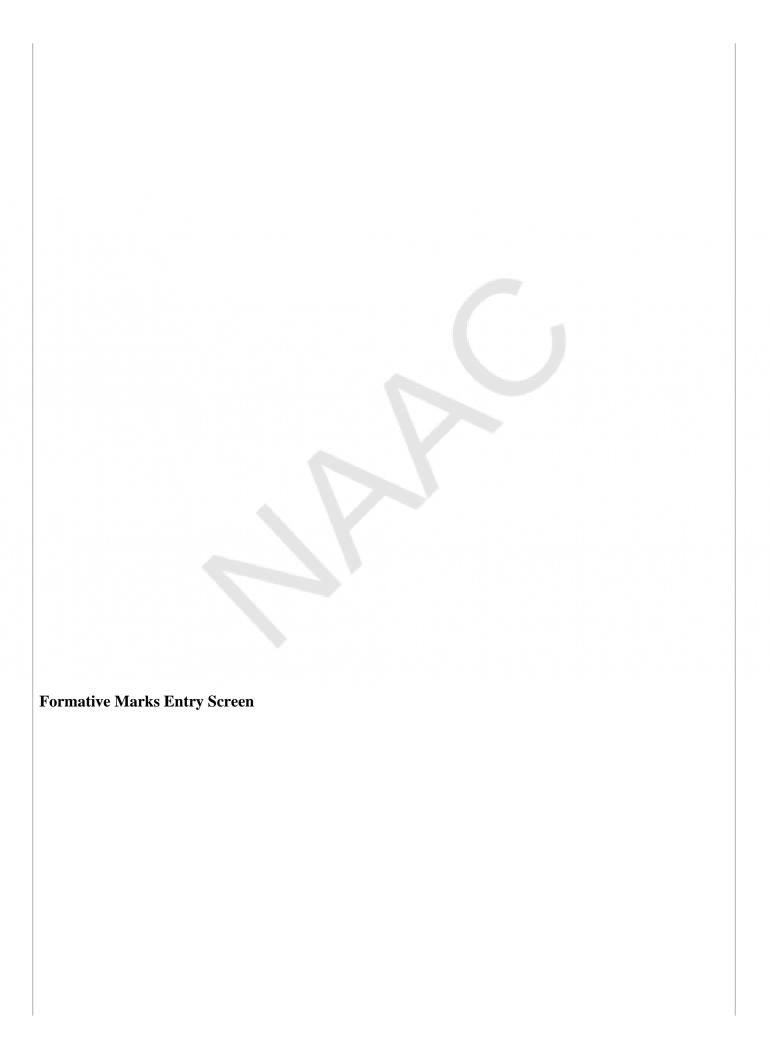


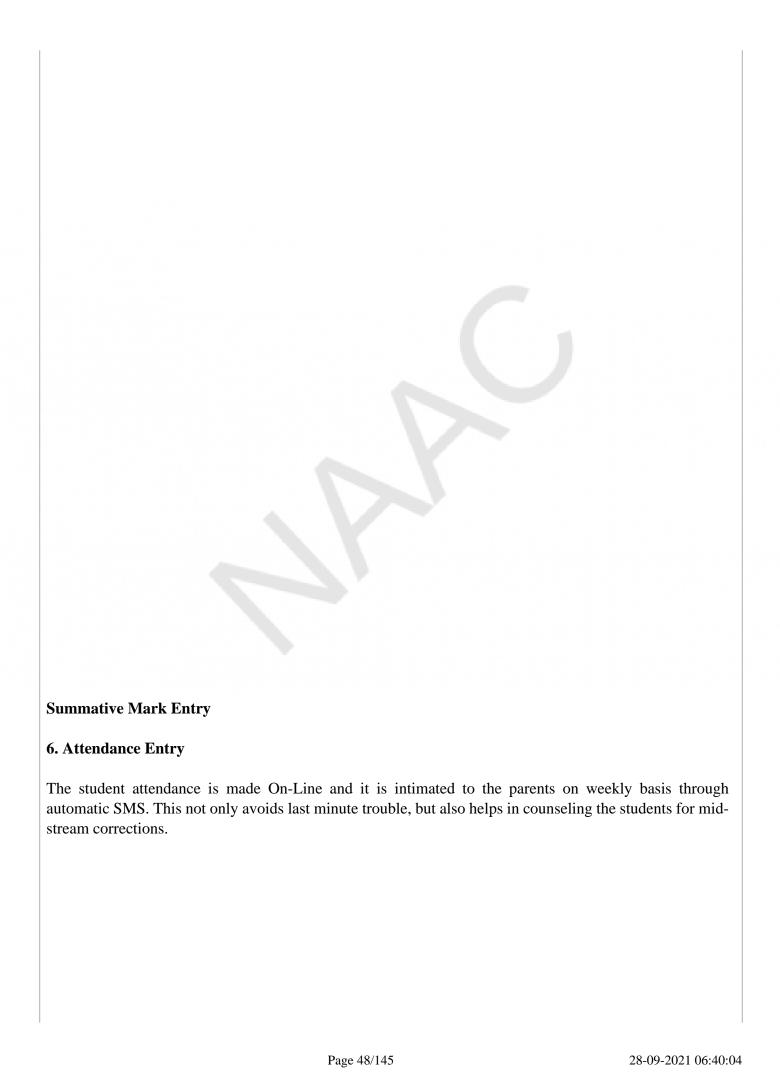


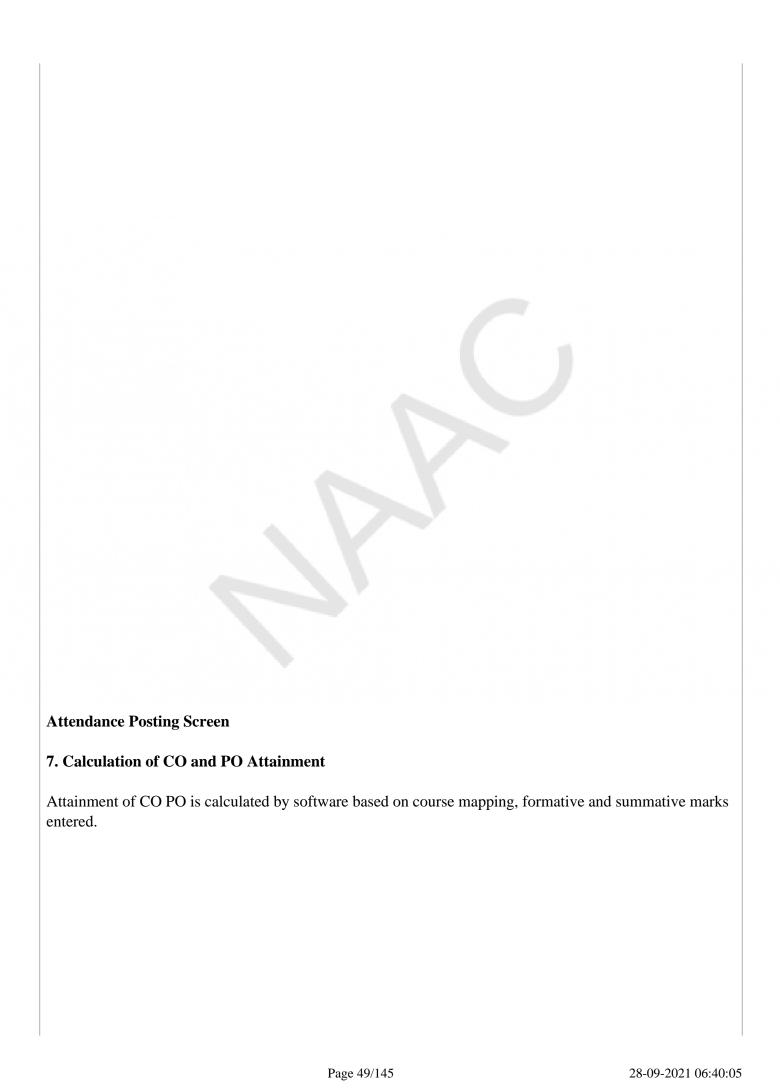


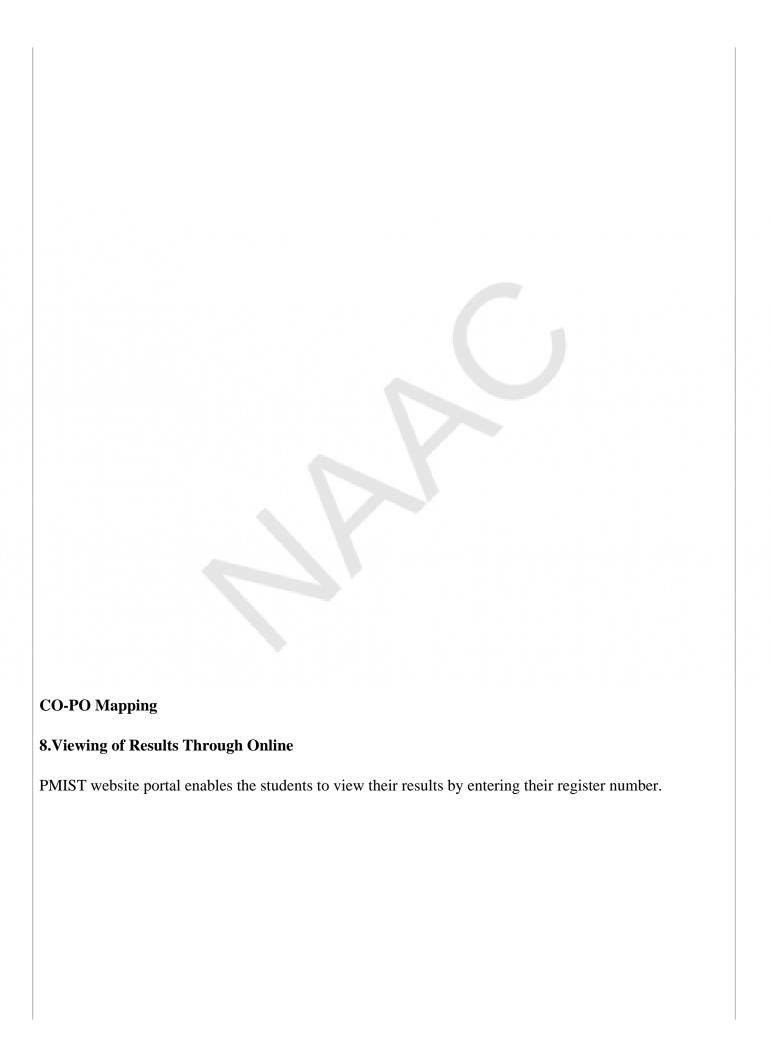


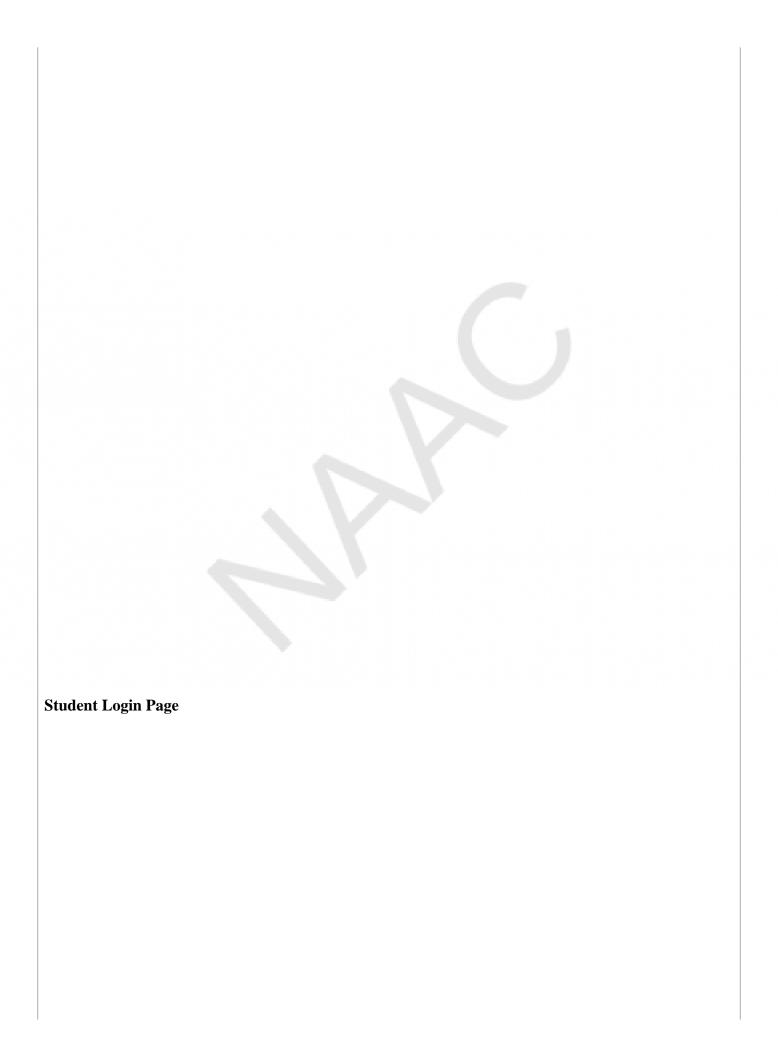


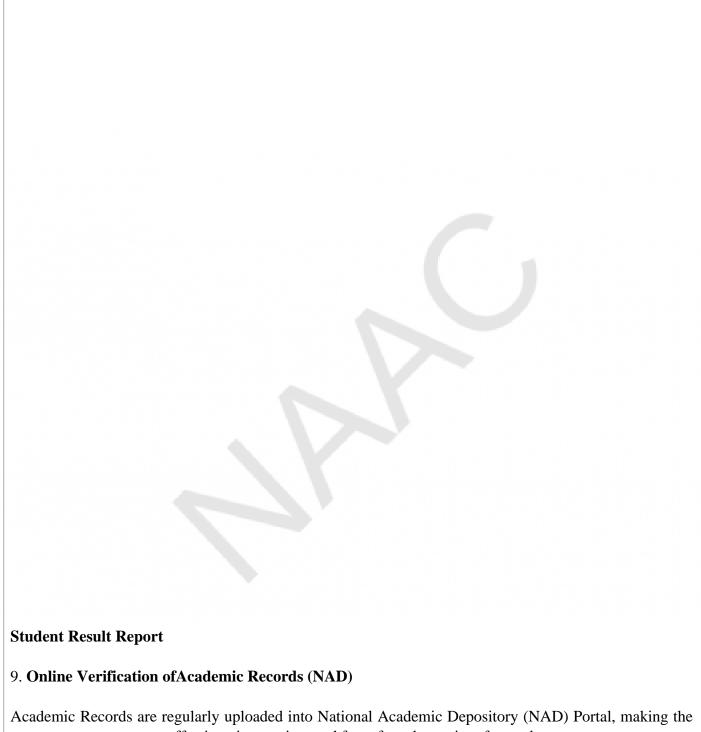












system transparent, cost effective, time saving, and for safe and security of records.

Besides IT integration, the following reforms are introduced in the examination system.

#### **Credit Transfer from MOOC Course:**

The students are encouraged to opt for MOOC / SWAYAM courses. The credits earned in MOOC courses are integrated with the scores of the regular courses.

#### **Use of Teslin Sheets**

As per UGC norms, the grade sheets and degrees are issued in Teslin sheets that are durable and long-lasting.

File Description	Document
Year wise number of applications, students and revaluation cases	View Document

#### 2.5.4 Status of automation of Examination division along with approved Examination Manual

**Response:** 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document
Annual reports of examination including the present status of automation	View Document

#### 2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

#### **Response:**

PMIST is following Outcome Based Education (OBE) from the academic year 2015-16.

- Programme Outcomes (POs) and Program Specific Outcomes (PSOs) are developed based on the guidelines given by the statutory bodies
- Course Outcomes (CO) are designed in such a way to realize the POs and PSOs
- Based on the COs, syllabus of a course is developed
- Course Outcomes are mapped with the POs and PSOs indicating the correlation strength
- Correlation strength ranges from 0-3, 0 indicates no relationship and 3 indicates strong relationship of CO with respect to PO.
- Mapping of Course Outcome with respect to the Programme Outcomes and Programme Specific Outcomes are represented in Course Articulation Matrix.



#### **Assessment Process:**

Course Outcomes are assessed by different instruments through the Formative and Summative assessments.

- Formative assessment is a Continuous Internal Assessment which is applied as a mechanism for monitoring the consistent, sustained learning outcomes of students in all programmes.
- Course teacher prepares assessment tools to assess the course outcomes.
- Formative and summative assessments are mapped to the COs of the course.
- Marks obtained in the various assessment tools give the attainment of CO.
- PO attainment is calculated based on the CO attainment.

#### **Outcomes:**

The level of Course outcome, Programme Outcome and Program Specific Outcome are calculated using software.

- A detailed summary of attainment of each Course Outcome is presented to the Head of Department.
- The Course Committee analyses the reasons for non-attainment of Course Outcome and recommends corrective action plan.

#### **Publicizing:**

Publicizing the POs, PSOs, and COs are done at various levels.

- Foundation programme is given to the students after their admission, during which the program POs and PSOs are explained well by the Head of the Department.
- Controller of Examinations elaborates the evaluation patterns used for different programmes.
- At the commencement of the semester, the students are given the course plan book containing the POs, PSOs and syllabus of courses of the semester including COs and the evaluation pattern of each course. Further, the respective course teacher explains the Course Outcomes and the evaluation pattern.

POs and PSOs are made available in the department webpage of the institute website, which is accessible using www.pmu.edu.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document

2.6.2 Attainment of Programme outcomes,	Programme specific	outcomes and o	course outcomes are
evaluated by the institution			

-						
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The attainment of Course Outcomes (CO), Programme Outcomes (PO) and Programme Specific Outcomes (PSO) of various courses pertaining to a specific programme are done based on Direct and Indirect Assessment methods.

#### 1. **Direct measure** is calculated through

- 1. Assignments, slip test, quiz, seminar, case study, group discussions or any other instrument used by the faculty members for Formative Assessment
- 2. Theory Examinations (Formative & Summative Assessment)
- 3. Laboratory Examinations (Formative & Summative Assessment)
- 4. Project / Models/In-Plant Training
- 2. **Indirect measure** calculated through
  - 1. Course Feedback

#### **Assessment of Course Outcomes (COs)**

• The attainment levels of COs are measured through the Formative Assessments and Summative

Assessments.

- Assessment tools are structured in such a way that each question maps to a specific CO and Learning Levels according to Blooms Taxonomy. Based on the marks scored by the students in each question, CO attainment is calculated.
- Each class is expected to attain 60% in each course outcome.

#### **Assessment of Programme Outcome (POs and PSOs)**

The CO-PO mapping indicates the significance of each CO with each PO, used for calculating the PO attainment level. Each CO is correlated with PO with different grade levels viz, strong, medium and low which are represented as 3,2 and 1 respectively. This correlation gives a (direct) measure for attainment of every PO.The student's feedback obtained provides input to the faculty for self-appraisal/ improvement / development.

- 1. Direct measure is based on the Course Outcome Attainment.
- 2. Indirect measure is based on the course feedback conducted to the students who have completed the programme.
- 3. Overall PO attainment is calculated with the ratio of 70:30 of direct and indirect measure.

File Description	Document	
Upload any additional information	View Document	
Paste link for Additional Information	View Document	

#### 2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 97.2

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 867

### 2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 892

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	View Document
Upload any additional information	View Document
Paste link for the annual report	View Document

### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process	
Response: 3.62	
File Description Document	
Upload database of all currently enrolled students	View Document

### Criterion 3 - Research, Innovations and Extension

#### 3.1 Promotion of Research and Facilities

3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

#### **Response:**

PMIST has a well-defined comprehensive research policy in place for ensuring highest quality standards in research, innovations and extension. The research policy meticulously aims at promoting scientific thinking, logic and ensuring amazing outputs in the emerging areas, that are of equal importance in both academics and scientific explorations.

The institute houses a well-equipped Central Instrumentation Centre and Centre of Excellence for promoting research and facilitates the procurement of new equipment(s), software, journals and research databases.

The Central Instrumentation Centre at the institute houses following facilities:

- Trinocular Stereo Microscope (Olympus) Funded by DST
- UV-Spectrometer
- e-Yantra Robotics lab: Established with support of IIT-B
- Scanning Electron Microscopy (SEM TESCON VEGA): Funded by DST-Nanomission
- Raman Spectroscopy: Funded by DST –Nanomission
- Thermal Gravimetric Analysis (TGA) Funded by DST
- Atomic Force Microscopy (AFM) Funded by DBT
- Multi Syringe (Electro spinning): Funded by PMIST

#### **Centres of Excellence:**

#### 1. Centre of Excellence for Training and Research in Automation Technology (CETAT)

This Centre aims at providing hands-on training in Industrial Automation to the students and faculties for upgrading their technical skills, essential for research progress. PMIST has established this Centre with an investment of Rs.1.63 Crores and is supported by BOSCH Rexroth (India), Bengaluru with instruments worth of Rs.3.27 Crores.

The following four laboratories have been set up at the Centre.

- 1. Hydraulics laboratory
- 2. Pneumatics Laboratory
- 3. Programmable Logic Controller Laboratory
- 4. Sensorics Laboratory

Using the central instruments facilities, the defence sensitive project of Indian Air Force Station, Thanjavur has been successfully completed based on MoU between the IAF and PMIST on 10th May 2016 with a clause that bulk production shall also be undertaken by the institute. Currently, the tender process for bulk

production of this product is under active consideration at Air Headquarter.

#### 2. Centre of Excellence for Next Generation Networks:

PMIST in collaboration with TEJAS Networks, Bengaluru has established a Centre of Excellence for Next Generation Networks in 2013 for inculcating training to students and faculty in Optical Communication and Networking Technologies.

#### 3. Centre of Energy and Environment:

The Centre for Energy and Environment (CEE) in PMIST plays a significant role in facilitating innovative research activities in the area of Energy and Environment. This centre is backed by various renewable energy gadgets such as Biomethanation Plant, Solar energy and Biomass Gasifier Unit.

#### 4. Veeramani Mohana Centre for Quality of Life Engineering Research (VMCQLER):

This centre is involved in developing rural traditional herbal products with modern scientific approach.

#### **Initiatives to promote Research:**

- Provision for Seed Money for initiating basic and fundamental research
- Promotion of Interdisciplinary research culture
- Appreciation Awards for the faculty excelling in research
- Technology Business Incubator for promoting startups and entrepreneurs
- Local and need based research
- Research incentives for publication and patents
- Subscriptions to IEEE journals (online), Proquest (online), etc.,
- Free access to Urkund software for Plagiarism checking

File Description	Document	
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption		
Any additional information	View Document	
URL of Policy document on promotion of research uploaded on website	View Document	

### 3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 2.03

### 3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
10.16	0	0	0	0

File Description	Document
Minutes of the relevant bodies of the University	View Document
Institutional data in prescribed format	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

### 3.1.3 Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 0

# 3.1.3.1 The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

### 3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response: 4

3.1.4.1 The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	0	1	1

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 3.1.5 Institution has the following facilities to support research

- 1. Central Instrumentation Centre
- 2. Animal House/Green House
- 3. Museum
- 4. Media laboratory/Studios
- 5. Business Lab
- 6. Research/Statistical Databases
- 7. Mootcourt
- 8. Theatre
- 9. Art Gallery

**Response:** A. 4 or more of the above

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	View Document
Upload any additional information	View Document
Paste link of videos and geotagged photographs	View Document

### 3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

**Response:** 10.53

### 3.1.6.1 The Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognitions by national and international agencies.

Response: 2

File Description	Document
Institutional data in prescribed format	View Document
e-version of departmental recognition award letters	View Document

#### 3.2 Resource Mobilization for Research

3.2.1 Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response: 27

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
14	1	4	1	7

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

### 3.2.2 Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response: 64.65

3.2.2.1 Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
3.20	4.30	27.13	21.72	8.30

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for research projects sponsored by government	View Document

### 3.2.3 Number of research projects per teacher funded by government and non-government agencies during the last five years

Response: 0.46

### 3.2.3.1 Number of research projects funded by government and non-government agencies during the last five years.

Response: 31

#### 3.2.3.2 Number of full time teachers worked in the institution year-wise during the last five years..

Response: 335

File Description	Document	
Supporting document from Funding Agency	<u>View Document</u>	
Institutional data in prescribed format	View Document	
Any additional information	View Document	
Paste Link for the funding agency website	View Document	

#### 3.3 Innovation Ecosystem

### 3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

#### Response:

PMIST has developed a culture of innovation in academic, research and entrepreneurship and the institute has transformed its innovative ideas through the Periyar Technology Business Incubator (TBI). Department of Science and Technology, Government of India about Rs. 4.77 crore.

- It facilitates the promotion of entrepreneurship, innovative product development among the students, faculty and especially among Women.
- PMIST encourages Innovation as part of the curriculum across all disciplines of Engineering, Technology, Arts, Science and Management.
- The alumni have incubated start-ups in the area of Drones, Automation, Biotechnology, fabrication, Herbal products and Nutraceuticals
- Startups are borne out of PMIST and neighbouring institutions are also utilized Periyar TBI. They are motivated in identifying local problems as opportunity and are encouraged to operate in the neighborhood.
- It provides incubation facility at a subsidized cost for the students of PMIST.
- It assists in the process of filing for patents for both faculty and students.
- Financial assistance is provided for students attending Hackathons and competitions related to Innovation and Entrepreneurship. Periyar TBI provides financial assistance to the students for commercially viable projects.

- PMIST encourages the farming community to practice Agri business. In addition, it has facilitated the formation of a 1000 member Farmer Producer Company in Thanjavur District through Periyar TBI.
- Periyar TBI developed and patented "An Electro-Pneumatic Projectile Launching Training System" by engaging the students, faculty members and startups.

#### **Achievements of Periyar TBI**

A few student projects such as buffing process, insect repellence, microbial consortium for dehairing of animal hides, drone construction were successfully transferred to Startup establishments.

- Few startups received funding and awards from prestigious schemes/programmes like DST-Lockeed Martin India Innovation Growth Programme, BIRAC etc.
- Currently four startups are chosen for making simulators to Indian Air Force under Make in India programme.

#### **PMIST Institution Innovation Council**

- Institute has formed MoE AICTE supported Institution Innovation Council (IC-201810657) and it is actively participating and organizing various programmes such as leadership talks, Internal Hackathon competitions, Concept of Proof competitions, online courses in Intellectual Property Rights at World Intellectual Property Organization, Geneva.
- The Institution Innovation Council (IIC) and Entrepreneurship Society (E-Cell) coordinates with the Incubator and organizes programmes
- It has awarded four stars in 2019 and 5 stars in 2020. Ms.B.Abarna, B.Tech(Biotechnology) has been awarded Rs.1 lakh as innovation fund from BIRAC, DBT, Govt. of India with SRISTI and NGO.

Centre of Excellence in Training and Research in Automation Technologies (CETAT) and its facility is instrumental in winning a Research Developmental project from Indian Air Force. Outcome of this project was a simulator for providing training for the gun men of IGLA missile.

PMIST has also introduced credit courses in Entrepreneurship Development and Intellectual Property Rights (IPR) as core/elective courses for all UG and PG students.

In 2020, PMIST was awarded Atal Ranking on Institution on Innovation Achievements (ARIIA) is categorized as "Band B" institution (rank between 26 - 50).

File Description	Document
Paste link for additional information	<u>View Document</u>

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 47

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
16	08	10	07	06

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>

3.3.3 Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response: 10

3.3.3.1 Total number of awards / recognitions received for *research* / innovations won by institution / teachers / research scholars / students year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
2	2	2	2	2

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e- copies of award letters	<u>View Document</u>

#### 3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

**Response:** A. All of the above

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards 1.Commendation and monetary incentive at a University function 2. Commendation and medal at a University function 3. Certificate of honor 4. Announcement in the **Newsletter / website** 

**Response:** C. 2 of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e- copies of the letters of awards	View Document

#### 3.4.3 Number of Patents published / awarded during the last five years.

#### Response: 11

3.4.3.1 Total number of Patents published / awarded year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
8	3	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

#### 3.4.4 Number of Ph.D's awarded per teacher during the last five years.

#### Response: 1.42

3.4.4.1 How many Ph.D's are awarded within last five years.

Response: 84

3.4.4.2 Number of teachers recognized as guides during the last five years

Response: 59	
File Description	Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>
URL to the research page on HEI web site	View Document

### 3.4.5 Number of research papers per teachers in the Journals notified on UGC website during the last five years

#### **Response:** 1.1

### 3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
76	60	18	25	40

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

# 3.4.6 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

**Response:** 0.18

### 3.4.6.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
8	2	14	7	4

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 3.4.7 E-content is developed by teachers:

- 1.For e-PG-Pathshala
- **2.For CEC (Under Graduate)**
- 3.For SWAYAM
- **4.For other MOOCs platform**
- 5. For NPTEL/NMEICT/any other Government Initiatives
- **6.For Institutional LMS**

**Response:** E. None of the above

File Description	Document
Institutional data in prescribed format	View Document

### 3.4.8 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

**Response:** 3.5

File Description

Bibliometrics of the publications during the last five years

Any additional information

Document

View Document

View Document

### 3.4.9 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response: 11

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

#### 3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

#### **Response:**

Periyar Maniammai Institute of Science and Technology (PMIST) offer consultancy services since its inception under **P**eriyar **E**ngineering **C**onsultancy **S**ervices (PECS). PMIST has a well defined, comprehensive and transparent policy on consultancy services which is revised and periodically updated.

The Institute continuously motivates the faculty members, research scholars and staff and students to associate with consultancy projects catering to industries and other research organizations/academic institutions. The institute is committed to render high quality and affordable consultancy services to industries and other organizations.

Faculty are motivated by providing allowances such as TA and DA, grant of on duty, transparent revenue sharing procedure to undertake consultancy projects. Due consideration is given while evaluating the Academic performance of the faculty involved in consultancy.

#### **Salient Features of the Consultancy Policy**

The salient features of the consultancy policy are:

- Consultancy Advisory Committee reviews and updates the policy periodically
- Procedures and role of the members of the consultancy work are defined
- Revenue sharing scheme for various types of projects under consultancy
- 'Earn while you learn scheme' exists for the students
- Standardized templates exist for easy process

PECS a few notable Government consultancy projects under "Smart City-Thanjavur", Soil exploration in Indian Air Force Station (IAF), Assets mapping of Thanjavur District in Indian Space Research Organization Bhuvan portal (ISRO) Moat Survey, Digitization of heritage structures and building material testing services, Digital land survey and many other work for the construction industries in this region and there are also few notable Non-Government Consultancy projects.

The revenue generated through consultancy exhibits the significant growth of the institution during the last five years.

File Description	Document
Upload soft copy of the Consultancy Policy	View Document
Upload minutes of the Governing Council/ Syndicate/Board of Management related to consultancy policy	View Document
Upload any additional information	<u>View Document</u>
Paste URL of the consultancy policy document	View Document

### 3.5.2 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 0

### 3.5.2.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document

#### 3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.

#### **Response:**

PMIST provides platform for students to participate in various co-curricular, extracurricular and out-reach activities. These activities provide a platform for students to interact with various sections of society and understand challenges, firsthand.

#### PERIYAR PURA

Dr.A.P.J.Abdul Kalam during his tenure as the President of India, envisioned the transformation of Rural India through his ambitious mission "Providing Urban Amenities to Rural Villages (PURA)" in the year 2003. Sixty Seven villages have been adopted under Periyar PURA for carrying out outreach, extension and research activities including:

- Training for economic developmental activities.
- Residential rural camp for farmers, women and children in villages.
- Entrepreneurial activities and de-addiction awareness programmes.
- Tribal camps were organized to resolve their issues in Nilgiri District.
- 40 medical camps were organized in neighborhood Periyar PURA villages. More than 1000 women
  were screened for breast and cervical cancer by medical professionals from Periyar Medical
  Mission, Chennai and Periyar College of Pharmaceutical Sciences, Trichy and Harshamitra
  Hospital, Trichy.

#### **NSS**

Students participate in various programmes conducted at PURA villages such as Awareness Programme on Malnutrition and Legal Rights, Fire Safety, waste management and free eye camps.

#### CHILD LINE

The CHILDLINE Nodal organization of Thanjavur District has been working for the care, protection and rights of the children.

- Provided training for three district police personnel on POCSO Act, Juvenile Justice Act and legal rights that protects children.
- Organized awareness programmes and created Network, linkages with allied departments working for child care and protection

#### NCC

Suitable Environment is extended to students for motivating the cadets for taking up career in the Armed Forces. NCC cadets of PMIST participate in the regular activities like parade classes and outside activities.

#### YRC and Red Ribbon Club activities:

Blood donation camps were regularly organized with student's participation.

#### Unnat Bharat Abhiyan (UBA):

As a Participating Institution of UBA five villages were adopted. In this students are involving to conduct programmes for community activities, survey and participating in Gram Sabha.

#### Periyar Community Radio (Periyar FM 90.4 MHz)

Programmes concerning Health, Education, Agriculture and Women empowerment are broadcast through the community Radio covering a radius of 25 km.

#### **Impact of Extension and Outreach Programmes**

- The expert group of the Shyama Prasad Mukherji Rurban Mission (SPMRM) headed by the Joint Secretary of Ministry of Rural Development, GoI visited the Periyar PURA villages and appreciated the activities. The Joint Secretary reported that "Periyar PURA model is being sustained by committed participation and leadership provided by the Periyar Maniammai University through active engagement of students and staff members with villagers."
- The UGC and AICTE review committee which visited PMIST during January 2018 observed that, "It is heartening to observe the commitment of the Institute to underprivileged, women empowerment and eco-friendly environment. There is no doubt that institute is working sincerely to contribute to the nation and region building. The village adoption programme along with extension activities is worth mentioning as one of the major contribution of the institute".

File Description	Document
Upload any additional information	<u>View Document</u>

3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years

Response: 0

3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copy of the award letters	View Document

3.6.3 Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs).

**Response:** 73

3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc. (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs) year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
10	16	21	13	13

File Description	Document
Reports of the event organized	View Document
Institutional data in prescribed format	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 15.18

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
153	372	719	627	580

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document

# 3.7 Collaboration

3.7.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

Response: 50.2

3.7.1.1 Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
12	75	65	56	43

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Copies of collaboration	View Document

3.7.2 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

**Response:** 37

3.7.2.1 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
12	7	7	8	3

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the MoUs with institution/ industry	View Document

# **Criterion 4 - Infrastructure and Learning Resources**

# 4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

# **Response:**

PMIST is spread over in a lush green campus located in 114.85 acres with a built up area comprising 9,09,017 sq.m. It includes various departments, administrative blocks, allied services and residential facilities for students and staff. The organizational infrastructure consists of:

- Technology Block I (TB I)
- Technology Block II (TB II)
- Education Block (ED)
- Architecture Block (ARCH)
- Periyar Technology Business Incubator (Periyar TBI)
- Periyar Knowledge Centre (PKC)
- Staff Quarters
- Women's and Men's Hostels
- Sports complex and Open Play Grounds
- Hospital, Post office and Bank
- Cafeterias and Stationery stores
- Parking Areas and Security Cabins
- Lawn, Plantation and Water bodies



#### **Class Rooms:**

- PMIST has 104 class rooms and drawing halls fully equipped with ICT facilities such as LCD projectors, Wi-Fi connectivity, smart boards and white boards to enable hassle -free teaching learning process.
- The class rooms and other teaching facilities are available as per the norms of the respective regulatory bodies for UG & PG programs.

# **Laboratories:**

- PMIST has 82 teaching-learning laboratories fully equipped with State of Art equipments in accordance with the norms and standards prescribed by the regulatory authorities such as UGC, AICTE, CoA, NCTE, etc,.
- Specialized laboratories like Data Network lab Optical Networking Technology established in Centre of Excellence for Next Generation Networks (CENGN) in collaboration with Tejas

Networks, Bengaluru; Hydraulics lab, Pneumatics lab, Programmable Logic Controllers lab and Sensorics lab (Centre of Excellence for Training and Research in Automation Technology - CETAT), e-yantra lab (Robotics lab in association with IIT Bombay) to promote research and consultancy activities in collaboration with industries.

• Scanning Electron Microscope (SEM) Laboratory and Raman Spectro Photometer, Energy and Environment Laboratory, Building Material Research unit & workshop, Central Instrumentation Laboratory and Central Research Laboratory are the other special laboratories available in the campus.

# **Available Computing Equipments and Facilities:**

- 1403 numbers of desktops and laptops with required accessories, out of which 945 are exclusively used for teaching and learning process
- 1 GBPS bandwidth internet and Optical Fiber Connection for 5300 meters throughout the campus and intranet system
- Uninterrupted Wi-Fi network services with 77 access points and 6000 users capacity
- 4888 GB Server Storage capacity
- Security systems such as: Firewall DELL Sonic Wall NSA 5600, Router Cisco 2800 & Juniper Networks MX80, Antivirus - Kaspersky Endpoint and Wi-Fi authentication server
- Student Computer ratio is maintained as per regulatory norms.
- 14 System software and 80 Application software
- 104 numbers of laser printers, color printer and plotter with A4 to A0 size printing capability

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

# 4.1.2 The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

#### **Response:**

The mission of the institute is 'Inculcating universal values, self respect, gender equality, dignity and ethics'. In order to translate the mission into reality, PMIST endeavours to organize programs, events and various activities by engaging the students. Necessary infrastructure facilities are adequately made available in the campus.

#### **Facilities for Cultural activities:**

- PMIST has 12 clubs and societies, with Faculty advisors, for students to demonstrate their talents in various traditional arts and culture, literary works, etc.
- The Open Air Theater (Muthamizh Arangam) with capacity of 5000, Multipurpose Indoor Stadium

- with capacity of 1200 and 15 other auditoriums / seminar halls with a seating capacity ranging from 100 to 1400, are facilitating for cultural activities of students.
- An annual event named PEACE (Periyar Annual Cultural Event) is organized for the students to exhibit their talents
- National festivals like Republic Day, Independence Day, Harvesting festival (Pongal), etc. are organized.

# Yoga and other activities - facilities:

- Yoga facilities are available in the campus and hostels as well. Adequate number of Yoga mats and qualified Yoga trainers are available. **International day of yoga** is celebrated every year.
- *Silambam*, a powerful traditional martial art for self-defence using bamboo stick, training is given to interested students by professional trainers. Adequate numbers of bamboo sticks (160 nos.) are available for Silambam training.
- Training in **Karate**, another type of defence game, is provided for the students, especially for girls by experienced trainers.

# **Sports Facilities:**

Well-laid courts for games like Basketball, Badminton, Ball Badminton, Volleyball, Kabaddi, Kho Kho are available. Football fields and 400m standard Athletic tracks are available. Multipurpose Indoor Stadium is provided with indoor games like Badminton, Basketball courts, Volleyball, Chess, Table tennis, modern gymnasium, yoga hall and carrom. All hostels are facilitated with gymnasium, play fields and board games. Such facilities are optimally used every day by students and staff members.

Multipurpose Indoor stadium constructed in 2004 with a floor area of 1105.35sq.m provides the following facilities:

Sl. No.	Description of Sports and Year of Establishment	Nos.	Area
1.	Basketball Court, 2004	1	700 sq.m
2.	Badminton Court, 2004	4	4 x 120 sq.m
3.	Gym (with Fitness Equipments, Weight lifting sets)	1	251 sq.m
	(2004, 2010) with 55 equipments		
4.	Table Tennis (2005 & 2016)	6	6 x 50 sq.m
5.	Chess	20	-
6.	Carrom	12	-
7.	Yoga Hall, 2004	1	850 sq.m

The outdoor play fields and court facilities are established over 17066 sq.m area in 1990 and added further.

Sl. No.	<b>Description of Sports and Year of Establishment</b>	Quantity	Area
1.	400 meters Standard Athletic Field, 1995	1	28,000 sq.m
2.	Basket Ball court, 2003	1	700 sq.m
3.	Ball Badminton court, 2008, 2014	3	3 x 300 sq.m
4.	Badminton court, 2004	5	5 x 120 sq.m
5.	Volleyball court, 2010 & 2017	3	3 x 150 sq.m
6.	Kabaddi court, 2010 & 2017	2	2 x 120 sq.m
7.	Football Field, 2004	1	16000 sq.m

File Description	Document
Upload any additional information	View Document
Geotagged pictures	<u>View Document</u>
Paste link for additional information	View Document

# 4.1.3 Availability of general campus facilities and overall ambience

### **Response:**

The PMIST campus has vibrant and stimulating eco-friendly environment which makes the ambience pleasant.

### **Hostel:**

- Hostels with mess facility in a buildup area of 29308 sq.m one men's hostel with 185 rooms and three women's hostel with 367 rooms. Rooms in the women's hostel are provided with attached toilet and bath rooms to ensure personal hygiene and safety. TV halls with DTH, gym, play courts and library are available to enable the students to spend their leisure time
- All the hostels have safe hot & cold drinking water facilities with RO plants, solar water heaters for bathing and kitchen. 24 hour electricity, water supply, Wi-Fi connectivity, hospital service and vehicle for emergency.
- Sick rooms in all hostels to provide necessary care to the students
- Laundry facility in all hostels
- Centralized modern kitchen and spacious dining halls are attached within the hostel.

### **Residential Quarters:**

Staff quarters are available inside the campus. Allotment is made on request basis. In addition, separate fully furnished rooms are available in all hostels for the unmarried staff members on request.

#### **Guest House:**

Two guest houses are available to accommodate the visiting faculty and guest. In addition, guest room facilities are available in both women and men's hostels.

#### **Hospital:**

PMIST has 24x7 functioning hospital with 16 beds located in a 407 sq.m buildup area inside the campus with full time medical officer and two Para- medical staff. Ambulance services are available.

### **Periyar Community Radio:**

To empower the local rural community, *Periyar Community Radio 90.4 MHZ* started on September 2007, which extends its service up to 25 km radial distance in and around the institute.

# **Periyar Technology Business Incubator:**

Periyar Technology Business Incubator was established in the year 2006 with Herbal health as a core thrust area from grant in aid project of National Science & Technology Entrepreneurship Development Board with the support of Ministry of Science & Technology, Government of India.

### **Other Allied Services:**

- Post Office is located inside the campus with a build up area of 119 sq.m.
- Core Banking facility is available inside the campus with a buildup area of 550 sq.m with ATM and CDM facilities
- Transportation facility for students and staff with 17 buses, one tempo traveler and two vans.
- Covered vehicle parking areas for each block
- Institute's printing press for the publication of books and study materials
- 24x7 security facilities with male and female security personnel at all vital points
- Ramps, elevators and toilets in all buildings to facilitate barrier free mobility for persons with disabilities
- Stationery store and photocopier facilities with internet connectivity
- Cafeterias in the vicinity of main academic blocks
- Electrical power backup with standby power generators (8 Generators for 625 KVA) and 18 UPS with capacity of 96 KVA.
- 153 Surveillance cameras with 17 DVRs.
- 203 fire safety equipments and gadgets
- 17 units of Solar water heaters with 6000 liters storage capacity in the residential buildings
- Telecommunication service with NGN-OCB exchange by BSNL and 4G tower by Air Tel
- Helipad for the VIP visit
- Driving school for students
- Day care centre

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

# 4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 12.7

# 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
125.12	111.35	109.17	30.50	98.03

File Description	Document
Upload audited utilization statements	<u>View Document</u>
Upload any additional information	View Document
Institutional data in prescribed format	View Document

# 4.2 Library as a Learning Resource

# 4.2.1 Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

### **Response:**

Arjun Singh Library is the central library of the Institute and has been automated the services with indigenously developed library management software solution BRAIN. It provides a user-friendly interface for searching, locating and the availability of library resources. RFID technology which is integrated with BRAIN software is used for digitizing library services for issue of books and prevention of unauthorized handling.

Online Public Access Catalogue (OPAC), a web-based search interface for students and staff, provides search optimization of the library resources. A dedicated well equipped digital library with 70 nodes is housed in the central library to access the e-resources. Inter-Library Loan (ILL) is provided to the users through DELNET and Tamil University.

The Ph.D. theses of students are added to the Shodhganga service from INFLIBNET Centre (open national online library), a digital platform for research students to deposit their Ph.D. theses and make it available

open to researchers. So far, PMIST uploaded 80 numbers of theses in this platform.

E-Alert service assists faculty and students in keeping up-to-date with current research in specific areas of interest.

Arjun Singh Library has a rich collection of books, journals, dissertations, back volumes etc. It subscribes to various online resources such as E- journals (IEEE, ASCE) and E- databases (Proquest, J-Gate). In addition to the Arjun Singh Library, Department library in every Department keeps the collections of reference books, projects and theses. The Department libraries are digitally connected to the Central Library.

In addition, the Arjun Singh Library has membership with British Council Library, Tamil University and DELNET.

Urkund anti-plagiarism software is available for plagiarism check of theses, research articles, publications and other documents.

Arjun Singh Library is housed in three floors in the iconic building Periyar Knowledge Centre with built area of 2619.46 sq.m. The seating capacity is 640. The library has a collection of 42834 titles and 93107 volumes. Total number of national & international Journals (Hard and Soft) is 123. Total number of Magazines is 205.

The Digital facilities in Arjun Singh Library have been used by 265 users per day on an average.

Memberships in other professional bodies:

- Indian Society for Technical Education
- Computer Society of India
- Institution of Engineers (India)
- o All India Management Association, New Delhi
- Confederation of Indian Industry
- Association of Indian University
- Indian Geotechnical Society

# **Other Special Services:**

- New arrival display.
- News papers and magazines for reference.
- Digital Repository comprising question papers, dissertations and theses.
- Reprographic facility.
- Photocopying facility
- Browsing facility
- Rare Book Collections section

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

# 4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

**Response:** A. Any 4 or more of the above

File Description	Document
Institutional data in prescribed format	View Document

# 4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 28.71

4.2.3.1 Annual expenditure for the purchase of books and journals including e-journals year-wise during last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
20.04	18.56	22.67	8.95	73.32

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Audited statements of accounts	View Document
Any additional information	<u>View Document</u>

# 4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 25.16

# 4.2.4.1 Number of teachers and students using library per day over last one year

Response: 890

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents)	View Document

### 4.3 IT Infrastructure

# 4.3.1 Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response: 100

# 4.3.1.1 Number of classrooms and seminar halls with ICT facilities

Response: 119

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

# 4.3.2 Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

# **Response:**

PMIST Information Technology (IT) Policy sets forth the central policy that governs the responsible usage of all the users of the Institution's information technology resources.

#### **Salient Features:**

# PMIST – IT policy addresses:

- Authenticity, Accessibility, Availability and superior performance of the IT Infrastructure
- Security of official e-identity of the individual
- Fixing of responsibility for governing the implementation of the Policy.
- Purchase, installation, commissioning of IT equipments, software, etc.
- Monitoring and controlling of IT resources

### **Process & Implementation:**

- The System and Network administration of PMIST governs the hardware, software and network resources of the institution
- Wi-Fi access in PMIST is authenticated, controlled and the usage of internet connectivity in the

- campus is regulated
- Internet services use web filtering, content filtering and gateway antivirus and firewall
- The server setup helps in combating the risk due to failure by mirroring and is placed in different buildings
- The requirement for the new equipments and replacements is raised by the departments/sections. The appropriate specification and configuration is recommended by the Chief Coordinator-Hardware and Networking to the purchase committee. In consultation with the department/section head, the purchase committee recommends for the purchase
- The installation and commissioning of equipments is monitored by the System and Network administration

To make optimal usage of IT facilities, the following provisions are made:

- The staff members and students are educated to follow PMIST IT policy to utilize the IT infrastructure.
- High speed LAN connectivity with 1 GBPS network and Optical Fiber Connection for 5300 meters
- 1403 numbers of computers (Desk tops and Lap tops) are provided to all departments, Laboratories and administrative services etc.
- Storage server 2 No., Rack server 10 nos., Tower servers 4 nos. are provided with 4888 GB of storage
- Surveillance of IT facilities by installing 161 cameras
- Security is provided by Firewall 1 no., Router 2 nos. and Antivirus 300 users
- Network switches: 118 nos with core switches, manageable switches and unmanageable switches types
- System software: 14 and application software: 80
- Free and Open Source Software (FOSS) are being used
- 1500+ IP enabled devices are connected to PMIST network.

### **Budget & Utilization:**

The annual budget is arrived by collecting and assessing the actual requirements of various departments/sections. Then this is presented to the competent authority for approval. During the assessment period between 2015 and 2020, the institute sanctioned Rs. 203.86 lakh and utilized Rs. 186.05 lakh for augmenting IT infrastructure in the campus.

#### **Future Expansion:**

The removal of obsolete equipments and up gradation as and when required. It is planned to expand the internet facility by a supplement Internet Service Provider (ISP) along with National Knowledge Network (NKN). Cloud servers will be purchased to augment the storage capacity.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

# 4.3.3 Student - Computer ratio (Data for the latest completed academic year)

**Response:** 3.56

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

# **4.3.4** Available bandwidth of internet connection in the Institution (Leased line)

**Response:** A. ?1 GBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document

# 4.3.5 Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- **3.Lecture Capturing System(LCS)**
- 4. Mixing equipments and softwares for editing

**Response:** A. All of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Links of photographs	View Document

# 4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

**Response:** 93.7

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
766.99	851.83	524.91	660.77	783.80

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Audited statements of accounts	View Document

# 4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

# **Response:**

PMIST has systems and procedures for the maintenance and to ensure the optimum utilization of physical, academic and support facilities. The Planning and Monitoring Board which consists of the authorities of the Institute reviews the Maintenance policy.

# The key points of Maintenance Policy are:

The maintenance policy ensures the equipment, machinery and other supporting facilities are being best utilized for physical and academic activities in a good working condition and ensure to:

- Maintain the environment of the entire campus clean, hygienic and safe for the students and staff.
- Maintain the class rooms, hostels, residential quarters and other buildings in clean and safe condition.
- Maintain buses and other transport vehicles in good and safe working condition
- Monitor and record the repair and maintenance of buildings, equipment/ machine etc.

#### Organization, Functions and Responsibilities

- Estate Office division is functioning with headship of Chief Estate Officer by following well defined procedures. The estate office has skilled manpower to execute the works connected to Civil, Electrical, Mechanical, plumbing, ICT, vehicles maintenance, carpentry, horticulture, etc
- Complaints on maintenance can be lodged electronically as well as manually through a unique system of Service Request Forms (SRF)
- The Chief Estate Officer and his team maintain the physical infrastructure and services
- Electrical/Electronic equipment and UPS are maintained by the Electrical division of the Estate Office
- Lab equipment is maintained by lab in-charges and the skilled assistants by getting direction from HoD
- ICT facilities are maintained by System and Network administration g
- Landscape team consists of dedicated chief agricultural officer and gardeners maintain the campus

- garden and landscape
- The central library, headed by Director, maintains all inventory registers and other records for efficient functioning of central and department library
- Buses and other vehicles are maintained by Mechanical division of the Estate office

# Procedures for Utilization and Maintenance of Physical Facilities-classrooms, laboratories and seminar halls

Time Table for each Department is worked out based on the academic schedule of the semester which forms into the master timetable for allocation of the physical resources such as classroom, laboratories, library, seminar halls etc. to ensure optimal utilization of the facilities.

- All the works and services are carried out only after getting administrative and financial approval through proper channel from the Registrar
- Separate budget is allocated for the maintenance.
- The equipments in the laboratory are calibrated annually. Precision, costly and such other equipments which require maintenance are covered under Annual Maintenance Contract (AMC)
- The maintenance/repair/service work is intended by the Lab in-charges through HoD's in the prescribed Service Request form to the Estate office
- The maintenance/repair/service work is executed by the estate office on the approval of the Registrar
- The Log-books and inventory registers are being maintained at the Department laboratory
- The class rooms, buildings, wash rooms, labs etc are cleaned and sanitized every day. The log charts are followed as a record of compliance and inspection.
- The cleaning assistances use proper safety apron, cap, mask, gloves etc.
- Fire fighting equipment and other safety gadgets are maintained with periodic checkup and refilling for their active usage. Staff and Students shall be trained in fire-fighting and rescue operations periodically.
- Lights, electrical fittings, electrical gadgets are maintained on call by submitting requisition through service request form to the office of the Registrar
- Over head water tanks and sumps are cleaned every fortnight for which the log books are maintained by the Chief Estate Officer.
- Institute vehicles are being serviced (mandatory and regular) for the safety and better performance. Fitness certificate (FC) for applicable vehicles are obtained within due the date after complying with required services
- PMIST has signed an agreement with M/S Medicare Enviro Systems, Sengipatti, Thanjavur for clearing all the bio-waste and hospital waste periodically.

#### **Procedures for Maintenance of Library Facilities**

- The arrival of books in library are registered, entered in accession register and then stacked regularly
- The stock verification of the library resources are carried out annually
- The damaged books are segregated and the binding works are carried out by out sourcing agencies
- Maintaining relevant records related to periodicals is monitored
- The Learning resources are dusted and cleaned up at regular intervals and given chemical treatment for termite control
- Regular housekeeping practices are carried out properly and recorded

• The library is fitted with surveillance cameras (CCTV) at vantage points to maintain discipline and to prevent pilferages

# **Procedures for Maintenance of Computer ICT Facilities**

- Maintenance of computers, Printers and other IT peripherals are done by System and Network Administration team which is headed by Chief Coordinator
- The team comprises the trained Engineers and technicians for regular maintenance and service
- Works are carried out on request through the submission of service request and email to the Registrar
- E-wastes and obsolete ICT items are disposed off after getting required clearance from the authorities

# **Procedure for Maintaining Sports Facilities**

- The maintenance of sports facilities are carried out by the Physical Director by following the established procedures
- The athletic field is maintained by regular fillings through the Estate office to avoid damages caused due to climatic condition
- Indoor and Outdoor play fields are repaired as and when the situation arises
- Nets, posts, etc. are periodically cleaned, serviced and painted

# **Procedure for Maintaining Hostel Facilities**

- The room, verandah and rest room areas are cleaned and sanitized. Log-book is maintained as record
- Dining halls and tables are washed and disinfected after every dining times
- Kitchen, storage facilities, Steam boilers, cooking utensils, vegetable cutters, grinders, etc are properly cleaned and maintained
- Periodical Health checkup for cooks and staff attached with kitchen and dining are mandatory
- Stock verifications and inventory controls are carried out annually
- The wastes in the hostel are segregated properly and the Bio-degradable wastes are channelized to Biomethanization plant

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

# **Criterion 5 - Student Support and Progression**

# **5.1 Student Support**

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response: 20.34

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) year wise during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

2019-20	2018-19	2017-18	2016-17	2015-16
1060	790	1067	172	191

File Description	Document
Upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document

5.1.2 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 42.55

5.1.2.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
583	958	1775	2642	856

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

**Response:** A. All of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document
Link to Institutional website	View Document

- 5.1.4 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

File Description	Document
Upload any additional information	<u>View Document</u>
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document
Link for additional information	View Document

# 5.2 Student Progression

5.2.1 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 5.69

5.2.1.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
6	9	2	5	7

# 5.2.1.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
111	104	103	109	89

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>

# 5.2.2 Average percentage of placement of outgoing students during the last five years

Response: 39.29

# 5.2.2.1 Number of outgoing students placed year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
346	340	264	349	315

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Institutional data in prescribed format	View Document

# 5.2.3 Percentage of student progression to higher education (previous graduating batch).

Response: 7.4

5.2.3.1 Number of outgoing student progressing to higher education.

Response: 66

File Description	Document
Upload supporting data for student/alumni	View Document
Institutional data in prescribed format	View Document

# 5.3 Student Participation and Activities

5.3.1 Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.

Response: 84

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
14	09	21	26	14

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters and certificates	View Document

### 5.3.2 Presence of Student Council and its activities for institutional development and student welfare.

#### **Response:**

In accordance with the UGC guidelines and Lyngdoh Committee, the student's council at PMIST is elected through elections in a democratic and transparent manner. Every class representative is elected by the respective class students through voting. Equal representation is given to both the genders in the election process and is done transparently. Performance in Curricular, Co-curricular, Extra-curricular and other activities are considered as eligibility criteria for contesting in the election. Chief Election Officer is appointed by the Registrar for conducting the election and for picking up the office bearers of the student's council.



- The Council functions as a bridge between the institute administration and the students.
- Students' council members contribute towards enhancing the quality of academic processes in the institution.
- It supports in conducting various events in the campus, like Periyar Annual Cultural Event (PEACE), Annual sports meet, Open House exhibitions, Science Day and Technical Symposium
- The students' council foot for the additional support required to improve the students' performance.
- Represent in Anti-Ragging committee
- Coordinate in the preparation of Technical papers for *Technag* Institution Magazine
- The Students' council would help in the overall development of student community.
- The bearers of students' council represent in governance of the institute. They represent in IQAC, Board of Studies etc.

# Representation of students in other forums

- Gender Champions Club is formed as per MHRD instructions in the institute. This club organizes various awareness programmes on gender equality issues.
- Hostel Committee members ensure the quality of food and discipline among hostel inmates.
- Each department has its own association in which the student's council office bearers play a major role as office bearers. They help students to actively participate in event committees of conferences, workshops, guest lectures, and seminars.
- The council motivates the students in bringing out their hidden talents by participating in various club and societies.

Following clubs and societies are functioning in the institution for providing an opportunity to the diverse student population, trigger scientific skills and hone their leadership skills.

#### **List of Clubs**

- 1. Energy Club
- 2. Environment Club
- 3. Humanist Club
- 4. Photography & Media Club
- 5. Painters Club
- 6. Public Affairs Club
- 7. Rationalist Club
- 8. Citizen Consumer Club

#### **List of Societies**

- 1. Dance and Music Society
- 2. Debating Society
- 3. Foreign Language and Culture Society
- 4. Tamil Mandram

File Description	Document
Link for additional information	<u>View Document</u>

# 5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

# Response: 4

# 5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
3	6	4	4	3

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document

# 5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

# **Response:**

The Alumni Association known as Periyar Maniammai Alumni Association (PMAA) is a registered society under the Tamil Nadu Societies Registration Act (Regd. No. 35/2015). The registered office of the PMAA is at PMIST campus. PMAA chapters are functioning in various places in the country and abroad. PMIST alumni are spread across various countries and occupy high positions such as IAS, IPS, Defence and are also placed in State Government services as Engineers in PWD, TWAD, TNEB, Public Enterprises and other prominent organisations. A few alumni have also emerged as successful Entrepreneurs, bringing laurels to the nation.

The association has an Executive Committee consisting of the following office bearers:

#### PMAA Structure

- President
- Vice-President
- Secretary
- Joint-Secretary
- Treasurer

PMAA is functioning actively with chapters in India and abroad including Singapore Chapter and New Jersey Chapter. It carries out the association activities effectively and efficiently by organizing alumni meet periodically.

The PMAA is contributing to its Alma mater both financially and intellectually. The notable contributions

are:

#### 1. Financial contribution

### a. Periyar Chair

- The PMAA has instituted "Periyar Chair" in the year 2015 to carry out the following activities:
- Dissemination of the philosophy of Thanthai Periyar among the youth.
- Carrying out Research and publications in Journals
- Organizing seminars / workshops/conferences

Periyar Chair is continuously strengthened by benevolent donors for its activities like triggering scientific thinking, encouraging logic, self-respect and rational outlook.

# b. Contributed towards infrastructure development of the institution

#### c. Endowments

- Alumni of batch (1989-93) have initiated endowment for providing financial assistant to the economically poor students.
- Alumni of batch (1990-94) have initiated endowment for award of the institution rank holders.

### 2. Intellectual contribution

The members of PMAA are always on the forefront in helping the younger generation students. They extend a helping hand for all occasions, be it sharing knowledge or financial help.

- Provide guidance for career opportunities.
- Enable the students to get better placements in renowned organizations in India and abroad
- Help the students to pursue higher studies in foreign Universities.
- Represent as members in Internal Quality Assurance Cell (IQAC) offer suggestions for the development of the institution.
- Participate in Department Advisory Committee and Board of Studies to design, develop and enrich the curriculum, periodically.
- Act as resource persons for various events such as Seminars, Conferences and Workshops.
- Interact thorough social media platforms for sharing their views, opinions and for encouraging independent thought process
- Alumni also help to build and grow the institution's brand through word-of-mouth marketing.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

# **5.4.2** Alumni contribution during the last five years (INR in Lakhs)

**Response:** D. 5 Lakhs - 20 Lakhs

File Description	Document
Any additional information	View Document



# Criterion 6 - Governance, Leadership and Management

# 6.1 Institutional Vision and Leadership

6.1.1 The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

# **Response:**

PMIST has a clearly stated vision and mission that constantly and relentlessly reflects on its academic and administrative governance, described below:

#### **Academic and Administrative Governance**

PMIST is a Deemed to be University governed by UGC regulations. The statutory bodies of the institute are:

- Board of Management (BoM)
- Planning and Monitoring Board
- Finance Committee
- Academic Council and Board of Studies constituted as per the UGC norms.

The statutory bodies ensure proper functioning of all academic and non-academic sections at the institute.

#### **Academic Governance**

Aligning with the vision and mission of PMIST, curriculum is edged at all levels across programmes and is benchmarked with other leading institutions. The curriculum is formulated for instilling self-respect, gender equality, dignity and ethics.

State-of-the-art facilities are used in imparting high-level skills and knowledge for ensuring global competency among students.

Beside academics, students are encouraged to take up entrepreneurship for generating jobs, a cherished value of PMIST.

The institute functions in a rapidly changing environment and is aware of being competitive in the fields of research and innovation. To inculcate research culture and for facilitating innovations, a dedicated office of Academic Research has been established by the institute with a Research Advisory Committee to support its activities. The Research Advisory Committee (RAC) reviews and updates the research and consultancy policies in conformity to the institute's vision and mission.

#### The Administrative Governance:

The administration of the institute provides support for executing the academic and research activities adhering strictly to the norms. The administrative staff are motivated persistently for extending their

support in realizing the vision, mission and the core values of the institute.

The Board of Management, an apex policy decision making body plays an important role in formulating policies without diverting from the mission and vision.

The decision making in the institute is based on the concept of 'bottom to top approach'. In practice, the governance acts as pinnacle to oversee the environment and making sure that the administrative governance of the institute aligns with the foresight of everyone working for the institute.

# **Social Responsibilities**

The social responsibility is a core value that is etched forever in the vision, mission of the institute. The institute participates in various social welfare schemes targeting community development through the Periyar PURA Centre for Rural Development, Centre for Energy and Environment, NSS, NCC, Youth Red Cross, Periyar FM 90.4 Mhz(Community Radio) and other clubs and societies. The Centre for Energy and Environment creates awareness on disaster management during Natural calamities. The Periyar FM serves the farmers and general public broadcasting various interactive programmes like weather forecast, drip irrigation guidelines, effective use of manure; Women empowerment, health and hygiene, Talent Corner (for Children and Youth) and Social Awareness. These activities in turn, create social responsibility among the staff and students to build the spirit of teamwork among them.

File Description	Document	
Any additional information	View Document	
Link for additional information	View Document	

# 6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

### **Response:**

The statutory authorities of the institute enable the administration to provide a robust system of decentralization and participative management. The organization structure of the institute is designed in such a way that the authorities and responsibilities are completely decentralized, yet the decisions are made collectively.

The academic management systems such as the Department Advisory Board, Board of Studies and Academic Council provide academic freedom and flexibility. The stakeholders viz. students, parents, industry representatives etc. participate in the process and contribute at every level to desing curriculum and syllabus, across all disciplines.

• Board of Studies consists of Head of Department, Faculty, External Academician and Industry Representative who meet regularly for reviewing the curriculum and syllabus for regular updation with latest topics, technical advancements, information about newest innovations in alignment with academic industry and societal needs.

• Academic Council, the principal academic body of the institute consists of Vice-Chancellor Pro-Vice Chancellor, Registrar, COE, Dean Academic, Dean Research, Deans of Faculty, Centre Directors, Heads of Department, who ensure talks and interactions with academicians from other reputed institutes with the students and also for periodical review and approvalof the curriculum.

The Board of Management (BoM) is constituted as per the UGC norms. The BoM is the decision and policy making body of the institute and it meets periodically for reviewing the functions of the institute, laying down directions on various matters pertaining to the academic, administrative, personnel, financial and developmental matters.

The academic administration at the institute is carried out with the participation of Deans of Faculty, Directors of various Centres of Excellence, Heads of Department and Senior faculty members. The decisions related to the academic administration are taken at various levels and implemented scrupulously. The faculty members are empowered in terms of framing syllabus, setting of question papers and assessment.

The student / faculty / non-teaching staff represent in the following committees in the academic administration:

- Board of Studies(BoS)
- Internal Quality Assurance Cell (IQAC)
- Course Committee
- Department Advisory Committee
- Student Council
- Club and Society
- Anti-ragging committee
- Internal Complaint Committee
- Gender Champions Club
- Library Committee
- Anti Discrimination Cell
- Staff Welfare Club
- Women's Forum

Beside the student, the parents are represented in IQAC and Department Advisory Committee.

The department budget is prepared in consultation with the respective faculty members, Head of the Department and Dean of the Faculty. The proposed budget is submitted to office of the Finance Officer of the institute through the Dean of respective faculty for due approval process.

Thus, the Institute has provided financial power to the Heads of Department and Deans of Faculty. This provides freedom to the respective department to raise their requirements for teaching, research and consultancy. The decentralization process enables the faculty to participate in preparing financial budget of the institute. This practice simplifies the budget preparation which is absolutely transparent, accountable and less time consuming.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

# **6.2 Strategy Development and Deployment**

# 6.2.1 The institutional Strategic plan is effectively deployed.

# **Response:**

Periyar Maniammai University has formulated a more pragmatic strategic plan for its growth and development for the next five years from 2015 taking into account the strength, weakness, opportunities and challenges. Having been elevated to the status of a deemed to be university, the management focused on a changing the university into a multi- disciplinary campus providing opportunities for the students hailing from the rural backgrounds. Keeping the vision, mission and core values of the university strategic plan was formulated with thefollowing five key areas:

- 1. Introduction of new programmes
- 2. Upgradation of infrastructure
- 3. Improving research culture
- 4. Strengthening Academic facilities
- 5. Increasing Financial support to students

The strategic plan has been effectively deployed to achieve the objectives of each key plan.

# INTRODUCTION OF NEW PROGRAMMES IS ONE OF THE FIVE ACTIVITIES PLANNED IN THE STRATEGIC PLAN 2015- 2020

Periyar Maniammai University carries the legacy and image of being a College of Technology. It was decided to convert the University into a multi-disciplinary institution by offering UG and PG programmes under the School of Humanities, Science and Management, School of Computing Sciences and Engineering & School of Architecture and Planning. Further, there was a need and demand for such programmes. The University by conducting market survey, stakeholder survey and peer survey decided to introduce the new programmes as detailed below:

Academic Year	<b>Programmes Planned</b>	
2015-16	3 UG Programmes in Science	
2016-17	3 UG Programmes in Science & Management	
2017-18	3 UG Programmes in Arts & Science	
2018-19	2 PG Programmes in Science	
1 UG Programme in Architecture		

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# 2019-20 2 PG Programmes in Arts

The Periyar Maniammai University has taken steps to deploy the plan for introducing new programmes in the next five years. A market survey was carried out to know the demand for the kind of programmes and the industry perspective. Based on the result of the survey the brainstorming sessions were conducted at different levels involving department faculty, HOD, experts from academia, industry and other stakeholders.

The inputs collected during admission time from parents and students for new programmes were also considered.

Based on the above processes, the university offered new programmes in line with the strategic plan. The new programmes were proposed in line with the Regulatory bodies viz UGC and NCERT. Necessary approval from the statutory authorities of the University like Academic Council, Board of studies were obtained. The university has taken initiatives to ensure necessary infrastructure required for the courses offered newly. The admissions for the new courses have been done following the admission procedures of the university.

### **Achievement of the Plan:**

Academic Year	ProgrammesIntroduced
2015-16	B.Sc Physics & B.Sc. B.Ed (Integrated)
2016-17	BBA
2017-18	B.Sc Chemistry, B.A English & B.Sc Mathematics
2018-19	B.Design (Interior Design), MSc Chemistry & M.A Political Science
2019-20	B.Sc Computer Science & M.Com

File Description	Document
Any additional information	<u>View Document</u>
Strategic Plan and deployment documents on the website	View Document

6.2.2 The functioning	of the institutional bodies is effective and efficient as visible from policies
administrative setup.	appointment and service rules, procedures, etc.

### **Response:**

# **Statutory Bodies**

All the institutional bodies are constituted as per the norms of the respective Statutory Regulatory Authorities (SRA), and they meet periodically for formulating polices, critically reviewing the progress made and for offer suggestions to ensure further development. All the functional units of the institute operate effectively and efficiently by adhering to the norms of the statutory bodies.

# **Board of Management (BoM)**

The Board of Management (BoM), constituted as per UGC norms, is an apex body which formulates all policies and provides academic and administrative leadership.

### **Planning and Monitoring Board**

The Planning and Monitoring Board translates the strategic vision of the institute into annual plans and monitors their implementation.

### **Academic Council (ACM)**

The Academic Council reviews the regulations, curricula and syllabi of various academic programmes offered and recommendations across all disciplines by the Board of Studies for approval by the Board of Management.

# **Board of Studies (BoS)**

The Board of Studies which consists of Department HOD, Faculty, Student, Academic Representatives from External Institutes and an Industry Representative reviews the curriculum planning based on the feedback received from students and faculty members.

BoS examines the Curriculum Changes as per UGC/ AICTE/ respective statutory bodies, whether the syllabus and curriculum are aligned with Industry requirement, and reforming the research elements.

#### **Finance Committee**

The Finance Committee approves the annual budget, monitors the expenditures and reviews the internal and external audited reports. It also monitors the resource mobilization process and ensures proper allocation of resources for future needs.

#### **Bye-Laws of PMIST**

The day-to-day functioning of the institution is taken care of by the Officers of the Institution, namely, 1) Vice-Chancellor 2) Pro Vice-Chancellor 3) Registrar 4) Controller of Examinations 5) Finance Officer 6) Dean Academic 7) Dean Research 8) Director Centre for Students and Administrative Services (CSAS) 9) Director Centre for Institute Industry Interaction (CIII) 10) Deans of Faculty 11) Functional Directors and 12) Heads of Department.

Vice-Chancellor is the Principal Executive Officer of the institute who heads all its activities, and is responsible for implementation of the decisions of the statutory bodies. The Pro Vice-Chancellor assists the

Vice-Chancellor in all academic and administrative activities.

The Registrar is the administrative head of the institute, and coordinates all administrative activities. The Registrar represents the institute in all official meetings and legal proceedings.

The institution has four Faculties. Faculties are headed by Deans and each faculty is further subdivided into Departments.

Faculty members are attached to the departments, and report to department heads. Functioning of the Departments, laboratories and research is facilitated by faculty, administrative and technical staff.

The institution has nine Centres and each centre is headed by a Director. Functioning of the centre is assisted by faculty, administrative and technical staff.

The appointment and service rules are well defined in the Bye-Law of PMIST.

File Description	Document	
Any additional information	View Document	
Link to Organogram of the University webpage	webpage <u>View Document</u>	
Link for Additional Information	View Document	

# 6.2.3 Institution Implements e-governance covering following areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

# **6.3 Faculty Empowerment Strategies**

6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff .

### **Response:**

# **Performance Appraisal System**

PMIST follows a comprehensive Performance Appraisal System (PAS) that is recommended by UGC for assessing the performance of teaching and non-teaching staff annually. Teaching staff carries out the self-appraisal, and is verified by the respective Head of the Departments. Weightages are given to the faculty performance in academic, research and extension activities as per UGC guidelines. During scrutinizing both strength and weaker areas are identified, and the staff members are motivated to perform better in future.

Performance Appraisal of non-teaching staff is carried out based on the technical and non-technical jobs performed by them. Review of PAS is done by expert committee consisting of respective HoDs, Faculty Dean and Dean Academics. Scores secured by the faculty are documented and kept for reference for the promotional activities in future.

This PAS acts as an instrument for faculty improvement such as:

- 1. Career Advancement
- 2. Rewards and recognition
- 3. Corrective measures to improve performance
- 4. Training Need Analysis

#### **Promotional Avenues**

Promotion is based on minimum qualification and experience required for the post and vacancy. The Career Advancement for the staff is done in accordance withouthe norms of the concerned statutory bodies.

#### Welfare Measures

The institute provides various welfare measures such as:

- Employee Provident Fund
- Group Gratuity scheme
- EDLI Employee Deposit Linked Insurance Scheme
- Seed money for research
- Financial support for attending conferences
- Staff are provided with remuneration for doing consultancy work
- Reward for publication of quality research papers / patents/ projects/and books
- LIC Group Insurance Scheme
- Group Safety Insurance for Staff and Student
- Round the clock on-campus hospital facilities to cater to the medical requirements of employees and their family members
- Maternity leave for women employee
- Flexible time for feeding mother faculty
- Creche for the young children
- Residential accommodation in campus on subsidized rent, based on availability

- Study leave to pursue higher education/Research
- Causal Leave
- Earned leave
- Medical leave
- Hostel for staff
- Concession in transport fee for Transport coordinators
- Concession in the tuition fee for the wards of the faculty
- Support rendered in terms of financial and medical for the faculty affected with Covid'19 during the pandemic period.
- Faculty are encouraged to take up consultancy projects and duly provided with TA / DA / on duty and remuneration.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

# 6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

# **Response:** 5.13

# 6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
18	19	1	2	7

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	View Document

Other Upload Files	
1	<u>View Document</u>

# 6.3.3 Average number of professional development / administrative training Programmes organized

by the institution for teaching and non-teaching staff during the last five years.

Response: 15.8

# 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
16	12	13	17	21

File Description	Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

Response: 21.62

# 6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
80	20	25	53	33

File Description	Document
IQAC report summary	<u>View Document</u>
Details of teachers attending professional development Programmes during the last five years (Data Template)	View Document
Any additional information	View Document

### 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

### **Response:**

The institute mobilizes its funds - received mainly through the tuition fees paid by the students. Funds received are spent on payment of salary for the teaching, non-teaching staff and maintenance of the campus. Budget of the institute is prepared keeping in mind about the constant development and progress of one and all, including students, staff, faculty associated with it.

Here is the list of fund generating avenues:

#### **Mobilisation of Funds**

- Tuition fees collected from students
- Consultancy service charges collected from Industry or Government sector/Individuals
- Funds received by Faculty members from various Government and non-government agencies for carrying out projects/consultancy
- Exploring the avenues through MOUs signed with foreign universities
- Funds generated through interest earned on corpus fund, endowments
- Alumni contribution
- For infrastructure development, the institute avails term loan facilities from its bankers as and when required.

### **Optimum Utilisation of Resources**

- Usage of classroom and laboratories for full-time and part-time classes
- Workshop fabricates and maintaining furniture needs for classroom and labs
- Exclusive area was dedicated for production of Vermi compost
- Usage of Biomethanation to convert the waste to wealth
- Paper Recycling Plant is used in recycling waste papers into usable products.
- Usage of Laboratories for Consultancy work and research studies
- Multi-purpose indoor stadium is used for activities i.e. Conferences, seminars, exhibition, talks, indoor sports, cultural events etc
- Research data base (Proquest and J-Gate) is used by faculties and students
- Plagiarism software is used extensively by the faculty and students to check their projects and research papers.
- Proper water management and conservation practices
- Conservation of energy through utilization of LED bulbs, BEE standard electrical appliances and solar panels.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

### 6.4.2 Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

### **Response:** 5

6.4.2.1 Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	5.0	0	0

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	View Document
Any additional information	<u>View Document</u>
Annual statements of accounts	View Document
Link for Additional Information	View Document

# 6.4.3 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

### **Response:** 1

6.4.3.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	0

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>
Annual statements of accounts	View Document
Link for Additional Information	View Document

### 6.4.4 Institution conducts internal and external financial audits regularly

### **Response:**

PMIST follows structure of accounting and complies with the guidelines recommended by the Institute of Chartered Accountants of India conscientiously. The internal auditors conduct the audit at end of every quarter of the year. The external auditors conduct the in- depth annual statutory audit periodically and cross verify the expenditure with the approved budget.

Internal and External Auditors carry out the financial audits in the institute independently. The auditors check on the financial records for its accuracy and proper documentation using the TALLY Software.

Institute appoints Internal and External Auditors for examining the financial transactions made in Tally Software of the institution that is within the budget that been approved by BOM. Internal and External auditor's suggestion on finance management is adhered by the institution and followed diligently.

#### **Internal audit**

Internal audits are conducted once in every quarter. Mr.S. Vengadasan, Chartered Accountant, of M/S KSV & Associates, Chennai is involved in conducting internal audit during which vouching of bills, random checking and scrutiny of high value bills are done. The audit is generally conducted quarterly and the report is submitted to the institute. The internal audit is used in monitoring the accounting process on a continuous basis. The audit queries thus raised during internal audit are rectified and presented.

The following are checked during the Internal Audit:-

- Cash bills transaction within Institution and external agency
- Cash voucher transaction and documentation
- Purchasing and payments made to suppliers
- Payments made to suppliers, workers and staff
- Cash flow at the cash counter and its daily transaction.
- Deposit of cash in Bank

### **External Audit**

External audits are conducted once in a year. The auditor Mr. R Ramachandran, Chartered Accountant of M/s Ramachandran & Murali, Chennai is involved in conducting external audit during randomly check and scrutiny of high value bills. The audit report is submitted to the institute. The external audit is used in checking the accounting process which was recommended and placed in BOM. The following were checked during the external audit:-

- Rectifying entries made in the account ledgers
- Ensuring the Bank reconciliation procedure are followed for various e-Transfers
- Statutory Compliance with regard to TDS, GST, PF
- Maintenance of adequate supporting documents for payment of donations
- Recommendation made by the internal auditors and its follow up.

File Description	Document	
Any additional information	<u>View Document</u>	

### 6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

### **Response:**

PMIST has a well-established IQAC with Vice Chancellor as its Chairperson, Deans, nominated Professors, members representing Board of management, Industry, Local Society, Alumni, Chair person of the student council, Employer and Parents, as other members.

### Process I - Outcome Based Education (OBE) for all programmes

### a. Institutionalizing the process:

- IQAC has recommended the implementation of OBE for all programmes since 2015 by adhering to the norms of the statutory bodies.
- Each department develops its vision, mission by mapping through the well-defined vision, mission of the institution.
- Programme Educational Objectives, Programme Outcomes are aligned with course outcomes of each programme as recommended in their Board of studies.
- IQAC recommends and conducts awareness programmes and workshops for the faculty for the dissemination of knowledge of OBE. In turn faculty members make their students aware of the OBE process through the course plans documented with course outcomes, summative and formative assessment reports and evaluation patterns.

### b. Review of the Teaching-Learning Process through OBE:

IQAC reviews the following and provides recommendations:

- Outcomes of the teaching learning process
- ICT tools applied by the faculty
- Students' performance appraisal
- Students' feedback
- Evaluation process and reforms, if any
- Outcomes of the Academic audit conducted by internal and external academic and industry representatives.
- Timely publication of results and pass percentage of the students in the semester examinations.
- Arranging for annual convocation within 4 months from the last day of examination.

### **Process II - Review of Evaluation Process and Reforms**

### a. Institutionalizing the process:

Examination Advisory Committee consists of Controller of Examination, Deans and External Subject Experts. The Examination Advisory committee reviews the existing examination system and suggests reforms required in the following areas:

- Question Paper Pattern
- Quality of Question Paper setting
- Mode of Examination
- Tools for On-line Examinations
- Schedule of the Examination
- Reappearance Examination
- Grievances and Complaints from Students and remedial measures
- Adherence to duration of evaluation for timely publication of exam results
- Automation of Examination system through indigenously developed software and its further development
- Grading system
- Minimum attendance requirement for Examination

### b. Reforms:

The suggestions put forth by the Examination advisory committee brought to the IQAC along with its recommendations. In the IQAC elaborate discussions were taken up in the following points:

- Rules framed for the continuous assessments
- Minimum pass percentage for formative and summative assessments.
- Revision in the grading system
- Question paper pattern
- Revision of examination fee

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

6.5.2 Institution has adopted the following for Quality assurance 1. Academic Administrative Audit (AAA) and follow up action taken 2. Conferences, Seminars, Workshops on quality conducted 3. Collaborative quality initiatives with other institution(s) 4. Orientation programme on quality issues for teachers and students 5. Participation in NIRF 6. Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

**Response:** C. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

# 6.5.3 Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

### **Response:**

After the NAAC cycle II in 2015, IQAC has ensured the incremental improvements carried out in the following areas:

### 1. Academic Quality Initiatives:

- Outcome Based Education (OBE) is being implemented at the institute from the academic year 2015-16 onwards. It provides a robust framework which emphasizes on setting up a clear standard for measurable outcomes, making education more efficient and effective. A student centric system it enables in improving their attainment levels and paves way for continuous improvement.
- Based on demand and industry needs; new UG and PG programmes were introduced.
- More number of faculties with Ph.D. are appointed and internal faculty members are encouraged to register for Ph.D. at PMIST and other institutions. Faculty members are supported by providing flexible timings to do research.
- Technology enabled learning methods are improved for effective teaching-learning environment. Teaching methods such as flipped classrooms and using digital platforms like Google Classroom, Edmodo, MOOC, etc. increase the quality of teaching and usage of ICT skills by both students and faculty members.
- Value added courses and Minor courses are incorporated into the curriculum for enhancing the skills and knowledge in addition to regular courses for making students industry ready.
- The semester examination process has been automated for arrangements of hall allocation, issue of hall tickets and releasing exam results. The exam results are published through the institution website's student portal.
- Academic Audit has been carried out annually. Experts from various reputed academic institutions and industry experts are invited for conducting academic audit and its observations are brought to the IQAC for discussion on improvements.
- Research promotion policy is in place for encouraging faculty members to publish research papers
  in reputed journals, authoring books, chapters and writing research proposals to various funding
  agencies.
- Faculty and students are encouraged to publish patents.
- The academic and industry collaboration has been strengthened by signing MoUs with various industries.

• Establishment of Periyar Chair and Dr. A.P.J.Abdul Kalam Chair for improving research and extension activities.

### 2. Administration

- Institute has ISO 9001-2015 certification for quality management system.
- Recruitment exercise has been conducted across the country with premier institutes for diversity and quality teachers.
- Water & Energy conservation and Green environment practices are undertaken. An exclusive team is available for carrying out the energy and green audit. The members are trained and equipped with knowledge and skill in auditing process.
- IQAC members have been strengthened with representations from student's council, parents, alumni and industry experts.
- Women's Hostel was renovated to have better ambience for the students to stay in the hostel.
- Men's hostel was renovated and basic amenities were improved.
- Barrier free environment was established with Elevator facilities, ramp, washrooms and wheelchairs for differently abled people.
- Individual faculty cubicles were established.

File Description	Document
Any additional information	View Document

### **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

### **Response:**

Periyar Maniammai Institute of Science & Technology (PMIST) has its geneses from an exclusive college of Technology for women, perhaps the first of its kind in India. In an endeavour to empower women Periyar Maniammai College of Technology for Women was set up in 1988 to make higher education in Engineering & Technology more accessible to women in furtherance of the lofty ideals of Thanthai Periyar to provide education to women, for their emancipation.

The legacy of Thanthai Periyar is being carried forward by PMISTin all its activities and in Gender issues. PMIST addresses different forms of gender issues such as Female infanticide, violence against women, sexual harassment, forced prostitution, wage discrimination, global and national issues on women through the course viz "Human ethics, values, Rights and Gender equality" as part of the curriculum which seeks to sensitize students on gender issues and make them responsible citizens caring and treating women with dignity.

As per the UGC guidelines Gender Champions are selected for every academic year and these champions constitute 'Gender Champion Club', in practice since 2015. The prime aim of this club is to create an atmosphere free from any form of gender discrimination and harassment. It also helps prevention and prohibition of discrimination and to provide safety, security, and counseling. Through this club various programmes related to sensitization for security of women, upholding Women's Rights, protection against Sexual Harassment and the Right to Livelihood and also to create a healthy and secured environment in the campus are done.

To create a conducive environment at the workplace, Internal Complaints Committee (ICC) has been put in place with a presiding officer and 4 senior members and 2 student representatives. The members keep the process confidential, independent and comply with the procedure laid down in the UGC circulars.

PMIST campus provides a congenial atmosphere for transgender students. Adequate care is being taken in terms of professional counseling to deal with their emotional and physical problems. Separate rest room and dressing room are provided.

PMIST regularly celebrates International Women's Day during Annai Maniammaiyar's birthday every year on 10th March in a grand manner and conducts competitions, debate on topics related to women empowerment. On the eve of Annai Maniammaiyar Centenary celebrations, hundred girl students were provided with free hostel facilities and full fees exemption, admitted in the academic year 2018-19.

Periodically, health camps / checkups are being conducted for women for creating awareness particularly on cancer. The Women staffs are given opportunity for Mammogram and Pap smear tests through Periyar Medical Mission in collaboration with Shantha Cancer foundation and Harshamithra Hospital. Nagammai Day Care Centre is functioning for catering to the needs of kids of staff.

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PMIST engages full time Professional Counselor to the needy staff by providing counseling session periodically. The teaching faculty supplements the counseling for personal, academic grievances and gender problems. The Institute has adopted mentoring system making each faculty to be a mentor for a group of students from first year till final year.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

### 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

**Response:** B. 3 of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>
Any other relevant information	View Document

# 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

### **Response:**

### SOLID WASTE MANAGEMENT

The 4R concept –REDUCE, REUSE, RECYCLE, RECOVER is being implemented on the campus. The wastes are segregated at the source through Colour coded bins, red bin -non-degradable waste, Yellow bin - recyclable wastes and the green bin -biodegradable. Sweeping of dry leaves in the institute premises is allowed for composting and mulching.

Non degradable waste like plastics and glass are segregated and sold to the local vendors for recycling. Wastepaper generated in the campus is processed in recycling unit and reused as saleable articles such as paper bags, file pad, packing materials etc.

### LIQUID WASTE MANAGEMENT

#### 1. Biomethanation Plant

The Biomethanation plant in this Institution is multi feed with the feeds like Cattle dung, Night soil, Vegetable waste and Food waste. The gas producing capacity of the digester is 500cu.m per day and it generates 60KW of electricity. Different inlet units were constructed for Night soil, Vegetable waste and food wasteand one outlet pipe for collecting the digested effluent. All the toilet lines in the institute are linked to a Single pipeline. No septic tanks in the institute premises.

The power generated is supplied to the women's Hostels. The power generating capacity of the engine is about 60KWh. The digestateoutput after draining is allowed for vermin composting process.

### b) Grey water Treatment and reuse

The wastewateris collected from all buildings through 150 mm diameter well laid conduits of PVC pipe. The total length of pipeline is 3258 m. Also, 950m length open channel is provided to collect storm water. Through sedimentation and filtration arrangements, settleable solids and dissolved solids are removed. This grey water and storm water, after treatment, is collected in the percolation pond, it will be pumped and used for watering to the entire campus plantations. For optimal use of water for irrigating the landscapes, PMIST practices various modern systems like drip irrigation, sprinkler irrigation, rain gun method and indirectly helps to maintain underground water level.

### BIOMEDICAL WASTE MANAGEMENT

The institute has a Hospital with 24X 7 services. Biomedical wastes from the hospital such as soiled waste which includes dressing, bandages, plaster casts, waste sharps like hypodermic needles, syringes, scalpels and broken glass are segregated and safely disposed through Medicare Enviro Systems, Thanjavur.

#### E -WASTE MANAGEMENT

The e-waste generated from computers, electronic gadgets and other nonworking equipment are collected and then disposed through private authorized collectors.

### HAZARDOUS WASTE MANAGMENT

Hazardous wastes generated by the Biotechnology department isbiological medium wastes such as agar media which is subjected to decontamination and is treated with sodium hydroxide solution or by autoclaving method. The chemicals and solutions are neutralized/diluted to permissible wastewater disposal

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standards and flushed out. Also, the expired chemicals are disposed through Biomedical waste management system with Medicare Enviro Systems, Thanjavur.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

### 7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

**Response:** A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

### 7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- 5. landscaping with trees and plants

**Response:** Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document

# 7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

**Response:** A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Any other relevant information	View Document

### 7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Disabled-friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for persons with disabilities ( Divyangjan) accessible website, screen-reading software, mechanized equipment
- **5.**Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Any other relevant information	View Document

# 7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

### **Response:**

PMIST helps each student to understand herself or himself as a unique, competent and valued individual of a diverse community through various cultural and technical events.

Every year the institute organizes cultural events under the banner PEACE (Periyar Annual Cultural Events) where students can display their cultural talents. Students also conduct a dazzling array of events

covering different aspects of the languages through writing and Oratorical competitions, cultural events and festivals. These activities give them an opportunity to exhibit their skill and command over their native language, besides their regular curricular activities.

PMIST regularly organizes awareness programs on SwachhBharathAbhiyan, UnnathBharathAbhiyan (UBA), Rural and Tribal Camps, Health Camps and National Integration awareness programs through Center for Rural Development (CRD) & Department of Social Work.

Students having weak Socio-economic backgrounds are supported by PMIST to continue their education.

Through several academic and extra-curricular activities, PMIST thrives hard inintegrating the diversity towards innovation and product development for students and faculty.

PMIST focuses on imparting necessary skills and sensitizing the students to treat everyone respectfully without any discrimination based on race, caste, creed, religion, ethnicity or any political driven perspectives.

PMIST is dedicated to its societal responsibility by providing an inclusive environment to be a part of its flagship programme "Periyar PURA". The former President of India Dr.A.P.J.AbdulKalam, during his tenure as the President of India, highlighted a vision of transformation of Rural India by launching a large-scale mission by advocating the concept of Providing Urban Amenities in Rural Areas (PURA) in 2003. The rural developmental activities since 1996 which are carried out by the erstwhile PeriyarManiammai College of Technology for Women (PMCTW) now known as PMIST resembled the concept and objective of the PURA.

The mission of Periyar PURA is to improve the standards of living of rural people through education, employment and to provide most essential facilities and prevent migration. The specific objectives are:

- Addressing Socio Economic needs of the villagers
- Converge of Infrastructure Facilities
- Ensure sustainable use of Natural Resources.
- Educate and impart Vocational Training
- o Disseminate technology Know How and Do How for the youth.
- Initiate Entrepreneurship at local, regional levels.
- Promote Sustainable Agricultural Practices and bridge gap between Producer & Consumer.

Centre for Rural Development (CRD) started in 2007 plays an effective role in coordinating, creating linkage and networking among various Centers, Departments and student organizations besides connecting various stakeholders of Rural Development covering 0.1 million populations hailing from 67 Periyar PURA villages located in 4 blocks of Thanjavur, Pudukkottai and Trichy Districts.

PMIST as Participating Institution of Unnat Bharat Abiyan(UBA), the flagship programme of Ministry of Human Resource Development has adopted five villages by involving 220 students and conducted community engagement activities, survey and participating in Gram Sabha imparting concept of learning community life and harmony.

File Description	Document
Supporting documents on the information provided	View Document
(as reflected in the administrative and academic	
activities of the Institution)	

# 7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

### **Response:**

Students' progress and societal upliftment are the prime concerns of the PeriyarManiammai Institute of Science and Technology. For accomplishing the above, the institute has established acentre namely *Dr.Kalaignar Karunanithi Centre of Political science* since its inception which conducts various awareness programmes on:

- Constitutional obligations,
- Values, Rights, Duties and Responsibilities of the Citizens.
- Legislations for Women's Rights
- Human Rights movements in India
- Role of National Human Rights commission
- Alcoholism, Smoking and Tobacco and Responsibility of the Family Members
- Importance of National Identities
- Gender Equality Movements in India
- Anti-Child Labour

Every year the Constitution Day is being held on November 26th with a special lecture on the Constitution of India enlightening the students and employees about its origin and importance. This enables them to

have moral responsibilities with respect to the National Flag and National Anthem, safeguard public property, pay our taxes with honesty, promptly and protect the unity and integrity of the nation.

Students are enlightened in such a way that they are entitled to enjoy all the legal rights guaranteed by the Constitution of India.

All the Legislations passed for the protections of rights of women in the chronological order were explained through lectures on Special Marriage Act (1954), Maternity Benefit Act (1861), Dowry Prohibition Act (1961), Indian Divorce Act (1969), Medical Termination of Pregnancy Act,1971, Equal Remuneration Act, 1976, Indecent Representation of Women (Prevention) Act,1986, National Commission for Women Act, 1990, Prohibition of Child Marriage Act, 2006, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

Community awareness programme on Alcoholism were organized to explain the cause and side effects of alcohol consumption and Different ways of having self-control to overcome the issue.

The Department of Social Work of PMIST has been recognized and supported by Ministry of Women & Child Development as Nodal Organization for Childline -1098 an emergency helpline to work for the Children who needs care and Protection of Thanjavur District. CHILDLINE conducts various awareness programme on Child Care & Protection jointly with collaborative organization SHED INDIA.

### The Highlights are:

- Awareness on Crime against Women & Children
- Child Marriage Prevention and elimination
- Programmes on Child Rights, Safe touch &Unsafe touch
- Awareness Rallies on working together to prevent suicide.
- Sensitizing the problem faced by Adolescents
- Protecting Children from Violence, Exploitation and Abuse
- Awareness programme on legal service to victims of acid attacks scheme
- Organized Residential Tribal camp for tribal children on Basic Sciences and Mathematics
- Importance of education and welfare schemes for gypsy community people.
- Workshop on "Emerging Cyber Crime and Need for Information Security"

PMIST faculty took pledge and got certificates for commitment from website of Government of India on Women right, Rakstriya Ekta Diwas and Janata Curfew pledge (to follow the directions given by Government for controlling Corona Virus).

Weblink for Report on activities for sensitization on constitutional obligations:

https://pmu.edu/naac/pdf/7.1.9.Activities\_Report.pdf

# 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

**Response:** A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document

### 7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

### **Response:**

The institute organizes commemorative days of National and International Leaders with an aim to motivate students for leading their lives with morals and ethics. These programs promote self-discipline, morality, ethics, integrity, straightforwardness, self-reliance, human values, empathy, social responsibility, humility, honesty etc. These programmes have been incorporated into academic calendar of the institute.

### **National Days:**

- The institute celebrates Women's Day on March 8th every year at PMIST to encourage women students and faculty to achieve newer goals.
- The Department of Physical Education organizes Yoga sessions on International Day of Yoga to promote the importance of Yoga in improving the mental and physical well-being.
- On the occasion of International Literacy Day, Book Exhibition was organized by the Department of Library in the campus which attracted students and faculty members to buy books.
- Center for Rural Development, CHILDLINE, Nodal Organization jointly organize International Day of Girl Child, annually in October / November.
- Theinstitute celebrates International Mother Language Day torespect and recognize vernacular languages.
- The Institute enthusiastically celebrates national festivals such as Independence Day and Republic

- Day every year.
- December 2nd, every year is Founder's Day as it is the birthday of our Esteemed Chancellor D K Veeramani, the founder of the Institute. It is celebrated as Science Development & Scholarship day, where students exhibit their scientific model and projects for showcasing their logical and rationale thinking inculcated in them.
- Pongal Festival is celebrated, as a thanksgiving gesture to the farming community, for stimulating traditional and cultural values in minds of the next generation. Students, staffand faculty members participate in their traditional attires, prepare Pongal, and distribute it among themselves and others all in happy, festive environment.
- The Birth Days of National leaders are celebrated in the campus. The institute celebrates the birth anniversary of the Great Social Revolutionary Thanthi Periyar, Annai EVR Maniammaiyar, Annai Nagammaiyar, Mahatma Gandhi, Sardhar Vallabhai Patel, Vikram Sarabhai, Dr.APJ Abdul Kalam, Former Chief Ministers of Tamil Nadu Karma Veerar K.Kamaraj, and Dr.Kalaignar M.Karunanithi to create awareness among younger generation about their contribution for the growth and development of the Nation and Education in particular.
- The other events conducted by PMIST are:
  - International Youth Day
  - World Day for Prevention of Child Abuse
  - National Science Day
  - World Health Day
  - Children's Day
  - Engineers' Day
  - World AIDS Day
  - Teacher's Day
  - World Environmental Day
  - World Population Day
  - World Rural Women's Day
  - National Unity Day
  - National Voter's Day
  - Road Safety Week
  - Anti-childlabor day
  - World TB Day
  - o International Justice day
  - Vigilance Awareness Week
  - Flag day
  - Human Rights Day
  - Anti-Leprosy day
  - World Social Work day
  - Anti Human Trafficking Day
  - Ozone Day
  - World Mental Health Day
  - World Soil Day

File Description	Document
Geotagged photographs of some of the events	<u>View Document</u>
Annual report of the celebrations and commemorative events for the last five years	View Document

### 7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

### **Response:**

### BEST PRACTICE I – INNOVATION AND START-UP ENTREPRENEURSHIP

#### **Context:**

Modern approach of the higher education institutes around the world is innovation and start-ups, which provide the impetus for growth and a must even for the very sustenance. PMIST isrealizing this fact and follows the innovation and start-up as two barreled gun for survival and expansion. Accordingly, the institution provides all that are needed for active innovation through research. The very Motto of PMIST – **Think, Innovate and Transform** – reflects the culture of converting the ideas into need based projects that up-lift the standard of the society by enriching the quality of life.

In order to achieve the promotion of innovation among the students, PMIST has started Institution Innovation Council as per the directions of Ministry of Education.

The PMIST's Institution Innovation Council (IIC) encourages and helps the students to work with new and innovative ideas through seminars/ workshopson innovative and entrepreneurship processes and activities.

### **Objectives**

(Source: Ministry of Education; https://iic.mic.gov.in/assets/html/index.html)

The objectives of the adoption of Innovation as the best practice are:

- To create a vibrant local innovation ecosystem.
- Start-up supporting mechanism in HEIs.
- Establish function ecosystem for scouting ideas and pre-incubation of ideas.
- Develop better cognitive ability among students.
- To envision that the innovative creations result into society based entrepreneurships/ start-up businesses
- To explore, encourage, and ensure that the right environment for converting the creative thinking/ ideas into innovations are provided and persisted
- To associate with MIC and ARIIA continuously for expanding the areas of innovative research with their support and exposure to other similar institutes

### Process/ Practice:

As per the directions, PMIST's IIC has registered with MHRD' (MoE's Innovation Cell) MIC on 21 November 2018 with the number IC 201810657. This provides an opportunity to take part in the programmes and events of MIC that shape and fine-tune the innovation Process. They address and assist with various programmes such as Smart India Hackathon, National Student Start-up Policy, ATAL Ranking of Institution as on Innovation Achievements and in setting up IICs etc.

PMIST IIC is headed by Vice Chancellor of the Institution as President, Dean Research as Convener, two senior faculty members as members and 15 students as coordinators along with an expert in IPR, CEO of Periyar Technology Business Incubator and an Industrialist. IIC conducts/ organizes workshops, seminars, and interactive sessions with CEO/industrialists, entrepreneurs, investors etc. IIC also provides a mentorpool for the innovators. In addition to the faculties and students the research scholars also participate in MIC, AICTE and MHRD sponsored / conducted programmes.

Few programmes thus conducted by the apex bodies and IIC are as follows:

- India's First Leadership Series (IFLTS) Talks
  - o Mr. Anand Mahindra, CMD of Mahindra Group of Companies on 08-01-2019
  - o Dr. Anand Deshpande, CMD of Persistent Systems Ltd. on 24-01-2019
  - o Dr. Ajit Doval, National Security Adviser, Government of India, on 19-03-2019
  - o Prof. Anil D. Sahasrabudhe, Chairman AICTE on 22-04-2019
  - o Prof.Anil D Sahasrbudhe 09.04.2020
  - Prof.ParthaChakraborty 10.04.2020
  - Mr.Abhishek Singh 11.04.2020
  - o Dr.Nilesh N Oak 30.05.2020
- Workshop on Cognitive Skills, Design Thinking and Critical Thinking on 30.11.2018, and IPR for Faculty and students on 10.1.2019
- Hackathon under Smart India was conducted with various problem statements of Maruti Suzuki, Yamaha, MSME, and BOSCH. 35 students participated with the problems that are listed below:
- Security system by using computer vision approach
- Mobile app software development for GST
- My city information mobile app
- Mobile application for creating awareness amongst women to improve maternal healthcare
- Disease spreading avoidance system
- Trolley based smart textile
- Traffic monitoring system using deep neural networks
- Golf ball tracking with python
- Maternal healthcare application
- Finding root causes by sentiment analysis
- Traffic analysis using python
- Low cost cattle feed mixture
- Compact home gee maker
- Biogas generation from biodegradable wastes
- · Robotics and droned
- Sunlight uses in an IT company
- Vitamin B12 candles for RO system

- Bike crash detection
- Preventing letting out polluted water into canals and rivers
- Pesticide level checker using IoT
- Three student teams took part in Logo Competition by MIC on 10.6.2019 under the theme: "Innovation, Technology, Entrepreneurship, TeamSpirit& Networking".
- Four Projects submitted by the students
  - Human Abnormal Activity Detection
  - Foot Operated vehicle with reverse mechanism and solar panel power for differently abled persons
  - Design and Fabrication of PeriyarHowick
  - Nutraceutical Tofu to alleviate Malnutrition

### **Problems Encountered and Resources Required:**

Innovation cannot be acquired at once. To enhance the efficiency and effectiveness the following areas of improvements could be addressed to:

- Innovation activities shall be embedded in the curriculum
- Centralized programmes like leadership talk could be fine-tuned to make it better and more successful.
- The language of the talk can be English so that it is universally benefitted.
- Motivation of the students for innovation should be more aggressive and concerted.
- Additional Incentives for more IICs could be an encouragement factor
- IICs programmes could be tagged together with that of MIC ones
- Increasing the number of competitive events would motivate the innovators
- Staying proactive continuously is essential for students to make progress and succeed in their ideas
- Use of optimized time for implementing their ideas or goals in to outcome
- Getting balanced representatives of experts, faculty and students in the team

### **Evidence of Success:**

Five hundred students, research scholars and faculties participated in various programmes and events. Students have the opportunity of listening to the talks of great leaders. Innovating thinking has been gradually inculcated among the student community. Students have developed the habit of asking questions, which require ground-work preparation beforehand. Due to this sustained efforts the Start-ups and Incubates will build up in number in the near future. Innovation developments in local eco-system are gradually entering and increasing at the Institute.

The Institution Innovation Council at PMIST worked along with Periyar TBI and with other external experts (innovators and entrepreneurs) to achieve the goal of Ministry of Education which resulted in PMIST conferred with 4 stars in 2018 and 5 stars in 2019 for the activities creating Innovation, Pre-Incubation, Start-ups & Entrepreneurship, Intellectual Property Rights (IPR), Internship culture in the PMIST campus. It is one among apart top 125, five stars rating Institutions in India and top 51 five stars rating Institutions in South Zone-SRO.

Apart the above mentioned activities, IIC@ PMIST also facilitates students and faculty members to take distance learning courses at World Intellectual Property Rights (WIPO), Geneva, Switzerland.

https://api.mic.gov.in/uploads/institutes/homePageNews/TOP IICs 2019-20 5Star.pdf

### Function of Institution Innovation Council (IIC) at PMIST

- To conduct various Innovation, IPR and entrepreneurship-related programmes.
- To Identify and share success stories of Entrepreneurs.
- To organize periodic Webinars/workshops/Poster Presentations and interactions with entrepreneurs and create a linkage for student innovators.
- Creating an Institution's Innovation web page to highlight innovative projects carried out by the faculty and students.
- Conducting Hackathons, idea competition etc. with the linkage with industries.

### **Best Practice II - Extensive Adoption to MOOC Courses**

### **Context**

This is an era of net-age with/and netizens. Everyone for everything relies on e-based activities. This applies to knowledge acquisition as well. The students and the faculties both not only seek but also enlarge and enrich knowledge by continuously expanding the networks. Hence, it becomes an imperative and compulsion without an option, to provide and facilitate e-learning and e-teaching. This alone would transform the orthodox teacher-oriented teaching to student-centric teaching-learning. It is all the more important for Choice Based (Credit) Education System with Credit and Outcome Based Courses having continuous evaluation of meeting the outcomes contemplated. Accordingly PMIST encourages the faculties and students, the extensive adoption and use of MOOC's free and paid on-line courses. This provides immense opportunities for the students to opt for any number of courses out of many offered/available ones. They have to only approach an appropriate websites for the right information for learning from anywhere at any time.

### Objectives of Extensive Adoption to MOOC Courses as a Best Practice are:

- To expose the students/teachers to the current and additional courses available
- To enlarge their knowledge domain with the vast and up-to-date knowledge that would enhance their self-confidence and self-esteem
- To expand and enrich their self-study skill, attitude with independent approach
- To culture and nurture their reading habits leading to life-long knowledge acquisitions
- To guide them in selecting the courses of their liking that would shape their career/ future
- To consolidate and intensify their habit of focused attentiveness and concentration
- To encourage the teachers to seek for new avenues for knowledge enrichment
- To experiment/explore with modern ICT tools/ hardware and software during this study
- To synergize and synchronize the teaching-learning processes cementing the teacher and the students that would create a strong bond and strengthen the good rapport between them

### The Practice:

The Most of the students of PMIST are from rural background and from Tamil Medium schools. Hence, the adoption of MOOC courses is concentrated on the English based ones. Since, they are wards of the poor agriculturists; free courses are suggested first, instead of the ones with a fee. The students are advised to complete three courses first before going for five courses. This is to have a level-playing between the

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slow and fast learners. These Language courses would enlarge and enrich their listening, speaking, reading and writing skills in English.

Students not having laptops are advised and encouraged to download and install apps onto their mobile cells, tablets and PC, so that they learn the courses at their own time and place. They are asked to make notes of the lessons for effective participation during interactive discussions with the peers about the courses they had selected/ completed. Incidentally this would help the teacher in assessing whether the student is attentive and listening during the video lecturing. The understanding and grasp of the subject also could be evaluated from it. At the end Certificates are provided to the successful/completed students.

### **Problems Encountered and Resources Required:**

However, the following constraints are to be tackled with adequate resources for the effective implementation and success of adoption of MOOC courses:

- Since the students are from rural areas they are not quite familiar with online applications/ courses.
   Hence, Laptops/Tablets/ PCs/ Smart Phones with internet facilities might be provided to them to overcome the handicap of ICT usage.
- Quite often the net-work becomes an impediment for smooth operation. That needs to be addressed properly and set right for enabling the students to complete the courses in time.
- Slow-learners drag the moving bar of each video lecture so as to complete it without listening to it fully. Such students have to be properly instructed and monitored to learn the courses in total.
- Some students could not identify the Filter option in mobile. They are to be Filtering Free Courses in the website.
- Accent and pronunciation are difficult to comprehend for some students. Subtitles could be attempted to. They might be provided with earphones for listening to the video lectures for privacy and flexibility of operation at their convenience.
- All students do not have E-mail IDs. They might be provided one to every student.
- All the courses assigned to the faculties have to be completed for assessing the students reliability. The faculties have to constantly follow-up with the students for completion of the courses.
- Downloading and saving certificates take considerable time. The system has to improve to reduce the time taken for the same.

### **Evidence of Success:**

The usage/adoption of MOOC courses had enriched and enlarged the learning process of the students with improvements as listed below:

- The interest in acquiring additional knowledge through network has increased.
- The learning of extended courses elated them and put them on an elevated pedestal. They are motivated to learn more and more online courses related to their major subjects.
- The respect of and confidence on the teacher have enhanced and they become mutual between students and teachers.
- The Certificate provided has boosted their respect in the family and society.
- The extended study of MOOC courses has nurtured them for disciplined and structured academic performance.
- As a result the pass percentage of the students has improved with less failures and arrears.
- They have developed the basic norms and etiquettes of questioning and discussions.

In short they are thrilled to learn the subjects of their choice at their will at any place and at any time they choose.

File Description	Document
Best practices in the Institutional web site	View Document
Any other relevant information	View Document

### 7.3 Institutional Distinctiveness

### 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

### **Response:**

### **Environment Consciousness**

- Since inception in 1988 the scrolling campus of 114.85 acres of arid land has gradually been transformed into a green garden. PMIST offers environmental and energy related services to safe guard the planet earth from disaster.
- Institution is committed to a green policy which includes sustainable development activities like landscaping and vegetation, water conservation, energy conservation, waste management and green building materials like fly-ash bricks.
- Institution aims to achieve Zero Carbon Footprint by 2025. One of the ways identified for achieving this goal is reduction of wastage in energy and increasing the use of renewable energy.
- Consumption of energy is continuously monitored by a team of faculty and students from the
  Department of Electrical and Electronics Engineering and water and waste water qualities are
  checked by a team of faculty and students from Department of Civil Engineering & Biotechnology.
  Ways to reduce energy usage are discussed in the IQAC meeting. Promising ideas are implemented
  subsequently.
- The Biomethanation plant in this Institution is multi feed with the following feeds like Cattle dung, Night soil, Vegetable waste and Food waste. The gas producing capacity of the digester is 500cu.m per day.
- The Institution practices Reduce, Reuse, Recycle and Recover philosophy in all its activities. Color coded bins are used in the entire campus to segregate the solid waste.
- Institution has a Centre for Energy and Environment to perform research in renewable energy and continuously strives to increase the use of renewable energy in the Institution's day to day operations.
- Two student clubs namely Energy Club and Environment Club along with the Centre for Energy

- and Environment conduct awareness programs periodically among students and the public about energy conservation, water conservation, tree plantation and solid waste management.
- Use of motor vehicles is restricted inside the campus. All are motivated to use bicycles inside. This reduces pollution in the total area of the Institution.
- Institution continuously increases its green cover by planting trees. Every year tree saplings are planted by the newly admitted students of that academic year and also by the guests. All pervasive greenery on the sprawling premises of the Institution symbolizes the institutions success in countering environmental pollution and creating Eco-friendliness. Herbal garden is maintained in the campus.
- The campus has around 4,500 shrubs and plant varieties, 36,820 native trees. Such thick foliage of vegetation absorbs CO2 emission.
- Rainwater as runoff is collected on ground surface in the campus and fed into the collecting sumps and natural ponds located in different places of the Institution using recharge trenches of 3 nos having length of 300m and depth of 1.5m. Roof top water from the buildings are collected and fed in to two storage wells each having capacity of 5 lakh liters. The collected roof water is transported through PVC pipes of 100mm and 150mm diameter.
- The average rain fall in this vicinity of the area is calculated by survey as 1314mm. The average water collected from roof top of buildings is nearly 38520cum from lined road area 5756 cum and from surface run off from open area approximately 90593 cum.
- The runoff and drainage collected in the pond through trapezoidal unlined open channel having dimensions top width 2m, bottom width 1m and length of channel 1km.
- The rainwater thus harvested and collected in the sumps is directly used as irrigation water for lawns by suitable sprinklers in the campus and for vegetable farms by drip irrigation. The recharged ground water through deep bore well is utilized for all institutional needs and construction of buildings. The entire water needs of the Institution are satisfied by conjunctive water management.
- Two numbers of check dams were constructed in the institution premises. Both cover water shed area of 8096 sq.m each having the capacity of approximately 24290 cu.m length of 420m and depth of 3m. The other one has dimensions of about 91m x 20m x 1.5m. The constructed weir has the dimensions of 12m x 0.6mx 1.8m. Collected water is utilized for garden and farming.
- Ten varieties of Bamboo are cultivated in 10 acres in the institute under the funding of National Mission on Bamboo Applications (NMBA), Government of India. Bamboo needs one-tenth of the water as compared with paddy cultivation and it has a good retaining capacity of ground water and also the survival of 40 years as a standing crop. Each bamboo clump liberates 850 grams of O2 per day meeting the O2 requirement of a single person per day.
- All the waste paper generated in the campus is processed in the paper recycling unit and reused as saleable articles such as files, paper bags, packing materials etc.
- Hazardous waste generated by the Biotechnology department is biological medium wastes such as agar media which is subjected to decontamination and is treated with sodium hydroxide solution or by autoclaving method. The chemicals and solutions are neutralized / diluted to permissible waste water disposal standards and flushed out.
- The e-waste generated from computers, electronic gadgets and other nonworking equipment are handed over to the estate office of the institute and then disposed through private authorized collectors.
- Institution has constructed 220 modular eco toilets in Pillayarpatti village jointly with District Administration of Thanjavur District and District Rural Development Agency (DRDA)
- Solid Waste Management Trainings under Nirmal Bharath Abhiyan Scheme were given to 480 Panchayat Presidents, Overseers, Block Development Officers, Assistant Engineers of District Rural Development Agency (DRDA), Thanjavur District.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	View Document

### 5. CONCLUSION

### **Additional Information:**

### **Highlights of the Institution:**

- "Best Private University in India", award for Education Transformation for the year 2018 was awarded to PMIST by ASSOCHAM on 21st August 2018
- PMIST has achieved Five Star grading for its achievement in undertaking various activities prescribed by Institution Innovation Cell, Ministry of Education, Government of India to promote Innovation and Start-up in campus. PMIST is one among the top 125 Institutions / Universities in India and top 51 in South Zone
- PMIST has been categorized as 'Band B' Institution (Rank between 26-50) in category of "University and Deemed to be University (Private-Self financed)" in Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2020
- Periyar Technology Business Incubator has instituted with 25 incubatees and many of them have become successful entrepreneurs
- Pneumatically Operated Electronic Multipurpose Simulator (POEMS), a flagship innovation project and one of the prestigious projects carried out in association with the Air Force Station, Thanjavur. A Patent in the name of "Electro Pneumatic Projectile Launching Training System" has been filed.
- Asset mapping for 589 Panchayats in Thanjavur district in ISRO Bhuvan Portal
- Associated with Smart City Mission project, Thanjavur
- Institution has designed and installed more than 200 cost effective modular toilets in its neighbourhood places under Open Defecation Free India Scheme jointly with District administration Thanjavur
- PMIST is one among the 16 institutions to receive the grant of Rs. 1.03 Crore from DST- Nano Mission, Government of India to offer M.Tech. Degree Programme in Nano Technology
- As a record breaking project, Girl students from various science and engineering disciplines successfully launched Asia's first balloon satellite "SKI NSLV9 Maniammaiyar Sat" in association with Space Kidz, India, Chennai on 21 April 2019
- Faculty of Architecture and Planning has been ranked (All India) 23rd & 20th among the Best Architecture School during 2019 and 2020 respectively under India Today's MDRA Ranking
- Periyar Community Radio has been disseminating information covering about 25 km radius

### **Concluding Remarks:**

The vision and Mission of the institute has been firmly embedded in the PMIST's agenda which Fosters Social Responsibility & Community Engagement in Higher Education Institution in India.

All the aforesaid factors encapsulate the motto of PMIST: "THINK, INNOVATE TRANSFORM". Participation in all the societal responsibilities, PMIST embarks creative and intellectual thinking in all academic and curricular aspects by keeping the welfare of the society in all activities.

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### **6.ANNEXURE**

### **1.Metrics Level Deviations**

	Sub Questions and Answers before and after DVV Verification
1.2.1	Percentage of new courses introduced of the total number of courses across all programs
1.2.1	offered during the last five years.
	1.2.1.1. How many new courses were introduced within the last five years.
	Answer before DVV Verification: 2716
	Answer after DVV Verification: 0
	1.2.1.2. Number of courses offered by the institution across all programmes during the last
	five years.
	Answer before DVV Verification: 6072
	Answer after DVV Verification: 6072
	Remark: Minutes of the relevant Academic Council/BOS meetings has not shared by HEI.
1.2.2	Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course
	system has been implemented (Data for the latest completed academic year).
	1.2.2.1. Number of Programmes in which CBCS / Elective course system implemented.
	Answer before DVV Verification: 70
	Answer after DVV Verification: 39
	Remark: DVV has made the changes as per 1.1.
1.3.4	Percentage of students undertaking field projects / research projects / internships (Data for
	the latest completed academic year).
	1.3.4.1. Number of students undertaking field projects or research projects or internships.
	Answer before DVV Verification: 1842
	Answer after DVV Verification: 1730
2.4.3	Average teaching experience of full time teachers in the same institution (Data for the latest
	completed academic year in number of years)
	2.4.3.1. Total experience of full-time teachers
	Answer before DVV Verification: 1569.75
	Answer after DVV Verification: 1517
	Remark: DVV has given the input by not considered experience of librarian and physical director.
2.4.4	Average percentage of full time teachers who received awards, recognition, fellowships at State,
	National, International level from Government/Govt. recognised bodies during the last five years
	2.4.4.1. Number of full time teachers receiving awards from state /national /international
	level from Government/Govt. recognized bodies year wise during the last five years

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Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
15	23	12	10	5

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
2	1	0	2	0

Remark : DVV has not considered participation /Appreciation Certificate, Reviewer /Membership letter.

- Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years
  - 2.5.2.1. Number of complaints/grievances about evaluation year wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1	6	20	27	64

Answer After DVV Verification:

2010.20	2010.10	2017 10		2017.11
2019-20	2018-19	2017-18	2016-17	2015-16
1	6	20	28	76

- Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.
  - 3.3.3.1. Total number of awards / recognitions received for *research* / innovations won by institution / teachers / research scholars / students year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
9	10	6	4	12

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
2	2	2	2	2

Remark: DVV has made the changes as per shared supporting certificates by HEI and not considered workshops and conferences.

- The institution provides incentives to teachers who receive state, national and international recognitions/awards
  - 1. Commendation and monetary incentive at a University function
  - 2. Commendation and medal at a University function
  - 3. Certificate of honor
  - 4. Announcement in the Newsletter / website

Answer before DVV Verification: B.. 3 of the above Answer After DVV Verification: C. 2 of the above

Remark: DVV has select 2 of the above as per shared document of SL. No. 1 and 3 by HEI.

- 3.4.5 Number of research papers per teachers in the Journals notified on UGC website during the last five years
  - 3.4.5.1. Number of research papers in the Journals notified on UGC website during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
134	72	29	41	71

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
76	60	18	25	40

- Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years
  - 3.4.6.1. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
48	7	25	8	12

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
8	2	14	7	4

Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

3.5.2.1. Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
36.80	36.33	44.67	27.87	53.97

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark: Consultancy amount not reflected in the HEI income and expenditure statement.

- Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years
  - 3.6.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	4	2	3	4

Answer After DVV Verification

	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark: DVV has not considered participation and Appreciation certificate.

- Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs).
  - 3.6.3.1. Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc. (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs) year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
22	20	22	13	15

Answer	After	DVV	Verific	ation
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2019-20	2018-19	2017-18	2016-17	2015-16
10	16	21	13	13

- Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years
  - 3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
495	589	739	627	704

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
153	372	719	627	580

- 3.7.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year
  - 3.7.1.1. Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students yearwise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
39	163	143	143	107

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
12	75	65	56	43

Remark: DVV has not considered part of the curriculum.

- Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).
  - 5.1.1.1. Number of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) year wise during the last five years (other than the students receiving scholarships under the government schemes for

### reserved categories).

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
886	654	790	150	162

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1060	790	1067	172	191

- Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.
  - 5.1.2.1. Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
841	1091	2044	2680	865

Answer After DVV Verification:

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2019-20	2018-19	2017-18	2016-17	2015-16
583	958	1775	2642	856

- Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.
  - 5.3.1.1. Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
14	10	23	30	18

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
14	09	21	26	14

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

# 5.3.3.1. Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
4	6	5	4	3

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	6	4	4	3

- Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.
  - 6.3.2.1. Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
18	22	1	2	7

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
18	19	1	2	7

- Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).
  - 6.3.4.1. Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
80	20	26	54	33

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
80	20	25	53	33

6.4.3 Funds / Grants received from non-government bodies, individuals, philanthropists during the

### last five years (not covered in Criterion III and V) (INR in Lakhs)

6.4.3.1. Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
12.16	0	0	0	0

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	0

- 6.5.2 Institution has adopted the following for Quality assurance
  - 1. Academic Administrative Audit (AAA) and follow up action taken
  - 2. Confernces, Seminars, Workshops on quality conducted
  - 3. Collaborative quality initiatives with other institution(s)
  - 4.Orientation programme on quality issues for teachers and students
  - 5. Participation in NIRF

6.Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Answer before DVV Verification: A. Any 5 or more of the above

Answer After DVV Verification: C. 3 of the above

Remark: DVV has select any 3 of the above as per supporting's of 4,5 and 6 shared by HEI.

### 2.Extended Profile Deviations

ID	Extended Questions
1.1	Number of programs offered year-wise for last five years

### Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
72	76	76	76	77

### Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
39	40	37	35	34

### 2.1 Number of students year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3378	3183	3130	3210	3516

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3363	3177	3100	3165	3488

### 2.2 Number of outgoing / final year students year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
892	711	701	800	985

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
892	745	712	806	995

### 3.2 Number of full time teachers year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
180	178	201	228	234

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
175	174	197	223	229

# 4.1 Number of eligible applications received for admissions to all the programs year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
2006	1936	1906	1708	3478

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1853	1570	1204	2196	1908

### 4.5 Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

### Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
984	1069	679	833	1029

### Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
883.01	957.75	576.00	809.47	653.53