SELF STUDY REPORT

FOR 1st CYCLE OF ACCREDITATION

PADMASHREE DR. D Y PATIL INSTITUTE OF ENGINEERING, MANAGEMENT AND RESEARCH

SECTOR NO 29, PCNTDA (RAVET), NIGDI PRADHIKARAN, AKURDI, PUNE 411044 411044

www.dypiemr.ac.in

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Dr. D.Y. Patil Pratishthan's Dr. D.Y. Patil Institute of Engineering, Management & Research (DYPIEMR) feels privileged to present its Self Study Report to the National Assessment and Accreditation Council. Dr. D.Y. Patil Pratishthan, a part of the D.Y. Patil Group, was established in the year 1983 by Padmashree Dr. D.Y. Patil to provide quality education in various disciplines. Dr. D.Y. Patil Group's foray into the technical education extends back to more than three decades with a long standing commitment to its quality teaching and learning.

After making a mark in the field of technical education through its flagship institute, 'D.Y. Patil College of Engineering, Pune' established in 1984, , Dr. D.Y. Patil Pratishthan decided to start another engineering college and as a result DYPIEMR was established in 2012.

DYPIEMR, a self-financed Institute is approved by AICTE, recognized by the Government of Maharashtra and affiliated to Savitribai Phule Pune University (SPPU). It offers undergraduate degree programmes in Chemical Engineering, Civil Engineering, Computer Engineering, Electronics and Telecommunication Engineering and Mechanical Engineering with an intake of 540 students. The Institute is located at Akurdi, a suburb of Pune which is known as the 'Oxford of East' because of its rich tradition of academic excellence.

DYPIEMR provides a conducive learning environment through state-of-the-art infrastructure and other facilities. The Institute strives hard for the (w)holistic development of students by organizing various co - and extra - curricular activities and events. In a short span of six years, the Institute has matured in its standing and is moving in a progressive direction.

Vision

To strive for excellence by providing technical education and facilitate research for the welfare of society

Mission

- 1. To educate the students with strong fundamentals by providing a conducive environment
- 2. To inculcate research with creativity and innovation
- 3. To promote industry-institute collaboration and prepare students for lifelong learning in the context of technological change
- 4. To strengthen leadership, team work, professional & communication skills and ethical standards

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

• Association with illustrious brand and legacy – The D.Y. Patil Group of Institutions

- Clean, Green and Eco-friendly Campus awarded by Pimpri Chinchwad Municipal Corporation for the last two years
- Excellent state-of-the-art infrastructure
- Located in close vicinity to the IT and Industrial hubs of Pune, Hinjewadi, Pimpri-Chinchwad and Chakan
- Highly motivated and committed faculty and supporting staff
- Add-On training and value-added programmes for curriculum enrichment & holistic development of students
- Consistently good academic results
- Strong liaison with industry for students' projects, internships, industrial visits, expert lectures
- Good placements due to a proactive Training and Placement Cell
- Participative management with representation for students, staff and faculty at various levels
- Professional society chapters and clubs
- Active participation of students in prestigious project competitions like Hackathon, TCS Code Vita, Avishkar, etc.
- Personal counselling and mentoring through effective Teacher-Guardian scheme
- Effective use of ICT for teaching-learning

Institutional Weakness

- Low placements in core companies
- Few funded research and consultancy projects
- Few publications in peer reviewed quality international journals
- Average quality of students at entry level
- Less contribution by alumni as only three batches have passed out

Institutional Opportunity

- Potential for increasing placements due to locational advantage
- Potential for more interaction with industry for research and consultancy
- To attract and retain highly qualified and experienced faculty
- To attract highly meritorious students at entry level
- To strive for academic autonomy to increase employability and holistic development of students

Institutional Challenge

- Less academic flexibility
- To increase placements in core sector
- To attract students with high merit at entry level
- To accommodate different activities in the academic calendar
- To motivate students to participate in various Add-On programmes and activities
- To cope with rapidly changing technology

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

DYPIEMR is affiliated to SPPU and follows the Curriculum, Examination and A ssessment pattern prescribed by it. Senior faculty members of the Institute play a significant role in proposal, drafting and finalizing of the curriculum. Limited flexibility in the curriculum is offered with provision for elective courses for the final year students. Based on the feedback from stakeholders and consultations with experts, various technical as well as non-technical add-on courses are offered to the students to bridge the gap between the curriculum and industry expectations as well as to sensitise them on cross cutting issues such as gender, environment, etc. This helps to enrich the curriculum as well as to address the issues not covered by the curriculum of the affiliating university.

Effective curriculum planning and delivery is ensured through a well documented process based on the Plan-Develop-Check-Analyse (PDCA) cycle. Each department prepares its academic calendar in line with that of Institute Academic Calendar well in advance before the start of the academic session. This helps the faculty members to plan their course contents and delivery, and to identify the curriculum gaps based on COs and POs. Effective implementation and delivery of the curriculum is ensured through regular monitoring by Academic Coordinators and HoDs under the guidance of IQAC.

Teaching-learning and Evaluation

The admission procedure of the Institute is governed by the Government of Maharashtra and Directorate of Technical Education (DTE), Maharashtra through a Centralized Admission Process (CAP) which promotes diversity, transparency and inclusion during admission. Institute follows the guidelines provided by DTE regarding reservation policy and merit based admissions at Institute level.

As students with diverse academic and socio-economic background are admitted, special efforts are taken to assess their learning levels through various means such as their performance in qualifying examination, proficiency test, SPPU examinations, feedback from Teacher Guardians, etc. Slow learners are provided extra guidance and counselling to improve their performance. Advanced learners are encouraged to enroll for online courses like NPTEL, to participate in competitions like Hackathon, SPPU Avishkar, etc. This helps the slow learners to improve their performance and advanced learners to excel.

Through the initiatives of IQAC, Outcome Based Education (OBE) has been implemented in the teaching-learning process. Carefully designed Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are displayed and communicated to the stakeholders through various means. Various student-centric pedagogies like active learning, collaborative learning, project based learning, experimental learning are used in the teaching – learning process. Institute maintains its pace with the technical development and modernization in educational communications and utilizes them for effective learning and evaluation. The Institute is well equipped with an excellent ICT infrastructure and all faculty members utilize it effectively to help achieve the desired learning outcomes. Attainment of learning outcomes is evaluated in a structured manner using direct and indirect assessment tools.

The Institute meticulously follows all examination reforms and timelines set by SPPU. The process for continuous internal evaluation is transparent and robust. A well-defined mechanism exists, both at the Institute and University level, for timely redressal of grievances related to examinations and evaluation.

Excellent infrastructure, dedicated and motivated faculty and staff, individual attention and mentoring, and focus on student-centric academic processes have resulted in consistently good results over the years.

Research, Innovations and Extension

DYPIEMR believes that education and research are closely associated and hence it is keen to develop Research culture in the Institute. All attempts are being made to create an ecosystem for research and innovation. An 'Incubation and Innovation Cell' has been set up to encourage the faculty and students for research activities. Lectures by and interactions with eminent researchers are organised to inspire the students and faculty to undertake research activities. In a span of just six years, these initiatives have shown encouraging results. Institute has received research grant of Rs.12.88 lakhs in the last two years, one of them being from ISRO-SPPU Space Technology Cell of Rs.10.4 lakhs. Twenty two patents have been filed by the faculty and students. 537 research papers with 88 papers in UGC listed journals have been published in the last 5 years. In addition, over 150 research papers have been presented in various national and international conferences. Many students have won awards in various research competitions like KPIT Sparkle, Smart India Hackathon, SPPU Aavishkar Project Competition etc.

An active Industry-Institute Partnership Cell (IIPC) strives hard to establish linkages with industries and research organizations to undertake projects, internships, field visits, expert lectures etc. The Institute has signed 58 MoUs with industries and other organizations so far. A Centre of Excellence has been established in association with Virtusa Polaris 7 the Institute has received the Best COE award. Also, AICTE-CII survey has awarded Silver ranking to the Institute.

The Institute believes that along with technical proficiency it is necessary to sensitise the students about social issues for their holistic development.

To meet this requirement, numerous events such as blood donation camps, organ donation camps, road safety awareness, digital awareness, etc. are organised through an active NSS unit as well as in collaboration with voluntary organizations and NGOs.

Infrastructure and Learning Resources

The Institute has a clean, green and ecofriendly Campus with excellent state-of-the-art infrastructure conducive to learning. Physical facilities comprise 24 ICT enabled classrooms, 49 laboratories, workshop, 2 seminar halls, Central Auditorium, Cafeteria and enough space for indoor and outdoor activities. Ramps and lift have been provided for differently able students and employees.

The Central Library is stacked with adequate number of reference books & textbooks and has e-learning resources such as NPTEL videos, e-journals (IEEE, Sciencedirect, ASME and ASCE), etc. Institute Library is a member of the National Digital Library (NDL), DELNET and SPPU Jaykar Library. It's operations are automated through the e-Granthalaya software. Library resources are made available to the students beyond normal working hours during examinations.

DYPIEMR has an excellent IT infrastructure with 563 computers with the necessary System and Application Software, 63 Mbps internet leased line, high speed Cisco Wi-Fi routers and switches, smart boards, LCD projectors, etc. Centralised firewall Cyberoam is used for network monitoring, bandwidth management and internet security.

The Institute has a well-documented process for the augmentation, upkeep and maintenance of it's infrastructure and learning resources.

Student Support and Progression

DYPIEMR believes that students are the primary reason it exists as an institution. Institute always strives hard for the overall development and progression of the students. The Institute has a Teacher-Guardian (TG) scheme to provide personal attention to the students as well as to track their performance. The TGs do not limit their interaction to only academics, but also mentor the students on several aspects like personal issues, career guidance as and when needed. The TGs also communicate regularly with the parents about their academic progress, attendance and wellbeing. The needy students are intimated and guided about the various scholarships, Earn & Learn scheme and Book Bank facility of library.

The Institute has a dedicated training and Placement Cell which provides required training and motivates students for research and higher studies. The students are guided for the competitive exams such as GATE/GRE/TOFEL/CAT, etc. Special efforts are made for improving soft skills of students through various training and add-on programmes. The Institute provides 100% placement assistance. Every year more than 150 companies visit the Institute for recruitment. The outcome of these efforts is very well validated by the placement results over the last three years.

Institute always motivates students to participate in various co-curricular and extra-curricular activities in and outside the Institute. Organization of such activities helps in boosting the confidence of the students and improves their overall personality. These events are also reflected in the academic calendar of the Institute. DYPIEMR has an active Students Council through which various co-curricular and extra-curricular activities are organized. Besides this students are also given representation on academic and administrative bodies like IQAC, College Development Committee, Internal Complaints Committee, Anti-ragging Committee, etc.

There is a transparent mechanism to address students' grievances. The Internal Complaints Committee and Anti-ragging Committee have been constituted as per the guidelines of the statutory authorities to redress the grievances regarding sexual harassment and ragging respectively. A separate Grievance Cell has been constituted to resolve other grievances of the students.

Institute has a registered Alumni Association and regularly organizes alumni meets and interaction with students to guide the present students.

Governance, Leadership and Management

The vision of the Institute is to strive for excellence by providing quality technical education and facilitate research for the welfare of society and accordingly the mission of the institute has been articulated. Individual departments have also framed their vision and mission statements in-line with those of the Institute.

The management provides leadership to the faculty and supporting staff by involving them in the decision making process, thereby, building organizational culture based on trust and participative management. Management of the Institute believes in decentralization and participative management and hence roles and

responsibilities of various bodies/cells/individuals are well-defined as is evident through their minutes of meeting.

Institute has various faculty empowerment strategies. 50% fees concession is given to the children of employees, studying in any institute of Dr.D.Y.Patil Pratishthan. Besides this, other welfare measures such as group insurance, provident fund, gratuity, etc. are provided to the employees. Faculty members are encouraged and supported to register for PhD. A number of professional development programmes have been organised for the faculty and supporting staff. They are also encouraged to participate in such programmes in other institutes. Financial provision is made by the management every year for effective working of the Institute. Systems are in place to ensure effective and optimal utilization of financial resources. All accounts are duly audited every year. IQAC plays an important role to ensure that quality is initiated, promoted and sustained in all activities. Through its efforts, various quality initiatives have been implemented in the Institute.

Institutional Values and Best Practices

Core values of DYPIEMR are Excellence, Ethics & Integrity, Focus on students, Accountability & Transparency and Use of technology. All activities in the Institute are carried out to inculcate these core values among the students and staff in order to fulfill the Vision of the Institute.

The Institute is committed to sensitise the students and staff on gender equality through various gender equality promotion programmes. To ensure safety and security, CCTV cameras are installed all over the Campus and security is provided round the clock. Equal opportunities are provided to all irrespective of their gender. It is heartening to note that the Institute is headed by a woman, four out of six HoDs are women and 36 % of faculty members are women.

DYPIMER is committed to adopting environment friendly practices with regards to plantation, waste management, use of renewable energy resources, rain water harvesting etc.

A number of programmes have been organized for the benefit of and in association with local community. Institute makes all out efforts to create awareness among students and staff about social responsibilities and consciousness about human values & professional ethics.

In order to achieve its Vision, the Institute has adopted a number of best practices. Career Augmentation Training is provided to the students to enhance their technical and soft skills and to make them globally proficient and employable.

DYPIEMR has established an Industry – Institute Partnership Cell to foster meaningful interaction. This Cell has been instrumental in creating linkages with industries, thereby, contributing to enhancing the quality of education by arranging industrial visits, sponsored projects, guest lectures by experts from industries, etc.

DYPIEMR takes pride in its dynamic and talented faculty. At the same time it realizes the need to train and retrain them to maximise their potential as teachers who shape the next generation for nation-building. Various enrichment programmes are, therefore, organised for the faculty at Institute and Campus level. The objectives are to enhance their knowledge and skills, to augment their effectiveness in content design and delivery, to inculcate professional ethics and integrity, and to familiarize them with their social responsibilities.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	e
Name	PADMASHREE DR. D Y PATIL INSTITUTE OF ENGINEERING, MANAGEMENT AND RESEARCH
Address	Sector No 29, PCNTDA (Ravet), Nigdi Pradhikaran, Akurdi, Pune 411044
City	Pune
State	Maharashtra
Pin	411044
Website	www.dypiemr.ac.in

Contacts for Communication							
Designation	Name	Telephone with STD Code	Mobile	Fax	Email		
Associate Professor	Kiran M Narkar		8888849219	-	hodmech@dypiem r.ac.in		
Principal	Anupama V Patil	020-27654470	9423858907	020-2765656 6	principal@dypiemr .ac.in		

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details			

University to w college)	hich the college is	affiliated/ or v	vhich gove	erns the c	ollege (i	f it is a constituent
State	University name Document					
Maharashtra		Savitribai Phu	le Pune Un	niversity	View	<u>Document</u>
Details of UGC	recognition					
Under Section	D	Date		V	View Document	
2f of UGC						
12B of UGC						
	gnition/approval by	•	_	oodies lik	e	
	Recognition/A roval details In itution/Depart	pp Day,Monst year(dd- tme yyyy)	nth and	Validity months	in	Remarks
AICTE,NCTE, Statutory Regulatory	Recognition/A roval details In	Day,Mor year(dd- yyyy)	nth and mm-		in	Remarks

UGC), on its affiliated colleges?	
Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by	No

No

Details of autonomy

Does the affiliating university Act provide for

conferment of autonomy (as recognized by the

any other governmental agency?

Location and Area of Campus							
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.			
Main campus area	Sector No 29, PCNTDA (Ravet), Nigdi Pradhikaran, Akurdi, Pune 411044	Urban	5	14997			

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current	Academic year)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Chemical Engineering	48	Higher Secondary Certificate	English	60	60
UG	BE,Civil Engineering	48	Higher Secondary Certificate	English	120	100
UG	BE,Compute r Engineering	48	Higher Secondary Certificate	English	120	120
UG	BE,Electroni cs And Telec ommunicatio n Engineering	48	Higher Secondary Certificate	English	60	60
UG	BE,Mechani cal Engineering	48	Higher Secondary Certificate	English	180	161

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	Professor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				10				26				75
Recruited	1	0	0	1	7	3	0	10	31	19	0	50
Yet to Recruit				9				16				25
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			50
Recruited	0	0	0	0	0	0	0	0	31	19	0	50
Yet to Recruit				0				0				0

Non-Teaching Staff							
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government		7,		0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				33			
Recruited	23	10	0	33			
Yet to Recruit				0			

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				24					
Recruited	16	8	0	24					
Yet to Recruit				0					

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n	Professor			Assoc	iate Profes	ssor	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.	1	0	0	6	3	0	2	4	0	16
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	1	0	0	29	15	0	45

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	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	0	0	0	31	19	0	50

Part Time Teachers										
Highest Qualificatio n	Professor		Assoc	iate Profe	ssor	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	0	0	0	0	0	0	0

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	0	0	0	0			

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	375	47	0	0	422
	Female	82	13	0	0	95
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme	Year 1	Year 2	Year 3	Year 4	
SC	Male	32	37	38	23
	Female	14	7	8	13
	Others	0	0	0	0
ST	Male	5	3	5	0
	Female	1	0	0	2
	Others	0	0	0	0
OBC	Male	60	74	61	96
	Female	25	18	25	19
	Others	0	0	0	0
General	Male	281	259	300	263
	Female	70	67	92	68
	Others	0	0	0	0
Others	Male	32	32	33	20
	Female	7	5	6	3
	Others	0	0	0	0
Total		527	502	568	507

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response: 896

6	File Description	Document
	Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
5	5	5	5	5

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2385	2169	2054	1375	818

File Description		Docum	nent	
Institutional Data in Pre	escribed Format	View	<u>Document</u>	

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

2017-18	2016-17	2015-16	2014-15	2013-14	
176	176	176	176	136	

File Description		Document	
Institutional Data in Prescrib	oed Format	View Document	

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

2017-18	2016-17	2015-16	2014-15	2013-14
519	401	306	NA	NA

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
124	122	113	73	45

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
144	136	120	84	48

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.4 Institution

Total number of classrooms and seminar halls

Response: 27

Number of computers

Response: 563

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

2017-18	2016-17	2015-16	2014-15	2013-14
681	557	558	297	215

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

Dr. D. Y. Patil Institute of Engineering, Management and Research (DYPIEMR) is affiliated to the Savitribai Phule Pune University (SPPU) and follows the syllabus prescribed by it. However, Institute plays a role in the development of the curriculum by participating in the proposal drafting and finalizing of the curriculum. Institute has a structured strategic plan and is meticulously followed for the effective implementation of the curriculum in order to progress towards attainment of Institute's Mission and Vision.

- 1.Based on the inputs from IQAC/AMC (Academic Monitoring Committee), Institute and Department Academic Coordinators and HoDs prepare the Academic Calendar for every semester in line with SPPU Calendar and is distributed to the time table coordinator of all departments.
- 2. Based on the expertise and choice of faculty members, subject load is distributed and teaching plans & course files are prepared.
- 3. Academic calendar is displayed on the notice board as well as on the Institute website.
- 4. Resource planning is done before the start of the semester and procurement of hardware, software and consumables is done accordingly.
- 5. Course and Module coordinators plan and monitor the content delivery and course outcomes. They also identify the curriculum gaps and content beyond syllabus and suggest measures to address them.
- 6. Faculty members are encouraged to participate in Orientation Workshops, FDPs to enhance teaching, training and content development skills.
- 7. ERP/Moodle is used to maintain records of attendance, lesson plans and to upload course material.
- 8. Institute conducts proficiency test for First Year (FE) students to identify slow and advanced learners. An action plan is prepared to help the slow learners to address the course pre-requisites.
- 9. Assignments, tutorials, unit tests, online tests, mock orals and practical are conducted to judge the understanding of the students.
- 10. Extra theory/practical classes are conducted for direct second year students. Remedial classes are conducted for slow learners.
- 11. Effective implementation of curriculum is ensured by supplementing classroom teaching with expert lectures, in house and industry supported projects to nurture innovativeness among students.
- 12. In order to provide personal attention to the students, Institute has adopted Teacher Guardian scheme. Regular meetings are conducted with students to counsel them about their academic performance and personal difficulties. These are communicated to parents by means of letters/SMS/Phone calls.
- 13. Institute and Department Academic Coordinators regularly monitor the academics.
- 14. Reports of academic activities prepared by the faculty are audited by Departmental Academic Coordinators and Institute Academic coordinator.
- 15. Internal and external feedback of faculty is taken every semester to appreciate the efforts taken by the faculty, as well as to identify and suggest the areas of improvement.

16. Guest Lectures, Industrial visits, Workshops etc. are organized to bridge curriculum gaps and to cover content beyond syllabus.

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

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 37

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
12	11	07	05	02

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 7.34

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
04	01	01	01	00

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 40.85

1.2.1.1 How many new courses are introduced within the last five years

Response: 366

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	<u>View Document</u>
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

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

Response: 5

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Addon programs as against the total number of students during the last five years

Response: 59.15

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1151	1058	1139	963	599

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

Various cross cutting issues are integrated in the curriculum of SPPU.

The curriculum has incorporated environmental and sustainability issues through courses such as

- Energy Audit and Management
- Refrigeration and Air Conditioning
- Road Safety
- Innovations in engineering field/ Agriculture
- Fire & Safety Technology
- Basic Civil & Environmental Engineering
- Hydrology and Water Resources Engineering
- Environmental Engineering
- Air Pollution and control
- Green Building Technology
- Environmental Studies
- Smart Cities
- Water Management
- Green Computing
- Energy Conservation In Chemical Process Industries

Issues like Human Values and Professional Ethics are addressed in the curriculum through the following courses

- Computer Forensic and Cyber Applications
- Cyber Security

- Humanities and Social Sciences
- Professional Ethics and Etiquettes
- Emotional Intelligence
- Value Education
- Intellectual Property Rights

Though the issues of gender equality are not addressed through the SPPU curriculum, Institute strives hard to create and maintain an environment where students, faculty and non-teaching staff can work together in an atmosphere free of gender violence, sexual harassment, and gender discrimination. To sensitize the faculty, staff and students about gender equality various programs are organized. For holistic development of students, the Institute also conducts different activities to inculcate moral and ethical values, professional ethics, life skills and gender equality. The Institute also strives hard to create and maintain an environment where students, teaching and non-teaching staff can work together in an atmosphere free of gender violence, sexual harassment, and gender discrimination.

- As a social responsibility, institution has adopted 2 children from 'Nachiket Balagram' orphanage. Frequent visits are organized to the orphanage for birthday celebration of the children, and to create digital awareness the children from this orphanage are invited to the Institute to learn computers.
- The institution celebrates various National days like Yoga Day, Teachers day, Engineers day, Republic day, Independence Day to impregnate values about nationalism and integrity among the faculty and students.
- Awareness workshops regarding IPR are conducted for the students and faculty.
- Students are also made aware of the Human values by organizing various activities like under National Social Service (NSS).
- Programs such as tree plantation, Swaccha Bharat Abhiyan are conducted in the Institute.
- International Women's Day, Social awareness seminars on sexual harassment are conducted by the Institute.
- Student Council also plays an important role in sensitizing the students on gender issues to give equal representation for both genders.

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

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 24

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 24

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 18.78

1.3.3.1 Number of students undertaking field projects or internships

Response: 448

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

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni and 5) Parents for design and review of syllabus-Semester wise/year-wise

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

- 1.4.2 Feedback processes of the institution may be classified as follows:
- A. Feedback collected, analysed and action taken and feedback available on website
- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

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

File Description	Document
Any additional information	<u>View Document</u>
URL for feedback report	<u>View Document</u>

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 16

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
320	329	338	242	142

File Description	Document
List of students (other states and countries)	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 99.12

2.1.2.1 Number of students admitted year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
527	502	568	507	445

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
540	540	540	540	420

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

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 100

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
176	176	176	176	136

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

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

Students from diverse academic backgrounds and abilities are admitted every year. In order to enhance the overall performance of all the students, it is first necessary to assess their learning levels and identify slow and advanced learners. Special efforts are made by the Institute to track the performance of the students through various ways and means to help the slow learners to improve and the advanced learners to excel. Learning levels of the students are assessed through the following means

- 1. Performance in qualifying and entrance examinations
- 2. Performance in the proficiency test on Physics, Chemistry, Mathematics, English and General Aptitude conducted after the admission in the first year.
- 3. Analysis of the internal tests conducted by the Institute, laboratory work, continuous internal evaluation, SPPU examinations in the previous year, etc.
- 4. Monitoring by Teacher-Guardian (TGs)

To improve the performance of slow learners the following measures are adopted

- 1. Remedial/Extra lectures
- 2. Individual attention
- 3. Regular counseling and mentoring by TGs
- 4. Assignments to boost their confidence and enhance self-learning skills
- 5. Communication to parents about the performance of their wards
- 6. Additional help in solving assignments and previous University question papers

The progress of advanced learners is monitored regularly and they are mentored to excel through the following means:

- 1. Regular counseling and additional guidance by the course faculty
- 2. Projects sponsored by Industry as well as internships in industry/research organizations
- 3. Platform to showcase their skills through the various activities in the Institute
- 4. Awards to toppers
- 5. Motivation to appear for competitive examinations like GATE, CAT, GRE, etc.
- 6. Encouragement/Guidance to publish research papers and to file patents
- 7. Guidance for higher studies and research
- 8. Add-on courses on latest technologies
- 9. Encouragement to register for NPTEL certification courses, project competitions like Avishkar, Hackathons etc.

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

2.2.2 Student - Full time teacher ratio

Response: 19.23

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.25

2.2.3.1 Number of differently abled students on rolls

Response: 6

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document
Any additional information	View Document

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:

Over the years the teaching learning process has evolved to be more student-centric, participative and creative. At DYPIEMR, emphasis is to facilitate learning in the best possible manner by adopting various teaching pedagogies. Student centered learning focuses on students' interests, abilities and learning styles making the teacher a facilitator of learning for individuals.

The teaching learning process at DYPIEMR is directed towards implementing Outcome Based Education (OBE). All academic processes are designed and implemented towards attainment of students learning outcomes which are measured through direct and indirect means.

Following techniques are used to make teaching learning process student centric:

- Active learning: It is a form of learning in which the teacher/ faculty strives to involve students in the learning process more directly than other methods via Group discussions, Quiz using ICT tools, One minute paper, Virtual Laboratory, Role play. Industrial visits and Expert lectures by stalwarts from the Industry. To further facilitate the adoption and utility of modern pedagogy by the faculty members and students, online learning resources such as NPTEL, Online Journals and other E-resources are offered. The students' Association is very proactive in organizing varied events uniformly spread throughout the Academic Year, so that they emerge with their dormant talents both in their personal and professional lives.
- Collaborative and Project based Learning: Research has shown that collaborative learning fosters better higher level thinking skills and deeper understanding of learning material. Final year project is a good example of collaborative and interactive learning. Students are encouraged to undertake projects sponsored by Industries and Research organizations such as DRDO, NCL etc. and to undergo In-plant training/ Internships during vacations. Various technical events such as project exhibition, model making, software development, circuit development etc. are organized for the students to showcase their technical skills. Students are also encouraged to participate in inter collegiate events.
- Cooperative Learning: It is a fresh pedagogical approach which aims to embed class room activities into academic and social learning experiences, viz., think-pair-share, seminars, flipped class room etc.
- **Problem Based Learning:** It is a student-centered pedagogy in which students learn about a subject through the experience of solving an open ended problem. In view of this, the Institute encourages students and faculty to participate in Avishkar competition, Hackathons, various state and national level competitions etc. The Institute also motivates students to participate in Go-kart and SAE SUPRA.
- Experiential and Participative Learning: To enhance participative and experiential learning, the Institute organizes various workshops for students such as Electronics System Design, Internet of Things, Android App development etc. The Institute organizes "Smart City" model making competition and

Project Exhibition for the students to enhance their experiential learning abilities.

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

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 124

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	<u>View Document</u>
Provide link for webpage describing the "LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 24.84

2.3.3.1 Number of mentors

Response: 96

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

The limitations of the traditional chalk and talk method of teaching are well known. OBE demands that teaching – learning process should enhance cognitive, affective and psychomotor domains of learning. Hence it is necessary to bring in innovation and creativity in the teaching-learning process to make it more engaging, active and participatory. In this context, technology in general and ICT in particular plays a very

important role.

Faculty members are encouraged to attend various faculty development programs to enhance their domain knowledge as well as to make them aware of the latest trends in education technology. They are also trained to use the various ICT tools for teaching-learning.

Some of the tools used to make the teaching-learning process more innovative and creative are as follows:

- 1. Effective use of various ICT tools
- 2. Use of simulation software models, animations and videos extensively in content delivery
- 3. Course material developed by the faculty is uploaded on Moodle, ERP Software, Google classroom etc. Videos by some of the faculty are also available on YouTube. There have been 1,23,627 views, 1177 likes and 67514 subsribers for these videos so far.
- 4. Blogs /websites are created by faculty members to share course material and other information with the students online.
- 5.NPTEL videos and course material are made available to the students and they are encouraged to use them.
- 6. Students and faculty are encouraged to enroll for NPTEL online courses. This year students and faculty members have enrolled for 1044 courses.
- 7. Institute has established the 'Virtusa Polaris-DYPIEMR Centre of Excellence' to train the students in the latest technology. This has resulted in 35 students getting placed in Virtusa Polaris
- 8. To promote experiential learning, students undertake projects sponsored by industry and research Institute.
- 9. Project based learning is encouraged through mini projects, model making, participation in Go-Kart, Hackathons, etc.
- 10. Webinars on various topics are telecast for the students.
- 11. Various technical events are organized for the students to showcase their technical acumen and expertise.
- 12. Students with aptitude for research and development are motivated and encouraged to present their work in National/International Conferences/Seminars/Workshops and to publish it in National/International journals. They are also guided to file patents.

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

2.4 Teacher Profile and Quality

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

Response: 90.13

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
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 10.43

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
18	11	07	05	07

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 6.76

2.4.3.1 Total experience of full-time teachers

Response: 838.08

File Description	Document
Any additional information	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 29.35

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
20	07	00	01	00

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

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 18.93

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
29	25	22	16	09

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	<u>View Document</u>

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

DYPIEMR is affiliated to the prestigious SPPU and hence we are very vigilant and proactive in adopting all the reforms of SPPU. For instance, SPPU appealed that the Institutions under its banner should do away with the traditional method of examination and assessment and instead come up with new and transparent evaluation system. Accordingly SPPU introduced one such transparent evaluation system, which caters to the contemporary needs of the society and matches the product outcomes to the global standards.

SPPU has also introduced online examinations for first year, second year and midterm examinations for third year and final year students as a part of the 2012 evaluation pattern. However, it did not include the feature of independent passing in it. Final evaluation for a course was based on total marks of online and end semester examination without considering independent passing. Later on, in the SPPU 2014 revised

evaluation scheme, independent passing was made mandatory for both the examinations and in the 2015 pattern, credit based evaluation was introduced. Institute has consistent practice to conduct unit tests, assignments, tutorials which are part of formative assessment.

At the Institute level students' performance in various courses is monitored on a continuous basis through a robust and transparent continuous evaluation system. The students are informed about the assessment parameters and the entire evaluation process at the commencement of the academic session.

Every attempt is made to align the assessment process with OBE by using direct and indirect assessment tools viz:

- Attendance
- Unit Test marks
- Assignments
- Performance in mock oral and practical examination
- Prelim marks
- Attentiveness in class
- Timely submission
- Interaction in class etc.
- Online Practice Examination

Term work marks are allotted by maintaining Continuous Assessment Sheet (CAS) by each faculty/teacher to evaluate performance of students during practical sessions. Seminars, mini projects and final year projects play an important role in assessing the learning outcomes of the students. These projects are evaluated continuously through periodical reviews using carefully prepared rubrics. After these reviews, suggestions are given for further improvements. Students maintain "Project Diaries" with record of their project progress. Mock practical examinations are conducted to give preliminary experience of University practical examination to students.

The state of the s		
File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

In order to monitor the progress of students, the Institute has a transparent and robust continuous internal evaluation system in place. This consists of the assessment of the term work of the students which is done taking into consideration various factors as outlined in 2.5.1 above.

For the First Year students an induction program is organized immediately after the conclusion of their admission procedure. During the induction program, parents along with their wards and FE students are invited for a detailed session on academics, co and extracurricular activities, assessment patterns, trainings,

projects, importance of attendance etc. for all the four years of their stay with us. Second Year, Third Year and Final Year students are informed about the mechanism of internal assessment at beginning of every semester.

Continuous internal assessment is done throughout the semester by subject teachers and the performance of students is communicated to the students and parents regularly. Continuous internal assessment sheets are maintained by the faculty and shown to the students as and when necessary. Marks obtained by the students in various tests are displayed on notice boards. Answer sheets of these tests are shown to the students and suggestions for improvement are given. Teacher Guardians monitor the performance of the students and discuss it with them during their meetings. Overall performance of students is also communicated to their parents by the concerned TGs as well as during Parent Teacher Meet.

Seminars and projects of the students are assessed by two/three reviews done by their guides throughout the semester. Carefully prepared rubrics are used to evaluate seminars and projects of the students. These rubrics are shared with the students' right at the outset of every Semester.

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

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

The Institute is affiliated to Savitribai Phule Pune University (SPPU) and as such the examination system which is adhered to is as per SPPU norms. An Examination committee is framed every academic year and a College Examination Officer (CEO) is appointed along with a representative as a member to coordinate all SPPU examinations and also deal with students' grievances regarding examinations. The redressal of some of the grievances regarding SPPU examination is ensured through the following process.

• Examination form related grievances - Student profile related correction.

Solution- The online inward examination form system of SPPU has a portal for examination form filling and related grievances.

• Online Examination related grievances.

Solution- A chat window is provided by SPPU to solve online related grievances of students in real time. The student can mark a particular question as invalid question which is passed to expert panel headed by Subject Chairman, and if student complaint is genuine the marks of subject is added to student result.

• Question paper related queries - misprint, data missing etc.

Solution-SPPU sends online correction on reporting issue by the student to the Institute through CEO.

• Result related grievances - Mistakes in Marks sheet printing.

Solution- Student need to report to the Institute and same is communicated to SPPU by Institute. The genuine cases are entertained by SPPU and necessary corrections are done in marks sheet.

• Photocopy of theory paper Answer sheet.

Solution: Student can apply for theory paper photocopy through SPPU website. After receiving students' application the necessary action is taken by SPPU in keeping with the student's application. University sends the scanned copy of the respective theory paper to the applicant via mail.

• Revaluation of theory paper answer sheet.

Solution- Student can apply for revaluation / rechecking through SPPU website. After receiving students application the necessary action will be taken by SPPU as per student application and if any change in given marks of said student after revaluation/ rechecking the new marks given to students and corrected mark sheet send to student through Institute.

Grievances related with internal examinations

The department examination cell is responsible to solve grievances of students related to internal examinations. The cases are attended promptly on receipt of grievances from the students. Students contact department examination committee for any grievances of examinations. Students can also contact subject teacher for grievances on internal marks of any subject. As a result of this, transparency in the internal examination process is maintained which has resulted in minimum redressals or grievances of students.

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

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

Being affiliated to the parent University- SPPU, the Institute strictly abides by the academic calendar of SPPU. To add on to this, the Institute devises its own academic calendar prior to the commencement of each semester which is in tandem with the SPPU academic calendar. This calendar is shared with all the faculty members and students of this Institute before the commencement of academic session.

Based on Institute's academic calendar, each department devises its academic calendar showcasing events planned by individual department. A standard procedure is followed by all the departments to devise this calendar in order to maintain certain uniformity. The academic calendar includes co-curricular and extracurricular activities viz: industrial visits, expert lectures, seminars/ workshops/ conferences etc. as well as schedule of CIE.

Dates proposed by SPPU for the commencement and conclusion of semester, in-semester, end-semester, and online examination are reflected in Institute's calendar and are strictly adhered to. Academic Monitoring Committee and the Departmental Academic Coordinators discuss and plan various academic, co-curricular, extra-curricular and social activities in accordance with the SPPU calendar, post which, these activities are included in academic calendar of Institute.

Each faculty prepares his/her Teaching plan in concurrence with the academic calendar of the department. The Institute and Departmental Academic Coordinators (DAC) ensure smooth conduction of lectures and practical sessions. Attendance of students is monitored and absenteeism of students is communicated to parents via SMS and phone call. Cumulative attendance and defaulter student lists are displayed every month as per the procedure. Internal examinations are conducted by all the departments on the dates planned in academic calendar. Results of internal assessments are declared, displayed and communicated to students within the scheduled time frame. Before commencement of final oral and practical SPPU examination, each department schedules mock oral/ practical examination and implemented accordingly.

Meetings of the Principal and HODs are conducted to review the syllabus coverage and related academic activities. The HODs, in turn, organize departmental meetings and initiate the required steps for syllabus completion.

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

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) for all programs are well defined and are inline with the vision and mission of the Institute. COs are appropriately mapped to the POs and PSOs.

Faculties are familiar with POs, PSOs of the programs as they are involved in PSO formation and mapping process of the college.

Learning outcomes are being clearly stated by Institute, with the help of following resources:

- Vision and Mission statements of Institute and departments, POs, PSOs are enclosed in the course file of each subject and course journals of each student.
- POs, PSOs & COs are uploaded for display on the Institute's website and Moodle.
- PSOs and POs are printed in the Newsletter of the departments.
- POs & PSOs are displayed on notice boards and display areas in each department.
- On the commencement of every semester, COs are communicated to students by the respective course faculty.

File Description	Document
COs for all courses (exemplars from Glossary)	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response:

Each course outcome is mapped with the program outcome and program specific outcome. To meet these POs and PSOs, the curriculum is premeditated and designed by SPPU. The educational outcomes are designed, taking into account the presupposed approach, wherein they efficiently grant the evidence practically illustrating the degree to which program purposes and objectives are not being successfully attained, including achievement of appropriate skills and competencies by students. Course Outcomes are mapped with the Program Outcomes as well as Program Specific Outcomes. As a consequence, the attainment level is calculated for each course on the basis of the student's performance in the internal and external assessments. Furthermore, the realization of Program Outcomes (POs), Program Specific Outcomes (PSOs) is computed for every course through the medium of direct & indirect assessment tools.

Direct Assessment Tools:

The direct assessment tools are formulated to ensure the resourceful functioning of the embedded assessment procedure in order to utilize the existing student course work as both a grading instrument as well as data for assessing student learning objective. Embedded assessments are executed through the means of classroom-based or continuous assessments. Moreover, they are an ideal trajectory to assess individual student performance, the course, or the program and as the information is aggregate, they can be formative or summative, quantitative or qualitative. If embedded assessments are properly designed, the students are rendered capable to judge whether they are being taught or assessed as planned. In the course of each semester the unit test/ assignments are conducted and questions of these examinations are mapped with the COs and on the other hand, the POs attainment is implemented through the assessment of each course's respective COs. The degree of assessment of the POs is evaluated based on the academic

performance of each student. The Program Outcomes (POs) accomplishment is also evaluated by conducting mock practical, quizzes, seminars and projects. The average percentage of each course is considered to appraise the degree of attainment.

Indirect Assessment Tools:

The Course End Surveys, Alumni Survey and Feedback are collected from the various related stakeholders such as students, alumni, parents and employer and additionally, their analysis is carried out. Consequently, the module coordinator consolidates all the PO attainment determinants and factors from the courses & prepares the final report. This PO attainment is further presented in front of PAC (Program Assessment Committee) and then to IQAC (Internal Quality Assurance Cell). The Course End Survey is carried out through a questionnaire handed out to each student for each course and then calculates the percentage of the CO attainment.

This analysis is compared with threshold values and attainment is categorized into three consecutive levels, viz. level 1, level 2 and level 3.

CO attainment:

Direct Attainment of CO = 30% of CO attainment in internal examination + 70 % of CO attainment in the external examination.

PO attainment:

Overall PO attainment = $0.8 \times Direct$ attainment + $0.2 \times Indirect$ attainment

File Description	Document
Any additional information	View Document

2.6.3 Average pass percentage of Students

Response: 93.18

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

Response: 519

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 557

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry, corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 12.88

3.1.1.1 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)

2017-18	2016-17	2015-16	2014-15	2013-14
11.48	1.4	0	0	0

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document

3.1.2 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.03

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

Response: 03

3.1.2.2 Number of full time teachers worked in the institution during the last 5 years

Response: 96

File Description Document

Supporting document from Funding Agency

Funding agency website URL	<u>View Document</u>
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3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other

View Document

initiatives for creation and transfer of knowledge

Response:

Institute has formed an 'Incubation and Innovation Cell' to inculcate and promote the innovation and entrepreneurship culture. This ecosystem for innovation creates efficient and economical products by using current resources available.

Objectives of Incubation and Innovation Cell

- To promote research culture for faculty and advanced learners
- To satisfy the technical and infrastructure needs of budding engineers with innovative ideas
- To foster educational excellence by identifying interests of students towards entrepreneurship and research
- To motivate students for excelling on global platforms

A research advisory committee has been formed in order to monitor and address the issues of research and innovation. The Institute conducts orientation sessions for the faculty members and students to increase the awareness about preparation of research proposals, funding agencies, patents and copyrights. An additional platform has been provided to share the views of researchers by starting an in-house journal, "Journal of Innovations in Engineering and Applied Science (JIEAS)". JIEAS is published half yearly and is available on www.jieas.in

To achieve this ecosystem, short term training courses and expert lectures for students and faculty are arranged regularly. Eminent scientists and researchers are invited for inspirational interactions with faculty and students to promote innovation.

Outcomes of the innovation ecosystem have resulted in the following

- Saad Memon from Computer Engineering Department has developed a mini super-computer, 'Param Vijay Bhatkar' under the guidance of Dr. Vijay Bhatkar. The processing speed of this super computer was appreciated at many conferences and exhibitions. Based on his work, he has been selected in St Andrews Scotland University for higher studies with full funding. He is the only student from India selected for this program.
- Aakash Patil, a Mechanical Engineering student, worked on innovative design of external discharge plasma thruster for space propulsion. California Institute of Technology, USA appreciated his work and offered him Summer Under-graduate Research Fellowship.
- Faculty and students from Department of Civil Engineering received a survey project of Rs. 4.16 Lakhs from IIT Bombay.
- Ayush Agrawal, a student of Mechanical Engineering, received a cash Prize of Rs. 2.5 lakhs in the KPIT-Sparkle project competition for the Project, 'Electricity Generating Device from the Waste Heat of Gas Stove'.
- Vikas Dive, a faculty of Mechanical Engineering received a grant of Rs.10.48 Lakhs from ISRO-SPPU Space Technology Cell.
- Dr. Minaz Alvi received a research grant of Rs. 1.4 Lakhs for the project 'Low Cost Natural Draft Cooling Tower'.
- Some of the students have started start-ups in different areas like Online Water Supply, Android App Development, IT Firm, Construction Material Supply, Automobile Spare Parts Supply etc.

- Students of Mechanical Engineering have designed a sport four wheel vehicle using innovative ideas of maximum power with minimum weight.
- Students of Civil Engineering Department implemented innovative water filter technique using non aerated constructed wetlands and aerated compact filtration.
- Twenty Two patents have been filed by the students and faculty members based on their innovative ideas.
- Faculty members and students have been appreciated for innovations in competitions like GO-KART, AVISHKAR (SPPU Research Competition) and HACKATHON, Transform Maharashtra etc.

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

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 42

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
18	14	04	03	03

File Description	Document	
Report of the event	<u>View Document</u>	
List of workshops/seminars during the last 5 years	<u>View Document</u>	
Any additional information	View Document	

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

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

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	<u>View Document</u>
Any additional information	View Document

3.3.3 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 0.19

3.3.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
24	21	17	15	11

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

Response: 1.65

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

2017-18	2016-17	2015-16	2014-15	2013-14
18	28	49	20	42

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	<u>View Document</u>

3.4 Extension Activities

3.4.1 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:

Conforming to its Vision, Mission and Core Values, DYPIEMR believes that students should ultimately become responsible citizens aware of their social responsibilities. Social activities help make a person as a responsible citizen with high moral and ethical values. For the holistic development of students, Institute sensitizes them about their social responsibilities by arranging different extension activities in the neighborhood community.

- NSS Unit has promoted social innovation for the betterment of society. Under NSS initiative, students have carried out different projects, namely, automatic production of jaggery, implementation of intelligent traffic control system for congestion control, ambulance clearance & stolen vehicle detection, efficient waste management system using IOT, smart society using IOT, Automatic detection of vehicle number plate using image processing, solar powered lawn grass cutter, disintegration of plaster of Paris, quality analysis of drinking water etc. Students from Chemical Engineering Department in association with NSS Unit and National Chemical Laboratory, Pune are conducting a survey to find the number of students studying in school to develop efficient solar cooker.
- To create awareness about environment sustainability, activities such as, Swatch Bharat Abhiyan, Nirmal Vari, Tree Plantation etc. are conducted regularly. Institute is always keen to create awareness about the public cleanliness. To support this our student of Computer Student Association (COMPSA) cleaned the Ganesh Ghat after Ganesh Visarjan at Pawana River. Several students also worked as volunteers to monitor the traffic during the Visarjan procession.
- Institute-Neighborhood Network is developed in association with nearby organizations to carry out various social welfare activities. Institute has adopted two children from Nachiket Balagram (an orphanage at Akurdi, Pune). Students and faculty of each department take turns in visiting Nachiket Balagram on regular basis and provide them with basic items of daily needs like food, fruits etc.
- DYPIEMR has a tie-up with Niramay Hospital Pvt Ltd. Chinchwad, Dr.Shrirang Gokhale has conducted many sessions for faculty and students on awareness about Dengue, Malaria, heart diseases etc.
- Several social activities were carried out, such as, notebook distribution to the deprived students, blood donation camps, Candle march for Gujarat flood victims, donation for Kerala flood victims, organ donation camps, donation of water purifiers, blankets, mattresses to the Vruddhashram, etc. in association with organizations like charitable organizations and NGOs.

- Each year International Yoga day is celebrated on 21st June to bring awareness about the health among the faculty and students.
- Department of Civil Engineering arranged a workshop on making eco-friendly Ganesh idols in association with Environment Conservation Association (ECA).
- Student Welfare Cell actively works towards arranging various social activities, such as, 'Sanvidhan Pandharwada', 'Marathi Bhasha Din', 'Van Mahostav' etc.
- Institute has been approved by the Government of India as a training center under the "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" to train school and college dropouts to make them employable.
- DIGIDHAN program is conducted to help uneducated people to understand the digital transactions. Our house-keeping staff along with their families benefitted from this program.

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

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 13

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

2017-18	2016-17	2015-16	2014-15	2013-14
7	3	1	2	0

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 179

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
51	45	42	32	9

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document
Any additional information	<u>View Document</u>

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 70.39

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2169	1735	1591	696	433

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 387

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
147	120	98	16	06

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	<u>View Document</u>
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 58

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2017-18	2016-17	2015-16	2014-15	2013-14
20	17	10	07	04

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	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:

DYPIEMR offers Bachelor of Engineering course in Mechanical Engineering, Computer Engineering, Electronics and Telecommunication, Civil Engineering and Chemical Engineering. Being a premier Institute, DYPIEMR elevates an exceptionally modern and state-of-the-art infrastructure that goes a long way in facilitating fleckless services for their students as well as the staff members. An exquisitely planned infrastructure with well furnished, breezy and lustrous Classrooms, Tutorial rooms, and Computer laboratories is available. The Spacious Computer center is having computers and peripherals with all latest configurations and high end servers. In addition a language lab with software such as ILT software and Clarity English Success software is also available. Seminar halls with ICT/AV aids and air conditioning add value to the existing infrastructure.

To develop functionally suitable and conducive environment for students and staff for academic purpose, classrooms are equipped with multimedia teaching aids. Institute has a spacious and well-furnished library with reading room, digital library, reprography, e-journals, and printed journals.

Institute has functionally and conveniently designed Training & Placement cell, Examination control rooms, well maintained lawn and garden, lift, ramp and special rest rooms facilities for differently able, CCTV surveillance at all strategic locations, generator (125 KVA) and four UPS of total capacity 80 KVA, sewage treatment plant, water purifiers, and canteen and sanitation facility.

Amenities and facilities comprises Wi-Fi internet connectivity, Students Activity Center, rooms for cultural activities, indoor and outdoor sports facilities, amphitheater, common auditorium with large seating capacity and audio video facility, girls and boys common rooms. Separate hostels for boys and girls are available with facilities like mess, TV room, Reading room, Wi-Fi, games and sports facility, medical facility and first aid room. Availability of doctor on call and campus vehicle for emergency endows warm hood for students. Institute transcends the boundaries of time and location to provide perpetual learning environment for all by ensuring periodic and preventive maintenance.

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

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

Response:

Institute has 4.5 acres of playground for outdoor games such as Cricket, Basketball, Volleyball, Football and other activities. Students are provided with the necessary sports equipment. The Sports ground is maintained regularly, especially during the execution of the annual events. Institute encourages students to participate in zonal, inter-zonal, inter-state/national level competitions.

The space for Indoor games such as Chess, Table Tennis, and Carom etc. is available for students. Students are encouraged to participate in inter collegiate and University level sports events.

The girls' hostel has a well-equipped gymnasium for the inmates.

Open space is available at different locations for promotion of Yoga and meditation events.

Annual Sports events titled "Kurukshetra" are organized to enhance the physical and psychological strength of the students. Large numbers of students participate in annual sports event and the major use of sports facilities is on weekends, holidays and inter-colligates event. Yoga Day is celebrated every year for students and staff members for empowering spiritual and mental health.

For cultural events, spacious amphitheater, open air theatre with good landscaping and ample seating capacity, well equipped Auditoriums & seminar halls with audio visual aids are available.

Annual Cultural event "Mrudung" is also organized to provide a vibrant platform for students to showcase their talents. The students also reveal their talents through the Art Circle named "Aaveg Kala Mandal". Students participate in different events organized at University level, Zonal Level competitions etc. A separate budgetary provision is also made by the management for organizing different sports events and cultural events.

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

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 27

File Description	Document	
Number of classrooms and seminar halls with ICT enabled facilities	View Document	
any additional information	View Document	
Link for additional information which is optional	View Document	

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 45.93

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
123	130	232	180	185

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	<u>View Document</u>
Any additional information	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

Library is an entity that has to be appreciated by the patrons due to its efficient functioning. To effectively function, the library in DYPIEMR is well equipped with 10949 books comprising of Text books, Reference books and general books. In addition, Journals, Technical Magazines, newspapers, CDs etc. are also available. The library also has subscription to National Digital Library, DELNET, SPPU- Jaykar Library, e-journal facility, subscriptions to various journals, availability of downloaded e-books etc.

An Integrated Library Management System (ILMS) is an Enterprise Resource Planning system for library, used to manage different functions of library.

Institute uses e-Granthalaya 3.0 for library automation. It uses MS SQL Server 2005 and also supports data entry in local languages. The e-Granthalaya Software has following modules:

- **1.** Circulation (lending materials to patrons and receiving them back): This module is made to issue/return/renew the books.
- **2. Setting**: This module generates the barcodes, listing of books (by authors, publishers,) etc. There is provision for immediate confirmation of library transactions through the email and message alert facility.
- **3. OPAC**: The software provides built-in Web OPAC interface to publish the library catalog over Intranet. Online Public Access Catalog for searching the library resources is available on URL http://192.168.25.85/OPAC/ for basic, advanced and browse search. Library web OPAC link is provided on Institute website under infrastructure page https://www.dypiemr.ac.in/infrastructure/library for users.
- **4 Reports**: Book accession register, Books Issue/Return date wise, user wise, department wise, etc. reports can be generated using this module. This helps in maintaining optimum stock of the concerned resources and tracking of the library resources.
- **5. Serials**: This module maintains the record of serials (Print Journals, Magazine, and Newspapers).

Digital Library Collection, Rare Books, open Source books, previous year question papers, Institute News, and daily online newspaper are made available for users through open source software Calibre. The link is available through LAN http://192.168.25.8:8080/.

Institute Library is using social media platform for information dissemination like Library blog https://dypiemrlibrary.blogspot.com/ .

Library has 601 NPTEL video courses available on link http://192.168.25.251/.

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

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

Institute Library has downloaded various rare books from Rare Book Society of India (RBSI). The collections are stored in open source Calibre Digital Library. Students and Faculties can access these **rare books** through LAN as reference material for enrichment of their knowledge. The rare books having large variety of title such as inspiring Stories, history, yoga, philosophy survey, observations, astronomical, geographical, botanical, economic, literature, religious, treatise, culture, etc.

The Calibre digital library is well stocked by 1101 eBooks on Engineering, competitive exams like GATE,

MPSC and UPSC. The autobiographies and biographies of great people are kept in library which includes scientists, engineers and leaders. Great deal of motivation is being impacted by these books to our student's editorials. The collection of editorials and important articles from all the national newspapers are displayed in the library to enrich the General Knowledge and Current Affairs of students.

File Description	Document	
Any additional information	View Document	

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 20.15

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

2017-18	2016-17	2015-16	2014-15	2013-14
32.38	7.87	23.62	23.29	13.58

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	<u>View Document</u>
Any additional information	<u>View Document</u>

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

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

4.2.6 Percentage per day usage of library by teachers and students

Response: 27.98

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 702

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

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The Institute has the following IT facilities that are frequently updated to cater to the demands of rapidly changing technology.

Application Software: Application software's like Auto CAD, MS Office, Quick heal, Xilinx logic, CATIA v5-R23, ANSYS v16, Gram++, Android studio, MATLAB, Automation Studio, Mastercam etc.

System software: System Software like Windows, Linux, Ubuntu etc. are available at Institute level.

Server: Examination server, virtual Lab server, Moodle Server, Oracle Server, DHCP server, Windows server etc. are available for smooth conduction of various activities such as online examinations, workshops, and hands on sessions to bridge the gap between industry and academia.

Learning Management System (LMS): -The Institute is using Moodle (24 GB RAM, 8 TB SATA HDD, with windows 2012 OS.) as an effective teaching learning tool.

ERP:-The Institute has cloud-based ERP system, smartschoolmis, which is used for academic and training placement activities like attendance monitoring, SMS notifications to students and parents, conduction of Mock/Online examinations, Online Teacher's Feedback etc. This ERP software has 28 modules for managing the entire Institute system.

Internet Connectivity and Wi-Fi: The Institute has massive network of 563 computers with 63 Mbps Internet connectivity and Wi-Fi facility with 10 access points to fulfill the academic and research needs. Centralized firewall Cyber roam is used for network monitoring, bandwidth management and Internet security. 63-Mbps P2P (1:1 OFC) connectivity from GAZON Tech Provider communication is used.

The Institute has centralized Management system in order to support the IT infrastructure and services. Faculty members have provided with the computer and Internet connection at their respective locations. Each Computer laboratories has Internet connection for faculties and students for their academic purpose. For uninterrupted computing back up is available.

LAN facility: 3-Layer Switching (Core, Distributed and Access) network is available for the entire campus. Core layer switches in the buildings have been connected with the Optical Fiber Network.

File Description	Document
Any additional information	View Document

4.3.2 Student - Computer ratio	
Response: 4.24	
File Description Document	
Any additional information	<u>View Document</u>

4.3.3 Available bandwidth of internet connection in the Institution (Lease line) >=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

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

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document	
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document	
Any additional information	View Document	
Link to photographs	<u>View Document</u>	

4.4 Maintenance of Campus Infrastructure

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

Response: 12.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
27.08	34.98	22.61	82.01	39.85

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	<u>View Document</u>
Any additional information	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:

The Institute adopts standard established systems and procedures for maintaining the physical, academic

Page 55/102 16-11-2018 11:04:04

and support facilities. There are Institute level committees that look after the various aspects of the utilization and maintenance of the physical, academic and support facilities.

- General civil maintenance and upkeep of civil infrastructure is carried out at the campus level.
- Minor maintenance of furniture items and metal fixtures is carried out by the workshop department and the minor electrical maintenance is looked after by the Electrical Maintenance coordinator and his team.
- The maintenance of water coolers, Air conditioners and fire extinguishers in the Institute is carried by external agencies through annual maintenance contract.
- Sports ground is maintained regularly, especially during the execution of the annual events.
- Security of the Campus is assigned to external agency.
- The canteen committee monitors hygiene and quality of food regularly.
- Emergency exits and firefighting system are provided to counter situations like fire hazard and natural calamities.
- Maintenance of the campus garden is looked after by the gardeners.
- The maintenance and housekeeping of the classrooms, laboratories, library, and the Institute as a whole are taken care by external agency and non-teaching staff.
- Repair and Maintenance of laboratory equipment's/instruments are initiated by the respective Laboratory In charge as and when required. The purchase committee handles the repair/maintenance/calibration request appropriately. As a part of regular practice laboratory in charge, along with laboratory assistant, ensures proper working of all equipment at the beginning of each semester.
- The classrooms, laboratories, seminar halls, and library facilities are utilized regularly by the students for the learning process and timetables indicate the regular utilization of the respective facilities.
- All the computer related facilities including hardware, computer peripherals, UPS and generator are maintained by lab assistants and electricians of the Institute.
- Anti-virus software is purchased and is renewed annually for the smooth working of all the computers in the Institute.

File Description		Document	
	Any 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 Government during the last five years

Response: 55.8

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1636	1396	1133	631	368

File Description	Document	
Upload self attested letter with the list of students sanctioned scholarships	View Document	
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document	

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 0.39

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
6	5	7	9	4

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Any additional information	<u>View Document</u>

5.1.3 Number of capability enhancement and development schemes –

- 1. For competitive examinations
- 2. Career counselling
- 3. Soft skill development
- 4. Remedial coaching
- 5. Language lab
- **6.Bridge courses**
- 7. Yoga and meditation
- 8. Personal Counselling
- A. 7 or more of the above
- B. Any 6 of the above
- C. Any 5 of the above
- D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document	
Details of capability enhancement and development schemes	View Document	
Any additional information	View Document	
Link to Institutional website	View Document	

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 66.49

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

2017-18	2016-17	2015-16	2014-15	2013-14
2259	2169	1844	345	187

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 2.7

5.1.5.1 Number of students attending VET year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
80	21	78	52	13

File Description	Document
Details of the students benifitted by VET	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
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

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 36.47

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
212	232	256	0	0

	T
File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	<u>View Document</u>

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 6.36

5.2.2.1 Number of outgoing students progressing to higher education

Response: 33

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	<u>View Document</u>
Any additional information	<u>View Document</u>

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 15.81

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
7	14	9	0	0

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
134	67	17	0	0

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

Response: 7

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	2	2	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The Student Council is formed in the institution every year for the participation of students in academic and administrative bodies/committees. The Institute has an active students' council comprising of General Secretary, Sports Secretary and Cultural Secretary. The Principal is Head of this council and one faculty

Page 61/102 16-11-2018 11:04:06

member is appointed as the Student Development Officer. The council provides a platform to the students to plan, execute and express their views for various student activities like "Mrudang, Kurukshtra and College Magazine- Kaleidoscope" for the overall development of the students as well as the institution. This also helps in building up leadership qualities and teamwork.

Through this council the students can participate in many extra-curricular and co-curricular activities like expert talks, quiz competitions, group discussions, debates, robo racing competition, robo war, CAD war, project exhibition, coding competition, model exhibition, etc. for their holistic development.

The Institute has following bodies on which the students have their representation.

Academic Bodies

- ISTE (Indian Society for Technical Education Students Chapter)
- NSS (National Social Service)
- CSI (Computer Society of India Students Chapter)
- COMPSA (Computer Engineering Students Association)
- ACM (Association of Computing Machinery Students Chapter)
- MESA (Mechanical Engineering Students Association)
- CESA (Civil Engineering Students Association)
- IE (Institution of Engineers Students Chapter)
- IIChE (Indian Institute of Chemical Engineers Students Chapter)

Administrative Bodies

- Internal Quality Assurance Cell: Function of this cell is to plan, guide and monitor quality assurance and quality enhancement in all the academic activities.
- Anti Ragging Committee: To prevent ragging within campus premises and create awareness amongst students about consequences of harassment and ragging on the students.
- Cultural and Social Committee: This committee plans and organizes cultural and social activities at Institute level.
- **Alumni Association:** It has been formed to strengthen the bond between alumni and Institute and thus contribute for the overall progress of the Institute.
- General Grievance Cell: This cell takes into consideration general grievances of the students and to take proper action regarding their issues.
- Magazine Committee: This committee gives an opportunity to the students to showcase their talents such as sketching, painting, poetry, writing, etc. This exercise assimilates societal values in students.
- **Student Development Cell:** This cell gives an opportunity to poor and needy students to work in the Institute for which they are paid according to the norms set by University.
- **Student Council:** It Acts as Moderator between the students of all the departments. It looks after the needs and requirements of students and to communicate the same to the faculty advisors.
- **Internal Complaint Committee:** To provide moral support to the students to raise their grievance, if any to bring transparency in the process.
- College Development Committee: This committee is formed to contribute to the overall development of the Institute.
- Students Club: Institute has clubs like Rotaract, Astronomy, Arts Circle, Cyber Security and

Environmental Club.

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

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 20.6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
23	20	20	21	19

File Description	Document
Report of the event	<u>View Document</u>
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	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 non financial means during the last five years

Response:

The Alumni Association was formed on 27/12/2017 (Registration number MH/1855/2017/Pune) to create mutually beneficial lifelong relationships between DYPIEMR and its alumni. It is registered under the Societies Registration Act 1860 and as per the jurisdiction of Pune Region. The alumni association is formed with the following objectives-

- To foster the bonds between the Alumni and the Institute.
- To extend help to the students of the Institute through alumni for placement and industrial training.
- To act as a bridge between Institute and the industries for interaction on new developments in different disciplines of engineering.

- To assist the Institute to promote R & D activities, testing and consultancy.
- To extend help to the Institute authorities in every possible way for overall progress of the institution.

Through these offerings we hope to keep the alumni connected to DYPIEMR family and part of a legacy of engineering excellence at DYPIEMR and also to interact with the alumni in several events in the near future. Alumni Association plans to share experience of alumni by means of guest lectures and training program.

Non-Financial Contribution:

Alumni of various departments like Neel Shah, Vineet Kadam, Arshdeep Bhanot and Gopika Nair have delivered guest lectures on various topics such as Python Programming, Core Java Programming, CAD Design ,Basic requirements for Defence Services, etc. to TE and BE students. Also Varun Salunkhe and Saurabh Shimpi who are currently Entrepreneurs in their respective domains, had delivered a guest lecture on Career guidance and Entrepreneurship to their juniors. Some of the Alumni are also invited as judges for annual technical event "Innovision" of the Institute. They are also invited on the day of cultural program to perform and mentor.

A survey was also conducted of all the pass-out students of 2016, 2017and 2018 batch. They were informed about the formation of Alumni Association and a registration form was sent to the students to register for the association. In response to it so far 421 students have registered for the Association. Also many showed interest in delivering guest lectures and expert talks to the current batch of students.

Financial Contribution:

As per the survey conducted by the Alumni committee many alumni had shown interest in contributing financially to the Institute for the growth of Alumni Association of DYPIEMR. Also the alumni have assured to help in the overall development of the Institute in the best possible ways. Thus the purpose of formation of the Association is to foster strong bonds between alumni, students and the Institute. It will keep alumni informed and create a network enabling them to remain engaged with their alma mater and help in shaping its future through the Association's programmes and activities.

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)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: <1 Lakh

File Description	Document
Alumni association audited statements	<u>View Document</u>

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 3

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	2	0	0	0

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Any additional information	View Document
Report of the event	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Vision of the Institute

To strive for excellence by providing quality technical education and facilitate research for the welfare of society.

Mission of the Institute

- 1. To educate students with strong fundamentals by providing conducive environment.
- 2. To inculcate research with creativity and innovation.
- 3. To promote industry-institute collaboration and prepare students for lifelong learning in context of technological change.
- 4. To strengthen leadership, team-work, professional and communication skills and ethical standards.

The Institute is able to witness progressive growth due to its efficient governance, effective leadership and supportive management. The management of the institute fosters zeal and untiring efforts for the creation of conducive environment for teaching, learning and overall development of students to achieve vision and mission of the institute. The vision and mission of the Institute have been framed to make the Institution the most encouraging and promising place to achieve technical excellence.

Institution believes in striving for academic excellence, industry-institute interactions, professional competence and social welfare. Institute is functioning proactively to provide a professional environment to the students in terms of industry oriented training, personality development, quality technical education, project based learning, sports, cultural and social activities. Also, Institute provides a platform for arranging various co-curricular and Extra-curricular activities to strengthen leadership skills, teamwork as well as to create technical competence and social awareness in students.

The management of the Institute which comprises Governing Body (GB), Local Management Committee (LMC) /College Development Committee (CDC), Department Advisory Boards (DAB) and Internal Quality Assurance Cell (IQAC), plays a very important role in the design and implementation of policies and plans for the Institute. To achieve the vision and mission, policies and action plans are developed & executed by the Principal with the involvement of all stakeholders. The decisions and policies to improve academic activities are reviewed and effectively implemented through participation of faculty, staff and students.

Policies and action plans for the Institute are framed through deliberations with the GB & LMC / CDC and other stakeholders. As per the inputs of the LMC / CDC, the GB finalizes the course of actions for implementations of the plans for fulfilment of stated mission. The Principal, Heads of Departments and faculty members interact regularly with stakeholders through induction programs, parents' meets, alumni meets, and industry-institute interaction meets. These deliberations are treated as confidence boosters to

propagate quality policies, action plans and future projections of the Institute.

File Description	Document
Any additional information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

Participative Management is ensured at all operational levels i.e. GB, LMC / CDC, IQAC, various committees&cells etc. through representation of stakeholders. Inputs from faculty, students and all stake holders are considered for policy & decision making and its implementation at department and Institute level. The departments are encouraged to arrange various activities for the benefit of students and faculty, and all necessary resources are provided to conduct such activities. The functioning of the Institute is monitored at three levels as follows:

- **1. Dr. D.Y.Patil Prathisthan:** The management of the Institute rests with its GB, whose members, are appointed in accordance with the guidelines provided by AICTE. LMC / CDC is formed in accordance with the guidelines by SPPU. The resolutions made in the GB and LMC / CDC meetings related to the policies and plans are communicated to the Institute.
- **2. Institute -** Principal is the academic and administrative head of the Institute and the Member Secretary of the GB, LMC/CDC and chairman of IQAC. IQAC receives policy guidelines from GB and LMC/CDC as well as inputs from various stakeholders and prepares action plans for quality enhancement in line with the vision and mission of the Institute.
- **3. Department-**The Head of Department is responsible for the day-to-day management of the department and reports directly to the Principal. Every department has its own DAB and quality initiatives suggested by its members are forwarded to IQAC for further course of action.

Case Study of Decentralization and Participative Management:

In the meeting of LMC dated 20/6/2014, it was recommended by the members of LMC that a Training & Placement (T&P) Cell should be established and a Training & Placement Officer (TPO) should be appointed. This proposal was ratified by the GB in its meeting dated 28/6/2014. As a consequence of this decision, T&P Cell was established and a TPO was appointed.

T&P Cell of the institute works in tandem with that of the campus which is headed by the Dean, Campus Placements. TPOs of all institutes in the campus represent their institutes in the T&P Cell of the campus. Common training needs are identified and placement strategies are finalized by the campus level cell.

At the institute level , all departments are represented in the T&P Cell by the HoDs' & department coordinators. Students , being the most important stakeholders, are also given representation in the institute T&P Cell. The basic responsibility of the T&P Cell is to arrange and coordinate employment enhancement programs as well as campus placement drives. To achieve this objective , T&P Cell gets inputs

from stakeholders and in consultation with the Departments, different training programs & Add-On Courses in technical and soft skills domains are organized. Due to the democratic functioning and all-inclusive approach of the T&P Cell, DYPIEMR has established itself as a preferred destination for recruiters in a short span of six years resulting in good placements over the last three years.

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

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

In line with the targets set in the strategic plan of the Institute, GB and LMC had suggested to strengthen linkages with industries and educational institutes of repute and also to provide add-on and soft skill training to the students to enhance their employability potential.

Institute has a very well-established Training & Placement Cell and an Industry-Institute Partnership Cell (IIPC). These cells work in tandem and cater to training and placement needs as well as to strengthen industry collaborations.

T&P Cell plays a crucial role in grooming students for campus placements and in motivating them to go for higher studies. Professional trainings and add on programs for the students to help them in writing resume, facing interviews, improving their soft skills and technical competence are organized by the T&P Cell. Japanese language training provided under the TCS Hikari Programme presents excellent opportunities to the students to get employed in leading MNCs like TCS. T&P Cell also prepares students for the Barclay's training Program, TCS testimony, Code-Vita platform etc.

As a measure of quality improvement as well as to bridge the gap between academia and industry, DYPIEMR has established an Industry-Institute Partnership Cell (IIPC). IIPC strives to enhance industry interaction and bridge the gap between academia and corporate world by arranging activities like industry visits, internships, sponsored projects, external project evaluation etc. Valuable inputs are obtained from industry experts that help in aligning academic activities with the trends in the industry. Students are encouraged to work in industries as interns during vacations and also to take up industry sponsored projects.

Meticulous planning and painstaking efforts put in by the T&P Cell and IIPC, have shown encouraging results and DYPIEMR has made its mark in the field of technical education over a short span of six years. Decent placement statistics and number of linkages established are a testimony to the hard work of these cells. 733 students have been placed in the last three years and the placement process is still on. Institute has established linkages with more than 200 industries & organizations and has signed 58 MOUs resulting in more than 400 internships and 70 sponsored projects. The Centre of Excellence established in

collaboration with Virtusa has led to placements of 35 students. This center has also been rewarded as the BEST Centre of Excellence by Virtusa.

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

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

The Institute has a well-established organizational structure to facilitate smooth functioning of academics and administrative processes. Various bodies/cells are formed for effective as well as efficient performance of the Institute. The Governing Body is the highest decision making authority consisting of members of the management, Principal, Nominees of AICTE, DTE & University, experts from industry & education and nominated faculty members.

College Development Committee (formerly LMC) includes representatives of Management, Teaching and non-teaching staff, stakeholder representatives from industry and society. Principal is the Member Secretary of CDC.

IQAC has been constituted as per the guidelines of NAAC.

To deal with grievances, the Institute has formed various bodies such as Internal Complaints Committee, Anti-ragging Committee, SC-ST & OBC Cell, General Grievance Cell, etc. as per the norms laid down by different statutory bodies.

Every department has its own Department Advisory Board (DAB). It comprises representatives from industry, academia, alumni, students, parents and faculty. The Head of the Department is the Member Secretary of DAB.

Principal, Heads of the Departments, section in-charges and co-ordinators of various committees have adequate participation in making decisions in academic and administrative matters.

Qualifications, pay scales and other service conditions are as per the norms laid down by AICTE/Government of Maharashtra/SPPU adopted by Dr.D.Y.PatilPrathisthan, Akurdi.

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

6.2.3 Implementation of e-governance in areas of operation

- 1. Planning and Development
- 2. Administration
- 3. Finance and Accounts
- 4. Student Admission and Support
- 5. Examination
- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

Response: B. Any 4 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document
Any additional information	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

DYPIEMR has constituted 21 committees in addition to the committees as mandated by the statutory authorities. This facilitates a democratization and decentralization of the decision making process and helps to improve the efficiency of the organization.

Effectiveness of the Library Committee as is evident through its minutes of meetings and activities conducted are described below

The Central Library has always been striving hard to meet the expectations of its users. Library plays a very critical role in supporting the academic programs of the Institute. It identifies, evaluates, procures, processes and then makes learning resources available to the faculty and students for their teaching, learning and research assignments.

The requirements arising due to change in syllabus or enhancement in technology are submitted by the departments to the library.

Library Committee conducts meetings during which requirements submitted by the departments are discussed and the procurement plan as per the standard procedure is finalized in consultation with the Principal. Library provides various facilities to faculty and students such as Internet Facility for e-Resources, Library Blog, Digital Library Services, NPTEL Online Lectures, Book Bank Facility, newspapers etc.

The library takes initiative to provide information to students and faculty about the resources available in the library. Since the library has a large repository of resources, creating awareness about their effective utilization was a necessity. As a part of this initiative, a program on 'How to search scholarly information using search strategy' was organized on 26th Feb 2018.

The major features of this activity were:-

- To create awareness about searching scholarly information Using OPAC and CALIBRE
- How to kindle on intranet
- How to search resources on ASME, ASCE, IEEE, J-Gate, Elsevier, Springer etc.
- Getting email alerts on particular topic
- How to access the National Digital library

A large number of faculty and students benefited from this activity.

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

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

Management of DYPIEMR realizes that faculty and supporting staff are the backbone of the Institute. Hence, in addition to timely payment of salary as per norms, following welfare schemes are implemented.

50% Fee Concession to the wards of teaching and non-teaching staff members of the Institute

- · Special leaves to employees on their birthdays (for unmarried) and marriage anniversaries
- · Paid leave for qualification improvement to the employees
- · Provident Fund scheme for the employees
- · Gratuity scheme for employees
- · On duty leaves to the faculty members for attending as well as participating in conferences and seminars.
- · Maternity leave for women employees
- Group insurance of employees

In addition to this the management proactively participates in organizing picnics for all employees in places like Prathamesh farm, Chinmay Vibhutee Ashram etc.

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: 11.25

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

2017-18	2016-17	2015-16	2014-15	2013-14
07	17	08	07	09

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by

the institution for teaching and non teaching staff during the last five years

Response: 9.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
15	13	8	4	6

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 79.83

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
104	95	96	61	31

File Description	Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

A carefully designed performance appraisal system has been implemented at Institute level. It consists of self-appraisal and appraisal by the Central Appraisal Committee (CAC). Performance of the employees is assessed annually on various parameters to ensure that information on multiple activities undertaken by them is appropriately captured.

The information includes:

Part-A: Teaching-Learning Performance:

This section includes syllabus completion, attendance of students, projects guided, exam result of courses taught, feedback from students, and teaching learning methodologies adopted.

Part-B: Institute/ Departmental Performance:

This section includes role of Teacher Guardian along with impact analysis, contribution to department, Institute and campus level, Workshop/STTP/FDP organized by faculties, sponsored research project, consultancy, and faculty contribution in establishment of different centers.

Part-C: Self Development:

This section includes patent registered, books published, research papers published by faculties in National/International journal, value added courses like FDP/Workshop/certification courses /STTP attended etc., participation in Intercollegiate/University activities.

Part-D: Official Conduct

In this section, HOD gives the remark based on the self-motivation, punctuality, Target based work, Involvement and pro-activeness of the teaching staff.

Performance appraisal forms are submitted by each faculty after every academic year for evaluation. The outcome of the performance appraisal is that each faculty member becomes aware of their weaknesses and tries to improve so that they can perform better. Appreciation letters are awarded to the faculty members for superlative performance. Suggestions are given and help is provided to those who need improvement in their performance.

Performance Appraisal System for non-teaching staff is reviewed based on performance factors like attendance, job knowledge and skills, honesty, their character and length of service under authority. The system is transparent and the appraisal with comments of the Head of the Department is then analyzed by the Principal.

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

DYPIEMR maintains high transparency in all financial transactions. All expenses are done in accordance with well-defined procedures laid down by the Management. Every year Institute budget is prepared and submitted to the management for sanction. All expenses incurred are as per the provisions in the budget.

The institute has conventional well known mechanisms for conducting internal and external audits for every financial year to confirm financial compliance. Financial audit is carried out twice a year, in the month of October/ November for the period of April to September and in the month of April / May for the period of October to March.

An internal approval system for all expenses is in place. Accordingly bills / vouchers are recommended for payment by the Heads of the Departments, Section In-charges and are approved by the Principal. Standard accounting procedures are followed by the Accounts Department and proper records are maintained. Internal audit is carried out by the team headed by the Registrar. The purpose of internal audit is to review the implementation of sanctioned budget, fees received, overall expenses, outstanding receivables and payments etc.

External auditors are appointed by the management to carry out the financial audit. External audit is carried out once in a year. Last financial audit was carried out in July/August 2018. No major audit objections were found in the audit report since the Institute follows a good system of internal controls like calling for quotations, preparing comparative statements for purchases, preparation of purchase orders and approval notes. No expenses are allowed without proper approval or sanction from the authorities.

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

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 3

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	3	0	0	0

File Description	Document
Details of Funds / Grants received from non- government bodies during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The Institute has a well-defined financial policy which ensures effective and optimal utilization of finances for academic, administrative and development activities that help in realizing the institute's vision and mission. The major source of income for the Institute is fees received from the students.

Efforts are made to generate additional revenue through other sources like research grants, consultancy etc. The Institute has received research grants of Rs.12.88 lakhs from SPPU-ISRO joint research program and BCUD-SPPU, Pune etc. Under PMKVY-AICTE scheme, DYPIEMR has received Rs. 5 lakhs for vocational training of school/college dropouts.

Institute has also generated revenue by providing infrastructure for conducting CET examination, Admission Facilitation Centre for DTE Maharashtra State, Polling center for general elections, Earn and Learn scheme for needy students etc. The Institute has a robust mechanism to ensure optimal utilization of funds and other resources.

Planning and Budgeting: Financial planning is done through discussions and deliberations at various levels in the institute. Every year, before commencement of the academic session, Heads of the departments and section in-charges prepare budgets of their departments / sections based on the requirements submitted by faculty and staff. The expenses required for delivery of curriculum, organizing and supporting various co-curricular and extra-curricular activities, research, extension & outreach activities are also considered while preparing the budget.

Institute budget is prepared considering the requirements submitted by the Heads of Departments and section in-charges after discussion with them. This budget is then presented by the Principal in College Development Committee meeting and finally submitted for approval from GB. GB reviews the proposed budget and allocates the funds as per the necessity and priority of the proposed expenses and sanctions the budget after making the necessary modifications.

Expenses: Funds are utilized for the salary of employees, development of laboratories, procurement of books and journals, maintenance and other expenses in accordance with the sanctioned budget. There is a standard procedure in place for all purchases and other expenses. Depending on the requirements submitted by the departments & sections and budgetary provisions, quotations are invited from vendors. These quotations are examined by the Purchase Committee and comparative statements are prepared after negotiations with the vendors. This ensures that the right equipment is purchased at a competitive price. Recommendations of the Purchase Committee are forwarded to the management for further approval. Purchase orders are issued to the vendors after receiving the approval from the management. On receipt of

the material/equipment bills are forwarded to the accounts and finance section by the concerned department / section along with the test report and relevant documents. All payments are released to the vendors through RTGS / NEFT or cheque / DD. In case any additional funds are required for unplanned expenses, approval is taken from the management to meet the same.

Control: As there is a structured process for all expenses, there are inherent checks and balances to ensure that funds are utilized properly. All expenses incurred are audited periodically. Corrective measures are taken in case of any deviation observed.

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

Response:

The Institute has an active internal quality assurance cell (IQAC) operational since March 2017. The primary objective of IQAC is to suggest and promote measures for quality enhancement and establish a quality culture in the Institute to improve its academic and administrative functioning.

IQAC periodically reviews the academic and administrative functioning of the Institute and suggests measures to enhance quality. It also aims to internalize and institutionalize a quality culture in the institute. Examples of best practices implemented as a result of IQAC initiatives are described in the following paragraphs.

1. Teacher Guardian (TG) Scheme

An engineering institute is a training ground for students to learn the skills to be successful in their chosen fields and gain an understanding of how the professional world functions. However, many students enter the engineering program with little understanding of the complex landscape of engineering education. This poses a challenge to an educational Institute as well as to the students. Students with varied backgrounds in terms of academic, social and economic diversity are admitted to the programs every year.

At DYPIEMR this is treated not as a problem but an opportunity for good mentoring of students. To address this, Institute has developed a TG scheme to strengthen teacher students' relationship. The IQAC has played an important role in the functioning of TG scheme. Objectives of the TG scheme are

- To create a good rapport between teachers, students and parents
- To help new students to acclimatize to the campus life
- To counsel students on emotional and academic issues

- To monitor their attendance and academic performance
- To help and guide the students for their holistic development

Under this scheme a batch 20 to 25 students is assigned to a faculty, who acts as a mentor to the students and offers them emotional and academic support along with motivation for their upliftment. For this purpose regular meetings between TGs and students are conducted. Parents are informed on regular basis about their wards' performance. TGs also discuss students' issues with other teachers and Head of Department. This has resulted in an overall improvement of the students.

2. Performance Appraisal System

Appraisals are vital to an organization and employees in terms of performance and resource management. Understanding their roles, objectives, benefits and purpose is important to all employees. A carefully designed performance appraisal system has, therefore, been implemented at the Institute level.

The performance of faculty is assessed every year based on their contribution to teaching learning, self-improvement and contribution at department and Institute level. Efforts of those who excel in their performance are appreciated; others are counseled about their performance and encouraged for further improvements. It is heartening to note that this has resulted in improved performance by the faculty in terms of teaching learning, publications and patents etc.

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

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

Review of teaching learning process and methodologies of operation is taken through an active participation of IQAC. IQAC periodically reviews the processes and suggests measures to improve the quality of education imparted in the Institute. Some of the quality initiatives implemented as recommended by IQAC are

- Extensive use of ICT and OBE for teaching learning
- Interaction with industry and academic institutes of eminence
- MOOCS (NPTEL) and Skill enhancement program for students
- Effective Teacher Guardian scheme
- Faculty /student chapters of professional bodies
- Workshop/FDP for faculty members
- Promotion of research culture and IPR
- Online feedback from the students
- Performance appraisal of faculty

1. Teaching Learning Process

IQAC at DYPIEMR believes that the effectiveness of the teaching-learning process depends on its proper implementation, monitoring and review. Various pedagogies are used to make it more learner-centric. Faculty members are trained and encouraged to use ICT tools for effective delivery of the content. Junior faculty members are mentored by the senior faculty members. Academic activities are monitored regularly at the department and Institute level through the Academic Monitoring Committee (AMC). This involves checking of the course files & lab manuals, monitoring attendance of students, syllabus covered etc. which ensures that students are prepared for the In-semester and Online examinations conducted by SPPU. Regular feedback is taken from the students about the academics and corrective actions are taken wherever necessary. Reports of the AMC are discussed in the IQAC meetings. Internal academic audit is carried out after the end of each semester and external audit after the end of the academic year.

2. Outcome Based Education (OBE)

Through the initiatives of the IQAC, steps are being taken to implement OBE in a structured manner. All academic processes are directed towards implementation of OBE. Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) have been framed for all Programmes as per the requirements of OBE.

Course Objectives and Course Outcomes (COs) are clearly defined for each course and are communicated to the stakeholders before the commencement of the academic session. All COs are mapped properly to the POs and PSOs. Course contents are carefully prepared and delivered by the faculty to ensure the attainment of learning outcomes.

Contents beyond syllabus and curriculum gaps are identified by the faculty & module coordinators and are approved by the Department Advisory Board (DAB) of the respective Department. Based on these inputs DAB suggests some measures to address these issues. Various teaching pedagogies are used to deliver the courses. Additional activities like expert lectures from practicing engineers, field visits, mini projects etc. are also conducted to bridge curriculum gaps. Performance of the students is evaluated on a continuous basis through internal assessment based on assignments, unit tests, mock practical & oral examinations etc., and through external assessment based on theory and practical / oral examinations conducted by SPPU. Attainment of course outcomes and programme outcomes is calculated as per the scheme approved by the IQAC.

File Description	Document	
Any additional information	View Document	

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 74.4

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
117	103	70	46	36

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	<u>View Document</u>

6.5.4 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- **4.ISO Certification**
- 5.NBA or any other quality audit
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of institution	View Document

6.5.5 Incremental improvements made during the preceding five years	(in case of first cycle) Post
accreditation quality initiatives (second and subsequent cycles)	

Response:

The Institute has a perspective plan for development which includes improvement plans for quality of teaching-learning process, R&D, community engagement, human resource management, Industry-Institute interaction. Incremental improvements are as follows.

1. Infrastructure Development

After making a modest beginning in 2012, infrastructure in the Institute has been augmented from time to time to meet the requirements of revised curriculum, increased intake and changing technologies. Today, DYPIEMR is equipped with state-of-the-art infrastructure as per the norms of regulatory authorities.

2. Teaching Learning Process

The teaching-learning process in the Institute has seen a rising graph since its inception. From the regular chalk and talk practice it has evolved to blended learning with ICT tools. This has been a great learning experience to the faculty and students and has been prominently noticed in the attainments achieved during the deployment of OBE practices.

3. Human Resource Development

Sufficient number of faculty was added from time to time to meet the academic requirements. At DYPIEMR, faculty members have a wonderful blend of youth and experience. Efforts were made to support junior faculty to elevate their performance. FDPs, Seminars, workshops, training sessions etc. were conducted to keep their knowledge up to date. Experienced faculty at senior level has been appointed to improve the Cadre Ratio.

4. Holistic Development of students

Holistic development is achieved with the development of a person's intellectual, emotional, social, physical, artistic, creative and spiritual potential. Institute has developed structured plan for holistic development of the students. Expert sessions are organized regularly for the students to make them aware about the social issues, ethics and organization behavior etc. Students are also motivated to participate in co-curricular and extracurricular activities like technical competitions, seminars, paper presentations, Inter collegiate and Intra collegiate sports events, theatre events, road shows etc. New facilities were created to nurture the talent of the students.

5. Training, Placement & Entrepreneurship

Institute has established a training and placement cell through which various activities are organized for soft skill training, personality development, technical skill enhancement and assistance for placement. Internships in industries were increased through Industry-Institute interactions. MoUs were signed with industries and training institutes to make students industry ready.

6. Research, Innovation and IPR

Institute strives for excellence in all its endeavors. To promote excellence in research, Institute has established Incubation and Innovation Cell. The students were encouraged to participate in technical events to support their innovative ideas, develop in-house projects and were motivated to participate in various competitions. As a result of the concerted efforts, 22 patents have been filed by the faculty and students,

more than 500 research papers with 88 papers in UGC listed journals have been published in the last 5 years. In addition, over 150 research papers have been presented in various national and international conferences. Many students have won awards in various research competitions like KPIT Sparkle, Smart India Hackathon, SPPU Aavishkar Project Competition etc. The Institute has also received research grants of Rs.12.88 lakhs, one of them being from the prestigious ISRO-SPPU Space Technology Cell.

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 Number of gender equity promotion programs organized by the institution during the last five years

Response: 14

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
3	7	2	2	0

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document

7.1.2

- 1. Institution shows gender sensitivity in providing facilities such as:
 - 1. Safety and Security
 - 2. Counselling
 - 3. Common Room

Response:

a) Safety and Security

DYPIEMR shows consistent concern to gender sensitivity as this is a co-educational institute. All the stakeholders (students, faculty, and parents) are sensitized about gender equity through various informative programs. Equal opportunities are provided to boys and girls to participation in activities like cultural, technical and sports events and representation on different committees.

An Internal Complaints Committee (ICC) has been constituted to address the issues of sexual harassment and safety of women in the Institute as well as to create awareness and sensitize all concerned about gender equality.

Necessary measures are taken to ensure safety and security of girls staying in the hostel. Warden ensures that all the rules and regulations framed for the hostel are strictly followed. CCTV cameras are installed in campus entry gate, classrooms, laboratories, hostel and corridors for students' security. Anti-Ragging committee has been formed to handle issues related to ragging. Anti-Ragging awareness is created among

the students by putting the display boards. Lady Students Representatives are appointed for each division for every academic year. They represent the interests and voice of female students on issues they face. They are also responsible for supporting, coordinating and conveying to the relevant committees. Separate sick room is available in the Institute. General Physician is always available for the girls' hostel on call. College vehicle is provided in case of emergency.

b) Counseling

Professional counselors' sessions have been arranged for issues like stress management, women empowerment, image management and many more. Teacher Guardians also undergo training by eminent counselors for effective mentoring of students. Teacher guardians provide emotional support to impart moral and ethical values amongst students. They do individual and group counseling related to behavioral and academic issues like study skills, time management, examination anxiety and poor academic performance of the students. The teacher guardians and the female faculty also provide support in case of any personal issues.

c) Common Room

Separate common rooms have been provided for boys and girls. In girls' common room, institute has installed sanitary napkins vending machine under the state government's 'She Pad' scheme which aims to provide hygienic sanitary pads to all girl students.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

1.Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 10.56

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 14784

7.1.3.2 Total annual power requirement (in KWH)

Response: 139987

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 32.14

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 19828.8

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 61689.6

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	<u>View Document</u>

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

To create awareness among students about environment issues, courses are included in the curriculum. In addition students are sensitized through model/ poster making activities portraying themes like waste management, pollution, cleanliness etc. Every attempt is made to make the campus eco-friendly by proper waste management. There are separate procedures for solid waste, liquid waste and e-waste management.

a) Solid waste management

Institute has provided dustbins at various locations to collect solid waste like paper waste, wrappers and garbage. Housekeeping staff cleans the classrooms, laboratories, Institute premises and empties the garbage dustbins to Pimpri Chinchwad Municipal Corporation (PCMC) vehicle on daily basis. Towards the efforts for carbon neutrality, dry leaves and waste papers are not allowed to be put on fire in the campus. The Institute has carried out plantation drives to make the campus green. Scrap papers are collected and sold to the local vendors for recycling.

b) Liquid waste management

Institute has constructed an 180000 lit capacity of sewage water treatment plant for liquid waste management. An activated sludge process of Moving Bed Bio Reactor has been implemented for the treatment of the liquid waste. The treated water is used for gardening purpose and helps to maintain the greenery of the campus. The chemicals from the chemistry lab are collected and treated to neutralize it before sending to the sewage treatment plant.

c) E-waste management

Institute has developed procedures for e-waste management. Bins are placed department wise to collect e-waste like computer spares, electronic boards, electrical switches etc. This helps to create awareness among staff and students. The collected e-waste is disposed off through authorized agencies for dismantling and recycling.

File Description	Document
Any additional information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rain water harvesting system has been installed in the Institute which has saved considerable amount of water. The entire campus rain water is collected in the Institute harvesting storage which is a rectangular tank provided at backside of the Institute. Through the natural slope of building, rain water gets collected and is channelized through gutters to the pre-defined storage destination which is used for gardening. This helps in water conservation by storing surface water which otherwise would runoff during monsoon.

File Description	Document
Any additional information	View Document

7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

Response:

a) Public Transport

The Institute is situated near Akurdi railway station. The timings of the institute are in line with the train timings making it convenient for the faculty and students to commute by local trains. Due to the locational advantage of the Institute being connected by main road, it is having good accessibility of buses. Many of our faculty, staff and students prefer to commute using car pool service helping to reduce pollution. Every second Saturday of the month is observed as 'No-Vehicle Day' and no cars and bikes are allowed in the Institute premises.

b) Pedestrian friendly roads

Campus is well equipped with pedestrian friendly roads. The same roads are also utilized for vehicles movements but with very low limiting speed of 15 km/hr.

c) Plastic-free campus

Institute has taken steps towards creating an eco-friendly campus by prohibiting the use of plastic. Canteens and cafeteria in the campus are not allowed to use any plastic utensils.

d) Minimal usage of paper

Institute has taken initiative towards paperless office by using Enterprise Resource Planning (ERP) system and internet access. All the attendance of the classes is taken on the ERP software. Communication with all stake holders is made through services like email, SMS, Whatsapp, Google sheets, ERP and other automation software that ultimately reduces paper work.

f) Green landscaping with trees and plants

Institute is equipped with a wonderful green landscaping which is appreciated by all. The green campus has a variety of plantation all around the campus, a special landscaped garden and beautiful fountain. Institute also has provision for sustainable lawn maintenance and landscaping. For maintaining the greenery, sprinklers are used to water the lawns using recycled water.

Pimpri Chinchwad Municipal Corporation (PCMC) has awarded First Prize to Dr. D.Y. Patil Educational Complex as 'Best Landscape Design and Best Landscape Maintained Campus' consecutively for the last three years.

Institute has taken various measures under the guidance of Institute leadership to keep the campus clean, green and pleasant. Diversity has been very well kept in mind while planting trees in the campus. Institute also practices to gift saplings to all the guests in the Institute to increase consciousness about nature.

File Description	Document
Any additional information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary

component during the last five years

Response: 7.93

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component yearwise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
23.91	55.15	50.14	32.16	13.85

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities
- 5. Rest Rooms
- 6. Scribes for examination
- 7. Special skill development for differently abled students
- 8. Any other similar facility (Specify)
- A. 7 and more of the above
- B. At least 6 of the above
- C. At least 4 of the above
- D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	<u>View Document</u>
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 67

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
44	13	7	1	2

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 84

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
15	26	18	16	9

File Description	Document	
Report of the event	View Document	

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
URL to Handbook on code of conduct for students and teachers, manuals and brochures on	View Document
human values and professional ethics	

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description Document

Provide URL of website that displays core values View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 42

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
7	11	10	9	5

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

DYPIEMR organizes different national festivals and birth & death anniversaries of great personalities to inculcate among the students and employees a sense of patriotism and awareness about the contribution of these great personalities in nation building.

- In order to remember the heroic efforts by our freedom fighters & the founders of constitution behind the historic events, the Institute celebrates Republic and Independence Day every year.
- In the memory of the second President of India, Dr. Sarvepalli Radhakrishnan, his birth anniversary on 5th September is celebrated every year as the Teacher's Day.
- Science day is celebrated on 28th February in memory of Sir C.V. Raman.
- In the memory of the greatest Indian Engineer, Bharat Ratna Sir Mokshagundam Visvesvaraya, his birth anniversary on 15th September is celebrated as Engineer's Day every year.
- From the inception of the International Yoga Day on 21st June 2015, it is celebrated every year in

the Institute

- The Institute has adopted two children from Nachiket Balagram(Orphanage) situated in the vicinity. Education and daily needs of these children are taken care by the Institute. Regular visit to the orphanage by faculty and students are scheduled. The students and faculty also visit Nachiket Balagram to celebrate the birthdays of these children.
- Founder's Day is celebrated by donating items like refrigerator, water coolers to old age home-Vridha Anand Ashram.

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

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

DYPIEMR has a well formulated transparent financial, academic and administrative policy which ensures effective and optimal utilization of finances for its development.

Financial Transparency:

The Institute is working with full transparency of its financial transactions. DYPIEMR is a self-financed Institute and the fees collected from the students are as per the guidelines of the Fee Regulatory Authority (FRA), Government of Maharashtra.

All financial transactions related to fees are carried out online or through demand drafts

At the start of every academic year, each department has to provide a budget which is approved by the GB and is later utilized for the procurement according to the department's requirement and preference. The procurement is handled by the Local Purchase Committee (LPC) according to the standard approved process.

To maintain transparency and to verify that standard norms are followed, financial audit is carried out by certified external agency.

Academic Transparency:

The Institute always tries to be transparent in academics throughout. All academic activities are implemented in a transparent manner according to the academic calendar. Students are aware of the course plans, activity schedule and examination schedule as these schedules are communicated at the commencement of the academic session. They are also informed about the continuous evaluation system at the Institute and University Level which ensures transparency.

Department level Academic Coordinators monitor department wise academics under the guidance of HoDs. They are responsible for the continuous update of the weekly coverage of the syllabus which helps to monitor the pace of the academics. Inter-departmental monitoring is also done to maintain transparency in the attendance and adherence to the timetable. Attendance of the classes is maintained regularly using ERP software. HoDs and Principal can monitor the attendance of any class on ERP through their respective logins. Attendance of students and their performance in continuous assessment is displayed on notice boards regularly and their parents are also intimated.

The evaluation system at the Institute as well as the University is transparent and proper mechanisms are in place for the redressal of students' grievances.

Administrative Transparency:

Administrative transparency is ensured through decentralization and participative management. For effective and efficient administration, different bodies and committees have been constituted. Roles and responsibilities of individuals and committees are clearly defined. Democratic functioning of these committees has resulted in creating a healthy work environment.

Auxiliary Functions:

Transparency of the auxiliary functions is ensured as majority of the auxiliary activities are handled by the different committees that have representation for students, faculty& staff and other stakeholders.

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

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice-I

Title of the Practice: Career Augmentation Training for Students

Objectives of the Practice

- To improve communication skills, employability skills and soft skills
- To enhance the technical competence of students
- To render the students globally proficient and employable

The Context

One of the core values of DYPIEMR is 'Focus on Students'. Students are considered as the most essential and crucial stakeholders of the Institute and all efforts as well as the pedagogical design are directed solely towards their holistic development so that they become quality conscious technocrats and responsible citizens. Employers look for skills and attributes in two broad areas: defining skills (technical skills) and enabling skills (soft skills). Students from a diverse socio-economic and academic background are enrolled into the Institute annually. Based on the assessment of learning levels of students and feedback received from stakeholders special training programs are organized.

The Practice

The following efforts and initiatives are taken by the Institute to train students:

• Soft Skills Training

- Professional trainers are hired to train students to enrich their skills and help them secure a
 career trajectory through extensive aptitude training sessions, group discussion, personal
 interview techniques and resume writing skills.
- Enhancement of interpersonal skills through which the students are trained to function effectively in multi-disciplinary and heterogeneous teams using abilities of working in a team, conflict management, leadership qualities via knowledge acquisition, demonstration and applicative practice.
- Personal Interview sessions which include image management and personality development comprising aspects such as attire and dress codes, greeting, gestures, postures, confidence & preparation for the anticipated questions.
- An all-encompassing training under the extensive supervision of the Training and Placement Cell
- Emphasis on improving skills of communication, listening, negotiation, etiquettes, language etc.

• Add-On Training

- Rigorous training and preparation of the students in their core technical domains like Java, DBMS, SQL, C, C++, Ansys, Software Testing, CATIA, CAD, Robotics, STADPRO, IoT, Big data Analytics, Redhat etc.
- o DYPIEMR -Virtusa Centre of Excellence for specialized training in latest technologies
- Provision of training according to current market trends to meet the demands and requisites of leading organizations
- Organization of Training sessions for students with regard to opportunities in higher education and importance of GATE, TOEFL, GRE etc. So far, approximately 656 students have appeared for competitive examinations
- Career counseling sessions are organized regularly. Till now, 6134 students have participated in different counseling sessions all together

• Foreign Language Training

Ounder the prestigious TCS-HIKARI program, Japanese Language Training Program (JLTP) is an initiative for endowing the students with better placement opportunities in MNCs /top leading organizations looking out for multilingual candidates. This training is proposed by TCS in our Institute under the TCS Hikari Program. Professional trainers are hired for training the students at the N5 level training program. The students are duly certified after the successful completion of the training and are endowed with a direct

placement opportunity in TCS after clearing and qualifying the N5 level examination. In the last two years, approximately 90 students have appeared for the JLPT examination.

Evidence of Success

- In the last three years, 733 students are placed and placement assistance is currently extended to the remaining unplaced students
- 35 students got selected in Virtusa
- 4 students have been recruited by the Indian Army. Tanay Kumthekar secured AIR 42nd rank in the Combined Defence Services Examination
- 6 students have successfully established themselves as entrepreneurs
- A significant increase in the number of students who have qualified the GATE and GRE examinations. In 2017-18, 17 students have cleared the national/international examinations for higher studies
- Akash Patil, a student of Mechanical Engineering, selected for Summer Internship at Caltech University, California, USA.
- Ayush Agarwal, a student of Mechanical Engineering, awarded second rank in KPIT- SPARKLE & received a cash prize of Rs 2.5 Lacs.
- Kartik Karande, a student of Computer Engineering, selected in State/ Regional AICTE Vishwakarma Project Competition.
- Ayush Agarwal , a student of Computer Engineering, selected in level 1 Avishkar-SPPU Project Competition.
- Jayesh Ramane, a student of E & TC Engineering, selected in level 1 Avishkar- SPPU Project Competition
- Unstinted encouragement meted out to the students has resulted in their participation in various competitions organized and conducted by the corporate domain and industries viz. TCS CodeVita, TestiMony, EngiNX, Barclay's Tech Innovation Challenge, KPIT Sparkle, Aakruti by KPIT, Infosys Hackathon, Hackathon Pune by e-Zest, Go-Kart, SPPU- Avishkar etc.

Problems Encountered

- Constraints to accommodate the training programs in the cramped academic schedule
- Identification of resource persons and their availability as per the academic schedule
- An observed reluctance of the students to participate in career enhancement and student development training sessions

Resources Required

Institute has the required resources such as well-equipped seminar halls, computer center, Virtusa center of excellence, Incubation and Innovation center and qualified human resources to carry out the training activities.

2. Best Practices-II

Title of the Practice: Industry Institute Partnership

Objectives of the Practice

- To promote involvement and participation of experts from the industry in the development of curricula & students' projects
- To arrange industry field visits and industrial training for the faculty and students of the Institute
- To develop a strong technical workforce that would bridge the gap between the requisites of the industry and academic orientation
- To facilitate internships, organize seminars, workshops and expert talks by eminent personalities and leading industrialists
- To arrange Add-On Courses which would permit and facilitate the students to choose any branch specific or interdisciplinary course apart from academics which will help strengthen the profile and knowledge base of the students
- To identify relevant industries and execute Memoranda of Understanding between the Institute and the industries to bring the two parties professionally, academically and strategically closer

The Context

The success of an educational institute depends on the quality of its faculty and the technical profile of its students. An academically/professionally empowering interaction between Institute and Industry is the need of the hour. This will have great bearing on the engineering curriculum, exposing engineering students to industry atmosphere and trends as well as subsequent placement of young graduating engineers in industries across the country. With the advent of globalization and opening up of the Indian economy to the entire globe, the competition infused among industries has become stringent, rigid and cut-throat. Thus, in order to obtain technological solutions to their problems, they seek and pursue engineering institutions. Similarly, there is an urgent need to train engineering students to enhance their core competencies and develop technical skills to render them employable in multinational companies, by exposing them to newer technologies and engineering methodologies. These objectives can only be achieved by bridging the gap between industry and the academic institutes and therefore, through a strong Industry-Institute interaction.

The Practice

Taking into account the need to enhance the professional development of the students, the Institute has constituted an Industry Institute Partnership Cell (IIPC). The IIPC actively assists and facilitates the students by providing them necessary guidance from experts who, in turn, aid the budding professionals and entrepreneurs of the Institute. The cell pursues the objective to motivate the students and offer guidance and information about the various entrepreneurship encouragement schemes declared by the State and Central government.

The IIPC is instrumental in enhancing the quality of education by arranging vocational trainings, guest lectures, industry sponsored projects, industrial visits, faculty trainings etc. through Industry Institute interaction.

To promote Industry - Institute Partnership, the following practices are undertaken:

- Organizing workshops, conferences and symposia with a collaborative effort and participation of faculty and industrial professionals
- Encouraging professionals from industry to visit Institute to deliver lectures and expert talks in order to give the students regular insights into the corporate arena
- Visits of industry executives and practicing engineers to the institute for evaluating student projects and exhibits, discussions and delivering lectures on industrial practices, trends and experiences
- Signing Memoranda of Understanding between the Institute and industries to provide inputs beyond curriculum and internships for the graduating students
- Deputation of faculty for industrial training as a part of Train the Trainer Programs. Furthermore, the faculty members who attend training in industries share their knowledge and experience with others in the department and also impart in-house training to the students
- Setting up and establishing an Industry Centre of Excellence in the Institute for imparting industry oriented training programs
- Promoting scholarships/fellowships instituted by industries at the institute for the benefit of the students
- Encouraging students to participate in competitions organized and conducted by the industries

Evidence of Success

- Enhanced interaction with the industry has resulted in good placements
- The Institute has established the Virtusa Centre of Excellence (COE). The Institute was awarded the "Best COE" by Virtusa based on the students' performance in the various assessments conducted by them. 35 students have been recruited by Virtusa through this COE.
- DYPIEMR has been awarded with Silver rank by AICTE-CII Survey
- Institute has so far signed 58 MOUs with industries and organizations
- Yearly scholarship of Rs. 30,000 was awarded to students under the Schneider Electric India Foundation Scholarship Program.
- BMW, India has donated a twin power turbo diesel engine to Mechanical Engineering Department under their Skill Next scheme.
- Several industry sponsored projects were undertaken by the final year students. Projects were accepted and appreciated during the external evaluation. Up till now 70 industrial sponsored projects are completed and more are still undergoing
- On the basis of the students' feedback, the guest lectures, workshops and other training sessions conducted by industry experts have helped students to improve their skills and technical knowledge
- Participation of students in various competitions organized by industries like: TCS CodeVita, TestiMony, EngiNX, Barclay's Tech Innovation Challenge, KPIT Sparkle, Aakruti by KPIT, Infosys Hackathon, Hackathon Pune by e-Zest etc.

Problems Encountered

- Reluctance of industries to collaborate with academia
- Constraints to accommodate the activities in the academic schedule
- Traditional reluctance of students to participate in professional development /training

Resources Required

Institute has the required resources such as well-equipped seminar halls, computer center, Incubation and Innovation center and qualified human resources to carry out the activities in collaboration with the industries.

File Description	Document
Any additional information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Faculty Enrichment Program

The vision of the Institute is to strive for excellence by providing quality technical education and facilitate research for the welfare of society. In line with the vision, priority and thrust, the Institute consistently provides motivation, support and platform to all the faculty members as it believes that they play a vital role in the development of the Institute. The Institute organizes Faculty Enrichment Programs for promoting the qualitative factors of the faculty through a three pronged strategy that aims at their personal, professional and holistic development. This would empower them and facilitate their role as educators and mentors responsible for grooming the future citizens with knowledge, attitude and skills.

The Institute conducts various Faculty Enrichment Programs with the following objectives:

- To enhance knowledge and skills
- To inculcate professional ethics
- To motivate towards quality research
- To augment their effectiveness in content designing and delivery
- To familiarize them with their social responsibilities
- To train them to provide extra care to students requiring special attention

In order to churn out engineers with professional excellence, and to prepare the students for better career opportunities, faculty members are expected to have a genuine and sustained commitment to excellence in teaching and learning. The methodology, through which the Institute's teaching-learning process is strategized, is an important factor for moulding the professional careers of students. To meet the demands and exigencies of the technical profession and the emerging job markets, the Institute offers opportunities to empower the faculty to identify the appropriate instructional materials and assessment methods. A continuous process of faculty quality enhancement helps to involve the participants in an active, in-depth teaching-learning activity.

Experience has significantly proved that fostering quality teaching is a multi-level process and the support required for quality teaching takes place at three inter-dependent levels:

- An Internal Quality Assurance Cell (IQAC) is setup at the Institute level for framing policies to enhance quality in every activity
- At the program level, different measures such as appraisal and feedback systems are developed to evaluate and enhance the quality of the faculty by conducting and encouraging them to attend faculty development programs which will lead to better content delivery of the courses as well as the holistic pedagogical performance
- Support is given to faculty to enhance their professional qualifications by promoting higher studies

IQAC reviews the appraisal and feedback of the faculty and recommends appropriate measures required for their improvement. Such feedback and guidance is essential and plays a key role in providing ample opportunities to faculty to meet the Institute's expectations. Meetings and discussions are conducted with the faculty about their recent accomplishments and performance. Based on the guidelines, faculty members are encouraged to attend various FDPs/In-house training sessions.

- 1. Faculty members are motivated to regularly attend faculty development programs organized by various colleges to enhance their technical skills. As of now, 20 faculty development programs have been organized by the Institute. 873 Faculty Development Programs, Workshops and Short Term Training Programs have been attended by the faculty so far.
- 2. Syllabus implementation workshops are organized by SPPU and faculty are encouraged to participate in them.
- 3. Faculty is trained to understand and implement Outcome Based Education for framing the intended learning outcomes, designing teaching learning activities geared towards attainment of course & program outcomes
- 4. Interactive sessions and motivational lectures from eminent persons on topics like Role of Information and Communication Technology in Teaching, Sharing Best Practices, Spiritual Qualities of a Faculty, Team Building of Faculty members, etc. are organized. Approximately 70 faculty have successfully completed a course on use of ICT for teaching conducted by IIT Bombay
- 5. Constant encouragement is provided to the faculty to upgrade their qualifications and enrich their research profiles through publication of books, articles and paper presentations, etc. 537 research papers with 88 papers in UGC listed journals have been published in the last 5 years. In addition, over 150 research papers have been presented in various national and international conferences.
- 6. An Incubation and Innovation Cell is established to encourage, motivate and guide the faculty to file patents, apply for research funding etc. Till now 22 patents are filed by the faculty members and research grants of Rs. 12.88 Lacs has been received.
- 7. Institute also conducts Seminars and Workshops to gather the best of the academic and industry perspectives on current topics. Expert talks and workshops by eminent academicians are organized to improve the teaching-learning process
- 8. Faculty is encouraged to be associated with different professional bodies to enhance their professional relations and standing. Presently, faculty members have 173 memberships of professional bodies of national and international repute. Institute is having a functional ISTE chapter with 98 faculty as life member. Since its inception, the ISTE chapter has successfully conducted 11 FDPs/STTPs. Considering all these technical activities Institute has been awarded with "ISTE Best Faculty Chapter Award-2017".
- 9. Faculty is encouraged to enroll for MOOCS certifications like NPTEL and use Virtual labs of College of Engineering, Pune and Amrita University to keep themselves updated. As of now, approximately 52 certification courses are completed by faculty under the umbrella of NPTEL
- 10. Faculty are deputed for certified Train the Trainer programs from Google, NASSCOM, Virtusa etc.
- 11. Training programs on Education Technology by NITTTR are organized for faculty.

12. To enhance the holistic development of the teaching and non-teaching staff, lectures by spiritual leaders and motivational speakers are organized.

Enhancing teaching-learning process and thereby upgrading the quality of the graduating students is the primary priority of the Institute. Furthermore, through the provision of such enrichment programs, Institute's consistent efforts revolve around the students' performance and engagement. The students' academic performance has improved over the years, which exhibits effective and innovative teaching methodology of the faculty members. Additionally, the faculty members have incorporated active learning methodologies through discussions, group work, lectures, laboratory work, workshop exercises, assignments, projects, use of ICT, classroom presentations, video lectures etc. They are enthusiastically participating in student mentoring activities and are also actively contributing in research publications and patent filing.

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

5. CONCLUSION

Additional Information:

Quality Policy

Improve constantly and forever

Core Values

• Excellence

We, at DYPIEMR, are committed to make relentless efforts to pursue excellence in everything we do.

• Ethics & Integrity

We are committed to the highest standards of honesty, integrity, and academic and professional ethics.

• Focus on Students

We believe that students are the primary reason we exist as an institution. Our primary objective is not only to educate students in their chosen disciplines, but also to inspire them to become leaders in their chosen fields.

• Accountability & Transparency

We commit ourselves to be accountable for all our actions and promise to be transparent in all our endeavours.

• Use of Technology

We are committed to promote the use of technology for teaching-learning and governance.

Concluding Remarks:

Since its inception in 2012, Dr. D.Y. Patil Pratishthan's DYPIEMR has grown by leaps and bounds in the field of technical education in a short span of six years. This has been made possible through the painstaking efforts of faculty and staff under the guidance of visionary management.

DYPIEMR has made its mark due to a conducive environment for effective teaching-learning process, various add-on and value added programmes for the holistic development of students and good placement record.

Self Study Report of PADMASHREE DR. D Y PATIL INSTITUTE OF ENGINEERING, MANAGEMENT AND

In the continuously evolving teaching-learning process, emphasis is on Outcome Based Education (OBE) to ensure attainment of learning outcomes. In the implementation of OBE various pedagogies adopted are aided by the Institute.

All attempts are made to create an ecosystem for Research and Innovation. One of the faculty members has recently received a grant of Rs.10.48 lakhs from prestigious ISRO-SPPU Space technology Cell. Though lack of quality research publications has been identified as a weakness, a large number of publications by the faculty is a testimony of their research potential.

A proactive T&P Cell caters to the needs of the students to provide all assistance to them to facilitate their placement by the time they graduate. A good placement record over the past three years, inspite of the economic slowdown, validates the efforts taken by the T&P Cell.

Institute realises that in addition to being technocrats, students need to be good human beings and hence it is necessary to inculcate human values and life skills among the students through various activities.

In conclusion, an enlightened management, dynamic and talented faculty, dedicated supporting staff, a robust teaching-learning environment and awareness about social responsibilities has helped DYPIEMR to fulfill the aspirations of budding engineers and it has become a preferred destination for a large number of students from all over the country in a short span of just six years.