



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, 70-MILE STONE,
G.T.ROAD, VILLAGE-PATTIKALYANA, SAMALKHA, DISTRICT-PANIPAT,
STATE-HARYANA

132102

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NAAC

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Institute made a beginning in 2006 by introducing B. Tech. programs in CSE, ECE, ME and TE in affiliation with the *Kurukshetra University, Kurukshetra with its name as Panipat Institute of Textile Engineering*. The name of institute was changed to Panipat Institute of Engineering and Technology in the year 2009. Presently the following programs are offered by the institute in affiliation with the *Kurukshetra University, Kurukshetra*.

B. Tech., Computer Science and Engineering

B. Tech., Civil Engineering

B. Tech., Electronics and Communication Engineering

B. Tech., Information Technology

B. Tech., Mechanical Engineering

B. Tech., Textile Engineering

Bachelor of Computer Applications

Master of Computer Applications

Bachelor of Business Administration

Master of Business Administration

B. Voc. in BFSI

The applied science and humanities department supports in the first year B. Tech. classes of the engineering departments (computer science and engineering, civil engineering, electronics and communication engineering, information technology, mechanical engineering, and textile engineering). The computer application department supports the BCA and MCA programs. The BBA, MBA and B. Voc. programs are supported by the business and management studies department. In favor of participative administration and considering the volume of students, the BBA and B. Voc. programs are taken care by a separate departmental unit head. The departments running the programs under the state technical board are diploma mechanical engineering and pharmacy department offering Diploma – ME and D. Pharma respectively.

Vision

Panipat Institute of Engineering and Technology (PIET), Panipat was established as a growth oriented self financed institute by the *Vidhyapeeth Education Trust* with an aim to provide good quality higher education in

the year 2006. The founder and chairman Shri Hari Om Tayal, a philanthropist based in Panipat, has a clear vision for the institute **to be globally known and recognized educational institute having a transformative impact on the society.**

Mission

PIET's mission is **to impart knowledge, skills and creativity to all the students; provide a conducive environment for quality teaching, learning, and research; to create awareness on sustainable technologies and innovative solutions to societal problems including entrepreneurship; and to strengthen institutional and industrial collaborations nationally and internationally.** Institute is committed to the core values of integrity, transparency, social responsibility, institutional excellence, and support for innovation.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Conducive working environment and dedicated faculty members
- State of the art infrastructure with wifi, lecture recording and other support system
- Green campus environment
- Variety of institutional scholarships to support students
- Student activities to promote social welfare and responsibility
- Centres of excellences for skill development
- Internship opportunities and international exposure to students
- Use of innovative teaching methods in accordance with Education 4.0
- Participative administration
- Promotion for holistic development of students
- Student centered approaches and initiatives for supporting slow learners
- Availability of latest tools and technologies
- NBA accreditation of B. Tech. program in CSE
- Support for faculty students and staff development
- Innovations and startup initiatives

Institutional Weakness

- Delay in university results since the institute is not a degree awarding body.
- Lack of flexibility for curriculum revisions
- Lack of flexibility in scheduling add on courses due to occupied university calendar
- Funded research and patents

Institutional Opportunity

- The region is open to future developments due to proximity with the NCR
- Preferred location due to rising pollution in NCR region
- To become a autonomous

- To become incubation hub

Institutional Challenge

- Students with diverse background and needs
- Inflexibilities of affiliating system and academic autonomy
- Availability of experienced faculty
- Meeting the educational outcomes through poor overall university results
- Time consuming university examination system

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institute adopts the curriculum provided by the *Kurukshetra University* in all its affiliated programs. The course outcomes have been mentioned along with the university syllabus. These course outcomes have been revised to regulate the program outcome and program specific outcomes attainment processes.

The CBCS system has not been implemented by the *Kurukshetra University* in any of the programs offered in PIET, however a good number of programs are following elective system. As an example, out of 15 programs offered during 2018-19, 12 programs were following the electives system to provide choice of subjects to the students. In addition to the elective subjects, departments plan and offer add on courses to students and conduct seminars and workshops on the topics of curriculum, and beyond. The institute has established a system of stakeholder's feedback analysis on curriculum to improve the learning through curriculum delivery along with other academic support system.

Teaching-learning and Evaluation

As regard to student admissions, a maximum of 25% of sanctioned intake can be filled by the institution (management quota) and rest 75% is filled through the Haryana State Technical Education Society (HSTES) as per the state government rules for admissions in Diploma/B. Tech./MBA/MCA/M. Tech. programs. There is no management quota in the BBA and BCA programs. The state quota is 85 % of the sanctioned intake and remaining is for Rest-of-Haryana category for all programs. The institute supports student diversity by admitting students from diverse backgrounds and regions such as Delhi, North East, Uttar Pradesh, Bihar, J&K etc. and also neighboring countries such as Nepal, Bhutan and Bangladesh etc. The girl student's gross enrollment at present in all the programs is about 28%. The institute facilitates the girls and other state students by providing well furnished in campus hostel facility.

Identification of student's learning pace is a regular process in the institute. Classrooms with lecture recording systems are available in all the departments as a learner centric measure. The ICT facilities are available in more than 90 % of the class and seminar rooms. Internships and project work are the standard practices to support participative, experiential and collaborative learning modes. All the programs, through the faculty members, offer a variety of learning experiences to their students e.g. seminars, GDs, role plays, case studies, workshops, industrial and field trips etc. The institute provides good learning resources (LMS) to the students and faculty members. The academic and administrative audits are conducted to analyse and plan for reforms in

academic and other processes.

Setting up of the COs and PSOs and their attainments is a standard practice across all the programs. The student assessment processes are transparent and includes the academic grievance redressal. Test questions are directed through the Bloom's levels and attainments are computed and monitored with remedial measures in all the programs. During last many years, most of the university merit positions are bagged by the PIET students in all the programs.

The institute follows a fair and transparent process for recruitment and selection of the faculty members.

Research, Innovations and Extension

The institution supports the faculty members to timely submit research project proposals and approach funding agencies for resources. The institution also encourages the students and staff to engage in interdisciplinary and interdepartmental research and development activities. The staff development and research promotion policy is in place to acknowledge and reward the staff achievements at appropriate level. The faculty members engaged in Ph. D. and research activities also collaborate with other agencies for sharing research facilities. The institute has also formalized policy on consultancy with clear specification of revenue sharing between the staff members and the institution.

The Institute Innovation Council is being run for last two years in collaboration with the MHRD and created an ecosystem for innovation with five star ranking. There are patents filed and granted to the institute faculty members. The institution has conducted a good number of activities such as seminars, workshops, FDPs and camps etc on research methodology, intellectual property rights and entrepreneurship. The institute has created a number of skill development avenues for students and faculty members through collaborations and creation of centre of excellences. The practices of student exchange program are also established for the same

The students at PIET are actively and visibly involved in various extension activities for creation of awareness towards community issues, gender disparities, environmental and sustainability issues. The student clubs, NSS, Rotaract at PIET and the programs organized by the district administration are important platform for the community activities.

Infrastructure and Learning Resources

The institute provides abundant infrastructure for conduct of regular classroom teaching, tutorials, seminars, curricular and other extracurricular activities (auditorium and open air theatre) that are well furnished and ICT enabled for efficient support to the academic processes. The campus is clean, green and supports ecological diversity. Good quality potable water and canteen facilities are available for use of students and staff. The library and other central facilities are also managed conforming to the requirements and expectations of all stakeholders. There is a computer centre in the institute and 27 other computer labs housing about 928 computers catering to students from computer science and engineering, information technology, computer applications and all the other engineering and management programs. Software such as CATIA, MATLAB and all other as per the curricular requirements and further enrichment are available in the laboratories. The administrative activities are also supported by the ICT for operational efficiency and outreach.

The institute library also hosts sufficient books, journals, and digital contents in the form of video lectures, e-

books, e-journals, data bases etc. PIET has a state of the art server room to host its own applications and connect with the video capture system. The institute provides free email accounts for its faculty and staff with high speed internet bandwidth of 110 MBPS. The institute's infrastructural and ICT facilities have also been recognized by the AICTE twice by allotting it the only nodal centre in Haryana for Hackathon-2018 and Hackathon-2019. The well equipped infrastructure of the college is efficiently maintained by various sections and budget allocation.

Student Support and Progression

The mentor mentee system at PIET and the student categorization supports student community on their academic issues. The other grievances, if exist are taken care by the grievance redressal cell, examination committee, antiragging and other statutory committees available in the campus. Appropriate student participation in such committees is also supported by the institute. To support further in their career institute provides learner centric and skill oriented trainings, with the primary objective of improving the employability and entrepreneurship of students through emerging technologies. Other career support initiatives for higher studies and employment are also available to all the students.

The institute time to time organizes special programs through the seminar and workshop modes towards promotion of social justice and value based education. The important national and international days are also celebrated in the campus in this context.

The alumni activities have been there in the PIET soon after graduation of the first batch of students in around 2011. Later, in 2019, the alumni association has been registered with the Department of Industries and commerce, Haryana under the Haryana Registration and Regulation of Societies Act-2012. The alumni association has been functioning with the objective to contribute in terms of strengthening the professional bonds between PIET and its alumni with financial contributions and other modes of engagement such as career mapping and advice.

Governance, Leadership and Management

The Institute is managed by the board of governors, constituted as per the norms stipulated by AICTE. Members of the board include leading educationists, industrialists and social workers who discuss and decide upon policies and action plans in the best interest of all the stakeholders. PIET has delegated authority at various levels to ensure good governance. The administrative structure including the director, deans and heads of the departments indulge in planning various developmental issues and strategies for benefit of the stakeholders.

The Institute has variety of welfare schemes and provisions for the benefit of its teaching and non-teaching staff. Annual self-performance based appraisal system has been adopted by the institute to monitor and encourage the staff development.

PIET is a self financed institution and funding required for running the college is entirely generated through fee collection and bank loans for infrastructure development to be repaid later in installments. Institute's budget is the primary instrument of fiscal control and, accordingly, contains all projected revenues and expenditures of the administrative and academic programs. Institutional budget aims at optimum utilization of finance and prepared every year under the supervision of the director of institute taking into consideration of recurring and

non-recurring expenditures. The *vidhyapeeth* educational trust, parent body of the institution appoints the external auditors.

The IQAC as per NAAC guidelines was formulated in PIET on 16/07/2018. The IQAC has been instrumental in setting up various initiatives such as revised program audit framework, inclusion of the Blooms level in the evaluation process, student personality and professional development, social and extension activities, seminars, workshops, conferences, promotion of entrepreneurship and innovations, formation of centre of excellences, MOUs for skill development, supporting accreditation processes, strengthening teaching learning system and student activities in emerging area etc

Institutional Values and Best Practices

The institute has a rich cultural mix of students from Haryana, Delhi, North East, Uttar Pradesh, Bihar, J&K etc with the students from other countries such as Nepal, Bhutan and Bangladesh. Drawn from various places and countries, students have found PIET a home away from home. PIET, through its various initiatives and efforts tries to create an inclusive environment. The institute has initiated different measures for the promotion of gender equity. Different type of gender equity promotion programs are also organized in the institute and various facilities are also provided to the girl students and female staff. The institute organizes various programs to promote human values and ethics.

The institute has been conducting the energy, green and environmental audits by external agencies to take stock of its efforts on energy and resource conservation, rain water harvesting, solid/liquid waste and e-waste management, biodiversity, green practices etc. The institute campus is disable-friendly and various assistive facilities and measures are in place.

There are two practices, included for presentation in this report, which have evolved internally in the institute and have led to further improvements in its functioning. The first is a scholarship test conducted by the institute in last many years which has created awareness about variety of student's need for assistance through scholarships. As an out come the institute now offers a range of institutional-scholarships across all its programs. The second practice is on adoption of blended learning which has resulted into the improved student engagement. The institutional distinctiveness has been reported as creation of environment for experiential learning and entrepreneurship which has led to facts that presently in SIH 2020, seven student teams from the institution have qualified at national level for finals of the software edition while four teams have qualified for the final of hardware edition. Out of the seven qualifying teams of software edition, two have received the first prize of Rs. 100000 each and one stood at third with a cash prize of Rs. 50000.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY
Address	Panipat Institute of Engineering and Technology, 70-Mile Stone, G.T.Road, Village-Pattikalyana, Samalkha, District-Panipat, State-Haryana
City	Panipat
State	Haryana
Pin	132102
Website	www.piet.co.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Shakti Kumar	0180-2569799	9354613020	0180-256980 0	info@piet.co.in
IQAC / CIQA coordinator	Dinesh Pratap Singh Chauhan	180-2569799	9053013020	0180-256959 9	dean.academics@piet.co.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 minority institution	No

Establishment Details

Date of establishment of the college	19-05-2006
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University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Haryana	Kurukshetra University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
PCI	View Document	19-06-2019	12	
AICTE	View Document	21-05-2019	12	

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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Recognitions

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Panipat Institute of Engineering and Technology, 70-Mile Stone, G.T.Road, Village-Pattikalyana, Samalkha, District-Panipat, State-Haryana	Rural	14	56656

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate or Equivalent	English	90	28
UG	BTech,Computer Science And Engineering	48	Intermediate or Equivalent	English	180	180
UG	BTech,Electronics And Communication Engineering	48	Intermediate or Equivalent	English	60	45
UG	BTech,Information Technology	48	Intermediate or Equivalent	English	60	60
UG	BTech,Textile Engineering	48	Intermediate or Equivalent	English	30	5
UG	BTech,Mechanical Engineering	48	Intermediate or Equivalent	English	120	35
UG	BCA,Computer Application	36	Intermediate or Equivalent	English	120	102

UG	BVoc,Business And Management Studies	36	Intermediate or Equivalent	English	25	0
UG	BBA,Business And Management Studies	36	Intermediate or Equivalent	English	312	312
PG	Mtech,Computer Science And Engineering	24	B. Tech. B.E. or Equivalent	English	18	0
PG	MCA,Computer Application	36	Under Graduate	English	30	5
PG	MBA,Business And Management Studies	24	Under Graduate	English	180	151

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	11				19				189			
Recruited	10	1	0	11	11	4	0	15	97	92	0	189
Yet to Recruit	0				4				0			

Non-Teaching 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				49
Recruited	45	4	0	49
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				40
Recruited	37	3	0	40
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	1	0	11	4	0	3	12	0	41
M.Phil.	0	0	0	0	0	0	2	8	0	10
PG	0	0	0	0	0	0	92	72	0	164

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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 engaged with the college?	Male	Female	Others	Total
		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
Diploma	Male	47	31	0	1	79
	Female	3	0	0	0	3
	Others	0	0	0	0	0
PG	Male	57	7	0	1	65
	Female	84	7	0	0	91
	Others	0	0	0	0	0
UG	Male	479	101	0	29	609
	Female	149	23	0	8	180
	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	15	14	15	16
	Female	2	2	1	3
	Others	0	0	0	0
ST	Male	5	1	3	0
	Female	0	0	1	0
	Others	0	0	0	0
OBC	Male	79	68	55	64
	Female	20	10	11	14
	Others	0	0	0	0
General	Male	569	587	615	688
	Female	272	282	294	271
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		962	964	995	1056

Extended Profile

1 Program

1.1

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

2018-19	2017-18	2016-17	2015-16	2014-15
424	412	420	420	400
File Description		Document		
Institutional data prescribed format		View Document		

1.2

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	14	14	14	15

2 Students

2.1

Number of students year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3155	3238	3359	3381	3224
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
494	502	502	480	485

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2018-19	2017-18	2016-17	2015-16	2014-15
742	681	680	669	581

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2018-19	2017-18	2016-17	2015-16	2014-15
207	217	219	202	193

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
219	219	219	202	193

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 74

4.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
2428.41	2357.95	2700.72	2023.31	2027.74

4.3

Number of Computers

Response: 1082

NAAC

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:

The academic calendar is prepared at the institute level through consultation among the Director, Deans and Heads of the departments according to the academic schedule published by the *Kurukshetra University*. The institute academic calendar is then circulated to the departments and the Heads of the department prepare the departmental academic plans with their faculty members. Further the Heads allocate the courses to the faculty members and arrange to prepare the timetables. The faculty members then prepare a detailed course diary and gather all the relevant course material.

The curriculum delivery process involves its planning and content delivery through appropriate teaching methodologies. The institute ensures that the curriculum delivery is made effective through various planned processes, which are:

- **Curricular Planning:** This process involves review of COs, POs, PEOs, lesson plans, gap analysis, subject allocation, timetable preparation. Course planning process is standard in all the programs and course diaries are prepared by respective teachers. The institute assures timely start and completion of the academic activities in line with the affiliating university's academic calendar. The subject allocation before every semester is based on a *skill matrix* filled by the departmental faculty members which accounts for readiness of every faculty member as regard to the subjects of the forthcoming semester. As a common practice in all departments, subjects are allocated as per the faculty member's specialization and choice.
- **Curriculum Delivery:** It consists of the teaching through conventional and blended methods, labs, projects, industrial trainings, and seminar presentations. Due importance in treatment is given to all the university curriculum components e.g. lectures, laboratory classes, tutorials, field visits, industrial trainings, seminars and projects. Appropriate teaching methodology is adopted as per the requirements of contents as the multimedia facilities are available in the lecture halls in every department. Details of blended learning methods are also available on institute's website. A learning management system (lecture recording and management system by Impartus™) is available in all the departments. Flip based platforms are also made available to the first year B. Tech. Students. Teachers also encourage the students' learning through, group presentations, case studies, brain-storming etc. Uses of the open source digital contents, such as NPTEL, are in general encouraged. Industry visits, seminars, workshops are also planed time to time in all departments to provide sufficient experiential learning.
- **Learning Evaluation:** Learning evaluation is an important step to ensure effective curriculum delivery and forms a basis for measurement of curriculum effectiveness and accordingly teachers plan of remedial measures.
- **Monitoring and Remedial Measures:** Monitoring involves the attendance and performance of the students through continuous internal assessments and CO attainments. The outcome of monitoring is to decide for remedial classes.

- **Feedback and Audits:** To ensure improvements in effectiveness of the curriculum delivery, feedback is utilised. It identifies the shortcomings and incorporate changes related to the curriculum delivery.

File Description	Document
Upload Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The affiliating university (Kurukshetra University, Kurukshetra) prescribes the academic calendar to be followed by various programs offered in the institute. The university calendar includes the following relevant details

- Beginning and end of teaching
- Schedule of sessional examinations for continuous internal evaluation
- University examination
- Mid semester breaks and vacations

Institute adheres to the prescribed academic schedule and prepares a detailed academic calendar including the events such as convocation, alumni meet, annual function and sports meet etc. This calendar is then sent to all the departments well before commencement of the academic session. A copy is made available in the departmental notice boards and the institute website. Based on the institute calendar the departments plan for the following academic activities in their departmental calendar:

- Add on courses, seminars, industrial visits, and guest lectures
- Schedule of continuous internal evaluation tools such as assignments, internal practical evaluation, remedial classes and student feedbacks etc.
- Project allocation (Projects are identified in advance and students start working on the same right from the beginning of semester. There is a project monitoring plan of departments for each program and the department ensures timely completion the projects).
- Internships are scheduled as per the curriculum and during vacation in the summer break.

Before commencement of classes, timetables are prepared for all the programs by respective departments. The start of teaching in all the programs is always as per the academic calendar prescribed by the Kurukshetra University. The teaching coverage is monitored by the departments so that the syllabus is completed as per the schedule. The plan of syllabus coverage is prepared and implemented by teachers in their course diary. The departments ensure the timetable compliance in their programs so that the academic delivery takes place as per the plan. If the requisite number of lectures cannot be scheduled, the instructors in consultation with the students and HOD decide on a schedule of extra classes. The internal sessional exams are conducted at the institute level; therefore they always take place as per the academic schedule. The conduct of practical classes is also monitored by the department head who ensures timely completion of the same. Additional activities such as seminars, presentations, industry visits are also executed by the departments as per their schedule. The make-up examinations for the sectional exams permitted by the

departments are conducted by the concerned instructors in charge as per the departmental academic calendar.

File Description	Document
Upload Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 80

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

Response: 12

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

1.2.2 Number of Add on /Certificate programs offered during the last five years**Response:** 78**1.2.2.1 How many Add on /Certificate programs are added within the last 5 years.**

2018-19	2017-18	2016-17	2015-16	2014-15
21	14	17	14	12

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years**Response:** 54.12**1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
1580	1377	2200	1968	1750

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

1.3 Curriculum Enrichment**1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum****Response:**

The crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability are reviewed and the related subjects under different programs offered in the institute are listed and briefly explained below for each crosscutting issue separately.

Professional Ethics:

- BBA-101: **Business Organisation** (1st semester) - professional ethics for different forms of business organization are taught.
- BBA-108: **Principles of Management** (2nd semester) - social responsibility and business ethics are discussed.
- HRM-304: **Organizational Change and Intervention Strategies** (3rd Semester MBA) - values, assumptions and beliefs, ethics of Professionals etc. are dealt.
- MBA-402: **Corporate Social Responsibility and Sustainability** is on corporate social responsibility and sustainability and deals with the concept of corporate responsibility and value creation for the society.
- HRM-404: **Counselling Skills for Managers** (4th semester, MBA) - qualities and values for a professional counsellor, together with values for a counsellor and dilemmas for ethics in counselling are taught.
- IB-404: **International Strategic Management** (4th semester) - leadership and corporate culture, values, ethics and social responsibility with relevance to organisational strategy implementation are taught.
- IB-405: **Cross Cultural and Global Management** (4th semester) - ethics in international business, western and eastern management thoughts in the Indian context are included.

Human Values:

- BBA-111: **Understanding Social Behaviour** (2nd semester) - social problems their causes and remedies, attitude formation and change, morale audit, values etc. are taught.
- BBA-201: **Understanding Human Behaviour** (3rd semester) - approaches for studying human behaviour and behavioural approaches that provides a basis for understanding of ethics and values are included.
- CP-108: **Seminar** of first semester MBA, topic relating to the contemporary business issues/practices comprising Indian ethos, values, current socio-economic and business context are assigned.
- MBA-302: **Indian Ethos and Business Ethics** (3rd semester MBA) - deals with the human values and ethics that need to be followed in business.

Environment and Sustainability:

- MPC-201N: **Environmental Science** (3rd semester level in all the B. Tech. programs) - various environmental and sustainability issues are dealt. These include eco-system concepts and biodiversity conservation various resources including the social issues related to environmental protection and climate change.
- BT-101N: **Fundamentals of Biotechnology** (1st year level in all the B. Tech. programs) - role of biotechnology in agriculture, medicine, environment, industry and forensic science is taught.
- HM-252A: **Civil Engineering - Societal & Global Impact** (4th semester) - the study of erosion in sustainability is discussed.
- ME-404N: **Power Plant Engineering** (final year B. Tech. ME) - environmental issues such as

disposal of nuclear waste are dealt.

- ME-420N: **Waste Heat Recovery System** (final year B. Tech. ME) - environmental issues such as mitigation of harmful emissions from energy production, control of air, and water and ground pollution such as disposal of nuclear waste are dealt.

Gender

- HRM-302: Indian Labour Legislation in MBA program deals with gender justice in constitutional and legal aspects.

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

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 20.66

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
90	87	91	82	79

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 59.59

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 1880

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni

Response: A. All of the above

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

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1.Feedback collected, analysed and action taken and feedback available on website**
- 2.Feedback collected, analysed and action has been taken**
- 3.Feedback collected and analysed**
- 4.Feedback collected**
- 5. Feedback not collected**

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

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 71.56

2.1.1.1 Number of students admitted year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
962	964	995	1056	1063

2.1.1.2 Number of sanctioned seats year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1393	1428	1428	1392	1404

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

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

Response: 20.48

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

2018-19	2017-18	2016-17	2015-16	2014-15
121	95	86	97	105

File Description

Document

Average percentage of seats filled against seats reserved

[View Document](#)

Any additional information

[View Document](#)

2.2 Catering to Student Diversity

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

Response:

Student categorization is a **systematic process** being practiced in PIET for every semester. In this process the students' attendance and their academic performance (assignments, surprise objective test, and first midterm test) is compiled and slow learners are identified as those having performed below average even after attaining the classes regularly. Fast learners are those having above average performance. The educational philosophy adopted at PIET believes that every student is unique and can learn in variety of ways. On one side an advanced learning student is one who practices learning more conveniently or effortlessly than others. He or she therefore consumes less time to complete the assigned academic tasks as against a slow learner. Therefore the fast learners are encouraged to **endeavour in other professional and life skills**. Simultaneously on the other side, a slow learner does not always mean dearth of intellect therefore they are provided with extra academic engagement and also **mentored** to plan their time more strategically.

Bridge courses are organised for students of B Tech at the time of their admissions in first year. The learning levels are also assessed during these bridge courses so as to place appropriate treatment. Additionally orientation programs are also organised for the first year students in which motivational sessions, training of life skills and time management are included. It has been observed that students with commerce background are usually aware of the basics required in most of the management subjects however the students with arts and science background need to bridge this gap otherwise they initially become slow learners. As a measure against slow learning, the department organises one week add on bridge course including the basics of business statistics, economics and accounts to bridge their gap.

Special initiatives for advanced learners:

- Questions with higher complexity are included in the assignments to challenge their learning skills.
- Fast learners are issued books for the entire semester for all the subjects taught in a semester. They are also allowed to issue additional reference books when needed for two weeks.
- They are encouraged to take up relevant *Swayam* courses and become members of student clubs and professional bodies.
- They are asked to take leadership in institutional and student club activities at departmental and institutional level and participate in state/national level events and competitive examinations.
- Participation in innovations/SIH.

Special initiatives for slow learners:

- Mentoring
- Sufficient set of assignment questions worked out especially for slow learners.
- They are also provided with the learning material having a simplified approach to the subject.
- Periodic communication/interaction with parents through the heads of departments.
- Faculty members conduct one to one doubt clearing, library sessions, extra and remedial classes.
- Evening remedial classes for hostellers.

File Description	Document
Upload any additional information	View Document

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

Response: 15:1

File Description	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:

The educational process in PIET adopts a balanced approach as regard to various student centric methods listed below.

Experiential Learning:

- Field trips and internships
- Minor and major projects
- Case study analysis
- Ad-mad competition
- Budget analysis
- Human resource analytics and competency mapping
- Mock interviews
- Trainings and courses on new technologies
- Prototype and model making competitions
- Survey camps
- Advanced experiments

Participative learning:

- Workshops and boot camps
- Tech Fests
- Hackathons
- Expert talks and consultations
- Group discussion, debates, role plays, quizzes
- Business plan creations
- Seminar preparation and presentation
- Various co-curricular and extra-curricular activities

- Extension activities

Problem solving methodologies:

- Tutorial Sessions
- Brainstorming
- Special Assignments
- Peer group engagement
- Project based methods
- Internal Hackathons

All the B. Tech., M. Tech. and MBA programs incorporate major and minor projects offered to student batches, which fulfil the need of a participative problem solving process involving real life engineering and management problems. These projects require experiential usage of various engineering hardware/software tools to solve problems in hand. Students in all the programs take up industrial visits at all level so that the experimentation performed in laboratories are related to industrial practices and environment. Students in all the programs also undergo industrial training of six to eight weeks that provides them experience and understanding of professional skills. Students of MBA and BBA take up experiential and participative approach of learning through case based studies and role plays. Student seminars organised in all the programs enable them to learn from each other and refine their presentation and communication skills. Participative workshops and trainings are also organized in the departments to facilitate faculty and students in acquiring the necessary skills for use of modern tools and techniques.

Other student centric provisions available in the institute:

- Availability of laboratory facilities for new technologies not covered under curriculum, such as robotics, IoT, AR and VR etc.
- E-learning through M-tutor application and availability of other ICT based learning tools.
- Facilities to study from digital contents and undertake MOOKs, NPTEL/SWAYAM courses.
- Problem based approach in learning through course projects.
- Offering various online platforms to get extra knowledge through IIT spoken tutorials and other online modes.
- Availability of various computational facilities to students where they can refine their simulation, design and development skills such as Matlab, Scilab, AutoCAD, Pro-E, Catia, etc.
- Facilities of the necessary software/hardware tools required for students' practical learning, problem solving and project work for electronics, computer science, information technology and other streams.
- Student clubs/chapter based technical activities.
- Student's participation in real-life-problem based competitive events such as Smart India Hackathon.

File Description	Document
Upload any additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:**The following hardware and software integrated ICT tools are used by all the teachers:**

- **Lecture Capture System (LCS) as Learning Management System:** PIET is the first engineering institution in Haryana which joined hands with *Impartus* and introduced the lecture capture system at large scale in the teaching learning process. The lecture capture system by *Impartus* is a cutting edge end-to-end solution to automatically record the complete classroom experience. The platform also enables students and teachers for collaborative learning by sharing content. This facility is used by all the teachers.
- **Quiz Assessment Tool:** Teachers also use an assessment tool called Plickers for a quick and simple way to check student understanding. This assessment tool allows teachers to collect on-the-spot formative assessment data without the need to have students use devices or paper and pencil. In order to engage the students in active learning, Plickers usage in the classroom found to be very beneficial. Students find it easy to use as it helps them answer the questions anonymously. Teachers get opportunity to evaluate the students as to how well they understood the course content.
- **Handwritten Answer sheets Assessment Tool:** *RealLearning* is an AI based technology to help teachers evaluate handwritten answer sheets and generate remarkable insights for students and the administration. Beside PIET this solution is currently used by some of the reputed institutes like IITs.

The following software solutions based ICT tools are used by all the teachers:

- **M-Tutor:** The first year students and teachers use a mobile based ICT tool called MTutor, which is a digital tutorials package for higher education developed as per university curriculum.
- **Microsoft Teams:** Team for education allows teachers to set up specific team for classes, professional learning communities, staff members etc. PIET has the subscription for this product. Online lectures, quiz, activities of every discipline are successfully conducted over team platform. MS team enables to organise guest lectures and workshops for students as well as faculty members by those experts who were quite difficult to access via conventional process.

The following ICT based lab facilities used by teachers:

- **Virtual Labs:** This is an initiative of Ministry of Human Resource Development (MHRD), Government of India under the aegis of National Mission on Education through Information and Communication Technology. PIET also has been a centre for Virtual Labs.
- **Spoken Tutorials:** The Spoken Tutorial Project supported by IIT Bombay is subscribed by PIET for learning the open source software. To come into the program a college has to pay Rs.25000/ as a user fee to train students on any number of courses with certificates. This facility is supported by the PIET teachers.
- **Online Learning Resources:** The teachers encourage the students to learn from NPTEL lectures and videos. They also study from the certifications offered by *Swayam (ICT initiative of MHRD)*, *Udemy* etc.

File Description	Document
Upload any additional information	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 18:1

2.3.3.1 Number of mentors

Response: 173

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

2.4 Teacher Profile and Quality

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

Response: 98.72

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

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 12.83

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

2018-19	2017-18	2016-17	2015-16	2014-15
42	32	27	14	19

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)	
Response: 3.96	
2.4.3.1 Total experience of full-time teachers	
Response: 820.75	
File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode
Response:
<p>The mechanism of internal assessment is transparent and well known to all the stakeholders. The mechanism adopted in this regard is as follows:</p> <ul style="list-style-type: none"> • The institute adopts the guidelines prescribed by the Kurukshetra University as regard to the internal assessment. These guidelines are shared with the students after their admission during the orientation program. The information regarding continuous internal evaluation is also available in website and the departmental notice boards at semester beginning. • The subject teachers share the mechanism of internal assessment with the class at the start of semester and timely update the students about their performance in each component of the assessment process. • Schedule of the internal assessment (theory, lab performance, project, industrial trainings etc.) is provided through the institute and departmental academic calendars. • The overall internal assessment in theory marks include two sessional tests, one make-up test, quizzes, case studies/mini projects, assignments and attendance depending upon the course and program. The two sessional tests are organized centrally by the institute's examination cell under a

controller of examinations in a fair and transparent way similar to the university examinations. The student performances in these tests are shown through their answer scripts and student concerns if any are addressed immediately by the examiner.

- Recently the institute has adopted an AI based robust evaluation software tool to access and categories the student performance in sessional examinations.
- The continuous internal evaluation of practical subjects is based on lab performance, lab record, and oral examination.
- In case of industrial trainings, the student seminars are organized through the semester and their performance is assessed based on their presentation, participation, and training report.
- The internal evaluation of projects is based on project rubric for continuous assessment. Similarly seminar evaluation rubric is used for its assessment.
- To bring robustness in to the internal assessment, uncertainties in marking of above individual components, wherever possible, is minimised by merging range of marks using approach similar to the practice of letter grades.
- Further the internal assessments are routinely monitored by head of the department or a faculty member nominated by him. Student performance is also shared periodically with their mentors and parents.
- The students who fail to attend any evaluation process with valid reasons are provided a replacement chance to recover and students not satisfied with their evaluation can also timely submit an appeal.

File Description	Document
Any additional information	View Document

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

The process of handling internal examination related grievances is available in the institute website and known to faculty and students. Where possible, efforts are always made to resolve a complaint informally before the formal procedure by the respective teacher.

Process to deal with the academic complaints

The student's complaints related to internal examination are resolved at various levels as stated below:

- The student having an academic appeal is first expected to approach concerned subject teacher after getting the answer script/overall evaluation from the concerned subject teacher within 2 days to resolve the same. The concerned teacher will rectify the error if any and update the student data in the records. The grievance of other nature can be directed to the concerned head of department directly.
- If the issue still persists, the student is required to approach the head of department within next 3 working days. The second opinion by another senior faculty member is to be taken to resolve the matter of appeal. The grievance of other nature should be resolved by the concerned head.

- Even if the issue is not resolved at the head of department and concerned subject teacher level, the student should fill in the “Academic Grievance/Appeal Form” and submit the same to office of the controller of examinations and during his absence to the office of the institute director. The grievance committee redresses the grievance finally.

Institutional measures to minimise the internal evaluation related grievances

Other measures placed by the institute that help to minimise the grievances are as under:

- **Sessional paper moderation:** Question papers are moderated in the department to keep the difficulty level neither too low nor too high.
- **Student absent in sessional examination:** If a student is unable to appear in the mid term examination with a valid reason, he/she may appear in re-examination conducted for the concerned subject.
- **Evaluation of answer scripts:** Answer scripts are evaluated uniformly maintaining parity in the class evaluation.
- **Assessment of seminar, project and labs:** Assessment of these courses is carried out using uniform norms and by open presentations, written project/lab reports and extent of participation in the practical work.

Principles for consideration of student academic appeals and grievances

- Student complaints shall be considered in a transparent and timely manner.
- The procedures for student appeals and grievances shall be easily accessible to students and staff.
- The appeal or grievance shall be considered by independent and unbiased decision-makers.
- The final decision shall be based solely on relevant evidence and information.
- All appeals and grievances received in writing must receive attention.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

The program outcomes (POs), program specific outcomes (PSOs), and course outcomes (COs) are published in the institute website, separately for each program department wise, and can be accessed by all the students, teachers and also other stakeholders i.e. parents, alumni, and the employer. The course outcomes are also discussed by the subject teachers with the concerned students during the classroom interactions. Their relevance with Program Outcomes and Program Specific Outcomes is also discussed and explained. The POs and PSOs are displayed at different observable locations in every department. The COs, POs, PSOs are also available in:

- **Departmental Records:** All the departments maintain files containing the list of course outcomes, program outcomes and program specific outcomes of all courses offered under the program.
- **Lab Courses:** Practical course outcomes are available with practical list of lab courses in the curriculum and displayed in respective labs.
- **Library:** Central library/departmental library also keeps copies of all syllabi that subject wise contain COs for easy access to students and faculty.
- **Examination Question Papers:** The question papers of the internal examinations also enlist the CO number against each question for easy reference of all concerned and the student performance is recorded against each course outcome so that its attainment level is estimated.
- **Assignment Questions:** The assignment questions are also marked with their course outcome.

Through the above practices, the students and teachers become well aware about the stated programme and course outcomes. The practice is also required for computation of PO attainment. The teachers play an important role in refining the COs and PSOs and therefore provided proper orientation in this regard. The course outcomes are stated through active verbs using Bloom's taxonomy and expressed as complete declarative sentences that clearly describe the knowledge, skills, and competencies expected from the students to acquire after completion of their subject of study. The program outcomes are standard nationwide and the program specific outcomes are defined outlining the competencies which are to be provided to students of the program.

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

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

The institute follows outcome based education and evaluates the attainment of course outcomes (COs), program outcomes (POs) and program specific outcomes (PSOs) with following salient points.

- The POs/PSOs are the attributes that must be imbibed in the graduates by the time of completion of their program.
- For every course, there are nearly six outcomes to be achieved at the end.
- All course outcomes shall have linkage to programme outcomes and program specific outcomes. This process of setting correlation levels is typically known as CO-PO mapping. The correlation level between every Course Outcome and Program Outcome is assigned in a tabular format. The correlation levels between a CO and PO are set to either of Low, Medium, or High which are represented by 1, 2, or 3 respectively. No correlation is marked as “-”.
- POs/PSOs attainment is a continuous process.

The assessment procedure used to evaluate program outcomes and program specific outcomes is broadly classified as direct and indirect attainment.

Direct Attainment Evaluation Process

i. Theory Subjects: The evaluation process as prescribed in the scheme of Kurukshetra University includes internal evaluation of 25% of the subject marks as continuous internal assessment by the institute faculty and rest 75% through the university examination process. The COs' attainment is calculated through both of the above processes by the concerned faculty members. An example of CO attainment targets applicable to internal and university examinations:

Attainment Level If the following target is accomplished

1. 50% students scoring 50% marks or more, out of the maximum marks
2. 60% students scoring 50% marks or more, out of the maximum marks
3. 70% students scoring 50% marks or more, out of the maximum marks

ii. Practical Subjects and Industrial Training: The performance of students is evaluated for lab work, viva voce and lab record through rubrics designed to gauge the student performance. The evaluation process for both comprises of 40% of the subject marks evaluated as continuous internal assessment and rest 60% through the examiner appointed by the university. The COs' attainment is calculated again through both of the above processes.

iii. Project: Project work is the most versatile and open ended tool for the development of graduate attributes. Every project topic differs in terms of analysis procedures; extent of simulation, design or experimentation; social, environmental and ethical contexts; levels of team engagements etc. Project's internal and external evaluation carries a weightage of 50% each. The internal evaluation is based on project rubric for continuous assessment.

iv. Seminar: Seminars are conducted and evaluated by the institute faculty members only.

Indirect Attainment Evaluation Process

- **Student Exit Survey** – based on the graduating student's perception of their own attainments as against POs and PSOs.
- **Alumni Survey** – of graduated students after one year of their passing.

The attainment evaluation is updated at the end of every semester; the unattained POs/PSOs are subjected to remedial measures so that the overall attainment by the end of program is maintained at an acceptable level.

File Description	Document
Upload any additional information	View Document

2.6.3 Average pass percentage of Students during last five years

Response: 71.54

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
742	681	680	669	581

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
960	975	1014	908	832

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey**2.7.1 Online student satisfaction survey regarding teaching learning process****Response:**

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document
Upload any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 5.3

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0.8	0	4.5	0	0

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 0

3.1.2.1 Number of teachers recognized as research guides

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 5

3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	0	1	0	0

3.1.3.2 Number of departments offering academic programmes

2018-19	2017-18	2016-17	2015-16	2014-15
8	8	8	8	8

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

The institute realises the role of innovation by putting due emphasis on knowledge creation, dissemination and assimilation of the culture of innovative practices through institute innovation council, entrepreneurship development cell, research promotion initiatives, centres of excellence etc. Faculty members are encouraged to engage in research and innovation activities to bring out patents with financial support for such initiatives. Some of the institutional initiatives to create an ecosystem for innovations are as under:

- Institute has successfully established the institute innovation council (IIC) as per the norms and directives of MHRD to systematically foster the culture of innovation among its students and faculty members. Various activities regularly take place under the IIC and it is ranked as five star IIC recently.
- In context with the student innovations, there are project based competitive events organised by the departments on annual basis to reward the best student project. Internal hackathons to promote student innovations are organised as well.
- The institute has established centres of excellence in collaboration with other institutes and corporate to promote research and innovation in the institute. PIET has collaborations with FICE-UC Berkley for IoT based smart city accelerator program, ChungBuk National University, Republic of Korea for research in AI and Machine Learning, Institute of Water Sciences Australia for Waste Water treatment, Centre for Excellence in Solar Power Engineering by SuKam, Dell EMC External Research and Academic Alliance for Data Science, Cyberops Infosec for Training in Cyber security etc.
- In addition to the above collaborations institute utilises techniques like automated lecture system, flipped learning, blended learning, m-tutor etc. to augment innovative methods in its knowledge transfer process.
- The team PIET in conjunction with the nation's leading technocrats, educators and industry experts have conducted knowledge dissemination session titled the "LEAD" (Learn, Engage, Assimilate and Develop) workshops which primarily focus on creation and adoption of innovative technologies like machine learning, artificial intelligence, IoT, robotics, data science, cyber security, cloud computing etc. to promote the culture of innovation at institution.

- Entrepreneurship development cell also has been actively supporting students and faculty members through various programs in the area of entrepreneurship, start-ups and IPR.

The culture of innovation among the higher education institutes has also been supported through the national level competitions for software and hardware challenges known as Smart India Hackathon. Institute took the initiative to host Smart India Hackathon in 2018 and 2019 and awarded the only nodal center status by MHRD in Haryana. Being host itself provided a great exposure to our faculty and students regarding idea generation and taking the project based learning at a higher level. Out of the seven qualifying student teams in SIH 2020, two have stood at the first position and one team at the third position in the national level. The institute, in its most recent initiative, is supporting a group of 30 students by providing internal scholarship to create startups.

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

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 44

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
11	10	12	6	5

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

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 0

3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

3.3.1.2 Number of teachers recognized as guides during the last five years	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years				
Response: 1.68				
3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.				
2018-19	2017-18	2016-17	2015-16	2014-15
56	85	56	73	78
File Description	Document			
List of research papers by title, author, department, name and year of publication	View Document			
Any additional information	View Document			

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years				
Response: 0.53				
3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years				
2018-19	2017-18	2016-17	2015-16	2014-15
53	12	24	13	7
File Description	Document			
List books and chapters edited volumes/ books published	View Document			
Any additional information	View Document			

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

Extension activities carried out in the neighbourhood community by the students are briefly described below:

Student Cultural Club: The student members of cultural club have been organising extension activities under supervision of their faculty advisors. Few such activities were in collaboration with local administration and NGOs.

PIET-Rotary Community Service: Students members in Rotaract club have been very active at the district level since 2014-15. There were 25, 300, 60, 54 and 76 members in the club during 2014-15, 2015-16, 2016-17, 2017-18 and in the year 2018-19 respectively. These student groups have not only been involved in group social events alone they also have meaningfully contributed through extension activities with the diseased and deprived in society.

National Service Scheme: PIET has been allotted one unit of 100 volunteers of the National Service Scheme (NSS) by the Government of Haryana. Few examples of extension activities of NSS unit in the neighbourhood community are -

- Annual NSS camp
- One to two tree plantation programs every year
- Annual first aid and nursing training
- One road safety awareness programme each year (2017, 2018, 2019 and 2020)
- Village pond renovation in 2019
- *Swachh Bharat Abhiyan* under *Unnat Bharat Abhiyan 1.0* in 2017
- *Swachh Bharat* summer internships in 2018 and 2019.
- *House Hold Survey in 5 Villages* under *Unnat Bharat Abhiyan 2.0* in 2018-19.

Raahgiri programs of Haryana Government: *Raahgiri* programs were started by the district administration with a view to increase happiness in the life of people and to reinforce brotherhood feeling in society. This programme is organised on any two optional Sundays every month. In the morning from 5 to 8 am nearly two km long stretch of the city road in Panipat is made traffic free for public to engage in various sports and cultural events. PIET has generously sponsored this event in Panipat. Students conveniently take part in these events since they are organised on off days. There were 4, 13 and 8 *raahgiri* events organised during 2017-18, 2018-19 and 2019-20 respectively.

Blood donation Activities: Organising the blood donation camps has been a very regular student activity all through the years since inception of the institute. The activity has been supported by Red Cross, Panipat centre and occasionally this has been coordinated also by the student clubs and Rotaract club student members with NGOs.

Celebrating Days of National/International Importance: Institute also organises and takes part in

extension activities organised by district administration related to Women's Day, International Yoga Day etc. to spread the social cause behind such events. One such example is participation in *Pinkathon* - Pink Marathon for women in Panipat on 8th March 2019 in which about 582 students participated. In the international yoga day organised in Panipat by the district administration 525, 472 and 632 students participated during 2017, 2018 and 2019 respectively.

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

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

Response: 46

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

2018-19	2017-18	2016-17	2015-16	2014-15
8	6	11	10	11

File Description	Document
Number of awards for extension activities in last 5 year	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 by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 109

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

2018-19	2017-18	2016-17	2015-16	2014-15
34	20	17	20	18

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

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 78.82

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3117	2816	2448	2182	2286

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

Response: 1346

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
435	311	259	184	157

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 31

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	6	4	4	3

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	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 infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

Institute is committed to provide quality education with the best physical facilities and infrastructure supports in all the programs. The institute confirms to the norms of statutory bodies in terms of available land, instructional area, administrative area, amenities area and other support facilities. Infrastructural resources are abundantly available for use of all the programs. These include lecture rooms - 50, tutorial rooms -13, drawing halls - 03, seminar halls -11, laboratories - 74, library with e-learning - 01, workshops - 03, open air auditorium - 01, auditorium - 01, research and incubation centre – 01 etc. The lecture and seminar halls are equipped with the necessary ICT facilities.

There is one central computer centre in the institute and 27 other computer labs housing about 928 good quality computers catering to students from Computer Science and Engineering, Information Technology, Computer Applications and all the other engineering and management programs. Digital Library is also available for use of students. There is a state of the art server room to host the software applications and connect with the video capture system. The institute provides free email accounts for its faculty and staff. The institute library also hosts sufficient books, journals, and digital contents in the form of video lectures, e-books, e-journals, data bases etc. A centre for innovation is coming up in the campus. Department wise facilities are listed as under:

- *Mechanical Engineering Department* apart from conventional labs such as Theory of Machines Lab, Mechanics of Solids Lab, I. C. Engines Lab, Heat Transfer Lab, Measurement & Control Lab, Mechatronics Lab, Material Engineering Lab, Fluid Mechanics & Machines Lab, Refrigeration and Air-Conditioning Lab, Tribology & Mechanical Vibration Lab, Computer Aided Design & Manufacturing lab, Automobile Engineering Lab, and Workshops; also provides facilities in the area of Robotics, CNC lathe, Unconventional Machining, and software labs such as AutoCAD and CATIA to the students.
- *Electronics and Communication Engineering Department* facilitates instruments and software in Digital Electronics Lab, Signal and System Lab, Micro-processor and Interfacing LAB, Antenna and Wave Propagation Lab, Digital Image Processing Lab, Micro-controller and Embedded System Design Lab, Communication Lab, Analogue Circuit Lab, Digital Communication Lab, Digital Design using Verilog Lab, Digital Signal Processing Lab, Wireless Mobile Communication Lab, Micro Wave Lab, IoT Lab, and Project Lab.
- *The Civil Engineering Department* facilitates its students with Structural Mechanics Lab, Soil Mechanics Lab, Geo-technology lab, Fluid Mechanics Lab, Hydraulic Engineering Lab, Transportation Engineering Lab, Concrete Lab, Surveying Lab, Environment Engineering Lab, and CAD lab.
- *The Textile Department* students work in Computer Aided Design Lab, Yarn Manufacturing Lab, Fabric Manufacturing Lab, Textile Testing Lab, Textile Chemical Processing Lab, Garment Lab, and the Knitting lab.

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

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

Response:

The facilities available in the institute for cultural activities, sports, games, gymnasium etc. are briefly described below:

(i) Facilities for Cultural Activities:

The main facilities for conduct of cultural activities are (a) Dr. APJ Abdul Kalam Auditorium and (b) the Open Air Theatre. Seminar rooms are distributed across all the blocks for conducting small academic and extra-curricular gatherings.

(a) Auditorium

The auditorium has been named after the great scientist and former President of India who had a strong affiliation with this institute. His words, *“Since I advocate extending education to the rural areas. I had a great anxiety to visit this institute. In the era of women empowerment, I am more impressed to find so many girls pursuing Engineering and Computer Courses, which is a good sign for the country. On visiting this institute, I felt a sense of pride and satisfaction looking at the facilities provided to students for their upliftment, which reflects a spirit of dedication to education on part of PIET management.”* Followings are the key details about the Auditorium:

- Area: 39.5 m x 11.5 m
- Capacity: 500 seats
- Year of Establishment: November 2017
- Usage: Dr. APJ Abdul Kalam Auditorium is an important central facility with fully functional air-conditioning, audio, video, lighting, and other ICT utilities for conduct of indoor functions and programs.

(b) Open Air Theatre

The open air theater is centrally located in the campus and is one of the earliest developed infrastructures. Followings are the key details about the open air theatre:

- Capacity: Sufficient for 3000 persons
- Usage: To provide a boost to the open air activities and cultural functions.

(ii) Sports and Games Facilities:

Realizing the importance of games and sports for overall development, institute has provided sports and

physical facilities. Sports infuse in students the spirit and skills of leadership, cooperation, co-ordination self-regulation, self-confidence and decision-making. There is a sports teacher available in the campus for practice sessions, coordination and other arrangements. Following sports grounds are available in the institute campus:

- Football, 100 m × 70 m
- Basketball, 28 m × 15 m
- Volleyball, 18 m × 09 m
- Badminton, 6.1 m × 3.5 m
- Cricket, 140 m dia.
- Kabaddi, 13 m × 10 m
- Kho-Kho, 27 m × 16 m

(iii) Gymnasium:

Health and fitness is prerequisite to all-round success and to a robust lifestyle. The institute has a unique fitness and recreational facility in the form of a state-of-the-art Gymnasium which is installed with 26 workstations equipped with globally branded Fit-line Machines. A Reebok-Certified Trainer is available with a view to provide the basic guidance and support.

Timing of Operation:

- Morning - 05:30 am to 06:45 am - Girls
- Morning - 06:45 am to 08:00 am - Boys
- Evening - 06:30 pm to 08:00 pm - Boys

File Description	Document
Upload any additional information	View Document
Paste 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. (Data for the latest completed academic year)

Response: 93.24

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 69

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)**Response:** 19.46**4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2018-19	2017-18	2016-17	2015-16	2014-15
395.67	554.42	539.43	348.23	411.74

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload 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:**

Two different ILMS solutions have been used during last five academic years. Both are separately described below.

(i) During Academic Years - 2014-15 to 2017-18:

- NAME OF ILMS: ERP
- DURATION: 2014-15 to 2017-18
- NATURE OF AUTOMATION: FULLY AUTOMATED
- VERSION: UPDATED REGULARLY
- SERVICE PROVIDER: IFW TECHNO CREATIONS PVT. LTD., GLOBAL INFOWAYS, NOIDA

Features:

- ERP software maintains all the activities of the library such as transactions, cataloguing, data updating, data editing, serial control, searching documents, report generating etc.
- Especially searching the documents by simple search or advanced search facilitates users to find out relevant document easily and quickly.

- Various types of reports that can be generated are daily transactions, unique titles of books, year wise addition, spending of amount, member reports etc.
- OPAC (online public access catalogue) facilitates users to know the availability of books, searching of documents and borrowing details of documents with in campus from the place where they are.

(ii) During Academic Years - 2018-19 onwards:

- NAME OF ILMS: KOHA
- DURATION: 2018-19 ONWARDS
- NATURE OF AUTOMATION: FULLY AUTOMATED
- VERSION: 19.05.05.000
- SERVICE PROVIDER: OPEN SOURCE

Features:

- The users can simply scan their id card or enter their library membership number while entering the library. Software gives reports and statistics of IN and OUT data from the library.
- The cataloguing module contains details regarding author, department, subject, course, publisher and books. All the data entered can be edited and can be updated, which gets stored in the corresponding table.
- The circulation module deals with issue and return of books and email alert for return and renewal.
- The serial management module designed to automate various activities involved in subscription of journals such as creation and maintenance of journals and subscription/renewal of journals.
- The books are entered into library module with the help of barcode. Thus no book can be given to any one without entering in the library database. Thus improves the security of books in library.
- Using OPAC faculty and students can check the availability of books and they can reserve books which are available but issued in library so that they won't miss books when returned.
- The institute library web page (<https://library.piet.co.in/>) contains information related to the library resources, e-resources, and e-repositories in one place.

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

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

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

Response: 11.71

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
10.31	7.41	9.17	14.29	17.36

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

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

Response: 24.21

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

Response: 814

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute aims at providing the futuristic facilities to its students so that they can utilize ICT resources to reach greater efficiency. Therefore the institution frequently updates its IT facilities to provide its students with the best of resources. Year wise up-gradation details from the session 2014-15 are as follows-

- During the session 2014-15, ten Benq projectors, one IBM server, and eighty one RAMs were added/upgraded.
- Fifteen TP links, two switches, two Benq projectors, seventy five HP computers were added during 2015-16 and the internet band width was increased to 35 MBPS. One hundred RAMs were upgraded during the same session.
- In the session 2016-17 seventeen Benq projectors, one Wi-Fi access point and 100 HP computers were additionally introduced.
- The internet bandwidth was increased to 55 MBPS during 2017-18. Twenty five new HP computers and hundred RAM were added and upgraded respectively.
- Four projectors, fifty new HP computers, 31 user software for language lab, and one Wi-Fi access point were added in the session 2018-19.

Recently during 2019-20, a lecture capture system in seventeen classrooms has been added and the internet bandwidth is increased to 110 MBPS. To facilitate remote meetings software solutions such as Microsoft Teams is also added and extensively used for conduct of online classes, seminars, and alumni meets etc.

Presently 69 classrooms, tutorial rooms, seminar halls have been equipped with LCD projectors and ICT facilities. Currently two Airtel lease line of 100 MBPS and 10 MBPS are in use to provide Wi-Fi facility to the students at both hostels as well as in the campus. The institute now has 78 Wi-Fi devices (21 existed before June 2014 and 40 recently added in the session 19-20) to cover the entire campus. The institute has always been reviewing the current needs and accordingly the internet bandwidth has been upgraded from time to time. All campus and hostel computer system are provided with user id and password for accessing the internet. All ids are secured with the help of Netwall bandwidth/traffic management and pfSense firewalls respectively. All the class rooms of the institute are equipped with DLP projectors, CCTV cameras and Internet connectivity.

The role of ICT in PIET is becoming more and more important and this importance will continue to grow and develop with the adoption Education 4.0. The use of ICT in the institute not only improves classroom teaching learning experience, but also provides the facility of e-learning. Effective use of technology such as the lecture capture system motivates students, make the classes more dynamic and interesting and renew teacher enthusiasm as they learn new skills and techniques.

File Description	Document
Upload any additional information	View Document

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

Response: 3:1

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

4.3.3 Bandwidth of internet connection in the Institution

Response: A. 750 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 3.42

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

2018-19	2017-18	2016-17	2015-16	2014-15
124.80	56.62	126.59	66.38	32.55

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

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

Response:

There are number of units and sections in the institute that provide maintenance and assistance to keep all the academic units including, the lecture halls, seminar halls, laboratories, computer centre, library, and auditorium, sports facilities, etc. in the proper working order. The guiding policy behind structure and working of these units is to provide an efficient and economical service with minimum or zero down time.

Maintenance Procedure:

- The request of maintenance from students, staff or faculty members is given to the head of respective department.
- The department head after review of the request, forwards it to the concerned maintenance unit along with the details of the maintenance work.
- The concerned maintenance personnel inspect and complete the maintenance task.
- The institute has annual maintenance contracts for lift, generator, online UPS, computers and printers, fire extinguishers, water coolers, air conditioners, water purifiers, photostate machines and cleaning of water storage tanks etc.
- The sophisticated electronic equipments and other mechanical system that can not be maintained in house are to be repaired by appointing external agencies. The concerned HOD initiates the procedure of hiring external agency. There are provisions also available such as comprehensive guarantee and extended warranty.
- The preventive maintenance schedule for all physical infrastructures is formulated by the concerned maintenance unit.
- The equipments beyond the possibility of repair are written off and sent out for safe disposal.

Maintenance, services and utilization of infrastructure facilities:***Classrooms***

- The classroom infrastructure such as white boards, furniture, curtains, air conditioners, electrical fittings and ICT facilities in the class rooms are checked prior to the start of semester. Cleaning of classrooms, corridors, faculty room etc is done on daily basis.

Laboratory and computers

- Laboratory stock registers are maintained to enter stock details in all the departments.
- The HODs ensure optimal utilisation of the lab resources.
- Minor repair and maintenance of lab equipments is undertaken by the concerned lab technicians.
- Requirements of major repairs and maintenance are submitted by the HODs to the Director office.
- Old and outdated equipments, instruments, chemicals etc. are discarded as per the institutional procedure.
- There is a system administrator to take care of the servers, networking, computers, projectors, printers, lecture recording system, login ids, emails, other ICT facilities and cyber security issues in the institute. This unit is headed by a system administrator under the Computer Science and Engineering department.

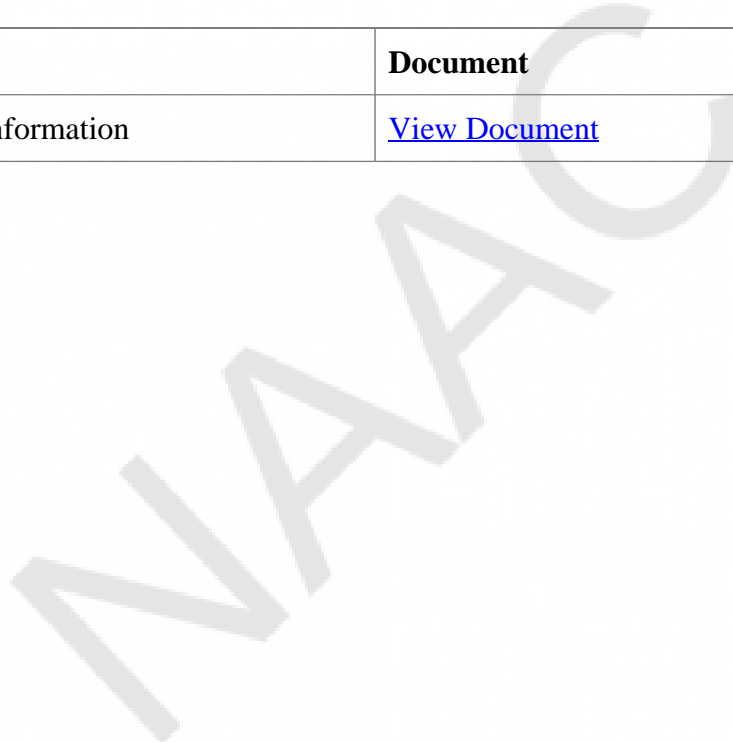
Library

- The record of usage of the library resources is maintained electronically through the software tools. The software is maintained through the annual contract.
- The up keeping of library books and minor maintenance is done in the library itself. For books in very bad condition binding is done by outside agency.

Sports Facilities

- The maintenance of badminton court, basketball court, volleyball court, other play grounds are supervised by the sports officer. The maintenance of these facilities is undertaken by respective maintenance units of the institute.

File Description	Document
Upload 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 last five years

Response: 4.09

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

2018-19	2017-18	2016-17	2015-16	2014-15
115	110	113	166	166

File Description

Document

upload self attested letter with the list of students sanctioned scholarship

[View Document](#)

Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)

[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 21.85

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

2018-19	2017-18	2016-17	2015-16	2014-15
747	739	731	725	630

File Description

Document

Upload any additional information

[View Document](#)

Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)

[View Document](#)

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 73.27

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

2018-19	2017-18	2016-17	2015-16	2014-15
2703	2545	2068	2287	2349

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

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

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload any additional information	View 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: 41.33

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

2018-19	2017-18	2016-17	2015-16	2014-15
350	351	259	236	201

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 0

5.2.2.1 Number of outgoing student progression to higher education during last five years

File Description	Document
Details of student progression to higher education (Data Template)	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/

Civil Services/State government examinations, etc.)**Response:** 33.04**5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
13	10	4	4	5

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

2018-19	2017-18	2016-17	2015-16	2014-15
30	27	16	14	16

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 (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.****Response:** 45**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.**

2018-19	2017-18	2016-17	2015-16	2014-15
4	14	12	6	9

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

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

Institute encourages participation of students in various academic and administrative activities/committees as nominated members. Students members enjoy freedom of expression on various development and academic issues and their suggestion are given due importance.

(a) Student representation in the administrative bodies

- **IQAC:** One alumni nominee (Mr. Manish Gulati, MBA) is included in the IQAC.
- **Anti-Ragging Committee:** There are four student representatives (Ms. B. Nidhi, Mr. Mridul, Mr. Rishabh, and Ms. Niharika).
- **Internal Complaint Committee:** There are three student members, one each from BBA (Ms Jasjeet), B. Tech. (Ms. Nishtha), and MCA (Ms. Dhairya).
- **Training and Placement Committee:** This committee involves one student member of every program from the pre-final year batch.
- **Grievance Committee:** There is a student representative (Mr. Rishabh Gulati, B. Tech. CSE).
- **Mess Committee:** This committee has hostel students, one boy (Mr. Aayush) and one girl (Ms. Sakshi Karn), as members.

(b) Student Clubs and Societies at PIET

Rotaract Club of Panipat Central at PIET, part of a global network under Rotary International opens new vista for the youth and helps them in personal development as well contribute to physical, social and community needs.

Clubs on Cultural and Extracurricular Activities -

- **Chill in Club** is a cultural club that organizes and promotes the cultural and extra-curricular activities. Club has office bearers: President-Gurpreet, Secretary-Gurjot, Executive Members-Kawaljeet, and Yogita.
- **Markodyseyisis** Mr. Kunal from MBA 1st year is the President of the club. The club has

organised activities such as ad-mad show, panel meet, business/ marketing plans, khandaan.

Clubs on Technical and Curricular Activities -

- **IEEE Student Chapter** has the student coordinators Mr. Pratham Kataria (CSE) and Mr. Pratham Jain (CSE).
- **Computer Society of India**- The office bearers in the Computer Society of India are President- Mr. Ujjwal Thanai, Vice President- Mr. Pralaad, General Secretary- Mr. Pratham Kataria, Treasurer- Mr. Yash, Technical Head- Mr. Kritik, Cultural Head- Mr. Nitesh Ghai, Organiser- Mr. Neeraj, Executive Head- Mr. Nitesh. The club organises technical events.
- **TechVision Club** has been formed in the Computer Applications Department. The club members are Ms. Dhairya, Mr. Satyam, Mr. Mahesh, and Ms. Kanika.
- **PIET Comp Techie** has been formed under CSE department - present coordinators are Mr. Tarun Bansal and Ms. Tanya.
- **Yantra Club** is student driven platform with student coordinators Mr. Sanyam, Mr. Udit, Ms. Tanya, Mr. Mubarak to organise activities such as poster making, circuit junkies, extempore, crossword competition, and electro champ etc.
- **Mechroussociety** is a group of students of Mechanical Department with present coordinators as Mr. Anchit, Ms. Yashu, Ms. Nidhi and Mr. Kapil. The group has conducted activities such as workshops, group discussions etc.
- **Finatrixis** Ms. Ashima Jain of MBA is the president of the finance club.
- **Techno GearHeads Club** aims to promote creativity and technical know-how and skill set of the students. Club has Ms. Shreya, Mr. Hitesh, Mr. Nishant and Mr. Chhanak as student members.

File Description	Document
Upload any additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 40

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
49	42	46	33	30

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The alumni association has been registered in the Department of Industries and commerce, Haryana under the Haryana Registration and Regulation of Societies Act-2012.

The alumni association functions with the objective to contribute in terms of strengthening the professional bonds between institute and its alumni with financial contributions and other modes of engagement. There have been regular financial contributions from the alumni amounting to a total of Rs. 532000 from the session 2014-15 to 2018-19. The institute alumni are scattered throughout the world and the alumni association also plays the roles of bringing them in connect with the institute for the benefit of present students. Alumni meetings are held at regular intervals. The alumni are active in interaction with present students for information sharing and learning. Various workshops, seminars, webinars have been conducted by the alumni for the development of the student community. Alumni network has a great benefit for current students. Alumni donate their valuable time to offer career support to current students and share their experiences with the juniors. Besides regular proceedings cultural activities are also organised at the time of alumni meet.

Present Office Bearers

- Smt. Payal Sharma, President, MCA (2012-15)
- Shri. Harshit Kakkar, Vice President, MBA (2013-15)
- Shri. Prince Verma, General Secretary, BBA (2012-15)
- Shri. Ankur Goel, Joint Secretary, BBA (2014-17)
- Shri. Mayank Gupta, Treasurer, BBA, (2014-17)
- Shri. Manish Gulati, Executive Member, MBA (2008-10)
- Smt. Namita Arora, Executive Member, MBA (2014-16)

Annual alumni meetings and gatherings have usually been conducted in the month of January during the 2014-2019. Apart from the regular proceedings, the agenda for institutional development of different gatherings in the period 2014-19 has been:

- To engage alumni through motivational talks.

- career progression and startups.
- To discuss about the promotion of placement activities.
- Social issues.
- To discuss, plan and organize educational, cultural and competitive programs for the betterment of current students.
- To promote cooperation among members and to share the alumni experiences in their area to the present students for guidance.
- To discuss and plan on how to render assistance to students in academics.

Alumni who are running businesses provide their inputs and support to students thinking for start-ups. Some alumni actively participate in the social works and work for the development and support of society. Out side the campus an interaction with alumni placed in Mumbai was held on 17th Oct, 2018 in the presence of member BOG. During this meeting various aspects such as placement opportunity for juniors, incubation centre in the campus etc. were discussed.

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

5.4.2 Alumni contribution during the last five years (INR in lakhs)

Response: A. ? 5 Lakhs

File Description	Document
Upload any additional information	View Document
Link for any additional information	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 and in tune with the vision and mission of the institution

Response:

Vision

To be globally known and recognized as an educational institute of engineering, technology, management and research having a transformative impact on society.

Mission

- *To impart knowledge, skills and creativity to all the students.*
- *To provide a conducive environment for quality teaching, learning, and research*
- *To create awareness on sustainable technologies and innovative solutions to societal problems including entrepreneurship*
- *To strengthen institutional and industrial collaborations nationally and internationally.*

Board of Governors (BoG)

BoG is the apex decision making body of the institute and comprises of eminent personalities from the fields of education, governance, public services, corporate houses and social services to frame the policies and provide the necessary guidance to the institute. The BoG ensures transparent and equal access of opportunities to all stakeholders of the institute. The chairman & vice-chairman, who are the prominent thinkers and visionary about the educational technology, also at times provide necessary inputs and help in planning for the new educational resources.

The institute leadership

The institution leadership, consisting director, deans, and heads, is represented by the proven and dedicated professionals in all the streams including engineering, management and computer applications. The institutional structure involves delegation of powers for smooth and efficient functioning of various administrative and academic processes. These core members are involved in planning and implementation of the academic processes and imbibe new methods and technologies for the faculty, staff and students. Regular meetings of these core members take place to continuously align the institutional activities with the vision and mission.

IQAC

The institute has a decentralized approach towards quality management where all the faculty and staff members are responsible and accountable for academic outcome assessment and academic quality enhancement. The quality standards are monitored by institutional committees such as IQAC which comprise of different stakeholders of the institute including students.

Participation of Teachers

Empowerment of the faculty, students, and alumni is at the core of institute policies. The faculty members play a crucial role in implementing the institute's vision and mission first through the academic processes they implement and next by participating in the proceedings of various committees engaged in day to day governance. The teachers also play a significant role as mentors, motivators and in spreading the cultural and social activities in and out of the institution by steering the NSS unit, PIET Rotaract, UBA and various other student's clubs. Under the guidance of teachers the students are provided beyond the curriculum exposure through seminars, workshops, interaction with alumni, industrial visits and trainings. The alumni are provided leadership development opportunities on the alumni association platform for institutional development. The students also play a meaningful role in various committees and club activities.

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

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

The Core Team

The core team members including the director, deans and heads of departments through regular meetings continuously align the institutional activities with the vision and mission. These core members are involved in planning and implementation of the academic processes. The institute has adopted decentralized and participatory management, which believes in collective ownership and democratic governance since its inception. Director and other administrative staff are in place since inception of the institute and are responsible for planning and execution of policies and processes on various issues related with institute development, budgeting, academics, research, outreach and other extension activities.

Administrative Decentralization:

- Administrative decentralization can be visualized in delegation of administrative responsibility to deans and head of various departments.
- There are deans for academics, engineering, and student welfare for developments of their respective area.
- To support the management programs there is a a chief academic mentor to advise the head and faculty members in management department on academic practices and implementing reforms.
- Heads along with the departmental faculty members and committees take care of the administrative, planning, budgeting and most importantly academic and the related student activities.
- IQAC is responsible for monitoring of quality issues including academic audits. Academic monitoring cell gathers information on the feedback and processes.
- The discipline issues are dealt by the concerned HODs in their departments and centrally by the

chief proctor.

- Anti ragging measures are all put in place by the anti ragging committee and squad.
- There are a number of institutional committees in place to conduct organizational activities in a fair and transparent manner.
- The registrar has been assigned the responsibility of the non teaching staff to accomplish operational objectives. The non teaching staffs also play a significant role in supporting the institutional processes.
- The training and placement unit is actively engaged in the related activities.

Case study:Library Committee

The librarian along with the other staff of the library earlier use to plan and purchase the library annual resources in consultation with the departments, but sooner it was realised that more quality resources are required to be added in various segments. A library committee was then constituted with the inclusion of one member from each department. The quality objectives were defined and all the planned purchases were researched by the concerned faculty members and approved by the committee after careful considerations for further recommendation by the library committee. The committee also worked on improvements to be introduced in the library including the digital contents and more importantly the ways to encourage students to make the best use of the library resources. It was a fruitful participative exercise for library development as many new informal initiatives came to practice.

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The framework of perspective plan

The perspective plan of the institute aims to fulfil the expectation of the stakeholders and counter the challenges faced by effectively deploying resources after taking due care of strengths and weakness of the institution, and tapping opportunities available. Students have expectations from institution in the form of strong and future ready education, student centric innovative teaching-learning approach, and career counselling and placement opportunities. Faculties expect academic autonomy and incentive for research and consultancy. Parents expect overall development of their ward for the betterment of the society. In addition to this various challenges exist in the form of inflexibility due to university affiliation system and delay in updation of syllabus as required by the industry.

The institute, in past, has envisaged utilising resources effectively and for doing so it was proposed that institute will focus on consistent improvement in all the spheres. Some of the key areas identified for

consistent improvement were teaching and learning system, computational - software and hardware facilities, library resources, alumni engagement, research and development, placements, innovation, incubations, extension activities with social impact and intake rationalisation. It was also envisaged to proceed on with the journey of different accreditation processes for overall quality improvement.

Effective deployment

- Consistent improvement in teaching learning has been ensured by incorporating innovative methodologies. Examples are flipped, blended, and project based learning.
- Institution has consistently improved the ICT facilities for better efficiency and to make the teaching learning more interactive. Institute utilises audio-visual devices, automated lecture capture technology, 3-d projection, communication lab, relevant software and digital resources etc.
- Library being an integral part of teaching learning process keeps on updating and adding new resources both offline and online in the form of books, journals, periodicals, newspapers and e-resources.
- Institute puts rigorous efforts to make students more employable by inculcating technical as well as soft skills among students by conducting skills development trainings, courses, workshops, seminars etc. Students are encouraged to make the best use of the internship opportunities.
- With enhancement of skills and by periodically reviewing outcome based education system, placement of the institution has also improved.
- Institute has been providing various opportunities for the over all development of students through engagement in extra-curricular and extension activities.
- The institute is moving ahead with the autonomy plan. Research, consultancy and innovation promotion supports have been created and deployed for the faculty and students.

Example activity:

It was previously envisaged that institute should apply for accreditation and in line with the same, department of computer science and engineering applied for NBA accreditation in order to get recognition for the efforts put by the department. NBA application process was started after critical evaluation of departmental teaching learning process and prequalifier data and SAR were submitted in the stipulated time. After the visit of NBA expert team department was granted NBA accreditation status for a period of three years on December 20, 2019.

File Description	Document
Upload any additional information	View Document

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

Response:

Administrative setup of the Institution

The Institute is run by Vidhya Peeth Education trust and governed by the Board of Governors (BoG)

constituted as per the norms stipulated by AICTE. Members of the BoG discuss and decide upon policies and action plans put before them. The institute follows delegation of authority and responsibility as per the organogram to ensure coordination and effectiveness.

- The director receives guidance and directions from the BoG on various academic and administrative issues of the institute.
- The director is the academic and administrative head of the institute who takes care and monitors overall functioning related to academic, administrative and financial matters.
- Director interacts with the deans and heads on various academic and administrative matters for smooth functioning of the institute.
- The heads of the department are responsible further for onward channelling of the institutional priorities in coordination with their teaching and non teaching staff.
- The training and placement unit is responsible for all the placement related matters.
- Director appoints coordinators and chairpersons for each committee and keeps consistent interaction for efficient and effective functioning of these committees for the benefit of all stakeholders. Coordinators/chairpersons appraise the related issues and submit the reports on matters of relevance to the head of institution.
- The director deals with the registrar who in turn is responsible for all the administrative units as shown in the organisation chart.
- There are boys and girls hostels functioning in the campus, which are looked after by the respective wardens. The chief warden owns the overall responsibility and updates the director on related matters.

Policies, appointment and service rules

The institutional policies and rules provide a guiding framework to all involved in the institutional processes.

- Institute's rules, procedures and policies are available in the establishment section for ready reference of all the concerned as well as on the institute's website.
- Institution's functioning is directed by procedures and processes according to its values, code of ethics, administrative and other policies. As an example research and innovation policy sets the framework for growth of upgradation of research and innovations.
- Recruitment and selection process for staff and faculty members is fair and transparent. Further the service rule and staff welfare policy ensures equitable treatment with all the employees.
- Various committees have been functioning smoothly as per the institute policies and procedures on academic as well as other non-academic matters. Each of the committee is constituted as per norms and guidelines of regulatory agencies.
- The rules and procedures related to governing are reviewed time to time and amended with the approval from BoG.

File Description	Document
Upload any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Paste link for additional information	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any 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:

The Institute has variety of welfare schemes and provisions for the benefit of its teaching and non-teaching staff. Some of the provisions are briefly described below.

- **Provision of leaves** - the institute staff and faculty members are eligible for casual leave, earned leave, medical leave, academic leave, half pay leave and extraordinary leave.
- **Maternity leave** - a lady teacher/employee of the institute after two years of service is considered for grant of maternity leave of two months and those who have completed one year but less than two years of service can be granted the leave for a proportionate period.
- **Academic leave** - is availed for Ph. D. work, academic liaisoning activity, collaborative research, attending seminars, workshops, conferences, FDPs etc.
- **Tuition fee concession to wards of employees** - wards of employees studying in any institute of PIET group can avail tuition fees waiver up to 50%.
- **Medical facility** - medical facility for students and staff is available at the institute's medical room. The staff members of the institute are also covered under the group insurance scheme.
- **Subsidised accommodation in campus** - limited accommodation facility and guest house for the

staff, faculty and guests is available within the campus.

- **Subsidised bus facility** - to the staff and faculty members for reaching the campus from their place of residence.
- **Subsidised transport facility** - to the staff and faculty members for their transport needs by institute vehicles.
- **Incentive policy for research** - The policy is in place to motivate the faculty members and technical staff of the institute to undertake quality research and innovation related activities.
- **Internal support for up-skilling programs** - such as, training programs, seminars, workshops, conferences, FDPs etc.
- **Consultancy** - revenue sharing provisions between faculty and institute are in place for benefit of the faculty members involved in industrial consultancy.
- **Book Purchase** - the faculty can purchase technical books up to Rs. 2,000 in an academic year.
- **ATM in campus** – the staff, faculty members can avail the bank ATM facilities with in the campus any time.
- **Subsidised food in canteen/mess** - the staff and faculty members can avail the subsidised food in canteen and mess.
- **Advance facility** - the staff and faculty members can apply for advance as per their financial needs to repay later in instalments.
- **Gym facility** – the staff and faculty members can avail the gymnasium facility available in the campus.

File Description	Document
Upload any additional information	View Document

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

Response: 5.02

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

2018-19	2017-18	2016-17	2015-16	2014-15
12	14	17	4	6

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	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:** 15**6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
16	19	20	10	10

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).**Response:** 67.67**6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
177	142	196	113	81

File Description	Document
Upload any additional information	View Document
Details of teachers attending professional development programmes during the last five years	View Document

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff**Response:**

Teaching Staff

Annual self-performance based appraisal system (PABS) has been adopted by the institute in which a performance appraisal proforma is provided to all the faculty members through respective HODs. The self-appraisal form consists of three main parts,

- **Part A:** It consists of general information of the employee like name, father's name, department, designation and date of joining etc.
- **Part B:** The second part is further subdivided into three subcategories.
 - The *first category* is related to the academic performance of the faculty that includes benchmarking of results for the subjects taught, teaching load of the faculty member, teaching skills and preparedness, and deviation in the planned teaching schedule due to absence or similar reasons.
 - The *second category* is related to the contribution of the faculty members in activities related to the administration. This particular section is related to contribution of the faculty members in central as well as departmental committees.
 - The *third category* is related to the contributions of the faculty members in research, publications, book chapters, books, projects/consultancies, research guided and faculty development programme attended, invited lectures and chairmanships at a national or international conference etc.
- **Part C:** The third part is related to the *other relevant information* that is not covered before like any other credentials, significant contributions, awards received etc.

The PBAS is designed to scale the overall growth of the faculty members. The faculty members fill the appraisal form once in the academic year and submit to the head of the department along with all the supporting documents. The benchmarking of results is provided to the faculty members by respective heads. After receiving the the form from a faculty member, it is responsibility of the concerned heads to check and verify the data of individual faculty member. The overall annual performance score of the individual faculty member is calculated through the verified data. The basis of annual performance grade score-

- A: Greater or equal to 120
- B: Greater than or equal to 105 and less than 120
- C: Greater than or equal to 90 and less than 105
- D: Less than 90

The complete departmental report is submitted to the director and the institutional policy guides the administrative procedures to help the faculty members in their performance improvement over a period of time.

The Non-teaching Staff

The performance appraisals of the non teaching staff members are coordinated by the registrar. The proforma is sent by the registrar to the various head of the departments. They are asked to fill the performance of technical staff on the basis of their overall working and contribution in the department. The filled proforma is submitted back to the registrar within a week time. The head of the department checks the overall performance of the staff and rates the category as per the performance in A, B or C grades.

File Description	Document
Upload any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The *Vidhyapeeth* educational trust, parent body of the institution appoints the external auditors to carry out the financial audit. The audited accounts of PIET are also scrutinized by the fee regulating committee of the Haryana state under the Directorate of Technical Education, Government of Haryana.

The staff and faculty salary is prepared through a software system – *saral* pay pack, which also takes care of income tax deductions and generation of form-16. The salary is paid through the bank accounts. The institute accounts are maintained in the software Tally 9.0 where from voucher entry to trial balance and bank account reconciliation work is performed and maintained through the software system. The balance sheet preparation is managed through the spreadsheets in which the data extracted from the Tally is processed. The accounting is maintained separately for the *Vidhyapeeth* educational trust and the institute. Auditing processes of institute takes place in two stages namely, internal audit and external audit:

Internal Audit: The internal audit is performed by an internal staff designated the duties for internal audit. The auditor performs the daily voucher verification and indicates the clerical errors if any. The errors thus reported are rectified by the concerned account department staff. In general the staff members of the account department are efficient and therefore serious audit lapses have not been reported so far.

External Audit: The external audits are carried out by the chartered accountants – Pardeep Tayal and Company, Panipat. The external auditor visits the institute to perform the audit and checks all the relevant documents personally. The audit reports are then prepared by the CA. So far except minor clerical errors any major audit objection has not been observed. After the audit process the account statements, ITR-7 are finalised. The account statements are finally certified by the CA. This audited statement is brought to the notice of BoG and the fee regulatory committee of the Haryana state. It is also an important document for bank loan processing for infrastructure creation etc.

File Description	Document
Upload any additional information	View Document

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

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

Response:

The resource mobilization at the institute provides a sound base for its programs. The strategies for mobilizing resources support the implementation of institute's strategic plan, and the ultimate fulfillment of its vision and mission. PIET is a self financed institution and funding required for running the college is entirely self generated through fee collection and bank loans for infrastructure development to be repaid later in installments. Therefore proper strategies for fund mobilisation are must for the financial wellbeing and sustainable growth of the institute. The institute fee is approved, by the fee regulating body under the Directorate of Technical Education, Government of Haryana, which is the main source of funds for operational expenses. Other occasional sources of income include the revenue collected against consultancies and a part of which is distributed among the concerned faculty and staff. Keeping in mind the academic calendar of the institute, various agencies are also allowed to utilize our well equipped laboratories, class rooms and all other infrastructures for conduct of their examinations on rent basis.

The salaries of teaching, non-teaching and administrative staff are fixed as per the merit of qualifications and experience by the institute during the selection process. The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure. The following resources are reviewed under annual planning –

- Physical infrastructure
- Academic infrastructure and learning resources
- Human resource development
- Library and related e-resources
- ICT resources
- Upcoming technological resources
- Institute development expenses
- Affiliation expenses
- Maintenance and other miscellaneous resources

Institute's budget is the primary instrument of fiscal control and, accordingly, contains all projected revenues and expenditures of the administrative and academic programs. Institutional budget aims at

optimum utilization of finance and prepared every year under supervision of the director of institute taking into consideration of recurring and non-recurring expenditures. Accordingly, all the administrative and academic heads submit the budget required for the subsequent financial year. All major financial decisions are taken with the approval of Board of Governors. Institute adheres to utilization of budget approved by the Board of Governors. Director and respective heads have the necessary financial powers to meet routine expenditure. Audit is conducted every financial year to ensure proper and optimum use of the resources and verify the compliances for norms & regulation.

File Description	Document
Upload any additional information	View Document

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 IQAC as per NAAC guidelines was formulated on 16/07/2018. One of the important functions of IQAC as recommended in the guidelines is '*parameters for various academic and administrative activities of the institution*'. In line with this requirement two important initiatives were placed in the institutes academic processes.

Practice-1: Setting up of the revised program audit framework

The revised program audit process approved by IQAC is designed to set the focal area in the academic process and observe the improvements over a period of time. It has the advantage of placing transparency in place and activates self reflection to improve. The audit is divided in to (a) *Administrative audit* and (b) *Academic audit*.

(a) *Administrative audit* - deals with the parameters of academic support and requirements for smooth conduct of a semester. These parameters include the issues which are separately grouped into *utilities, resources, plans*, and relevant *past records*. As a result of this audit process a check list has been created for putting up the preparations to begin a semester.

(b) *Academic audit* – is a rigorous and comprehensive quality audit based on six focal areas and twenty two criteria. The focal areas of academic audit contain a few criteria and each criterion is rated as any one from - Not applicable/ Not *Evident/ Emerging/ Established/ Highly Developed*. The list of focal area is as under.

- Learning outcomes (03 criteria)
- Curriculum and co-curriculum (04 criteria)
- Teaching and learning (06 criteria)
- Student learning assessment (03 criteria)
- Support (02 criteria)

- Audit process (04 criteria)

Additionally there are descriptive but brief sections on

- Audit procedure
- Department's approach to educational quality practice
- Program strengths
- Overall performance of the program
- Areas of improvement
- Performance in the focal area
- Concluding remarks

Practice-2: Inclusion of Blooms Level in the evaluation process

Revised Bloom's approach is a development of the original taxonomy into application dimensions. A series of faculty seminars and workshops were organised in the institute to demonstrate the idea and practice of this approach. Later with approval by IQAC in 2019, the Blooms level has now become essential to include against every question being asked in the sessional tests along with the course outcome number. This brings better understanding of educational objectives both in students and the faculty members.

Additionally through the minutes of IQAC meetings it can be observed that the cell has been instrumental for quality promotion activities such as:

- Student personality and professional development
- Social and extension activities
- Promoting seminars, workshops, and conferences
- Promotion of entrepreneurship and innovations
- Formation of centre of excellences
- MOUs for skill development
- Supporting accreditation processes
- Strengthening teaching learning system
- Student activities in emerging area etc.

File Description	Document
Upload any additional information	View Document
Paste 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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Examples of institutional reviews and implementation of reforms facilitated by the IQAC in teaching learning process, structures & methodologies of operations and learning outcomes.

1. Review of course outcomes and program specific outcomes

The course outcomes mentioned in the university curriculum are mostly content based. In the outcome based education it is important to align the course outcomes with the Bloom's levels so that the outcomes become measurable through the evaluation process. Through an IQAC initiative COs were refined for all the programs over a period of nearly two months after thorough discussions. After completion of the process the revised COs have been adopted. The program specific objectives were also reviewed in the same process to bring focus in the departmental plans on areas specific to student development. The mechanism of this review has been inclusive and with the participation of all the faculty members.

2. The outcome attainment process design

Attainment process is the foundation of academic activities in any program. There have been two routes, in the literature, to the attainments of graduate attributes, first through the course outcomes designed specific to a course and second by direct attainments of graduate attributes or program outcomes. The first method has been deployed in the institute wherever the learning contents are precisely defined and treatments of contents are in confirmation with the Bloom's levels. On the other hand there are many other curriculum components that are open ended. Examples are projects, seminars and internships. In such components, course outcome based attainments are impractical as the topics vary from student to student. Therefore it becomes important to decide objectives of such activities. These objectives are treated as course outcomes and then mapped over the program outcomes. Through the evaluation of such outcomes direct attainment can be obtained. Under the IQAC initiative, the complete attainment process for various curricular components has been reviewed and recommended.

3. Operational Reviews

Primary function of the *Internal Academic Audit Cell* formed along IQAC is to conduct the audits of all the programs, assuring the process to be faculty driven and on yearly basis to make assessment of the quality in following areas:

- Clear and measurable learning outcomes based on appropriate process
- Gap analysis and curricular enrichment activities
- Teaching tools and their effectiveness
- Student evaluation and learning assessment including POs attainment
- Academic Support System

4. Review of Teaching and Learning

Primary function of this unit is to conduct the online/offline student feedback for the courses under different programs and create a consolidated program report for review by the director.

5. Other IQAC initiatives on teaching learning process

After inception the cell so far has been instrumental in placing activities on teaching learning such as-

- Promotion of the use of NPTEL, SWYAM and other online resources
- Addition of lecture capturing and learning system
- Addition of smart assessment tools and AI based valuation system

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

6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

Response: B. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

Institute has initiated different measures for the promotion of gender equity. Different type of gender equity promotion programs are also organized in the institute and various facilities are also provided to the girl students and female staff.

Measures initiated

- **Block Chain training program for girls:** A special training session on co-curricular aspects has been arranged only for the girl students in which nearly 100 students from 1st and 2nd year participated. This program was held on 12th to 14th Sep. 2019 in campus. Experts gave the information of open source project Google Summer of Code (GSOC) and explained about Smart India Hackathon. One of the team trained under this initiative, participated in the SIH20 and got shortlisted at national level.
- **Udyan Shalini fellowships:** Institute in association with a public charitable trust *Udyan Care Foundation* facilitates the girl students with weak socio-economic. The Udyan Care Foundation provides an assistance of Rs. 20000 to full tuition fee as per the case and rest whole fee is borne by the institute. Nearly ten girl students have been benefitted by this scheme during last five years.
- **Only girl children scholarship:** 20 % tuition fee waiver is provided by the institute to such girl students.
- **ICC:** For gender justice in all its intervention and practices an ICC has been established as per UGC guidelines. The ICC is responsible for looking into any complaints filed by students and staff about woman grievances in the institute.

Few Recent Activities

- **Self-defence training program for girl students organised by NSS:** This program was organized by NSS team on 26th Aug, 2019. In which 30 girls participated. The training was provided by Ms. Anny from Self-defence Training Academy, Panipat.
- **Seminar on Durga Shakti mobile application for girl's safety:** A unique mobile application from Haryana Police for women safety (**Durga Shakti**) provides a platform for woman to seek immediate help from police in times of distress. A seminar was organized by the BBA department to give the knowledge of this app for girls' safety on 20th Aug. 2019.
- **Women Day celebration:** Institute celebrates the women's day since last six years. One acid attack victim Ms. Ritu Saini from *Sheroes* (an NGO) was invited in the institute on women's day in 2018 to motivate the girl students. The women's day, in 2019, was celebrated at the district level in an event known as Panipat *Pinkathon* in which nearly 600 girls and staff participated from institute.

Facilities provided to girl students

- **Girls Common Room:** The institute maintains separate rooms for the rest and recreation among girl students.
- **Sanitary Napkin Vending Machine:** Institute provides this facility to girl students. The machine can be easily operated just by dropping a coin into it.
- **Women Safety and security:** The Institute has appointed security staff near the main gate of the institute, near canteen and near girl's hostel, thus providing with 24 hours security. The campus has well-functioning CCTV installed in office, library, hostels and at all the floors of the buildings.

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

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

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

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

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

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

Response:

Description of the facilities in the institute for degradable and non-degradable waste:

1. Solid waste management:

Solid wastes are generated from canteen, kitchens, play grounds, toilets, laboratories, hostel facility, guest houses etc. The approximate amount of waste generated (in kg/month)

- Biodegradable waste – 3564.5
- Non Biodegradable waste – 15
- Others (electronic waste) – 01

The solid waste generated in the institute managed by followings methods:

- Reusing: Reuse of one side printed paper for internal communication. Treated sewage water used for gardening.
- Recycling: Two types of waste bins are provided in the campus for biodegradable and non-biodegradable waste, whose amounts are mentioned above. Waste such as fully used stationary, old news papers, metallic waste, plastics etc are sold out for recycling.
- Composting: Horticulture waste is also disposed by the land fill method.
- Others: The items such as canteen waste are given to a local pig farm for their consumption.

2. Liquid waste management

A sewage treatment plant (STP) of capacity 35000 litre per day has been installed in the campus that removes contaminants from wastewater. It uses physical, chemical and biological processes to remove contaminants and produces environmentally safer treated wastewater reused for gardening purposes.

3. Biomedical waste management

Presently such a waste, in the form of syringes in the pharmacy department, is in very limited quantity and stored in a safe bin for future disposal.

4. E-waste management:

The institute has a tie up with Exigo Recycling Pvt. Ltd., which is certified by the Haryana State Pollution Control Board and Central Pollution Control Board for recycling of E-waste.

5. Waste recycling system

The scrap items such as iron waste, aluminum waste, tin containers, old newspapers, cartons, plastics are best recycled by their respective industries. Therefore these items are sorted and kept separately for selling to the recyclers. Time to time they are sold to the local recycling agencies.

The recycled water from the sewage treatment plant is supplied to the gardens for watering through the permanently installed PVC pipe lines.

6. Hazardous chemicals and radioactive waste management

Presently there is no such lab/department in the institute that produces radioactive chemicals and radioactive waste. Chemistry labs in B. Tech. and D. Pharma of the institute are involved in conventional

practicals, where the reacted chemicals are diluted and do not pose much of a hazardous threat; however they are diverted to a separate soak pit after dilution for safe disposals.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

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

7.1.5 Green campus initiatives include:

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

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

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

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

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

Response:

The Institute has a rich cultural mix of students from Haryana and NCR with the students from other countries such as Nepal, Bhutan and Bangladesh. Drawn from various places and countries, students have found PIET a home away from home. The institute, through its various initiatives and efforts tries to create an inclusive environment. Some of the institutional efforts are classified and described below:

Cultural diversity

- **Cultural activities:** Two major cultural festivals are organized every year, *Carbuncle* and *Maestros* during odd and even semesters respectively. *Carbuncle* is the platform for exhibiting the latent talent of new aspirants with the purpose to make every new student feel connected. *Maestros* an inter-institute technical and cultural fest is organised annually to provide an inclusive platform to all the students. It also aims at showcasing the incorporation of creativities, talents and innovations. The last day's performance, known as star night, is usually allocated for a popular and invited celebrity. Such cultural programs provide students an effective mechanism to mix with each other and create a harmonious environment. Nepali actress Keki Adhikari was invited for interaction with the students and cultural performance on 26th March, 2019.

Regional, communal and linguistic diversities

- **Celebration of festivals:** Students celebrate not only the popular local festivals such as Holi, Deepawali, but also festivals like *Good Friday*, *Baisakhi*, etc. which creates cultural harmony. Celebration of the '*Day of Social Justice*' by students also spreads the social integration and respect for the belief of equality of human beings. Celebration of the *Hindi Divas* in PIET is reflective of its linguistic inclusiveness in the campus.
- **Student Exchange program with CIT Chennai:** The student exchange program with CIT is taking place from the year 2018 and so far two such programs have been organised. During 2018 a group of fifteen students from B. Tech. ME visited CIT Chennai from 5th to 15th March 2018. In 2019 sixteen students of B. Tech. ME, IT and ECE visited CIT Chennai from 17th to 26th June 2019. In turn the students from CIT also visited PIET and stayed in the campus during 2018 and 2019.
- **Programs on Empathy:** Students sharing empathy with the Nepali students at PIET organised a candle march for the loss of lives due to earthquake on 25 April 2015 and contributed Rs. 61000 for relief fund of Nepal.

- **Programs on Harmony:** Programs organised on art of living, ethics, and spirituality are great institutional measures to create communal harmony in the fraternity.
- **NSS and Students' Rotaract and other Clubs:** Student club members and NSS volunteers are instrumental in creating sensitisation about community services. There is also a student Rotaract club to provide an opportunity to address the physical and social needs of communities promoting better relations.

Socioeconomic and other diversities

- **Institutional scholarship schemes:** Institute also takes account of socioeconomic diversities among the students and offers scholarships to girls, child having single parent and students with weak financial backgrounds.
- Visit to Brahmakumaris and interaction with sister Shivani.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

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

Response:

Sensitization through the curriculum

The subject Constitution of India (MC-902A) is taught at the second year level to the B. Tech. Students. The course curriculum also deals with the fundamental right and duties.

Annual Activities: Republic Day, Independence Day

Most of the cultural programs presented in these functions revolve around the ideals of freedom struggle and the protection of the sovereignty of the country that are essentials among constitutional values. To inculcate the feeling of nationalism all major functions end with the recital of the National Anthem.

Sensitization by other Activities:

- The extension activities organized by NSS students, and similar activities by the PIET Rotary Club members also sensitize the students on many issues such as brotherhood, composite culture, environment, and scientific temper covered under the values and citizen's constitutional duties.
- During annual fests one of the popular student inter-college activities in which student teams participate and present their themes around the some of the constitutional values is *Nukkad Natak*.
- Integrity pledge was organised in the institute including the faculty members and the students of

different programs on 31st October. The pledge included to follow probity and rule of law in all walks of life and to perform all tasks in an honest and transparent manner.

- For the faculty members, a few development programs have been organised by a renowned professional trainer, Mr. Surya Narain Bahadur on various aspects of responsibilities in personal and professional life touching upon the constitutional obligations.
- The PIET management is sensitive towards the sacrifices of Indian freedom fighters, and one of the blocks in the campus is named after the hero of the Indian independence movement, *Saheed* Bhagat Singh.
- Developing scientific temper is another aspect of citizen duties that is addressed through all the academic activities. To symbolically respect this factor, the main auditorium has been named after *Dr APJ Abdul Kalam*.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document

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

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

Response: A. All of the above

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

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

Response:

The Institute celebrates Republic Day and Independence Day with full respect and gaiety. *Holi* is also celebrated with full decorum and enthusiasm in the institute. It incorporates so much fun and joy in the

college campus as the whole campus gets filled up with the vibrancy of colours. The Institute also organizes special performances of celebrities to put the cherry on the cake. *Diwali* is another religious festival which is celebrated with full enthusiasm in the institute by adorning the campus with dazzling *rangolis*. Staff gathering is arranged before the institute's Diwali holidays, and sweets and gifts are arranged for all. Other festivals such as *Baisakhi* and *Raksha Bhandhan* are also celebrated by student groups in the institute.

Institute students also celebrate the teacher's day every year on 5th September to remember Dr Sarvpalli Radha Krishnan. To grace this day, students exhibit their talents as a treat to the teachers. Students also show their gratitude and thankfulness towards their teachers by giving speeches, and singing "*guru vandana*". Engineer's day is celebrated on 15th September every year, in honour of *Bharat Ratna Sir Mokshagundam Visvesvarayya* as a tribute to one of the greatest engineer of the country for his outstanding contribution to the society. On this day, various competitions are organized by the departments of the institute like working model making competition, innovative and technological plans competition etc. Through all these competitions, students get feel of their future role as engineers in developing India. Additionally, a few national and international commemorative days, which spread awareness about social concerns among the youth, are also celebrated by the departments. The reports of these celebrations are normally published in the departmental newsletter/magazine, and available on the institute's web portal. List of such commemorative days celebrated is provided below, and the additional information contains a report of these celebrations along with the URL.

- Indian Army Day on 15th January
- World Cancer Day on 4th February
- World Day of Social Justice on 20th February
- Science Day on 28th February
- Women's Day on 8th March
- World Consumer Rights Day on 15th March
- World Happiness Day on 20th March
- World Poetry Day on 21st March
- World Water Day on 22nd March
- Good Friday on 19th April
- World Health Day on 7th April
- International Yoga Day on 21st June
- Independence Day on 15th August
- Teacher's Day on 5th September
- World Suicide Prevention Day on 10th September
- Hindi Divas on 14th September
- Engineer's Day on 15th September

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Best Practices 1

Title

PIET Quest- The Institute Scholarship Test

Objective of the Practice

- To recognize and reward the meritorious students
- To identify and support meritorious students for higher studies from the entire region of Delhi and north Haryana
- To create avenues for support to marginalised sections.
- To create widespread awareness in the northern region about the institute to attract students with overall potential

The Context

In today's world education has become one of the most essential but expensive pursuit. In the society so many talented students find it very difficult to pursue their higher education because of lack of financial resources to meet the expenses involved. PIET Quest acts like a small push that can also be a giant leap for individuals in such a scenario. It is organized every year to recognize, reward and support the latent talents of arts, science and commerce streams from schools, colleges, and polytechnics since 2008. The practice has gained widespread popularity in the region over the years due to its novel approach.

The Practice

The PIET Quest is organized annually. It involves three rounds:

Screening round

- Round one is held at schools and colleges where the students are studying. The institute staff contacts the school authorities to fix the test date for this first round the, and then they visit the school on the scheduled date to conduct the test.
- The results are declared after the test and qualifying students are enlisted.
- Such qualifying tests are conducted in the schools, polytechnics and colleges of Panipat, Sonipat, Karnal, Rohtak, Kurukshetra, Panchkula, Shamli, Bagpat and Delhi regions.
- The enlisted qualifying students are then invited for the second round in the institute campus.

Advanced screening round

- The second round test is held in the institute through an online platform.

- In the second round 12 toppers are selected in each category from arts/commerce (school level), science (school level), polytechnics and colleges.

Final round

- These toppers then go through an open stage
- Career counselling sessions are also held in the campus by distinguished experts to help the students to decide the best option among the plethora of career opportunities available nationally and internationally.

Rewards

- Awards worth rupee one crore are given away every year.
- It is notable to mention that prizes like Honda activa scooters/motor bikes, laptops, mobiles, MP3 players, projectors are given away to the winners.
- The winners are also offered scholarships (tuition fee waiver) if they take admission in any program offered by the institute.
 - First Position - 100% tuition fee waiver
 - Second Position - 50%
 - Third Position - 25%
 - Fourth, Fifth, Sixth Positions - 10%

Outcomes

During this social interaction we come across the fact that beside this talent hunt aspect lot many other concerns also exist in the society where an aspiring student feels difficulty in terms of financial resources, so the institute over the years has introduced a variety of other institutional scholarships based on the experience of conducting the PIET Quest.

Evidence of Success

Since the inception of PIET Quest in 2008, down the line the contest has gained popularity in the academic arena and geographical reach has been spread across entire north Haryana, Delhi and some part of Uttar Pradesh. Initially it was started in Panipat, Sonapat and Karnal, only from then the count of candidates tested has risen from a few thousands to more than 70000 yearly. The number of participating schools colleges and Polytechnics also has gone up on yearly basis. However the primary success of the activity has been incorporation of many scholarship schemes at the institute level from the experience of conducting PIET Quest.

The contest, being a perennial feature of the institute, received a shot in arm when dignitaries such as Dr. APJ Abdul Kalam, former President of India; Dr. K. Kasturirangan, member, Planning Commission of India; Professor Kaptan Singh Solanki, Governor, Haryana and Punjab; Mr. M. S. Bitta, President, All India Anti Terrorist Front; Lt. Gen. (Dr.) D. D. S. Sandhu, Vice Chancellor, Kurukshetra University, Kurukshetra & Dr. A. Sivathanu Pillai, CMD & M.D. Brahmos, New Delhi, lauded the means and measures involved in smooth and fair conduct of the exercise.

Problems encountered and resources required

- With the increase in geographical outreach and number of schools, colleges and polytechnics, there is huge requirement of resource.
- In the starting years we used to have manual evaluation of the answer sheets of the participants but as the volume of work has risen enormously we shifted to OMR sheets and deployed scanner for the evaluation.
- As we provide the entire transportation to the participants coming to the institute for the final round from various locations, managing such a large fleet of buses is a daunting task. Therefore few additional busses are usually hired for this event
- In the final round we provide snacks and lunch to nearly 3000 participants in the campus. Managing the logistics for the entire process is very challenging.

Notes

Presently there are thirteen different institutional scholarship schemes available to cater to different socio-economical needs and support diverse talents, which have emanated from the experience of this practice.

Best Practices 2

Title

Adoption of Blended Learning

Objective of the practice

- Improved student engagement
- To bring changes in the participative aspects of student centric learning process through technological interventions

Context

In the era of innovative communication technologies becoming a part of life, old lecture mode content delivery is losing its charm in the student community. Now the techno savvy students are more demanding, so engaging them through a regular classroom is a big challenge in teaching these days. In such a scenario to improve the student engagement, adoption of pedagogical innovations like blended learning has the solution. It is an instructional methodology that leverages technology to provide a more personalized approach to learning, giving students control over the time, place, path and pace of their learning. As learners participate in face-to-face training and interact with relevant and actionable video, audio, text, presentations, and other types of bite-sized content, they are more likely to engage, retain information, and apply what they learn.

The Practice

PIET started the blended learning for its students with MTutor, which is claimed as India's first digital tutorials package for higher education developed as per university curriculum. The tool is loaded with the rich graphic-aided content to make learning fun and easy, and is a value addition to the conventional classroom teaching. This increases the retention power of students and makes students perform better.

Features like assessments and tests, live chat, ask-a-doubt and question bank, make it even more engaging and impactful for upgrading student performance.

The second tool introduced in this area is the lecture recording and learning management system by Impartus. This tool offers timetable based, pre-scheduled recording of classroom lectures using multi-view recording with audio. By providing the flexibility to watch the recorded classroom lectures from any time and location, students have much more control over their learning. With this aim of facilitating learning to the students, PIET has incorporated the lecture capturing system for all the under graduate and post graduate programs. Viewing recorded material provides more opportunities for offline interaction and engagement after the class time.

Evidence of success

Adoption of MTutor and Impartus video lecture capturing system has benefited both teachers and students. It has enhanced the engagement of students in the teaching learning process. Now, our students are more engaged and focused on deeper learning. Blended learning has helped in

- Improved time management
- Students to return to track even if they miss a few lecture classes
- Effective opportunities for collaborative engagement
- Controlled content treatment for improved learning outcomes
- Improved quality of lecture delivery

Problems encountered and resources required

- Initially there were some problems in adoption of the new system on both hesitations in adopting the change and technical resource functionality in terms of campus wide networking.
- With the passage of time and as the system is getting matured problems have been reduced.
- During implementation of these facilities, institute has made sufficient investment to create the physical resources required for the blended learning.
- At present both faculty and students are giving their best for optimum utilization of these learning resources.

Notes

The lecture capture system is a cloud based solution, therefore needs good amount of internet bandwidth to upload the live lectures. These lectures are reviewed and downsized appropriately for further access of students.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Nurturing the Experiential Learning towards Creation of Environment for Innovations and Entrepreneurship

Panipat Institute of Engineering and Technology has distinguished itself for being a centre for promotion of multi-disciplinary thinking among the students through experiential learning. It is aligned with the missions of creating such a stimulating environment in the institute where readiness for facing challenges is imbibed in the faculty and the students. This makes students ready to accept and meet challenges in the real world and it provides a track to be followed for professional success.

Role of Internships

To provide better exposure and develop our students, PIET initiated the journey with tie ups with foreign universities where students are exposed to different learning cultures and get a chance to work on a particular project. Taking advantage of this opportunity our students have completed internship based projects at Ural Federal University, Russia, Igor Sikorsky Kyiv Polytechnic Institute, Ukraine and Stevens Institute of Technology, USA etc. Adoption of such practices has lead significantly towards a culture of project development and idea generation among the students.

Organising and Participating in the Hackathons

As a reflection of institutional efforts on internship and project activities, our students have competed at national level in Smart India Hackathon 2017 which is a nationwide initiative of MHRD to provide students with a platform to solve some of the pressing problems, and thus inculcate a culture of product innovation and a mindset of problem solving. Our team named Raman came up with National Entrepreneurship Internship Exchange Software which was a problem statement by the Ministry of Skill Development and Entrepreneurship to improve their governance systems. This team had won second position all over India for the software development and also got a cash prize of Rs. 75000.

Further in the same journey, institute took the initiative to host Smart India Hackathon in consecutive years 2018 and 2019 and awarded the only nodal center status by MHRD in Haryana. In Smart India Hackathon 2019, PIET was one of the few Institutions selected for interaction with the honorable Prime Minister of India. Being host itself provided a great exposure to our faculty and students regarding idea generation and taking the project based learning at different level.

During Smart India Hackathon (SIH)-2019, student team headed by Mr. Sarthak won the student innovation award with cash prize of Rs. 5000 for his project Tracking spurious drugs and ensuring brand safety. Now in SIH 2020, 7 teams from our institution have qualified for finals of the software edition while 4 teams have qualified for the final of hardware edition. Out of the seven qualifying teams, team 'Bored Coders' lead by Vikrant Chauhan got the first prize (Rs. One Lack) in the category 'Smart Communication', for the solution provided for IFS global issues. Team 'Idea and Strommers' lead by Rishabh Dhingra also got the first prize (Rs. One Lack) in the category 'Healthcare & Biomedical Devices' for a solution for the Ministry of Health and Family Welfare. The third team 'Tech Monks' got

third prize (Rs. Fifty Thousand) in the ‘Smart Cities’ category. Such an achievement is a rare phenomenon even for the institutions and universities with longstanding prestigious track.

Project Based Learning

Experiential or project based learning has also promoted the culture of students’ engagement in making relevant projects. Another example of student’s achievement is that our student team has won the top team award at *Global Accelerator 2019* - a project showcase competition organized by FICE (<https://fice.in>) in collaboration with UC Berkley. Twenty four teams of innovators from different institutions across the country were shortlisted for the event. The project displayed by PIET student teams were -

- Project 1: Web application for project based learning
- Project 2: Giftsvenue
- Project 3: Waiter Bot

The technological interventions and tools have a great significance to enhance outreach for the experiential learning. Accordingly the institute has progressed further in its journey by deploying Enterprise and Education 4.0 in its educational practices.

Enterprise 4.0

In these days and time where the world has significantly moved towards a boundary less globe, today mankind is at a juncture where new age technological advancements are driving the human race into uncharted territories. The workplace of the future will be all about different skill sets as well as automated collaborators. Institute has decided to conduct a series of knowledge dissemination sessions, on Enterprise 4.0, titled as LEAD workshops (Learn, Engage, Assimilate and Develop) in conjunction with the nation’s leading technocrats, educators and industry experts. The first LEAD workshop held at the PIET campus on the 28th and 29th June 2019 was attended by 110 teachers and principals from various schools and colleges including panelists from industry.

Education 4.0

Institute’s Education 4.0 initiative, with its emphasis on analytics, AI, IoT, robotics and other new age learning frameworks ensures that the students should become ready to face the world of tomorrow, successfully.

Innovation and Entrepreneurship Development

To promote the diverse aspects of experiential learning, the institute has created supporting mechanism in terms of entrepreneurship development cell. This cell has organized various activities to promote a mindset and impart skills among the students to become an entrepreneur. It has organized 4 entrepreneurship awareness camps where 60 to 80 students participated actively in the each awareness camp. These camps were funded by the National Science and Technology Entrepreneurship Development Board (NSTEDB). Further in the same line the institute is planning to setup an innovation centre and has recently initiated a scholarship scheme with the name of ‘Super 30’ to support the innovations and budding entrepreneurs.

File Description	Document
Link for any other relevant information	View Document
Link for appropriate web in the Institutional website	View Document

NAAC

5. CONCLUSION

Additional Information :

The AICTE in 2020-21 has approved following new undergraduate programs under Engineering and Technology - Emerging area group in affiliation with the Kurukshetra University, Kurukshetra

- Computer science and engineering (artificial intelligence and data science) – 60 seats
- Computer science and engineering (cyber security) – 30 seats
- Computer science and engineering (artificial intelligence and machine learning) – 60 seats
- B. Pharma.

Concluding Remarks :

Since inception in 2006, PIET has been working to achieve the goal to impart skills and knowledge to students in order to make students more employable and further strengthen *institutional* and industrial collaborations. Institute provides conducive environment for quality teaching, learning, and research.

Institute offers courses for diverse areas ranging from engineering, management, computer applications and pharmacy. Innovative methods like project based learning, blended learning, flipped approach etc have been introduced to make learning process more interactive and participative. More and more focus has been given to inculcate practical knowledge among students. In addition to the curriculum prescribed by the affiliating university, institute also offers add on courses to students to keep them well equipped with the skills demanded by the industry. Institute consistently seeks feedback from its stakeholders and time to time inculcate the suggestions received from stakeholders. Institute follows the reservation policy as prescribed by the regulating bodies. Institute hosts students from all across the country and also from countries like Nepal, Bhutan, Vietnam and Bangladesh etc. Institute has excellent hostel facilities for students from far areas.

Institute has strong support of ICT enabled devices in teaching learning process. Institute believes in having the best faculty and to have that institute follow transparent process for recruitment and selection. Institute gives due consideration to make students socially responsible and in order to achieve this goal institute conducts various extension activities on issues such as gender disparities, environment conservation, blood donation, energy conservation etc. on regular basis. Institute has excellent collection of books, journals, research articles etc. in library. Institute follows policies and action plans which are in the best interest of all stakeholders. Institute follows transparent and fair practices in every aspect of functioning by having proper monitoring to ensure good governance. As PIET is self-finance institute and students fees constitutes major part of revenue, institute emphasizes to spend funds considering optimum utilisation. Institute has numerous welfare measures for staff to ensure effective participation from all the stakeholders. The institute also supports the students by offering various institutional scholarships.