Guidelines for the Creation of the

Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) in Accredited Institutions

(Revised in October 2013)

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

NAAC

VISION

To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

MISSION

- *To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;*

- *To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;*

- *To encourage self-evaluation, accountability, autonomy and innovations in higher education;*

- *To undertake quality-related research studies, consultancy and training programmes, and*

- *To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.*

Value Framework

To promote the following core values among the HEIs of the country:

- *Contributing to National Development*
- *Fostering Global Competencies among Students*
- *Inculcating a Value System among Students*
- *Promoting the Use of Technology*
- *Quest for Excellence*

Contents

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Introduction

In pursuance of its Action Plan for performance evaluation, assessment and accreditation and quality up-gradation of institutions of higher education, the National Assessment and Accreditation Council (NAAC), Bangalore proposes that every accredited institution should establish an Internal Quality Assurance Cell (IQAC) as a post-accreditation quality sustenance measure. Since quality enhancement is a continuous process, the IQAC will become a part of the institution's system and work towards realisation of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions. For this, during the post-accreditation period, it will channelize all efforts and measures of the institution towards promoting its holistic academic excellence.

The guidelines provided in the following pages will guide and facilitate the institution in the creation and operation of the Internal Quality Assurance Cell (IQAC). The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. Its success depends upon the sense of belongingness and participation it can inculcate in all the constituents of the institution. It will not be yet another hierarchical structure or a record-keeping exercise in the institution. It will be a facilitative and participative voluntary system/unit/organ of the institution. It has the potential to become a vehicle for ushering in quality enhancement by working out planned interventionist strategies to remove deficiencies and enhance quality like the "Quality Circles" in industries.

Objective
The primary aim of IQAC is

- To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

Strategies
IQAC shall evolve mechanisms and procedures for

a) Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks;

b) The relevance and quality of academic and research programmes;

c) Equitable access to and affordability of academic programmes for various sections of society;

d) Optimization and integration of modern methods of teaching and learning;

e) The credibility of evaluation procedures;

f) Ensuring the adequacy, maintenance and proper allocation of support structure and services;

g) Sharing of research findings and networking with other institutions in India and abroad.

Functions
Some of the functions expected of the IQAC are:

a) Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution;

b) Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;

c) Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes;

d) Dissemination of information on various quality parameters of higher education;

e) Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;

f) Documentation of the various programmes/activities leading to quality improvement;

g) Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices;

h) Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality;

i) Development of Quality Culture in the institution;

j) Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC.

Benefits
IQAC will facilitate / contribute

a) Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement;

b) Ensure internalization of the quality culture;

b) Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices;

c) Provide a sound basis for decision-making to improve institutional functioning;

d) Act as a dynamic system for quality changes in HEIs;

e) Build an organised methodology of documentation and internal communication.

Composition of the IQAC

IQAC may be constituted in every institution under the Chairmanship of the Head of the institution with heads of important academic and administrative units and a few teachers and a few distinguished educationists and representatives of local management and stakeholders.

The composition of the IQAC may be as follows:

1. Chairperson: Head of the Institution

2. A few senior administrative officers

3. Three to eight teachers

4. One member from the Management

5. One/two nominees from local society, Students and Alumni

6. One/two nominees from Employers /Industrialists/stakeholders

7. One of the senior teachers as the coordinator/Director of the IQAC

The composition of the IQAC will depend on the size and complexity of the institution. It helps the institutions in planning and monitoring. IQAC also gives stakeholders or beneficiaries a cross-sectional participation in the institution's quality enhancement activities. The guidelines given here are only indicative and will help the institutions for quality sustenance activities.

The membership of such nominated members shall be for a period of two years. The IQAC should meet at least once in every quarter. The quorum for the meeting shall be two-third of the total number of members. The agenda, minutes and Action Taken Reports are to be documented with official signatures and maintained electronically in a retrievable format.

It is necessary for the members of the IQAC to shoulder the responsibilities of generating and promoting awareness in the institution and to devote time for working out the procedural details. While selecting these members several precautions need to be taken. A few of them are listed below:

➧ It is advisable to choose persons from various backgrounds who have earned respect for integrity and excellence in their teaching and research. Moreover, they should be aware of the ground realities of the institutional environment. They should be known for their commitment to improving the quality of teaching and learning.

- It would be appropriate to choose as senior administrators, persons in charge of institutional services such as library, computer center, estate, student welfare, administration, academic tasks, examination and planning and development.

- The management representative should be a person who is aware of the institution's objectives, limitations and strengths and is committed to its improvement. The local society representatives should be of high social standing and should have made significant contributions to society and in particular to education.

The role of coordinator

The role of the coordinator of the IQAC is crucial in ensuring the effective functioning of all the members. The coordinator of the IQAC may be a senior person with expertise in quality aspects. She/he may be a full-time functionary or, to start with, she/he may be a senior academic /administrator entrusted with the IQAC as an additional responsibility. Secretarial assistance may be facilitated by the administration. It is preferable that the coordinator may have sound knowledge about the computer, its various functions and usage for effective communication.

Operational Features of the IQAC

Quality assurance is a by-product of ongoing efforts to define the objectives of an institution, to have a work plan to achieve them and to specify the checks and balances to evaluate the degree to which each of the tasks is fulfilled. Hence devotion and commitment to improvement rather than mere institutional control is the basis for devising procedures and instruments for assuring quality. The right balance between the health and growth of an institution needs to be struck. The IQAC has to ensure that whatever is done in the institution for "education" is done efficiently and effectively with high standards. In order to do this, the IQAC will have to first establish procedures and modalities to collect data and information on various aspects of institutional functioning.

The coordinator of the IQAC and the secretary will have a major role in implementing these functions. The IQAC may derive major support from the already existing units and mechanisms that contribute to the functions listed above. The operational features and functions discussed so far are broad-based to facilitate institutions towards academic excellence and institutions may adapt them to their specific needs.

Monitoring Mechanism

The institutions need to submit yearly the Annual Quality Assurance Report (AQAR) to NAAC. A functional Internal Quality Assurance Cell (IQAC) and timely submission of Annual Quality Assurance Reports (AQARs) are the Minimum Institutional Requirements (MIR) to volunteer for second, third or subsequent cycle's accreditation. During the institutional visit the NAAC peer teams will interact with the IQACs to know the progress, functioning as well quality sustenance initiatives undertaken by them.

The Annual Quality Assurance Reports (AQAR) may be the part of the Annual Report. The AQAR shall be approved by the statutory bodies of the HEIs (such as Syndicate, Governing Council/Board) for the follow up action for necessary quality enhancement measures.

The Higher Education Institutions (HEI) shall submit the AQAR regularly to NAAC. The IQACs may create its exclusive window on its institutional website and regularly upload/ report on its activities, as well as for hosting the AQAR.

The NAAC Accredited institutions need to submit only the soft copy as word file (.doc/.docx) through e-mail (capuaqar@gmail.com). The file name needs to be submitted with Track ID of the institution and College Name. For example MHCOGN16601-Samudra Arts and Science College, Taliamegu-Maharashtra.doc or EC_32_A&A_143 dated 3-5-2004-Samudra Arts and Science College, Taliamegu-Maharashtra.doc. The Higher Education Institutions need not submit the printed/hard copy to NAAC. The acknowledgements would be sent to the institutions through e-mail.

Mandatory Submission of AQAR by IQAC

So far submission of AQARs was not a Mandatory requirement for Institutions applying to NAAC 2nd and subsequent cycles of Assessment and Accreditation (A&A). It has now been decided by the Executive committee of NAAC that **regular submission of AQARs should be made mandatory for 2nd and subsequent cycles of accreditation.**

In view of the decision of **Executive Committee of NAAC** the following will be the pre-requisites for submission of LOI for all Higher Education Institutions (HEIs) opting for 2nd and subsequent cycles of A& A **with effect from 16th September 2016**:

➡ Having a functional IQAC.
➡ The minutes of IQAC meeting and compliance to the decisions should be uploaded on the institutional website.
➡ Mandatory submission of AQARs on a regular basis for institutions undergoing the second and subsequent cycles of Assessment and Accreditation by NAAC.
➡ Upload the AQAR's on institutional website for access to all stakeholders.

The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. *(Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)*

Part – A

1. Details of the Institution

1.1 Name of the Institution
> Punjab Engineering College
> (Deemed to be University)

1.2 Address Line
> Sector 12

City/Town
> Chandigarh

State
> Chandigarh (U.T)

Pin Code
> 160012

Institution e-mail address
> Director@pec.ac.in

Contact Nos.
> 0172-2753051, 3055,3053

Name of the Head of the Institution:
> Prof. Manoj.K. Arora

Tel. No. with STD Code:
> 0172-2753051

Mobile:
> 9872577544

Name of the IQAC Co-ordinator: Dr. Sucheta

Mobile: 9814528121

IQAC e-mail address: iqac@pec.ac.in

1.3 **NAAC Track ID** *(For ex. MHCOGN 18879)*   -NA-

1.4 **NAAC Executive Committee No. & Date:**   -NA-
(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

1.5 Website address: **www.pec.ac.in**

Web-link of the AQAR:

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle				
2	2nd Cycle	-Not Applicable-			
3	3rd Cycle				
4	4th Cycle				

1.7 Date of Establishment of IQAC :   DD/MM/YYYY   01.08.2010

1.8 AQAR for the year *(for example 2010-11)*   **2016-17**

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((*for example AQAR 2010-11submitted to NAAC on 12-10-2011)*

   i. AQAR _____-NA-_____ _____ (DD/MM/YYYY)4
  ii. AQAR_____-NA-_____ _____ (DD/MM/YYYY)
 iii. AQAR_____-NA-_____ _____ (DD/MM/YYYY)
 iv. AQAR_____-NA-_____ _____ (DD/MM/YYYY)

1.10 Institutional Status

University   State ☐ Central ☐ Deemed [√] Private ☐

Affiliated College   Yes ☐ No [√]

Constituent College   Yes ☐ No [√]

Autonomous college of UGC   Yes [√] No ☐

Regulatory Agency approved Institution   Yes [√] No ☐

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution   Co-education [√] Men ☐ Women ☐

              Urban [√] Rural ☐ Tribal ☐

Financial Status   Grant-in-aid [√] UGC 2(f) ☐ UGC 12B ☐

              Grant-in-aid + Self Financing ☐ Totally Self-financing ☐

1.11 Type of Faculty/Programme

Arts ☐   Science [√] Commerce ☐ Law ☐ PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering [√] Health Science ☐ Management ☐

Others (Specify)   .

1.12 Name of the Affiliating University *(for the Colleges)*

Punjab Engineering College
(Deemed to be University)

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University   √

University with Potential for Excellence		UGC-CPE	
DST Star Scheme		UGC-CE	
UGC-Special Assistance Programme		DST-FIST	
UGC-Innovative PG programmes		Any other (*Specify*)	
UGC-COP Programmes			

2. IQAC Composition and Activities

2.1 No. of Teachers   8

2.2 No. of Administrative/Technical staff   1

2.3 No. of students   --

2.4 No. of Management representatives   1

2.5 No. of Alumni   --

2. 6 No. of any other stakeholder and

        community representatives   --

2.7 No. of Employers/ Industrialists   --

2.8 No. of other External Experts   3

2.9 Total No. of members   13

2.10 No. of IQAC meetings held :-   Nil

2.11 No. of meetings with various stakeholders: No.   NIL   Faculty   --

Non-Teaching Staff Students   `--`   Alumni   `--`   Others   `--`

2.12 Has IQAC received any funding from UGC during the year?   Yes `[ ]`   No `[√]`

    If yes, mention the amount   `--`

2.13 Seminars and Conferences (only quality related)

    (i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. `Nil`   International `--`   National `--`   State `--`   Institution Level `--`

    (ii) Themes   -NA-

2.14 Significant Activities and contributions made by IQAC

- To develop a quality system for conscious, consistent and catalytic programmed action to improve the academic and administrative performance of the PEC.
- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.
- To develop a system for conscious and consistent improvement in the performance of the institution.
- To channelize the efforts and measures of the institution towards academic excellence.

2.15 Plan of Action by IQAC/Outcome

    The plan of action chalked out by the IQAC in the beginning of the year towards quality

    Enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements

   * *Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body   Yes √ No ☐

Management ☐   Syndicate ☐ --   Any other body ☐ --

Provide the details of the action taken

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	10	Nil	Nil	Nil
PG	14	Nil	3	Nil
UG	8	Nil	Nil	Nil
PG Diploma	Nil	Nil	Nil	Nil
Advanced Diploma	Nil	Nil	Nil	Nil
Diploma	Nil	Nil	Nil	Nil
Certificate	Nil	Nil	Nil	Nil
Others	Nil	Nil	Nil	Nil
Total	32	Nil	3	Nil

Interdisciplinary	03		03	
Innovative				

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
   (ii) Pattern of programmes:

Pattern	Number of programmes
Semester	3 (UG, PG & Ph.D.)
Trimester	--
Annual	--

1.3 Feedback from stakeholders*   Alumni [--]   Parents [--]   Employers [√]   Students [√]
   (On all aspects)

   Mode of feedback   :   Online [   ]   Manual [√]   Co-operating schools (for PEI) [   ]

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Yes

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Centre of Management & Humanities Established in September 2016

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
106	42	32	31	01

2.2 No. of permanent faculty with Ph.D.

74

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
--	--	--	01	--	01	33	03	33	05

2.4 No. of Guest and Visiting faculty and Temporary faculty   [13]   [03]   [02]

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	11	26	--
Presented papers	11	24	--
Resource Persons	--	--	--

2.6 Innovative processes adopted by the institution in Teaching and Learning:

Institute follows student centric and innovative practices for teaching. Some of these practices followed by faculty are:
• Interactive lectures using various audio-visual aids like computer presentation, Visualize, etc., in addition to Black/White board
• Small group tutorials and assignments
• Laboratories
• Project based learning through mini, minor and major Projects
• Industrial internship
• Collaborative Teaching and Learning
• Report writing and Seminars
• Participation in Conference, Guest lectures, and industry conducted
 • Use of online educational resources as supplements
• Simulation studies
• Interactive brainstorming sessions Debates and Discussions
 • Case analysis and discussion
• Presentations
• Review and reinforcement
• Use of NPTEL resources The impact of all these practices have been positive as evidenced from students feedback and acceptance with enthusiasm. Learning attainments in all these methods have been above average.
• Running MOOCS courses in blended mode.
• Transfer of credit policy.

2.7 Total No. of actual teaching days during this academic year.

140 Days

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

The Instructor-in-charge, assisted by the team of tutors and other instructors, is responsible for making the question paper, conducting the examination in his/her course, getting the answer scripts evaluated by the team of tutors, and awarding the grades. The end term question paper for UG examinations are moderated by department committee under Chairmanship of Head of the department. The grades for all courses are moderated as per institute guidelines by duly constituted moderation committee. The grades are forwarded through the Head of the Department who will ensure that proper standards have been followed.

The complete transparency will be maintained in evaluation system. The graded scripts of quizzes, tests, and mid-semester examinations will be returned to the students within a reasonable time. The answer scripts of the final examinations will be shown to the students after marking. All instructors will notify a time for such access within three days of the examination. A student may point out errors or omissions, if any, in marking in writing on the cover sheet of the answer script. The instructor will take these into account before submission of grades.

The final grades earned by all students registered in a course will be submitted by the Instructor-in-charge to the Academic Section through the Head of the Department within the prescribed time limit.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop.

44

2.10 Average percentage of attendance of students

88%

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
UG	417	2.40%	---	--	--	97.60%
PG	228	10.08%	--	--	--	89.91%
Ph.D	27	--	--	--	--	100%

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	
UGC – Faculty Improvement Programme	
HRD programmes	
Orientation programmes	
Faculty exchange programme	
Staff training conducted by the university	
Staff training conducted by other institutions	90 Staff and 2 Faculty
Summer / Winter schools, Workshops, etc.	
Others	

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	46	42	Nil	29
Technical Staff	94	72	Nil	22

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- As per our core research focus, University develops R& D competencies in the specific domain areas of sciences & engineering with focus on inter-disciplinary research providing solutions to important issues facing society with emphasis on local problems.
- Identification of new research areas and deployment of internal resources to implement through PhD research.
- Facilitations of faculty members to explore new research areas, to generate initial results, and to submit proposals to funding agencies.

3.2   Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	02	24	12	21
Outlay in Rs. Lakhs	5.69	879.75	538.16	1039.83

3.3   Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	03	01	1	Nil
Outlay in Rs. Lakhs	1.30	0.90	0.90	--

3.4   Details on research publications

	International	National	Others
Peer Review Journals			
Non-Peer Review Journals			
e-Journals			
Conference proceedings	10	16	--

3.5 Details on Impact factor of publications:

Range | Nil | Average | 6.8 | h-index | 10 | Nos. in SCOPUS | 1006 |

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects				
Science & Engg. Research Board (SERB) Deptt. Of Science & Tech.	3 Years	Govt. Of India	65.70	44.11
DST Chandigarh Administration	11 Months	Chandigarh Administration	1.0	1.0
(ER&IPR) DRDO New Delhi	2 Years	DRDO New Delhi	31.84	21.42

Tehri Hydro Development Copr. Ltd. (THDCL)	3 Years	(THDCL)	49.19	10.0
DST New Delhi	5 Years	DST, New Delhi	250.0	165.0
Armament Research Board	3 Years	DRDO New Delhi	41.03	26.35
Science & Engg. Research Board	3 Years	SERB, New Delhi	15.10	5.20
DST, Chandigarh Adm.	6 Months	Chandigarh Administration	12.0	12.0
Aeronautical R& D Board	2 Years	DRDO, New Delhi	29.10	20.80
SERB, DST New Delhi	3 Years	SERB, New Delhi	27.75	9.25
SERB, DST New Delhi	3 Years	SERB, New Delhi	15.0	Nil
Minor Projects				
UGC –DAE Consortium for Scientific Research	2 Years	UGC – DAE	0.90	0.90
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects *(other than compulsory by the University)*	-	-	-	-
Any other(Specify)	-	-	-	-
Total	-	-	-	-

3.7 No. of books published   i) With ISBN No. $\boxed{08}$ Chapters in Edited Books $\boxed{01}$

ii) Without ISBN No. $\boxed{05}$

3.8 No. of University Departments receiving funds from

UGC-SAP $\boxed{--}$ CAS $\boxed{--}$ DST-FIST $\boxed{--}$

DPE $\boxed{--}$ DBT Scheme/funds $\boxed{01}$

3.9 For colleges   Autonomy $\boxed{--}$ CPE $\boxed{--}$ DBT Star Scheme $\boxed{--}$

INSPIRE $\boxed{--}$ CE $\boxed{--}$ Any Other (specify) $\boxed{--}$

3.10 Revenue generated through consultancy $\boxed{218\ Lacs}$

3.11 No. of conferences

Organized by the Institution

Level	International	National	State	University	College
Number	--	--	2	--	19
Sponsoring agencies	--	--	--	--	--

3.12 No. of faculty served as experts, chairpersons or resource persons   13

3.13 No. of collaborations   International 11   National Nil   Any other Nil

3.14 No. of linkages created during this year   09

3.15 Total budget for research for current year in lakhs :

From funding agency   1165.34   From Management of University/College   13.05

Total   1178.39

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	NIL
	Granted	NIL
International	Applied	NIL
	Granted	NIL
Commercialised	Applied	NIL
	Granted	NIL

3.17 No. of research awards/ recognitions   received by faculty and research fellows
       Of the institute in the year

Total	International	National	State	University	Dist	College
07	03	03	--	--	--	01

3.18 No. of faculty from the Institution
       who are Ph. D. Guides   66
     and students registered under them   208

3.19 No. of Ph.D. awarded by faculty from the Institution   27

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF | 11 | SRF | 02 | Project Fellows | 07 | Any other | 08 |

3.21 No. of students Participated in NSS events:

University level | 15 | State level | 0 |

National level | 0 | International level | 0 |

3.22 No. of students participated in NCC events:

University level | 0 | State level | 15 |

National level | 04 | International level | 0 |

3.23 No. of Awards won in NSS:

University level | 1 | State level | 0 |

National level | Nil | International level | Nil |

3.24 No. of Awards won in NCC:

University level | Nil | State level | 01 |

National Level | Nil | International Level | Nil |

3.25 No. of Extension activities organized

University forum | NIl | College forum | Nil |

NCC | 02 | NSS | 01 | Any other | Nil |

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility:

	Details of the Extension Activities and Institutional Social Responsibility
	The Institute has National Service Scheme (NSS) which is a Government of India public service program conducted by the Department of Youth Affairs and Sports, Government of India. In PEC, the program aims to inculcate social welfare in students, and to provide service to society

without bias.

- NSS volunteers help and learn from people in villages how to lead a good life despite a scarcity of resources.

- NSS unit of PEC has adopted villages and colonies near the Institute.

Following are the key objectives with which the NSS does extension activities for the communities:

- Understand the community in which they work;
- Understand themselves in relation to their community;
- Identify the needs and problems of the community and involve them in problem solving process;
- Develop among themselves a sense of social and civic responsibility;
- Utilize their knowledge in finding practical solution to individual and community problems;
- Develop competence required for group living and sharing of responsibilities;
- Gain skills in mobilizing community participation;
- Acquire leadership qualities and democratic attitude;
- Practice national integration and social harmony.

Projects:

1. AABHA

In this noble project, the students of PEC teach the children of the helping staff of the college, mainly mess workers, security guards, cleaning staff, etc. It is a semester long project and an integral part of NSS,PEC. The project covers the students of all classes and children are taught five days a week. Their teaching involves Content Teaching, Interactive sessions, Test series and Quizzes with the help of videos and presentations. All records are properly maintained and attendance is taken regularly. Regular teaching is an integral part. From time to time, special events such as movies are organized for the children to offer them a break from the studies and keep them refreshed. This project has time and again proved to be the most successful venture of NSS.

2. DRISHTI

This project is a film making project which was started under NSS PEC. The project has ever since promoted awareness through its short films and scintillating videos in general public. This project provides a platform for students to not only increase social awareness on prominent humanitarian issues in society but also enjoy the thrill of making short films. The students have made many short movies, several of which have won accolades at various national level competitions. With the success of every new short film or movie, this project is moving forward and proving to be a brilliant venture on the part of NSS PEC.

3. SPARSH

This project is an initiative by the NSS Unit of PEC University of Technology, Chandigarh to help the blind students excel in academics despite of their disability. For the execution of this project the University has collaborated with, The Institute for the Blind, Sector 26 Chandigarh (the only blind institute in the tri-city).The volunteers of this project record the content from the books that are provided by the blind school. Currently the recordings are done using the help of mobiles and laptops. The recordings are then sent to the blind school via email after proper editing and noise reduction. The students of the institute use these recordings to revise for their exams which help them prepare well for the same. Constant feedback is taken from the school authorities for further improvement in aspiration that this small step will go a long way ahead.

4. STREET PLAY

Street play or Nukkad Natak is a form of theatrical performance in outdoor public spaces which aims at spreading awareness about various social and cultural issues prevailing in the society. NSSPEC has been organizing such plays for many years and the plays have gained so much appreciation which encourages them to do even better every year. These plays if and as they are targeted towards youth can really stir up emotions, create awareness and lead the way towards positive change. Nukkad nataks are an important tool in creating awareness, empowering the youth and utilizing our right to freedom of speech and expression positively. This colloquial form of drama connects with the youth instantly. This enthusiasm if used in the correct manner can lead to drastic changes in our society, changes we wish for.

Regular Events

1. BLOOD DONATION CAMP

NSS PEC holds a Blood Donation Camp bi-annually in collaboration with PGIMER, Chandigarh. Every year approximately over 550 units of blood are collected. The donors are essentially the students, faculty and staff of the campus.

2. 7-DAY CAMP

The 7-Day Camp is an annual event by NSS wherein several sessions are conducted to ensure the all-round development of the students. The sessions aim to inculcate values in the students, educate them on various humanitarian issues and teach them to be successful in all walks of life. The camp aims for the students to grow better, physically and emotionally as well as academically and morally.

3. TEACHER'S DAY CELEBRATION DRIVE

Teacher's day is an opportunity to promote and recognize the importance of educators in the future of every generation and to show appreciation and highlight the many contributions of the teaching profession. Keeping in mind the selfless devotion and dedication of our professors, we the student volunteers at NSS-PEC reciprocated our bit, by distributing Teacher's Day correspondence to the retired faculty members of PEC on the 5th of September. The professors shared their memories and remembered their old students and talked of positions that they have achieved in life.

4. CLOTH COLLECTION DRIVE

NSS PEC organizes a cloth collection drive every winters for the needy who find it hard to gather enough fuel wood to burn it out in the chilly winter nights because for them warm-cozy winter clothing is a far-cry. The clothes are donated to the necessitous after conducting a prerequisite survey to determine the requirement of the number of clothes. And then the clothing is segregated on basis of gender and age before handing them over to the needy.

5. DIWALI SWEETS DISTRIBUTION

On the auspicious occasion of Diwali – The Festival of Lights, when all families join together to celebrate, policemen are seen on roads, maintaining the law and order. Making merry and enjoying to the fullest every second of the festive season, the NSS unit of PEC, Chandigarh does not forget to thank the real heroes of the society - the policemen. Every year NSS volunteers distribute sweets to the policemen on duty at numerous traffic junctions and markets in the city. The students thank the policemen for serving the society and wish them a Happy Diwali.

6. WORKSHOP COATS DISTRIBUTION DRIVE

As part of the induction of students in 1st year, the NSS wing of PEC holds a Workshop Coat Sale programme. Newly joined students, coming in for the registrations are provided with coats which would be required for their workshops. The coats are brought in from Ambala where they are made by people of Self Help Groups. NSS provides the coats at a price less than the regular price, with an aim to benefit the Self Help Groups as well as the students.

Other Events:

1. DIGITAL INDIA WORKSHOP

National e-Governance Division (NeGD) in association with National Service Scheme (NSS), Department of Youth Affairs is conducting awareness workshops on Digital India in 100+ universities all over the country. In association with the same, the NSS unit of PEC organized a Digital India Workshop on October 04,2016.

2. DENGUE AWARENESS WORKSHOP

A Dengue Awareness Workshop was held in PEC on 10th August' 2016 in collaboration with NSS, PEC. The chief guest of the day Dr. Vinita from GMCH and Dr. Gaurav Aggarwal, Public Health expert and Anti Malaria Officer, Chandigarh Administration enlightened the students about vector borne diseases and talked about various prevention techniques.

3. DIRECT BENEFIT TRANSFER SCHEME SURVEY

A survey was conducted by 2nd year volunteers for the Food and Civil Supplies Department, Chandigarh. The volunteers surveyed the servants living in the houses of nearby sectors and prepared the analysis, which was submitted to the authorities.

4. IBTIDA

In celebration of Road Safety Week India 2017, the student chapters of NSS and American Society of Civil Engineers of PEC, Chandigarh performed a street play at Sector 17 Shopping Plaza on Tuesday, the 17th of January 2017. The students enacted a street play highlighting the need of road safety and Traffic Awareness. The essence of driving responsibly was put forth as the theme of the event; the need for sensitizing the masses for driving safely, obeying the traffic laws, and respecting the rights of other drivers laid at the heart of the skit. The team put forward an enthralling performance through a mesmerizing sequence of dramatic scenes as the performance received a huge round of applause from the crowd.

5. CTU BUS PROJECT

CTU Bus Project was started by a research team of Computer Science Department, PEC in collaboration with IIT BOMBAY to know more about the traffic in the city. Its main objective is to observe and analyze the traffic density and the condition of the roads in general of the city. To contribute in its success, NSS participants volunteered to conduct research. An NSS volunteer will be given this task of spending a few hours in an allotted bus, in six hour shifts, which covers a specific route. He/she will have to note the precise time on which the bus reaches the specified bus stops. On completion of the given task, the volunteer will be awarded a certificate of appreciation and an incentive of Rs.500 per shift.

6. EASY REGISTRATION, EASY CORRECTION

The Easy Registration, Easy Correction campaign was conducted for the registration of students, faculty and staff in the electoral rolls by Lakshay Khurana, Campus Ambassador, Election Commission of India, along with a few NSS volunteers who worked under him. The campaign saw its completion as voter cards were distributed to all who had registered under this campaign. The campaign proved to be a successful venture on the part of Election Commission of India and NSS.

7. ORGAN DONATION AWARENESS WORKSHOP

The NSS unit of PEC University of Technology in collaboration with the PGI, organized an awareness session on 'ORGAN DONATION' at PEC auditorium, that was attended by large number of students and faculty of PEC..

8. TREE PLANTATION DRIVE

The NSS wing of PEC in collaboration with State Bank of India, PEC branch organized a tree plantation drive in the college premises with an aim to have a greener and cleaner environment. The student volunteers facilitated discussion and planted around 160 saplings, including neem, rubber and belpatra amongst other herbal plants. As part of the plantation drive, refreshments were distributed to the gardeners as well as the student volunteers post planting of the saplings.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	131.87	--	--	131.87
Class rooms	59	--	--	59
Laboratories	89	--	--	89
Seminar Halls	20	--	--	20
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	--	--	--	--
Value of the equipment purchased during the year (Rs. in Lakhs)	--	--	--	--
Others	--	--	--	--

4.2 Computerization of administration and library

> Library: - The Library is fully computerized using the Libsys software package which is an integrated multi user library management system. The data base of books available is being updated on day to day basis with details of recently acquired books. Library has implemented REFID enabled automation surveillance system for the library under TEQIP-II.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	114116	--	2295	20,77,206	116411	--
Reference Books	10943	--	17	16779	10960	--
e-Books	2279	--	147	14,66,691	2426	--
Journals	6960	--	--	--	6960	--
e-Journals	2875	--	2326	--	--	--
Digital Database	14	--	13	95,82,679	--	--
CD & Video	1064	--	233	--	1297	--
Others (specify)	--	--		--	--	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	179	11	11 labs	labs	01	Desktop	--	--
Added	31	1	--	--	--	--	--	--
Total	210	12	11 labs	--	01	--	--	--

4.5 Computer, Internet access, training to teachers and students and any other programme for technology Upgradation (Networking, e-Governance etc.)

Computer Centre is the central place for campus wide networking and internet connectivity. Backbone connectivity initiates from this centre and caters to more than 2000 nodes across the campus . The centre is equipped with web server , Academic server, E-mail server, Security wall, Bandwidth management and data server. The computer centre has network infrastructure consisting of routers, firewall, Unified switches. It also houses cluster of Windows and Linux based servers for mailing and web application hosting. A 100 terminal Cluster lab is available for students for their project work, programming assignments, M.Tech & Ph.D thesis work and conducting online placement test. Internet access for all students is available with 100 Mbps to 1Gbps speed.

The campus is now equipped with latest controller based wireless network with more than 200 wireless access point across the academic area and hostels for smooth internet access. The wireless network allows users to access network resources from nearest any convenient location within the campus.

Infrastructure upgraded during 2016-17.

- Existing core/edge switches have been replaced with newer technology supporting 10G Network Backbone.
- A Data Centre has been established for Central Research Lab under Technical Education Quality improvement programme Phase II (TEQIP II)   in Computer Centre.
- CCTV network has also been established in the institute this year. All entrances of the institute and other areas where security is needed have been covered under CCTV supervision. Central control room is functional for the cameras where security personnel can keep a close eye on the activities in the institute.
- A 40 KVA UPS with high availability is now placed in the Centre to cater to power needs of the Computer Centre.

4.6 Amount spent on maintenance in lakhs:

  i) ICT

  ii) Campus Infrastructure and facilities

  iii) Equipments

  iv) Others

                      Total:

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

Contribution of IQAC in enhancing awareness about Student Support Services is as follows:
- The institute facilitates Orientation sessions for the students to acquaint them with the Vision and Mission of the University and the facilities available in the campus.
- Various cells (Placement Cell & Counselling Cell) were established for the students by the institute.

5.2 Efforts made by the institution for tracking the progression

Efforts made by the institution for tracking the progression is attached as Annexure - 1

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2135	539	211	Nil

(b) No. of students outside the state

326

(c) No. of international students

39

Men

No	%
1647	77

Women

No	%
488	23

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1380	257	42	--	24	1703	1603	301	49	--	28	1981

Demand ratio   Dropout %

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- Students routinely interact with faculty for informal discussions & problem solving. A formal student support mechanism has been initiated. .

No. of students beneficiaries | Nil |

5.5 No. of students qualified in these examinations

NET | -- | SET/SLET | -- | GATE | 214 | CAT | -- |

IAS/IPS etc | -- | State PSC | -- | UPSC | -- | Others | -- |

5.6 Details of student counselling and career guidance

> 1. Individual Counselling
> 2. Group Counselling
> 3. Testing & guidance
> 4. Psychotherapy ,

No. of students benefitted | All |

5.7 Details of campus placement

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
135	395	251	|Nil

5.8 Details of gender sensitization programmes

| NIL |

5.9 Students Activities

5.9.1   No. of students participated in Sports, Games and other events

State/ University level | 197 | National level | 01 | International level | Nil |

No. of students participated in cultural events

State/ University level ☐   National level ☐   International level ☐

5.9.2   No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level | 48 | National level | Nil | International level | Nil |

Cultural: State/ University level | Nil | National level | Nil | International level | Nil |

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	446	Rs. 2,23,00,000/-
Financial support from government	116	Rs. 37,60,000/-
Financial support from other sources	--	--
Number of students who received International/ National recognitions	--	--

5.11   Student organised / initiatives

Fairs   : State/ University level [ ]   National level | √ | International level [ ]

Exhibition: State/ University level [ ]   National level [ ]   International level [ ]

5.12   No. of social initiatives undertaken by the students | 11 Nos |

5.13 Major grievances of students (if any) redressed: _____NIL_____

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

<div>

VISION

"**To become a centre of excellence in technical education and research and to occupy a place amongst the most eminent institutions of the nation**".

MISSION

- To build across the institute a culture of excellence in teaching and learning with needed performance and accountability from all support activities.
- To enhance the institute standing as the institute of choice for students across the country; and to augment the presence of international students to at least ten percent of student body.
- To cultivate a field in which new ideas, research and scholarship flourish leading to emergence of creators, innovators, leaders, and entrepreneurs.
- To design the education through a continuous process so that the students qualifying from the institute have the top rating in placement.
- To achieve excellence in application-oriented research in selected areas of technology to contribute to the development of the region and the nation.
- To promote co-and extra-curricular activities for over-all personality development of the students.
- To develop responsible citizenship through awareness and acceptance of ethical values.
- To build a family of alumni and friends to create a network of allegiance and support for the institute.

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6.2 Does the Institution has a management Information System

Yes

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

The Senate of the institute is the highest academic body, which has complete freedom to change the curriculum at short intervals. The Senate has two external members (typically one from academic institution of excellence such as IITs and the other from the industry). The Senate is guided by the Institute Academic Programme Committee and the Department/Center Academic Programme Committees. These committees have student representatives as members. Both, top-down and bottom-up approaches are prevalent in designing and development of the curricula. The committees take frequent inputs from the various stakeholders (i.e., industry, alumni and students) while proposing any changes in the curricula. The last UG curricula revision happened in 2014-15, with enormous flexibility given to the departments and students to form baskets of electives in different disciplines. The courses such as communication skills, technical communication, ethics and self awareness, engineering analysis and design, computer programming, full semester internship, industrial tours, as common core for all programmes, and suitable baskets of electives of basic sciences, engineering sciences, humanities and management for all programmes, are the hallmark of this curricula. The concepts of minor and specializations and Honors programmes have also been introduced. The next cycle of revision of UG curriculum is also due now.

The departments also have freedom to change the content of the courses or add new courses in the baskets of electives, whenever they so desire, with the approval of the Senate or the Chairman of the Senate.

Further, the revision in PG curriculum is also in the pipeline.

6.3.2 Teaching and Learning

The faculty members have been trained to use technology in their teaching learning processes. They use the e-content available on different online platforms. For the last three years, many of the QEEE courses are being taught to the students, wherein local faculty is also involved. From the last semester, the institute has started a few MOOCS courses on SWAYAM platform, a local faculty is assigned who also registers for the course, and these courses are taught in a blended mode. Facilities are also created where in faculty can generate their own digital content.

6.3.3   Examination and Evaluation

The evaluation of the students is a continuous process and is based on their performance in mid-semester examination, end semester examination, quizzes/short tests, tutorials, assignments, laboratory work (if any), make-up examinations (if applicable), etc. In general, there is no choice in test/examination papers.

The Instructor-in-charge, assisted by the team of tutors and other instructors, is responsible for making the question paper, conducting the examination in his/her course, getting the answer scripts evaluated by the team of tutors, and awarding the grades. The end term question paper for UG examinations are moderated by department committee under Chairmanship of Head of the department. The grades for all courses are moderated as per institute guidelines by duly constituted moderation committee. The grades are forwarded through the Head of the Department who ensures that proper standards have been followed.

The complete transparency is maintained in evaluation system. The graded scripts of quizzes, tests, and mid-semester examinations are returned to the students within a reasonable time. The answer scripts of the final examinations are shown to the students after marking. All instructors notify a time for such access within three days of the examination. A student may point out errors or omissions, if any, in marking in writing on the cover sheet of the answer script. The instructor takes these into account before submission of grades.

The final grades earned by all students registered in a course are submitted by the Instructor-in-charge to the Academic Section through the Head of the Department within the prescribed time limit.

6.3.4   Research and Development

Punjab Engineering College (Deemed to be University) imparts quality and socially relevant education in engineering at undergraduate, postgraduate and doctorate levels. Faculty and students of its department are involved in research activities of interest to society and industry. Our curricula derive its strength from the design and project contents.

We strive to strengthen further our research programs as well our relationship with industry by supporting our faculty and students to work on sponsored research and industrial projects and consultancy. We encourage collaborative programs, which enhance interaction of our faculty and students with industry.

Sponsored projects, In-house projects, consultancy and collaborations with industry and academia are important modes through which our faculty and students contribute towards knowledge and technology. Our institute provides financial assistance to its faculty and students to present the outcome of their research projects in national and international conferences in India and abroad. Our faculty engaged in helping society offers short term courses as well training programs for industry, institutes and organizations. Office of Dean Sponsored Research & Industrial Consultancy provides administrative and managerial support for the operation of Sponsored research, In-house Projects, Consultancy and other activities of the institute. It promotes and manages Institute-Industry interaction and provides helping hand in establishing collaborative programmes of interest to Institute and Industry. Faculty and students are encouraged to take up hands on industrial problems as consultancy projects to enrich their problem solving skills.

The institute website provides information on its resources and activities. It is an opportune moment to invite potential Industries and other academic and research organizations to explore their relation with Punjab Engineering College (Deemed to be University), Chandigarh.

6.3.5 Library, ICT and physical infrastructure / instrumentation

The institute campus extends over an area of 146 acres of land situated close to the beautiful Shivalik Hills. The campus is divided into various functional zones like hostels, main institute building, administrative block, residential complex for faculty and staff and a shopping centre. In addition to lecture theatres, tutorial rooms and drawing halls, the institute has auditorium, library, computer centre, reading rooms, workshops and well equipped laboratories. The institute has spacious playgrounds, tennis courts, squash courts, swimming pool, gymnasium and a student centre. Banking facilities with nationally connected ATMs along with a computerized post office are available. Adequate hostel facilities for both boys and girls are available on the institute campus.

Library:

Central Library, PEC university of Technology is a well-organized library housed in an area of about 27000 sq. feet. It is organized into various sections, which are manned by professionally qualified staff. Having centrally air-conditioned facility with 350 seats, library works with open access system to maximize the use of library resources. All students, faculty, staff and alumni are entitled to make use of the library facilities provided they enroll themselves as members of the library. Library Reading Halls remain open from Monday to Friday from 9 am to 8 pm and on Saturday from 9 am to 5 pm. The working hours of Circulation Section and Reference Section are from Monday to Friday from 9 am to 5 pm. During Exam Days (Mid-term & End-semester), the library remains open on all seven days of the week from 9 am to 12 midnight.

Central Library has a collection of **1,15,452** volumes (as on 31.3.17), comprising of books, standards, theses, bound volume of journals pertaining to physical sciences, engineering and technology, computer and information technology, social sciences and management. The library has an active collection of 30,267 books under Book Bank Scheme to support SC/ST as well as General categories students. The reference collection in the library is maintained separately and is categorized into Atlases, Bibliographies, Handbooks, Directories, Dictionaries, Encyclopedias and Technical data.

To keep its readers abreast with the latest developments in Engineering & Technology, the library provide access to over **2800 full-text e-journals** in addition to e-standards, bibliographic databases etc. from a number of publishers and aggregators through **E-ShodhSindhu** (outcome of merging of three consortia initiatives, namely UGC-INFONET Digital Library Consortium, NLIST and INDEST-AICTE Consortium). Full text e-journals are accessible from various commercial publishers/aggregators/learning societies such as IEL (IEEE), ASME, ASCE, Science Direct, Springer Link, Emerald Engg. Collection, ACM, Taylor and Francis, APS and AIP. All these resources are available through campus LAN. Library has also acquired more than **2400 e-books** from EBSCO, Pearson, Springer, Wiley, CRC and McGraw-Hill to let users experience the advantages such as text searching, hyperlinks, embedded hypermedia etc. over the conventional printed books. The library hosts a comprehensive Home Page as a part of the institute's web site. The Library Home page, http://pec.ac.in/library/Library.asp, serves as an integrated interface for all computer and web-based services available from the library.

Central Library is also having Multimedia Resource Centre (MMRC) to make use of most popular mode of education i.e. Electronic Media with the help of ICT Technology. Library has a collection of 1064 CDs, 143 Floppies, 25 DVDs and 581 video cassettes on various disciplines of engineering and technology. The library has also procured and installed NPTEL video and web courses on LAN of the institute for the benefit of the students.

activities in the Library including Acquisition, Cataloguing, Circulation and Serials Control are fully computerized using LibSys Software Package. The Online Public Access Catalogue (OPAC) of the Library is operational and accessible on the intranet at http://172.31.50.30:8380/opac/. It can be accessed online to search more than 97,910 bibliographic records, available in the Library database through a web-based search interface or with a window client of the LibSys on intranet. The editing and updating activities are done on the regular basis. Recently, in 2014, Library implemented **RFID enabled Automation and Surveillance** Project under TEQIP-II. Every document in the Library is being tagged with RFID tags and users are being issued smart cards. One self-service station is installed to facilitate the users with self issue/return of documents. Two security gates, i.e. theft detection pedestals, have been installed at the entrance and exit gates of the library to check the movement of unissued books outside the library.

6.3.6 Human Resource Management

Ratio of teaching to non-teaching staff (institution-wise)
1:1.98 (Permanent)
1:2.71(Permanent/Temporary /Contractual)

6.3.7 Faculty and Staff recruitment

Applications invited through advertisement in leading newspapers and notification on PEC website. The Selection process is given as under:

a) A minimum score as stipulated in the Academic Performance Indicator (API) based Performance Based Appraisal System (PBAS), set out in UGC Regulation in Tables I to IX of Appendix III.
b) The Selection Committee for the post of Assistant professor, Associate Professor and Professor in the University shall have the following composition.
1. The Director shall be the Chairman of the Selection Committee.
2. Three experts in the concerned subject nominated by the Director out of the panel of names approved by the relevant statutory body of the University.
3. Nominee of the Chandigarh Administration.
4. Head of the concerned Department
5. One representative of SC Category, if any of the candidates representing these categories is the applicant and if any of the above members of the selection committee do not belong to that category.
6. One representative of OBC Category if any of the candidates representing these categories is the applicant and if any of the above members of the selection committee do not belong to that category.
Note: At least four members, including two outside subject experts shall constitute the quorum.

Recruitment of Staff is done as per applicable rules.

6.3.8 Industry Interaction / Collaboration

Sr. No.	MoU with Industry/ Goverment/Institute	MoU Signing Date	MoU Validity (in years)
1.	Academic Cooperation Association (ACA)	01.06.2017	6 Months
2.	DRONAH (Development & Research Organisation for Nature, Arts and Hertiage)	27.02.2017	5 Years
3.	M/s Bergen Solar Power & Energy Ltd.	12.12.2016	3 years
4.	Bergen Institute on Research for Developments of Skills (BIRDS) & Solar Flame Corporation	12.12.2016	3 years
5.	FUTURE HITECH BATTERIES LTD., SAS Nagar, Punjab	12.12.2016	3 years
6.	GAIA Smart Cities Solutions Pvt. Ltd.	14.11.2016	2 years
7.	TATA Power Delhi Distribution Ltd. (TPDDL)	9.11.2016	5 years
8.	Space Applications Centre, ISRO	15.9.2016	2 years
9.	Snow & Avalanche Study Establishment (SASE), DRDO, Chd.	11.8.2016	5 years

6.3.9 Admission of Students

- The entire application process for admission is online. Admission to the B.Tech. programmes is based on merit list of JEE Mains conducted on an all India basis.
- The admission to M.Tech programmes is regulated through Centralized Counseling of M.Tech. with valid GATE score.
- Admission to the Ph.D programme is made on the basis of entrance test at institute level/ GATE examination and/or performance in the personal interview.

6.4 Welfare schemes for

Teaching	NIL
Non teaching	NIL
Students	NIL

6.5 Total corpus fund generated

760.15 Lacs

6.6 Whether annual financial audit has been done   Yes √   No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	--	No	--
Administrative	No	--	No	--

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes   Yes √   No ☐

For PG Programmes   Yes √   No ☐

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

Periodic meeting are conducted by the institute to look into grievances / suggestions.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not Applicable

6.11 Activities and support from the Alumni Association

PECOSA (Punjab Engineering College Old Students Association) holds two main functions in the institute namely, Global Alumni Meet in the month of February every year and Jaspal Bhatti Cultural Evening during September every year. On both these occasions , PECOSA gives away several awards and scholarships to different students of the institute.

6.12 Activities and support from the Parent – Teacher Association

NIL

6.13 Development programmes for support staff

A staff training programme on Information Security Management Systems (ISMS) Auditor/ Lead Auditor Training Course was attended by the 90 staff member & 2 faculty members at National Institute of Industrial Engineering (NITIE), Mumbai on 16th to 20th September 2016.

6.14 Initiatives taken by the institution to make the campus eco-friendly

NIL

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

7.3 Give two Best Practices of the institution *(please see the format in the NAAC Self-study Manuals)*

Provide the details in annexure (annexure need to be numbered as i, ii,iii)

7.4 Contribution to environmental awareness / protection

Nil

7.5 Whether environmental audit was conducted?   Yes [ ]   No [√]

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

8. **Plans of institution for next year**

Name _____   *Name* _____

_____   _____

Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

_____***_____

Annexure I

Abbreviations:

CAS   -   Career Advanced Scheme

CAT   -   Common Admission Test

CBCS   -   Choice Based Credit System

CE   -   Centre for Excellence

COP   -   Career Oriented Programme

CPE   -   College with Potential for Excellence

DPE   -   Department with Potential for Excellence

GATE   -   Graduate Aptitude Test

NET   -   National Eligibility Test

PEI   -   Physical Education Institution

SAP   -   Special Assistance Programme

SF   -   Self Financing

SLET   -   State Level Eligibility Test

TEI   -   Teacher Education Institution

UPE   -   University with Potential Excellence

UPSC   -   Union Public Service Commission

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