

Internal Quality Assurance Cell (IQAC)
Submission of
Annual Quality Assurance Report (AQAR)
(2015-16)



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*

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

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:	DrBalwinder Singh Surjan
Mobile:	9815295005

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:

(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)

-NA-

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	1 st Cycle	-Not Applicable-			
2	2 nd Cycle				
3	3 rd Cycle				
4	4 th Cycle				

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

01.08.2010

1.8 AQAR for the year (for example 2010-11)

2015-16

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

Punjab Engineering College
(Deemed to be University)

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

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-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="8"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="1"/>
2.3 No. of students	<input type="text" value="--"/>
2.4 No. of Management representatives	<input type="text" value="1"/>
2.5 No. of Alumni	<input type="text" value="--"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="--"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="--"/>
2.8 No. of other External Experts	<input type="text" value="3"/>
2.9 Total No. of members	<input type="text" value="13"/>
2.10 No. of IQAC meetings held :-	Nil

2.11 No. of meetings with various stakeholders:	No.	<input type="text" value="NIL"/>	Faculty	<input type="text" value="--"/>
Non-Teaching Staff		<input type="text" value="--"/>	Alumni	<input type="text" value="--"/>
Students		<input type="text" value="--"/>	Others	<input type="text" value="--"/>

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. International National State Institution Level

(ii) Themes

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
<ul style="list-style-type: none"> • Appropriate action to be taken for engagement of all the scheduled classes as per the academic calendar • Random monitoring of classes to verify the engagement of classes • To develop a mechanism for complete transparency of student evaluation • Declaration of results within a stipulated period of time • Updation of academic programs • Complete transparency of student's attendance • Up gradation of classrooms • Renovation of faculty rooms • Uploading of up to date information on PEC web server • Implementation of tutor scheme 	<p>All academic/co curricular activities carried out as per Academic Calendar</p>

* *Attach the Academic Calendar of the year as "Annexure. -1".*

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

(Copy of the Scheme attached as Annexure-II)

(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, UG scheme revised 2014, need based changes were during 2016-17

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

Entrepreneurship and Incubator Cell (EIC) opens on 8th June 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	01	13	10
Presented papers	65	44	--
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.

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 others 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, test, 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	1754	2.40%	---	--	--	97.60%
PG	531	10.08%	--	--	--	89.91%
Ph.D	15	--	--	--	--	100%

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

1. IQAC ensure time table uploading on website by all the department.
2. The record of number of classes held and scheduled by each faculty member is submitted to IQAC twice in a semester in prescribed Performa.
3. The performs are verified and compiled as per the time table.
4. Mass cut and class reschedule register from all the department are maintained by IQAC.
5. Random monitoring and checking of classes done during the semester.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	Nil
UGC – Faculty Improvement Programme	Nil
HRD programmes	Nil
Orientation programmes	Nil
Faculty exchange programme	Nil
Staff training conducted by the university	Nil
Staff training conducted by other institutions	01
Summer / Winter schools, Workshops, etc.	02
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	49	39	Nil	27
Technical Staff	99	67	Nil	20

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	Nil	7	4	22
Outlay in Rs. Lakhs	Nil	156.81	1161.57	1636.57

Details are attached as “Annexure-III”.

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	2	Nil	Nil	2
Outlay in Rs. Lakhs	0.60	Nil	Nil	0.60

3.4 Details on research publications

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

Brief details on research publications are attached as “Annexure-III”.

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

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				
TBRL	2014-15	Chandigarh	161.5Lacs	58.82Lacs
Minor Projects				
Nil	Nil	Nil	Nil	Nil

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP CAS DST-FIST
 DPE DBT Scheme/funds

3.9 For colleges
 Autonomy CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

Level	International	National	State	University	College
Number	01	15	03	19	Nil
Sponsoring agencies	--	--	--	--	--

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

3.13 No. of collaborations International National Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs:

From Funding agency From Management of University/College
 Total

Type of Patent	Number
----------------	--------

3.16 No. of patents received this year

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
and students registered under them

66

208

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

02

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

JRF 04

SRF 02

Project Fellows

Any other

06

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 4

National level 15

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

05

NSS

06

Any other

Nil

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

Details of extension activities and Institutional Social Responsibility are attached as “**Annexure-IV**”.

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 (\geq 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)

S. No	Department	Lab development	New Equipments/Software purchased	Status
1.	Applied Science Deptt.	Chemistry Lab	Dielectric Constant Meter	Working
2.	Computer Science Deptt.	Embedded OS & Microprocessor Lab	Cloud Aneka	Working
3.	Mechanical Engg.	Manufacturing Lab.	i) Electrochemical Spark Machine	Working

	Deptt.	Advance Manufacturing Lab	i) Micro-Tool-EDM ii) Fast Drill EDM		Working	
4.	Materials and Metallurgical Engg. Deptt.	Computer Lab	Lenovo Computer Corei5&i7	Quantity 10	Working	
			Canon printer mf 226dn	Quantity 01	Working	
		Extractive Metallurgy Lab	Diesets	Quantity 06	Working	
			Programmable Furnace	Quantity 01	Working	
8.	Production Engg. Deptt.	Human Engineering Lab.	3-D Scanning System with high end Laptop With Training		Working	
		Modern manufacturing Lab.	Load cell with data logger for Draw-bench and extrusion set-up		Working	
9.	Civil Engg. Deptt.	Upgradation of PG Highway Lab. Under TEQIP-II	Nuclear Moisture Density Gauge		Working	
			Bump Integrator as per CRR I Design		Working	
10	CMH	Digital Language lab	31 Computers,31 Headphones and four Software		By August 2017	Furniture awaited
		Room No. 305,New Academic Block	LCD Projector,TV,Speakers and Headphones		√	

Computer Centre

Software purchases	Cyberoam Licence Renewal for three years Microsoft Campus Agreement GIS Remote Sensing Software Trend Micro Antivirus Software.
Equipments	High end Server, Rack and other Accessories Network Switches, 25 Nos.(Edge Switches) Wireless Network

	Established LAN in 100 Cluster Lab,CC Established LAN in Language Lab, Applied Sciences. Established LAN in Admin Block Desktop Computer i7(50 Nos.)
Band width	32Mbps and 1Gbps link from NKN

Library

Level of Library Automation	High	
	Hard copy	Online
Journals magazines purchased	0	2323

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

Internet access	-	Yes
Badwidth available	-	32 MBPS and 1 GbPS,NKN
Hotspot in College	-	27
Server	-	13
List of Software	-	Ansys, Erdas, Email, Metlab, Trand Micro, English edge,Drupal
Training Programme conducted by the Department	Title of the Training Programme	Period
Microsoft Programme	FDP Microsoft Sakham(Faculty Development Programme)	25 th to 29 th July 2015

4.6 Amount spent on maintenance in lakhs:

i) ICT	317000
ii) Campus Infrastructure and facilities	441.79
iii) Equipments	400.00
iv) Others	--
Total:	317841.79

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 are as follows:

- The IQAC facilitates Orientation sessions for the students to acquaint them with the Vision and Mission of the University and the facilities available in the campus.
- IQAC ensures the students' involvement in intercollegiate events .
- IQAC ensures students participation in research work.
- Various cells (Placement Cell & Counselling Cell) under the contribution of IQAC were established for the students

5.2 Efforts made by the institution for tracking the progression

Efforts made by the institution for tracking the progression is attached as "Annexure – V"

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
1857	560	221	Nil

(b) No. of students outside the state

(c) No. of international students

Men	No	%	Women	No	%
	1647	77		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	1293	244	37	--	29	1754

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 for common problems
3. Testing & guidance
4. Psychotherapy
5. Expert talks on personality development.

No. of students benefitted

All

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
115	263	260	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 48 National level 64 International level Nil

No. of students participated in cultural events

State/ University level Nil National level Nil International level Nil

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	391	Rs. 2,12,70,000/-
Financial support from government	92	--
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

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

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.

6.2 Does the Institution has a management Information System

Yes, PEC Information System.

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 concept of minor and major specializations has 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 curriculum has been framed such that a student is exposed to more of technology courses at the very beginning of the academic programme. The exposure to workshop practice has also increased. To provide sufficient challenge to the brighter students, an Honours programme has been offered. In this programme the students are encouraged to overreach and undertake extra learning units, assignments, projects, etc., over and above what is prescribed for the regular course. The grade in the Honours course depends upon the student's performance in the regular material prescribed for the course as well as in the extra material covered. In addition to the regular courses a course on communication skills is offered after the college hours. In today's information-oriented global economy, university graduates must be savvy users of information technology. That is why, the institute's programmes use information technology as an effective tool to deliver content. The laboratory courses are carefully designed so that a student learns that there is an experimental methodology, that it is field-independent, reliable, and can be followed to make decisions at each stage i.e. from formulating the objectives to analyzing the results. The purpose of the laboratory experiments is to teach experimental methods to obtain design information rather than to demonstrate physical phenomena. Our students need to develop in an all-round manner and must understand the human and the social contexts within which all professional activities take place. For this reason the programmes should have about 5% content related to humanities and social sciences.

Besides above an innovative Academic web server facility has been in-house developed and implemented where the course materials, assignments etc. can be uploaded by the faculty for the reference of the students. Full semester internship in industry/research institutes during the sixth semester of BE programme gives the student good exposure to actual work environment. New courses like Mechatronics, Engineering Design, Introduction to Manufacturing etc. form an integral part of the BE curriculum. The evaluation process is completely transparent and continuous. Evaluated answer-books are available to the students within 96 hours of the end of the examination.

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 shall be 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 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.

6.3.4 Research and Development

The faculty is encouraged to undertake In-house Research Projects by providing them internal funding for creation/enhancement of facility, which is useful to research students (M.Tech & PhD) as well as to the needs of the industry. A budget of approx. Rs. 100 lacs is provided for this purpose annually.

Research Groups involving 3-4 faculty members, have been formed in the institute. The institute provides In-house funds for carrying out research work on a relevant emerging areas and for organizing national or regional level events. Such research group may expand to a new Master's Programme and may eventually become an Inter disciplinary Centre/Department

6.3.5 Library, ICT and physical infrastructure / instrumentation

Engineering works related to buildings, public health and electrical installation were taken up by the engineering department with the help of UT Administration.

6.3.6 Human Resource Management

1. There is emphasis on team building and involving all in taking decisions and implementing them.
2. A course on Human Values and Professional Ethics and Environment Science have been made mandatory for all the students during first year of their graduation.

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.

6.3.8 Industry Interaction / Collaboration

Sr. No.	MoU with Industry/ Government/Institute	MoU Signing Date	MoU Validity (in years)
1.	CDAC, Pune	15.10.2015	5 Years
2.	Terminal Ballistics Research Laboratory (TBRL), Chandigarh	06.01.2016	5 Years
3.	Indian Air Force	16.05.2016	

6.3.9 Admission of Students

- The entire application process for admission is online. Admissions to the B.Tech. programmes are 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 declare results within 30 days?

For UG Programmes Yes No

For PG Programmes Yes No

6.9 What efforts are made by the University/ Autonomous for nation 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

6.12 Activities and support from the Parent – Teacher Association

NIL

6.13 Development programmes for support staff

S. No.	No. of Programmes conducted for Non-teaching staff	Area of Programme	Facilities for improvement
1		MNIT, Jaipur	<ul style="list-style-type: none"> • Noting and drafting (written communication) • Pay Fixation • Pension rules/ leave rules/ LTC rules • Purchase procedures (GFR) • Loans and advances • Roster

	02		<ul style="list-style-type: none"> • RTI Act • Inventory/ Store Management • Communication Skills (Oral) • Inter personal skills • Time Management • Stress Management • Motivating self and others • Personality Development • Working in teams • Leadership and decision making • Values and attitudes for higher performance
2		NITTTR, Chandigarh	<ul style="list-style-type: none"> • Communication Skills (Oral) • Inter personal skills • Time Management • Stress Management • Motivating self and others • Personality Development • Working in teams • Leadership and decision making • Values and attitudes for higher performance • Knowledge of Computer (Word / Excel etc.)

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.

1. Women Grievance cell.
2. Feedback mechanism
3. Use of ICT in teaching.
4. Organizing seminar or talk on emerging topic.
5. Preparing newsletter for the department activities.

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

As per the plans of Higher Education Institute mentioned in previous AQAR, Institute has made sincere efforts to improve overall performance of the institute.

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

1. Remedial Classes to slow learner.
2. Preparing newsletter for the department activities

7.4 Contribution to environmental awareness / protection

NSS volunteers participated in the Vanmahotsva, celebrated at PEC Campus on 8th August, 2015 and planted around 200 plant saplings at different places around the campus.

7.5 Whether environmental audit was conducted? Yes No

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

1. 45th Annual Convocation (17 October 2015)

Dr. Sahasrabunde, Chairman,(AICTE) was the Chief Guest., Chandigarh, declared the convocation opened.

2. PECFEST 2015

The fest started with a 'Run for Education' marathon, which was flagged off by Mr. Sandeep Hans(PCS), Director for higher education, Chandigarh(U.T.), to support the social endeavour of the NGO-Teach for India'. Cultural and technical events.

8. Plans of institution for next year

- To sustain and improve the overall performance of the institute on National and International level.
- To adopt best practices at the institute for teaching and research.
- To improve communication skills, entrepreneurship skills and innovative skills etc. by way of encouraging the students to perform and to take part in national and international events.
- Take initiatives to fill vacant faculty posts.
- Take initiatives to rationalize the staff strength by increasing at certain levels and outsourcing at other levels.
- Increase sponsored research and consulting projects.
- To increase the number of students being admitted to PhD programme.
- To encourage faculty members to publish more number of research papers in refereed journals and national and international conferences.
- Encourage students to undergo overseas exchange programme.
- Organize interaction with industry and alumni through annual meets in each department.
- Organize short courses and workshops/seminars/conferences by various departments.
- Undertake city initiatives every year and offer solutions for urban problems.
- Undertake department level or NSS level initiatives or affirmative action for helping the underprivileged through skill development /knowledge development.
- To upgrade the infrastructural facilities in the various departments of the institute and ensure optimum utilization of them.

Name _____

Name _____

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

_____*_*_*_____

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
