# *ANNUAL QUALITY ASSURANCE REPORT*

# 2015-2016

## National Assessment and Accreditation Council

### Bangalore-560 072

Submitted by



Guru Nanak Dev Engineering College

Ludhiana

# 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.

## Part – A

## 1. Details of the Institution

1.1 Name of the Institution

> Guru Nanak Dev Engineering College

1.2 Address Line 1

> Gill Park

Address Line 2

> Gill Road

City/Town

> Ludhiana

State

> Punjab

Pin Code

> 141006

Institution e-mail address

> director@gndec.ac.in

Contact Nos.

> 9855400448

Name of the Head of the Institution:

> Dr.Manohar Singh Saini

Tel. No. with STD Code:

> 0161-2502700

Mobile:

> 99144-25025

Name of the IQAC Co-ordinator:

Dr. Harwinder Singh

Mobile:

9815188044

IQAC e-mail address:

harwin75@gndec.ac.in

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

PBCOGN19927

**1.4 NAAC Executive Committee No. & Date:**

EC(SC)/06/A&A/102

1.5 Website address:

www.gndec.ac.in

Web-link of the AQAR:

www.gndec.ac.in/AQAR2015-16.doc

1.6 Accreditation Details

| Sl. No. | Cycle | Grade | CGPA | Year of Accreditation | Validity Period |
|---------|-------|-------|------|----------------------|-----------------|
| 1 | 1st Cycle | A | 3.10 | 2015 | April 30,2020 |

1.7 Date of Establishment of IQAC:

31/12/2015

**1.8 AQAR for the year**

2015-16

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC

**NOT APPLICABLE**

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 ☐

    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)         Computer Applications

1.12 Name of the Affiliating University *(for the Colleges)*    IKG Punjab Technical University, Jalandhar

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

| | | | |
|---|---|---|---|
| Autonomy by State/Central Govt. / University | UGC | | |
| University with Potential for Excellence | NA | UGC-CPE | NA |
| DST Star Scheme | NA | UGC-CE | NA |
| UGC-Special Assistance Programme | NA | DST-FIST | YES |
| UGC-Innovative PG programmes | NA | Any other (*Specify*) | TEQIP II by MHRD, N.Delhi |
| UGC-COP Programmes | NA | | |

## 2. IQAC Composition and Activities

| | |
|---|---|
| 2.1 No. of Teachers | 7 |
| 2.2 No. of Administrative/Technical staff | 1 |
| 2.3 No. of students | 0 |
| 2.4 No. of Management representatives | 1 |
| 2.5 No. of Alumni | 2 |
| 2. 6  No. of any other stakeholder and    Community representatives | 2 |
| 2.7 No. of Employers/ Industrialists | 1 |
| 2.8  No. of other External Experts | 1 |
| 2.9 Total No. of members | 15 |
| 2.10 No. of IQAC meetings held | 1 |

2.11 No. of meetings with various stakeholders:     No.1         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. [ 1 ]   International [   ]   National [ 1 ]   State [   ]   Institution Level [   ]

(ii) Themes [ Quality Initiatives in Technical Educational Institutions ]

2.14 Significant Activities and contributions made by IQAC

> Evaluation of teaching staff through student feedback.
> Improvement of infrastructure
> Encouraged various departments for organising seminar/ workshop/ training programs etc.
> Enhancing the knowledge of faculty and students with Guest lectures by inviting eminent academicians

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 |
|---|---|
| To upgrade modern methods of teaching and learning | <ul><li>LCD Projectors are being used in classes for explaining the students the aspects practical.</li><li>Demonstration of computer practical's has been done through LCD projector.</li><li>To sustain and improve the overall performance of the institute on National and International level.</li><li>Adopted best possible practices at the institute for teaching and research.</li><li>Improved communication skills through Finishing Schools</li><li>Students opted for entrepreneurship after getting training from Science and Technology Entrepreneurship's Park, GNDEC, Ludhiana</li><li>Faculty vacant posts were filled.</li><li>11 Faculty promoted under CAS Scheme.</li><li>Increased sponsored research and consulting projects.</li></ul> |

| | • 100 Faculty members published quality research papers in referred journals. |
| | • Encouraged students to undergo overseas exchange programme. Few students attended a semester training in abroad |
| | • 15 Short courses and workshops/ seminars/ conferences by various departments were organised. |
| | • The infrastructural facilities in the various departments of the institute and ensure optimum utilization of them. |

*\* Attach the Academic Calendar of the year as Annexure.  Refer Annexure-A*

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

Management | √ |    Syndicate | |    Any other body | |

Provide the details of the action taken

AQAR (till date)  was placed and approved vide MC Resolution No.  S 147.1  dated 28.3.2016.

# 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 | 03 | 0 | 0 | 0 |
| PG | 13 | 0 | 0 | 0 |
| UG | 07 | 0 | 0 | 0 |
| Others | 02 | 0 | 0 | 0 |
| Total | 25 | 0 | 0 | 0 |

| | | | | |
|---|---|---|---|---|
| Interdisciplinary | 0 | 0 | 0 | 0 |
| Innovative | 0 | 0 | 0 | 0 |

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

| Pattern | Number of programmes |
|---|---|
| Semester | UG-7, PG(FT)-10,PG(PT)-5 |
| Trimester | NIL |
| Annual | NIL |

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

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

*Please provide an analysis of the feedback in the Annexure*

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

> Yes, Industrial Training, Departmental Elective, Open Elective, Project Work Major and Minor,   Core Subjects, Communication, Human Values Professional Ethics (HVPE).

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

> NOT APPLICABLE

## Criterion – II

## 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent/regular faculty

| Total | Asst. Professors | Associate Professors | Professors | Others |
|-------|------------------|----------------------|------------|--------|
| 217 | 176 | 18 | 23 | 0 |

2.2 No. of permanent/regular faculty with Ph.D.

40

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 |
| 32 | 15 | - | - | - | - | - | - | 32 | 15 |

**\*During the period in question, 9 Associate Professors have been promoted as Professors and two Assistant Professors as Associate Professors under CAS.**

2.4 No. of Guest and Visiting faculty and Temporary faculty

0

2.5 Faculty participation in conferences and symposia:

| No. of Faculty | International level | National level | State level |
|----------------|--------------------|-----------------|-------------|
| Attended | 32 | 13 | 5 |
| Presented papers | 32 | 13 | 5 |
| Resource Persons | - | 34 | 16 |

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

> ➢ Additions of multiple choice questions in question papers
> ➢ Special arrangement of classes on Aptitude and Soft skills
> ➢ Students Feedback system, Alumni Feedback, Employer feedback, Graduate Feedback have been made online.

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

90

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

Double Valuation as well as online multiple choice system, Bar coding

2.9 No. of faculty members involved in curriculum
restructuring/revision/syllabus development

| 48 |

as member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students

| 85% |

2.11 Course/Programme wise Distribution of pass percentage:

| Title of the Programme | Total no. of students appeared | Division | | | | |
|---|---|---|---|---|---|---|
| | | Distinction % | I % | II % | III % | Pass % |
| B.Tech. Elect. Engg. | 112 | 22.3 | 41 | 1 | - | 64.2 |
| B.Tech. CSE | 192 | 39.06 | 46.35 | - | - | 85.42 |
| B.Tech. Mech.Engg. | 227 | 32 | 48 | - | - | 80 |
| B.Tech. Civil Engg. | 228 | 24.0 | 48.0 | 0.5 | - | 72.00 |
| B.Tech. Production Engg. | 57 | 29.82 | 50.88 | - | - | 80.70 |
| B.Tech. IT | 113 | 31.85 | 50.44 | - | - | 82.30 |
| B.Tech. ECE | 114 | 40.35 | 45.61 | - | - | 85.96 |
| MBA | 52 | 13.46 | 59.61 | 7.69 | - | 80.77 |
| MCA | 68 | 82.35 | 14.70 | - | - | 97.05 |

**The figures depicted above are for the academic year 2015-16 (Pass-out in May 2016) only**

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

- Monitors and evaluates the Teaching and learning processes by way of conducting the periodical meetings.
- Review of Evaluation system: HODs present performance before Head of Institution about their respective department
- COE give presentation with contents about the conduct, evaluation and result.

2.13 Initiatives undertaken towards faculty development

| Faculty / Staff Development Programmes | Number of faculty benefitted |
|---|---|
| Refresher courses | 18 |
| UGC – Faculty Improvement Programme | - |
| HRD programmes | 01 |
| Orientation programmes | 01 |
| Faculty exchange programme | - |
| Staff training conducted by the university | 12 |
| Staff training conducted by other institutions | 14 |
| Summer / Winter schools, Workshops, etc. | 115 |
| Others | 27 |

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 | 103 | - | - | 97 |
| Technical Staff | 26 | - | - | 15 |

# Criterion – III

## 3. Research, Consultancy and Extension

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

> ➤ Each department has a Departmental research committee, which convene periodical meetings to review synopsis presented by Masters' students.
> ➤ Encouraging the faculty to pursue higher education. For which they are reimbursed Tuition fee etc.
> ➤ Encouraging faculty to publish quality research papers in referred Journals and conferences etc.
> ➤ Categorization of the projects undertaken by the final year students into three categories: Industry based, Research based and Automation based.
> ➤ QEEE (Quality Enhancement in Engineering Education) Lectures delivered in the institute.
> ➤ ICT based research oriented course on "Open Source Technology" in collaboration with NITTTR, Chandigarh.

3.2     Details regarding major projects

|                   | Completed | Ongoing | Sanctioned | Submitted |
|-------------------|-----------|---------|------------|-----------|
| Number            | 2         | 8       | 6          | 3         |
| Outlay in Rs. Lakhs | 50.34   | 263.06  | 220.86     | 130.00    |

3.3     Details regarding minor projects

|                   | Completed | Ongoing | Sanctioned | Submitted |
|-------------------|-----------|---------|------------|-----------|
| Number            | 1         | 2       | 3          | 3         |
| Outlay in Rs. Lakhs | 0.6     | 0.55    | 16         | 1.5       |

3.4     Details on research publications

|                          | International | National | Others |
|--------------------------|--------------|----------|--------|
| Peer Review Journals     | 108          | 18       | -      |
| Non-Peer Review Journals | 1            | -        | -      |
| e-Journals               | 8            | -        | -      |
| Conference proceedings   | 57           | 12       | 0      |

3.5 Details on Impact factor of publications:

EE Range  | 0.5-3.8 |  Average | 1.780 |  h-index | 10 |  Nos. in SCOPUS | 60 |

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 (Rs. in Lakhs) | Received (Rs. in Lakhs) |
|---|---|---|---|---|
| Major projects | 3/2 | UGC,DST,AICTE,CSIR,BRNS | 229.06 | 178.84 |
| Minor Projects | 1.5/06 | IEI,SGPC | 16.60 | 16.60 |
| Interdisciplinary Projects | 0 | 0 | 0 | 0 |
| Industry sponsored | 0 | 0 | 0 | 0 |
| Projects sponsored by the University/ College | 06 | MHRD, IIT Powai & Nex Robotics | Sanctioned grant yet to be received | 0 |
| Students research projects *(other than compulsory by the University)* | 06 | IE(I),Kolkatta | 3.00 | 3.00 |
| Any other(Specify) | 2 | 0 | 22.50 | 22.50 |
| Total | - | - | 271.16 | 220.94 |

3.7 No. of books published    i) With ISBN No.   `7`    Chapters in Edited Books   `7`

       ii) Without ISBN No.   `6`

3.8 No. of University Departments receiving funds from

UGC-SAP `0`    CAS `0`    DST-FIST `√`

DPE `0`         DBT Scheme/funds `0`

3.9 For colleges    Autonomy `√`    CPE `0`    DBT Star Scheme `0`

            INSPIRE `√`    CE `0`    Any Other (specify) `TEQIP II funding by MHRD,New Delhi`

3.10 Revenue generated through consultancy    `14407436`

3.11 No. of conferences organized by the Institution

| Level | International | National | State | University | College |
|---|---|---|---|---|---|
| Number | 1 | 1 | 0 | 0 | 0 |
| Sponsoring agencies | 0 | DST,TEQIP,IGI | 0 | 0 | 0 |

3.12 No. of faculty served as experts, chairpersons or resource persons   `36`

3.13 No. of collaborations    International `2`    National `9`    Any other `2`

3.14 No. of linkages created during this year   `7`

3.15 Total budget for research for current year in lakhs:

From Funding agency | 96 Lakh | From Management of University/College | 50 Lakh

Total | 146 Lakh

3.16 No. of patents received this year

| Type of Patent | | Number |
|---|---|---|
| National | Applied | 4 |
| | Granted | 0 |
| International | Applied | 0 |
| | Granted | 0 |
| Commercialised | Applied | 0 |
| | Granted | 0 |

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 |
|---|---|---|---|---|---|---|
| 8 | 1 | 3 | 4 | 0 | 0 | 0 |

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

28

91

3.19 No. of Ph.D. awarded by faculty from the Institution | 13

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

JRF | 1 | SRF | 2 | Project Fellows | | · Any other | NIL

3.21 No. of students Participated in NSS events:

University level | 247 | State level |

National level | | International level | 0

3.22 No.  of students participated in NCC events:

University level | 2 | State level | 10

National level | 1 | International level | 0

3.23 No.  of Awards won in NSS:

University level | 1 | State level |

National level | | International level |

3.24 No.  of Awards won in NCC:

University level | | State level | 15

National level | | International level |

3.25 No. of Extension activities organized

| | | | | | |
|---|---|---|---|---|---|
| University forum | 6 | College forum | 15 | | |
| NCC | 10 | NSS | 5 | Any other | 35 |

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

❖ Organising Medical Check-up camps and Blood Donation Campus
❖ Clean and Green Program in the campus
❖ Organised Experts lectures on health issues
❖ Organised religious program in College Gurudwara Sahib
❖ NCC Day in November 2015 was celebrated
❖ Combined Annual Training Camp for NCC Cadets of State of ten days from 13th June to 22nd June, 2016

# 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 | 67 Acres | 0 | Internal Resources | 67 Acres |
| Class rooms | 61 | 4 | Do | 65 |
| Laboratories | 62 | 2 | Do | 64 |
| Seminar Halls | 5 | 1 | Do | 6 |
| No. of important equipments purchased ($\geq$ 1-0 lakh) during the current year. | 20 | 18 | AICTE,DST, | 38 |
| Value of the equipment purchased during the year (Rs. in Lakhs) | - | 20 | - | 20 |
| Others | - | Open Air Theatre with capacity of 5000 | Internal Resources | 1 |
| | 4 | New Hostel 7 Storey (Boys) | AICTE grants | 1 |
| | - | FM Radio Station for Community Development | Internal Resources | 1 |

4.2 Computerization of administration and library

> ➤ All the computers in the office have internet facility
> ➤ Automation of library administration is under the process
> ➤ The students and faculty can also take photocopies of the books and journals from Central Library.
> ➤ The Library is Wi-Fi.

4.3  Library services:

| | Existing | | Newly added | | Total | |
|---|---|---|---|---|---|---|
| | No. | Value | No. | Value | No. | Value |
| Text Books | 38639 | 7727800 | 100 | 48058 | 38739 | 7775858 |
| Books | 47767 | 14330100 | 567 | 2722160 | 48334 | 17052260 |
| Reference Books | 4025 | 1207500 | 12 | 3500 | 4037 | 1211000 |
| e-Books | 518 | 523398 | NIL | NIL | 518 | 523398 |
| Journals | 140 | 368000 | 135 | 353593 | 135 | 353593 |
| e-Journals | 19987 | 2157358 | NIL | NIL | 19987 | 3228521 |
| Digital Database | 3 | 3092500 | Yearly Subscription | 3311500 | 3 | 6404000 |
| CD & Video | 1210 | NIL | 12 | NIL | 1222 | NIL |
| Others (specify) | NIL | NIL | NIL | NIL | NIL | NIL |

4.4 Technology up gradation (overall)

| | Total Computers | Computer Labs | Internet | Browsing Centres | Computer Centres | Office | Depart-ments | Others |
|---|---|---|---|---|---|---|---|---|
| Existing | 1150 | 29 | 50 Mbps | Every where in the campus | 1 | Yes | Yes | Hostels |
| Added | 50 | 2 | 950 Mbps | Do | 1 | Upgrading | Upgrading | Upgrading |
| Total | 1200 | 31 | 1 Gbps | Everywhere | 1 | Upgradation in process | Upgradation in process | Upgradation in process |

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

> ➢ Internet Connectivity increased to 1 Gbps.
> ➢ Students are encouraged to use internet for their project work.
> ➢ We have ERP Software in the Institution for e-Governance of students, faculty and staff.

4.6  Amount spent on maintenance in lakhs :

i)  ICT | 2.50

ii)  Campus Infrastructure and facilities | 50.00

iii) Equipments | 3.00

iv) Others | 16.54

Total : | 72.04

# Criterion – V

## 5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

---

**Canteen**

Clean Hygienic cafeteria 4 nos. is available for both students and faculty providing nutritious food for supporting studying in shift system

**Stationery Shop**

One Stationery Shop is available in campus. The basic requirements like stationeries, mobile chargers, books are kept for sales in college premises.

**Others**

> ➤ Printed information available in college calendar/college website
> ➤ Information also communicated to students regularly through HOD/Advisors
> ➤ Providing necessary information to hostellers through Hand book.
> ➤ Publishing College magazine every year to highlight students' skills in the area of short stories, writing, poetry, columns on important current events etc.

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5.2 Efforts made by the institution for tracking the progression

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> ➤ In all the departments, advisory classes are held periodically to keep close touch in between students and Advisors, in which students can share their views, problems with their Advisor. Advisors can take steps to redress their grievances. Weak students are identified in advisory and special classes are arranged to help them academically.
> ➤ Regular check of attendance and academic excellence.
> ➤ The institution has ERP Software for e-governance
> ➤ Suggestions and feedback are the index to understand the progression of students.

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5.3 (a) Total Number of students

| UG | PG | Ph. D. | Others |
|------|-----|--------|--------|
| 3836 | 329 | 1 | 112* |

*Pursuing their Ph.D with Supervisors of GNDEC

| Last Year | | | | | | This Year | | | | | |
|---------|-----|-----|-----|------------------------|-------|---------|-----|-----|-----|--------------------------------|-------|
| General | SC | ST | OBC | Physically Challenged | Total | General | SC | ST | OBC | Physically Challenged (Others) | Total |
| 685 | 82 | - | 21 | 27 | 815 | 692 | 68 | - | 23 | 23 | 806 |

Men

| No | % |
|------|-------|
| 3225 | 77.43 |

| No | % |
|-----|-------|
| 940 | 22.56 |

(b) No. of students outside the state [ 471 ]

(c) No. of international students

| | No | % | | | | No | % |
|---|---|---|---|---|---|---|---|
| Men | 0 | 0 | Women | | | 0 | 0 |

Demand ratio 100%       Dropout 6.42%

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

> Special classes/Expert lectures are arranged from time to time in which experts on different topics are invited from renowned institutions, organisations, companies to enhance the communication skill, general knowledge, how to crack competitive examinations for students, enabling them to meet the requirement of their curricula/competitive examinations.

No. of students beneficiaries [ 125 ]

5.5 No. of students qualified in these examinations

NET [ 0 ]   SET/SLET [ 0 ]   GATE [ 95 ]   CAT [ 8 ]

IAS/IPS etc [ 0 ]   State PSC [ 0 ]   UPSC [ 0 ]   Others [ 30 ]

5.6 Details of student counselling and career guidance

> ➢ Student counselling and career guidance of each and every student is done.

No. of students benefitted

[ 3836 ]

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 |
| 21 | 700 | 471 | 103 |

5.8 Details of gender sensitization programmes

> Guest lecture are arranged with high profiled women from various professions and walk of life on issues faced by women at home, institutions of higher learning and workplaces.

## 5.9 Students Activities

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

State/ University level  | 229 |  National level  | 30 |  International level  | 5 |

No. of students participated in cultural events

State/ University level  | 145 |  National level  | 1 |  International level  | |

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

Sports : State/ University level  | 119 |  National level  | 1 |  International level  | 1 |

Cultural: State/ University level  | 6 |  National level  | 1 |  International level  | 0 |

## 5.10 Scholarships and Financial Support

| | Number of students | Amount |
|---|---|---|
| Financial support from institution | 56 | 33,60,000 |
| Financial support from government | 713 | 3,51,57,730 |
| Financial support from other sources | 2 | 13200 |
| Number of students who received International/ National recognitions | 2 | Tuition Fee refunded for one semester |

  5.11    Student organised / initiatives

Fairs    : State/ University level  | 2 |  National level  | 0 |  International level  | 0 |

Exhibition: State/ University level  | 2 |  National level  | 0 |  International level  | 0 |

  5.12    No. of social initiatives undertaken by the students  | 29 |

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**
Realisation of glimpses of a Golden India in the real (rural) India which lives and abounds in its villages. GNDEC will excel nationally and distinguish itself as a recognised pre-eminent leader to serve this 70% brotherhood through its socio-economic upliftment by exposure of the have-nots to Engineering and Technology thereby grooming them as technically competent and intellectually vital graduates through practically focused quality learning experiences, and thus assuring productive careers for them.

**Mission**
- Upliftment of Rural Students through technical education
- Respond to local societal needs by developing selected "targeted research projects"
- Quality training programs in need based modern technology
- To maintain state-of-the-art infrastructure in laboratories
- To promote culture of self-employment
- To impart non-formal education to unemployed youth
- To inculcate moral, ethical, spiritual values in education at all levels

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

For Curriculum Development, each department has its Board of Studies, which comprises of industrialists, subject experts, and faculty.

### 6.3.2 Teaching and Learning

> - Modern teaching methods like LCD projectors and PPT methods have been implemented.
> - Students are exposed to submit their assignments, projectors etc.
> - Students are encouraged to participate in group discussions as a mean of enhancing knowledge.
> - Learning is encouraged by organising quiz etc.
> - Full transparency in teaching evaluation process.
> - Industrial Training consisting of 6 weeks and one semester is part of curricula

### 6.3.3 Examination and Evaluation

> - Continuous internal assessment system. Three sessional examinations are conducted in a semester. Then End Semester takes place.
> - Review of Results Deptt. wise to suggest Remedial coaching to improve results.
> - Periodical review of examination system
> - Display of Final Answer sheets to students
> - Uploading of provisional result in individual login of students as well as Redressal mechanism for students results

### 6.3.4 Research and Development

> - Efforts are made to create research environment to engage faculty in research and mobilization of research grants.
> - Ph.D programme being offered under QIP in Civil, Electrical and Mechanical Branches.
> - Faculty is free to apply for projects from various funding agencies like AICTE, DST and UGC etc.
> - Staff is encouraged to participate in Seminar, FDP, STTP, Workshops to update their knowledge with latest developments.

### 6.3.5 Library, ICT and physical infrastructure / instrumentation

> - To convey to information to concerned, various means like internet, Wi-Fi, display board are used.
> - Automation of library is under process.
> - New books are added every year.
> - Administrative procedure is computerised.

### 6.3.6 Human Resource Management

> - Staff and students are facilitated to organise and participate in social and academic activities of college
> - Five faculty members interacted with outside the country for research training and encouraging international students to come in India for their higher studies

### 6.3.7 Faculty and Staff recruitment

> - The appointments of faculty and staff is strictly as per AICTE/State Govt. norms regarding qualifications and experience.
> - Various positions are filled time to time.
> - Necessary supporting staff is recruited as per need.

### 6.3.8 Industry Interaction / Collaboration

7

### 6.3.9 Admission of Students

The admissions are made centralised by IKG Punjab Technical University on the merit basis of JEE.

6.4 Welfare schemes for

| Teaching | As per AICTE norms |
|---|---|
| Non teaching | As per State Govt. norms |
| Students | As per Govt. Norms |

6.5 Total corpus fund generated    7.5 Crores

6.6 Whether annual financial audit has been done    Yes  √    No  ☐

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

| Audit Type | External | | Internal | |
|---|---|---|---|---|
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | University, NAAC,NBA | Yes | Institute's Committee |
| Administrative | Yes | University, NAAC | Yes | Nankana Sahib Education Trust |

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 College for Examination Reforms?

- Bar coding is in place.
- Evaluation of system is done periodical.
- Provisional result is conveyed to students through their respective login ID.
- Display of answer sheets
- Remedial mechanism available for redressal student's grievance related to their end semester examination answer sheets.

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

The University is encouraging its affiliating College to get autonomy from UGC for effective working in limited scope as compare to large peripheral.

6.11 Activities and support from the Alumni Association

- Alumni Association meet is organised every year in addition to celebration of Golden and Silver Jubilees (Batch wise)
- It is extending technical help to students.
- Members of BOG of College, Academic Council, Board of Studies
- Financial aid for R&D, Scholarships etc

6.12 Activities and support from the Parent – Teacher Association

- The parents are extending financial cooperation in research etc. Last year a new Research award with title B.S.Pabla Award has been introduced by the Alumni to encourage UG/PG/Ph.D researchers.
- Extend full cooperation in conduct of training, expert lectures, placement, social awareness etc.
- Sponsored books for Central Library

6.13 Development programmes for support staff

Supporting staff are encouraged to go for training takes place at various places for updation.

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

- ❖ Tree Plantation, E-waste as per Govt. policy, discourage of polythene bags
- ❖ Solar system is in place
- ❖ Water Harvesting is in process.

# 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.

> ➢ Day of National and International importance are celebrated
> ➢ CCTV cameras have been installed within and around the campus for security purposes
> ➢ Educational tours
> ➢ Examination Reforms

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

Based upon the plan, following are the achievements:-

❖ Major /Minor projects to the tune of Rs. 2.5 Crores have been received.
❖ Faculty published 205 quality research papers in National/International Journals and Conferences
❖ Faculty generated consultancy worth Rs. 1.5 Crore
❖ Equipments worth Rs. 72.04 Lakh were purchased
❖ About 80 students secured various awards and recognitions
❖ Various activities 10 in numbers like STTP, Workshops, Conferences, Seminars were organised at Institutional level.
❖ Financial support worth Rs. 3.5 Crores was received from various funding agencies in the form of scholarships.

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

> ➢ Two way visibility of attendance.
> ➢ Inclusion of student in evaluation

7.4 Contribution to environmental awareness / protection

❖ Environmental Awareness Programme are organised for students as well as faculty from time to time.
❖ Separate cell i.e. Ground & Gardening exists for protection of environment and keep the trees alive and green and to feed them with manure.
❖ E-waste is followed as per Govt. policy.
❖ Solar system is in place in the form of street lights etc.
❖ Dustbins have been kept at all prominent places to keep environment eco-friendly.
❖ Water harvesting system is in process.
❖ No vehicles is allowed to enter in academic area.

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

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

**Strength**

- Locational advantage since located in industrial hub of Punjab.
- **70% seats are reserved for underprivileged (Rural) section of the society**
- **All seven UG courses accredited through NBA under TIER-1 Washington Accord. The institution is NAAC 'A' grade and TCS accredited.**
- **Conferment of autonomous status from UGC.**
- Only Govt. Aided College of Punjab running 15 PG programmes in engineering.
- MoU signed with international Universities by different departments.
- **Only government aided engineering college** of Punjab running successfully part time post graduate courses for field engineers/working teachers since 1980
- Apart from central library every department has its own departmental library
- Apart from central computer centre every department has a separate computational lab
- EDUSAT facility
- All faculty members are provided with Laptop, computer, internet connectivity at individual office.
- Grants received from AICTE /DST and other agencies against research project/Seminar/travel
- Internet connectivity at faculty residences and hostels also
- An independent Testing and Consultancy cell with an annual turnover of around one crore
- Availability of power back up and Wi-Fi facility to the whole college including hostel
- Among first six institutes of the country where STEP was started and among few institutions in the country where self sustaining STEP is running successfully
- Excellent sports facility & excellent performance in Sport activities under PTU.
- Registered Alumni Association with many branches existing around the globe and an alumni home in the campus
- Surveys conducted by different National magazines like Outlook, CSR, India Today etc. repeatedly placed the college among top ranking engineering colleges in India

## Weakness

- Input of low merit students at the entry level due to mission of the college (70% seats reserved for rural students)
- Needs Refurbishment of washrooms and replacement of Electrical fittings and appliances
- Limited specific Laboratories for PG Programme
- Needs Separate Faculty Cadre for PG Courses
- PG courses not accredited
- Needs New titles in print as well as digital form in departmental and central library
- Lack of Industry- Institute interaction in a purposeful manner.
- Inadequate mechanism of industrial exposure for faculty and staff which can update the latest technical knowledge and skill being used by the industry

## Opportunities

- Opportunities for integrated courses due to demand and Locational advantage of the campus
- Ludhiana being the industrial hub for medium and small scale industry, opportunities for starting short term and long term Industry specific courses for industrial personnel
- Opportunities of developing need based appropriate technologies for specific small and medium scale industry of the region
- Opportunities for collaboration with foreign universities for dual degree in upcoming technologies to meet the global challenges
- Opportunities of establishing new centre of excellence with collaboration of established foreign universities and research lab/National Institution & National Research Lab.
- By encouraging in-house research and collaborating with leading national institutes/Research lab it is possible to enhance publication and patent in each department.

## Threat

- Escalation of cost of education prohibiting the underprivileged section (rural students) of the society to opt for the technical education
- Merit of incoming students is getting affected due to opening of many new engineering colleges in the region.
- Bright students not opting teaching as profession thus making difficult in replacing the retired teacher with an equally intelligent new entrant, thus declining the supply of quality faculty

## 8. Plans of institution for next year

> - To encourage faculty to present papers in National and International Journals/Conferences.
> - To encourage faculty to apply for new projects.
> - To encourage students to participate in sports, cultural and co-curricular activities, which is essential for their overall personality.
> - Industrial tours have been made compulsory for each students from current academic year.
> - Improve transition rate of students

Name Dr.Harwinder Singh

Signature of the Coordinator, IQAC

Name Dr.Manohar Singh Saini

Signature of the Chairperson, IQAC

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**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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## ANNEXURE-A (ACADEMIC CALENDARS)

| | Even Semester | |
|---|---|---|
| **Sr.No.** | **Description** | **Period** |
| 1 | Session | 4$^{th}$ January, 2016 to 27$^{th}$ April, 2016 |
| 2 | First Mid Semester Examination | 8$^{th}$ February, 2016 to 12$^{th}$ February, 2016 |
| 3 | Second Mid Semester Examination | 17$^{th}$ March, 2016 to 22$^{nd}$ March, 2016 |
| 4 | Third Mid Semester Examination | 25$^{th}$ April, 2016 to 27$^{th}$ April, 2016 |
| 5 | Preparatory Holidays | 28$^{th}$ April, 2016 to 2$^{nd}$ May, 2016 |
| 6 | End Semester Examination (Regular) | 3$^{rd}$ May, 2016 to 20$^{th}$ May, 2016 |
| 7 | *End Semester Practical Examination | 21$^{st}$ May, 2016 to 25$^{th}$ May, 2016 |
| 8 | Institutional Training/Workshop Training | 26$^{th}$ May, 2016 to 12$^{th}$ July, 2016 |
| 9 | Vacations for Faculty | |

**Note :**
1. * Practical examinations for all the branches will start immediately after the end of regular examinations.
2. Number of days falling short of 90 should be compensated by making Saturday/holidays working.

| | Odd Semester | |
|---|---|---|
| **Sr.No.** | **Description** | **Period** |
| 1 | Session | 18$^{th}$ July, 2016 to 25$^{th}$ November, 2016 |
| 2 | First Mid Semester Examination | 05$^{th}$ September, 2016 to 09$^{th}$ September, 2016 |
| 3 | Second Mid Semester Examination | 18$^{th}$ October, 2016 to 24$^{th}$ October, 2016 |
| 4 | Third Mid Semester Examination | 23$^{rd}$ November, 2016 to 25$^{th}$ November, 2016 |
| 5 | Preparatory Holidays | 26$^{th}$ November, 2016 to 28$^{th}$ November, 2016 |
| 6 | End Semester Examination | 29$^{th}$ November, 2016 to 17$^{th}$ December, 2016 |
| 7 | *End Semester Practical Examination | 19$^{th}$ December, 2016 to 23$^{rd}$ December, 2016 |
| 8 | Winter Vacations | 24$^{th}$ December, 2016 to 31$^{st}$ December, 2016 |

Total Working days (including leave/Saturday & Sunday)     = 130 days
Actual Working days (including test)     = 086 days
Actual Teaching days     = 073 days

**Note:**
Number of days falling short of 90 should be compensated by making Saturday/holidays working.

**GNDEC, LUDHIANA**