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

(Revised in October 2013)



# राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

# 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

# I. Details of the Institution

1. Details of the institution	I <b>I</b>	
1.1 Name of the Institution	GURU NANAK INSTITUTE OF TECHNOLOGY	
1.2 Address Line 1	157/F, NILGUNJ ROAD, PANIHATI	
Address Line 2	Sodepur	
City/Town	Kolkata	
State	West Bengal	
Pin Code	700114	
Institution e-mail address	principal_gnit@jisgroup.org	
Contact Nos.	9432012683/ (033) 25233900	
Name of the Head of the Institution	Prof (Dr) Santanu Kumar Sen	Super months
Tel. No. with STD Code:	(033) 25233900	Principal Technology
Mobile:	9432012683	SODEPUR SODEPUR

Name of the IQAC Co-ordinator:  Prof (Dr) Arun Kumar Mondol									
Mobile:		[	98361733	365					
IQAC e-mail	address:		iqac gnit@jisgroup.org						
This EC n	·	<b>mittee No.</b> &A/143 da. e in the righ	& Date: ted 3-5-200 nt corner- b	EC(SC)/04/A					
1.5 Website a	nddress:		http://gni	it.ac.in/					
W	eb-link of th	ne AQAR:	1	gnit.ac.in/wp- :/uploads/2021/0	06/AQAR-GNIT	Г-2016-			
1.6 Accredita	tion Details					_			
Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period				
1	1 <sup>st</sup> Cycle	В	2.54	2014	2019				
2	2 <sup>nd</sup> Cycle								
3	3 <sup>rd</sup> Cycle								
4	4 <sup>th</sup> Cycle					1			
1.7 Date of Es	-	f IOAC: DI	)/MM/VV	ı	28/02/2	2014			

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

2016-17

1.9 Details of the previous year's AQA Accreditation by NAAC ((for example		
i. AQAR		(DD/MM/YYYY)4
ii. AQAR		
iii. AQAR		·
iv. AQAR		
1.10 Institutional Status		
University	State Central	Deemed Private
Affiliated College	Yes No	
Constituent College	Yes No	
Autonomous college of UGC	Yes V No	
Regulatory Agency approved Institution	itution Yes	No
(eg. AICTE, BCI, MCI, PCI, NCI)		
Type of Institution Co-educatio	on V Men	Women
Urban	√ Rural	Tribal
Financial Status Grant-in-a	aid UGC 2(f)	UGC 12B
	d + Self Financing	Totally Self-financing
1.11 Type of Faculty/Programme		
Arts Science	Commerce La	aw PEI (Phys Edu)
TEI (Edu) Engineering	Health Science	e Management
Others (Specify)		
1.12 Name of the Affiliating University	ty (for the Colleges)	MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY

Autonomy by State/Central Govt. / University	V		
University with Potential for Excellence		UGC-CPE	
DST Star Scheme		UGC-CE	
UGC-Special Assistance Programme		DST-FIST	APPLIED
UGC-Innovative PG programmes		Any other (Specify)	
UGC-COP Programmes			
2. IQAC Composition and Activit	<u>ies</u>		
2.1 No. of Teachers	7		
2.2 No. of Administrative/Technical staff	3		
2.3 No. of students	2		
2.4 No. of Management representatives	1		
2.5 No. of Alumni	2		
2. 6 No. of any other stakeholder and			
community representatives	1		
2.7 No. of Employers/ Industrialists	2		
		<u> </u>	
2.8 No. of other External Experts	1		
2.9 Total No. of members	19		
2.10 No. of IQAC meetings held 02 During 20	016-17		
	2	2	

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

2.11 No. of meetings with various stakeholders: No. Faculty	
Non-Teaching Staff Students 2 Alumni 1 Others 1	
2.12 Has IQAC received any funding from UGC during the year? Yes No V	
2.13 Seminars and Conferences (only quality related)	
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC	
Total Nos. 02 International National State Institution Level V	_
(ii) Themes  1. Frontiers of Modern Techniques for Quality Education Delivery 2. Role of Stakeholders in Designing Quality Education Systems	
2.14 Significant Activities and contributions made by IQAC	
The Internal Quality Assurance Cell of the college has been trying to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution and to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.	
Development of Smart Classroom Facility	
LAN connectivity encompassing the entire college with higher bandwidth	
Sensitizing quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders by teaching and non-teaching members, general meetings, notices, college Website and through Alumni meet, parent teacher meeting.	
Enriching the Library through establishment of tie ups and subscription	
Successful launching of Students Chapter of Institute of Engineer (I) Becoming Life Institutional Member of ISTE Establishment of NPTEL Nodal Centre Conduction of ACM ICPC 2016 as the Regional Centre Conduction of Smart India Hackathon 2017 as the only State Nodal Centre	

# 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
1.Developing Smart Classrooms  2. Implementation of LAN initiated. 3. Ensuring quality in education through Outcome Based Learning under Autonomous Structure: Board of Studies (BOS) with Head of the Concerned Department as the Chairman and all whole-time teachers of the Department as members. Two external experts nominated by the Academic Council, one representative from industry/corporate sector and one University nominee are also the members of the BOS. Regular meeting of the BOS is held and after getting autonomous status initiatives have been taken to restructure and redesign the curriculum of the respective UG and PG courses. Accordingly, intradepartmental, interdepartmental meeting (in specific cases) has been organized to clarify objective and outcome of the respective courses, followed by meeting of BOS and Academic council. New course curriculum has been	1. Four number of Smart Class rooms are created and made operative. 2. The Bandwidth have been augmented to higher speed of connectivity 3. Due to this modification of syllabus and curriculum, students are taking more interest in learning and attending classes. The attendance report of the last year is a proof of it. The parents of the students have also reported improvement in the students during the year. The faculty members are also more enthusiastic on offering deliberations on their own designed curriculum and syllabus.  Academic Calendar is available in Annexure.
prepared keeping into account the existing curriculum of the reputed Institute, outcome of the	
course concerned and learners need about the course. A learner centric approach	
has been introduced in the revised curriculum.	
Consequently the syllabus of each subject has been Prepared. This revised curriculum has become operative	
from the session 2015-16 1st year	

	students.	
	* Attach the Academic Calendar of the ye	ar as Annexure.
2.15 V	Whether the AQAR was placed in statutory	body Yes V No
	Management Syndicate	Any other body
	Provide the details of the action taken	
(AQA Body	e draft of Academic Quality Assurance Report QAR) of 2016-2017 were placed to the Governing dy approved the AQAR of 2016-2017 and recommebsite.	Body on 17-12-2016. After due consideration, the Governing nended that the same be uploaded on the college

### Criterion - I

# I. 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	-	-	-	-
PG	3	-	3	-
UG	6	-	6	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	2	-	2	-
Certificate	-	-	-	-
Others	-	-	-	-
Total	14	-	14	-
Interdisciplinary	-	-	-	-
Innovative	-	-	-	-

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

Pattern	Number of programmes
Semester	11
Trimester	-
Annual	-

1.3 Feedback from stakeholders* (On all aspects)	Alumni	٧	Parents	٧	Employers	٧	Students	٧	
Mode of feedback :	Online	٧	Manual	٧	Co-operating	g scho	ools (for PI	EI)	

- 1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.
  - 1. The syllabi are regularly been reviewed and made industry oriented and outcome based as per the requirement of national and international standards.
  - 2. Experts from premier institutes and industry have been incorporated in the BOS.
  - 3. Alumni, employer and other stakeholders feedback is analyzed and incorporated.
  - 4. In recent revision in most of the departmental programmes 10% of the course major underwent revision and rest with minor revision.

<sup>\*</sup>Please provide an analysis of the feedback in the Annexure

- 5. Frequency of BOS meeting in the departments during transitional phase of autonomy is at least once in a semester.
- 1.5 Any new Department/Centre introduced during the year. If yes, give details.
  - 1. The institute has been selected as the NPTEL Nodal Centre during 2016 to felicitate sharing of international level resources.
  - 2. The institute has started Students chapters of ISTE.
  - 3. Six Students Chapters of Institute of Engineers (India) has been formed.
  - 4. Centre for Quality Enhancement in Engineering Education (QEEE) establishment have been initiated.

### Criterion - II

# 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
178	167	04	07	

2.2 No. of permanent faculty with Ph.D.

22

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

As	sst.	Assoc	ciate	Professors		Others		Total	
Profe	essors	Profes	ssors						
R	V	R	V	R	V	R	V	R	V
46	-	-	-	1	-	-	-	-	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

14	04	-
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	20	78	97
Presented papers	93	78	112
Resource Persons	04	12	27

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

### • Skill & Knowledge Enhancement Initiatives

- Collaboration with ISTE has been done to enhance technical knowledge and allied skills.
- The Institute if Engineers (I) through institutional membership and student chapters provides domain specific knowledge and skill
- The institute as NPTEL Nodal Center receives quality resources.
- Mandatory usage of NDL, IEEE for project work.
- The institute is an institutional member of the British Council and resolutions have taken to start "APTIS" module augmentation of communication skill.
- ❖ Department level programmes organized for value additions.
- Industry linkage enhanced and student projects development work is encouraged.

### • Research and Innovation

- The research grant received from external funding agencies under autonomy has increased.
- ❖ Innovations are encouraged to the extent under autonomous Framework.
- The Projects from Regulatory Bodies (like AICTE MODROB-RPS, UGC minor project) as well as
- from other agencies DST, CSIR were granted only under autonomous structure.
- CII innovation Centre has been setup. Number of workable patent are filed and expected to be
- commercialized after patents are granted
- Number of Value addition Centers has been established to boost both the domain knowledge, Skills and encouraging innovation. The Collaborative Learning and Innovation Centre (CLIC) by the Tata Technologies has been
- setup and students are trained with State-of the Art Tools

2.7 Total No. of actual teaching days during this academic ye	2.7	Total No.	of actual	teaching	days	during	this	academic	yea
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195

2.8 Examination/ Evaluation Reforms initiated by

the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

- 1. Fully operational Autonomous Examination Cell under COE has been made functional with separate infrastructure.
- 2. Under autonomy portion of the paper setting and evaluation of scripts is done externally from reputed Universities / Institutions.
- 3. Soft Skill and Technical Skill are introduced as mandatory Zero Credit course in each semester.
- 4. Mandatory scrutiny and review of results
- 5. Results are simultaneously published online
- 6. Class tests and assignments are being taken On-line.
- 7. The process of Continuous Performance Evaluation has been initiated.
- 2.9 No. of faculty members involved in curriculum

restructuring/ revision/ syllabus development

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

2.10 Average percentage of attendance of students

76.3

### 2.11 Course/Programme wise distribution of pass percentage:

### 2012-2016

Title of the		Total no. of		Γ	Division		
Programme	year	students appeared	Distinction %	Ι %	II %	III %	Pass %
EIE	2016	13	0	84.62	15.38	0	100%
EE	2016	71	22.53	77.46	0	0	100%
IT	2016	20	85 %	15 %	0	0	100%
MCA	2016	53	73.58	18.87	7.55	0	100%
FT	2016	26	61.54	34.62	0	0	100%
CSE	2016	87	3.44	56.32	39.88	0.34	100%
ECE	2016	137	26.76	61.12	10.7	1.46	100%

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

### Contribution to the Process:

- 1. IQAC takes necessary feedbacks from stakeholders and external experts and proposes the same for implementation through AC and BOS.
- 2. Strategic planning for finding out the weak points in the prevailing system of Teaching-Learning process, departmental input regarding their weakness to IQAC.
- 3. IQAC assesses the infrastructural requirements and initiates the implantation.
- 4. IQAC conducts visits, audits and recommends changes necessary.
- 5. IQAC monitors Course-coverage reports the same to the Principal wherever a deviation is observed the HOD seeks clarification from the faculty member concerned and also connect Mentor.
- 6. Special remedial class work is planned.
- 7. IQAC ensures transparency in evaluation procedure for both theory and lab exams.
- 8. IQAC ensures that Academic Calendar, Class & Examination Schedules, Syllabus etc are catered to all students in time.
- 9. IQAC sensitize all through college website and Notice Boards the following:
  - a) Statement of Vision and Mission
  - b) Rules and regulations
  - c) Anti Ragging Declarations and college facilities against ragging
  - d) Necessary contact person's name with phone numbers.
  - e) Events schedules

# 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	-
UGC – Faculty Improvement Programme	-
HRD programmes	4
Orientation programmes	2
Faculty exchange programme	-
Staff training conducted by the university	2
Staff training conducted by other institutions	18
Summer / Winter schools, Workshops, etc.	-
Others	6

### 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	21	-	3	-
Technical Staff	26	-	3	-

### **Criterion - III**

# 3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
  - 1. Project proposals submitted to the funding authorities throughout the year with a projected plan along with increase in budget.
  - 2. MOU with reputed Industries undertaken for working on R&D problem.
  - 3. Mini-projects stressed at each of UG level practical course with an objective to nurture the innovative mindset of the students and produce future generation researchers.
  - 4. Interdisciplinary research work promoted at all levels.
  - 5. Motivate young faculty members more on R&D publication in good quality journals.
  - 6. Involve students in the process of publication with marked improvement in number of publications.
  - 7. Organization of Seminar/ workshops emphasized.
  - 8. R&D cell may organize one workshop on issues related to patenting; which will highlight the entire process of patenting R&D achievements and related rules.
  - 9. Motivate all to publish paper in SCI indexed journals.
  - 10. Motivate young faculty members in PhD enrolment.
  - 11. Emphasis on larger participation of faculty members in seminar/conference within the Country.
  - 12. Special emphasis on paper presentation and Invited talk rather than only participation.
  - 13. Motivate more senior faculty members in events related to Management Capacity Enhancement.
  - 14. Motivate middle level faculty members in participating workshops on 'Outcome based system'.
  - 15. The Projects from Regulatory Bodies (like AICTE MODROB-RPS, UGC minor project) were received only under autonomous structure.
  - 16. CII innovation Centre has been setup. Numbers of workable patent are expected to be filed.

### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number				
Outlay in Rs. Lakhs				

### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	16	03	19	16
Outlay in Rs. Lakhs	57.06	13	70.06	57.06

### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	6	12	3
Non-Peer Review Journals	83	60	5
e-Journals	2	3	1
Conference proceedings	4	3	1

Range 0.5- 6.0	Average	1.5 h-	index 47 N	los. in SCOPUS	6
Research funds sanction	ned and re	ceived from	various funding age	ncies, industry a	nd other org
Nature of the Pro	oject	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects		-	-	-	-
Minor Projects		2	UGC	57,000,00.06	47.83
Interdisciplinary Pro	jects	-	-	-	-
Industry sponsored		1	Exicom Tele System Ltd	194500.0	194500.0
Projects sponsored by University/ College	y the	1	19	1000,00.0	1000,00.0
Students research pr (other than compulsory by the U	ojects Iniversity)	-	-	-	-
Any other(Specify)		-	-	-	-
Total		4	19	570294506	29454783
No. of books published	i) With	ISBN No.	1 Chapter	rs in Edited Boo	ks 2
No. of books published No. of University Depa	ii) Witho	out ISBN No		s in Edited Boo	ks 2
No. of University Depa	ii) Witho	out ISBN No		DST-FIST  DBT Scheme	
No. of University Depa	ii) Without rtments re	out ISBN Notice is continued by the state of	s from	DST-FIST	/funds

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	-	-	1	-	1
Sponsoring	-	-	FOSET	-	JIS
agencies					Group

3.12 N	lo. of fa	culty served	as experts, ch	airperso	ons or resourc	e perso	ons 8			
3.13 N	lo. of co	llaborations	I	nternati	onal 1	Natio	nal 3	A	ny other	6
3.14 N	lo. of lin	kages create	ed during this	year	6					
3.15 T	otal buc	lget for resea	arch for curren	nt year i	n lakhs:					
Fro	From Funding agency				Managemen	t of Uı	niversity/	College	10.06	
Tot	al			_ ]						
			-	J						
3.161	No. of pa	atents receiv	ed this year	Type	e of Patent			Numl	oer	
				Nation		Appl Gran				
				Interna	ıtional	Appl Gran	ied			
						Appl				
				Comm	ercialised	Gran				
,		stitute in the Internation	•	Chata	TTuinnaite	D: at	Callaga	٦		
	Total 8	Internation	al National	State 7	University	Dist	College 2			
	0			,			2	_		
wł	no are Pl	culty from the culty from the culty from the cult from the			7					
anc	studem	is registered	under them	L	11					
3.19 N	lo. of Ph	.D. awarded	l by faculty fro	om the I	nstitution		2			
3.20 N	lo. of Re	esearch scho	lars receiving	the Fell	owships (Nev	wly en	rolled + e	xisting o	nes)	
	Į	IRF	SRF		Project Fel	lows	2	Any oth	er	
3.21 N	lo. of stu	idents Partic	cipated in NSS	events:	:					
					University	y level	256	State le	evel	
					National l	level		Interna	tional level	

3.22 No	o. of students participated in NCC events:				
		University level		State level	
		National level		International leve	
3.23 No	o. of Awards won in NSS:				
	1	University level	1	State level	
	I	National level		International level	
3.24 No	o. of Awards won in NCC:				
	1	University level		State level	
	I	National level		International level	
3.25 No	O. of Extension activities organized  University forum 1 College for NCC NSS	um 5 7	Any	other 2	
	Tajor Activities during the year in the sphere consibility	of extension activ	vities and	Institutional Social	
>	The institute runs SPFU of NSS under Univ	-	lucts vari	ous extension acti	vities
>	The institute vigorously numerous Sports participation.	and Cultural to	urnament	ts and encourage :	student
> >	Visit to Old age home and program through to Visit to Orphanage Home	owards communit	y Connect		
>	Visit to School and donate accessories Specia framework	l emphasis on C	lub Activ	ities under autono	mous
>	Different clubs viz. Robotics, Cultural, Cocobtaining Autonomy.	ding clubs, and F	Photograp	ohy Club setup aft	er
>	Corporate Social responsibility (CSR) prog	rams through N	ISS & Cluk	os are a regular pr	actice.

### 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	7 acres		College	-
Class rooms	43		College	-
Laboratories	50		College	-
Seminar Halls	06		College	
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	14	5	College	3,61,582
Value of the equipment purchased during the year (Rs. in Lakhs)				-
Others	-	-		-

### 4.2 Computerization of administration and library

- The library added substantial computerization for proper functioning.
- E-Books repository has been created.
- The AICTE-INDEST Consortium (Since January, 2007), online access facility to IEEE/IEE Electronics Library (IEL Online) The IEEE ASPP provides access to IEEE's core collection of technology journals. With peer-reviewed publications concentrating on theoretical and experimental papers, as well as practical applications in research, design, and specification, ASPP offers valuable research on a variety of topics. which includes: 179 IEEE online society-sponsored journals, transactions, and magazines
- ❖ Conference Proceeding Course Material E-Books E-Journals Faculty Publication Lecture Note
- NPTEL Wireless Communication Online Course Video Lectures IIT Delhi-NPTEL Question Papers
- Tutorials Video Lectures
- Library Automation: The integrated library management software (LibSys) is used for operations. The preparation of database for books, issues of journals (retro-conversion) and membership (or users database) using this software has already being completed.

### 4.3 Library services:

	Existing		Newly	added	Total		
	No.	Value	No.	Value	No.	Value	
Text Books	44700		1652	644594.00	46352		
Reference Books	4525		170	94314.00	4695		
e-Books	1.35 lakhs	11100.00	1.35 Lakhs	9600.00	1.35	9600.00	
					Lakhs		
Journals	17	56524.00	26	76706.00			
e-Journals	11170	639560.00	11170	888557.00	11170	888557.00	
Digital Database							
CD & Video							
Others (specify)	3000		250		3250		

### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart- ments	Others
Existing	592	CC7	Railtel	17	1	17	573	
Added	140		BSNL			2	140	
Total	732					19	713	

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
- 1. workshop on "Cloud computing and Big data analytics" was conducted.
- 2. A workshop was conducted as part of INFOCOM Corporate Pulse and BCCI sponsored Next Generation Employability HR Practise conducted.
- 3. Eminent experts from reputed institutions organised on technological advancement.

i) ICT 60,14,676/
ii) Campus Infrastructure and facilities 2,048,166.09/
iii) Equipments 95,823.07/
iv) Others 336,751.72/-

**Total:** 8,495,417.69/-

### Criterion - V

# 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - 1. A cheap store is available in-house, where books and other education accessories are available at a concessionary price. Students also get a spacious Students' Canteen where food is served at a concessionary price.
  - 2. The college organizes different award functions for motivating and acknowledging their achievements. Scholarship is also provided to achievers and students are also given the opportunity to learn in AIT, Bangkok.
  - 3. IQAC is also instrumental in looking after the Coding Club, The Drama Club, Gymnasium, Sports Activities, Robomentation Club for endorsing the creative and intellectual spirit among students.
  - 4. Through the Incubation Centre we nurture young and evolving minds. Technical and Financial support are provided to the students for innovating engineering models, displayed in i.e.: The Model Competition, Tech. Fest etc. Students are also encouraged to commercialize their innovation by filing for patent. The Coding Club engages and motivates students to build applications and derive complex engineering solutions.
  - 5. Multi platform communication system keeps our students updated, i.e.: Whatsapp, e-mail, Phone Call, Academic Calendar, Departmental Blog, Face book, Mentors, Website etc.
  - 6. Students are encouraged to attend special tutorial sessions on GATE, GRE, MAT, CAT, Civil Service Examinations etc.
  - 7. The IQAC Team ensures maximum participation of students in interactive sessions with the industry experts, distinguished educational representatives from academia and young intelligentsia, i.e.: SMART INDIA HACKATHON, IE(I) Chapter Inauguration, ACM ICPC, BCCI Next Gen Employability Conclave etc.

- 5.2 Efforts made by the institution for tracking the progression
  - 1. Regular Class Test, one-to-one interaction, Remedial classes, ICT interaction, Support over telephone and e-mail (at times) help us to track progress and development.
  - 2. A strong teacher-student/parents/guardians relationship allows flexible communication, catering to professional and emotional need of an individual thereby helping us to identify proper solution and achieving positive and maximum progress.
  - 3. All the students are mentored. Each mentor takes ownership of 30 students annually and exhibits full responsibility (professionally, personally and psychologically) for holistic development of the students.
  - 4. Feedback and Continuous Performance Evaluation helps us map data driven progress.
  - 5. Hard and soft copies of personal Student file maintained.
- 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
423	03	-	426

(b) No. of students outside the state

112

(c) No. of international students

14

	No	%	
Men	284	67	Womer

No	%
139	33

Last Year						Т	his Yea	ar			
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
435	23	9	11	-	478	379	34	7	3	-	423

Demand ratio 150%

Dropout 0%

5.4 Details of student support mechanism for coaching for competitive examinations (If any)							
1. MCQs in Semester Examination and Quiz in unit Test are included in Examination pattern.							
2. Training on Verbal /Quantitative Aptitude/Communication and Soft Skills are facilitated in-house and also by External Experts. Target oriented company specific training is also facilitated in-house for Campus Recruitment.							
3. Domain specific technical training is facilitated by industry experts.							
4. Collaborated with external organization expertise in Soft skill Training for pre-final year students of 2018 passing out Batch to enhance student's preparedness for the campus placements.							
No. of students beneficiaries 423							
5.5 No. of students qualified in these examinations							
NET 1 SET/SLET GATE 45 CAT  IAS/IPS etc UPSC Others 56							
5.6 Details of student counselling and career guidance							
<ul> <li>Multi-tiered Students counselling are done by Admission Cell, Departments, Mentors</li> <li>At Career guidance via Placement Cell</li> </ul>							
No. of students benefitted 400							
5.7 Details of campus placement							
On campus Off Campus							

	ojj cumpus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
129	561	388	56

5.	8	Details	of	gender	sensitization	programmes
$\sim$ .	v	Details	OI.	Schaci	SCHSICIZACION	programmes

- Gender sensitization initiatives starts from admission to equity action plan.
- Institutional Women Cell hosts awareness programme
- The equity factor is evident at objective of the institution in treating everyone equally

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5.9.1	No. of students participated in Sports, Games and other events				
	State/ University level	8 National level 1 International level			
	No. of students participa	ated in cultural events			
	State/ University level	118 National level International level			
5.9.2	No. of medals /awards v	won by students in Sports, Games and other events Sports:			
State/ U	Jniversity level	12 National level 1 International level			
Cultura	al: State/ University level	19 National level International level			

### 5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	24	6642250
Financial support from government	-	-
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
Exhib	ition: State/ University level   National level   International level
5.12	No. of social initiatives undertaken by the students
5.13 N	Major grievances of students (if any) redressed: No major grievances received.
<u>6. C</u>	Sovernance, Leadership and Management
	ate the Vision and Mission of the institution  MISSION
	To meet the demands for skilled manpower on a global basis in the field of engineering, technology and management.
	To inculcate amongst the students and inspire them to take up higher studies and research.
	To impart high quality education by providing the ambience needed for developing requisite skill for excellence in education and industry.
	VISION
	To ignite young minds with creativity and empowering lives.
	To train and educate students at both U.G and P.G levels to produce a galaxy of young professionals of outstanding ability who can become leaders in their profession.
	To pursue new educational initiatives of national significance.
	To develop responsible citizens who can meet the challenges faced by the society
	oes the Institution has a management Information System
	YES. The college has MIS to capture data as following:  1. Accounts and financial Process 2. Store and material requisition 3. HR Module for Employee details 3. Staff attendance through biometric and leave management 4. Library and information science (through libsys)

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

### 6.3.1 Curriculum Development

- 1. Institutional objective is oriented towards departmental programme educational objective (PEO).
- 2. Stakeholders (student, guardian, alumni, employer) feedback must be taken and analysed before framing out the syllabus.
- 3. The BOS of all technological departments must take into account the Institutional Vision, Mission and objective and frame the Curriculum accordingly.
- 4. A balance between professional core, professional elective and free electives with basic science, engineering science and humanities subjects has been attempted.
- 6. Curriculum must be outcome based

### 6.3.2 Teaching and Learning

The Teaching-Learning process is emphasized and enhanced continuously as a priority encompassing the following:

- 1. LCD projectors are used by the teachers, as and when required to incorporate visual based content delivery.
- 2. Teaching delivery through operational Smart Classrooms.
- 3. Text and reference books are available for students and the library is updated every month with new additions. Journals / Magazines; e-Books; e-Journal/Magazines and DVD are available.
- 4. SWAYAM and NPTEL content archive is in process.
- 5. Appointed new teachers and Technical Assistants.
- 6. Online course material has been prepared and made available to students.
- 7. Remedial Classes are arranged regularly for the students in need.
- 8. Regular Soft Skills and Aptitude Test training is provided by in-house and industry experts.

### **6.3.3** Examination and Evaluation

- 1. Conduction of Unit Test, Surprise Test, Mock Interview and Group Discussion.
- 2. Semester Examination under MAKAUT and complete conduction of Examination under Autonomy followed by Script Evaluation by external experts and publication of Result.

### 6.3.4 Research and Development

- 1. Applied for funds from FIST, DST.
- 2. Every faculty member is encouraged to complete Ph.D.
- 3. Encouragement for Filing of Patents.
- 4. Publication in peer reviewed journal with moderate to high impact factor.
- 5. Publication of Books and Book Chapters.
- 6. Increase in Research Papers published by Faculty members and by students in 2016-2017.
- 7. Participation in National/International Seminar and Conference along with publication of proceedings. The faculty members participated in 75 National/International Seminar/Conferences', while the figure for students stands at 43 in 2016-2017.
- 8. Sponsorship and leave arrangement for participating in National/International Seminar and Conference
- 9. Organizing Workshops for students every month.
- 10. UGC Minor Projects approved. Faculties are encouraged to take up more Minor and Major projects.

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

- 1. Fully automated central library with text and reference books; Journals / Magazines; e-Books; e-Journal/Magazines and DVDs. NPTEL and SWAYAM courseware to access offline for students and to complete different online courses including COURSERA and EDX.
- 2. As per requirements Physical Infrastructure including civil infrastructure are maintained and continuously developed under the supervision of management.
- 3. Dedicated 25 mbps connectivity by RAILTEL and 10 mbps by BSNL. The entire campus is Wi-Fi enabled.
- 4. More than 650 computers are operational every day.
- 5. Student records, attendance, internal marks and fee payments are fully computerized.
- 6. Entire official correspondence done through e-mails promoting paperless office.
- 7. Procurement, Remuneration and Leave maintenance are fully computerized.
- 8. State of the art Language Laboratory with LAN and Language Learning Software.

### **6.3.6 Human Resource Management**

- 1. Well planned and structured Human Resource Management Team.
- 2. Transparent and industry compatible recruitment policy and upward mobility.
- 3. Dedicated Team for Faculty Development and Career Counselling.
- 4. Dedicated Research and Development team for Career Advancement.
- 5. Special grooming for students.
- 6. Dedicated team for handling complaint or grievance.
- 7. Special care team for handling employee terminal benefits.
- 8. Ensuring prompt recruitment as and when required.

### **6.3.7** Faculty and Staff recruitment

- 1. Advertisement in leading national dailies and Job Opportunities advertised in official GNIT Website.
- 2. Interview panel consisting of external / internal experts and eminent professors from leading Universities/ Institutes.
- 3. Online submission of Resume.

### **6.3.8** Industry Interaction / Collaboration

- 1. The industry and Academia merged with Microsoft faculty Connection, Infosys Campus Connect and collaboration ISTE, IE etc.
- 2. Recommendations from industry personnel used for framing autonomous curriculum syllabus to ensure industry compatibility.
- 3. Industry representatives in Academic Council and Departmental Board of Studies.
- 4. Industry Visit and training by Industry experts are scheduled regularly.
- 5. Students' skill recognized by Industry Certification. i.e.: Infosys Campus Connect.
- 6. Periodical Invited Talk by Industry experts are arranged for the students. Direct communication between the experts and the students is encouraged.

### 6.3.9 Admission of Students

- 1. Admission is strictly based on the admission policies of WBJEE Board through JEE (main), AIEEE, WBJEE, AMPAI and other statutory provisions.
- 2. Merit based intake is encouraged.
- 6.4 Welfare schemes for

Teaching	Accelerated and quick Increment/ Promotion
Non teaching	Accelerated and quick Increment/ Promotion
Students	Prize for Achievement/ Financial Award

6.5 Total corpus fund generated

INR 1034127.00

6.6 Whether annual financial audit has been done

Yes V

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

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

6.8 Does the University/ Autonomous College declares results within 30 days?
For UG Programmes Yes V No
For PG Programmes Yes V No
6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?
1. Question papers reviewed externally from lead university/ institution, maintaining high standard in evaluations, introducing continuous performance evaluations and declaration of semester result within one month.
2. Answer scripts scrutiny and review by external experts.
3. Result publication fully computerized and accessible by students online.
6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges
1. Providing valuable recommendation / advise through University representative in statutory committees like Board of studies, Academic Council etc.
2. Budget allocation done by the college and approved by the management.
6.11 Activities and support from the Alumni Association
<ol> <li>A separate Alumni portal is being developed with immense facilities. General meeting is conducted in every semester.</li> <li>Seminar by eminent Alumni.</li> <li>Frequent meeting among existing student base and alumni through different formal meetings.</li> </ol>
<ul> <li>4. Domain specific lectures by Alumni regularly.</li> <li>5. Alumni facilitate in employee reference creating scope of internship.</li> <li>6. Alumni participate in Technological Fest and other creative and academic programmes.</li> </ul>

### 6.12 Activities and support from the Parent – Teacher Association

- 1. Parent-Teacher meeting is conducted every semester with more than 95 per cent turnout.
- 2. Correspondence is maintained with the Guardians/Parents.
- 3. Mentorship scheme ensures prompt solution helping students with academic and extra-academic support almost on a 24x7 scale.
- 4. Mentors track development, analyze individual student data and counsel accordingly.
- 5. Telephonic conversation with guardians/parents is a regular practice.
- 6. Feedback is garnered from guardians/parents for better understanding of stakeholders and incorporating solution/s (if required) effectively.

### 6.13 Development programmes for support staff

- 1. kriti Award function recognized the vital contribution of staff members to motivate them.
- 2. Management Development programme conducted.
- 3. Facilities are provided for skill upgradation.

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

- 1. The Campus strictly maintains itself being a plastic and smoking free zone.
- 2. The Campus is lush green with different species of plants including variety of flowers. The NSS Team took up the initiative to plant saplings on a regular basis.
- 3. Adherence to the E-Waste (Management and Handling) Rules, as laid down by Ministry of Environment and Forests. E- Waste materials are disposed.
- 4. The Campus is deployed with solar lighting.
- 5. To save electricity, LED lamps are used and a dedicated team works to tap and prevent any wastage. Air conditioners remain switched off during winter for almost 3 months (sparing strategic requirements).
- 6. Manpower is deployed to prevent any water wastage. Use of water level detector stops spillover.
- 7. Lawns, Playgrounds, Auditorium, Gymnasium and Sports room and all other central facilities are maintained on a regular basis.
- 8. Repellents used every day for controlling mosquito, air/waste borne diseases and other germs encompassing the campus boundary.
- 9. Sizeable Manpower deployed throughout the day to keep the campus clean and dust free.
- 10. The Campus practices almost paperless work culture sparing strategic requirements. All kind of organizational communication is done electronically.

### 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.

All the departments have their own Board of Studies encompassing Under Graduate and Post Graduate courses and all the full-time teachers are the members. Industry and University experts oversee the BOS. BOS is held on a regular basis. Under the aegis of the BOS a massive restructuring of syllabus has been completed ensuring learners' need, industry requirement and professional development by taking cues from institutes/universities of repute and sizeable discussion sessions with experts of industry and academia. Academic Review and Performance Evaluation of students was followed by one to one counseling session.

Online course material has been prepared and made accessible to students encompassing complete syllabus. The model of active, interactive and self-learning is encouraged among students. Students are doing interdisciplinary research work, cross domain projects and developing entrepreneurial skills.

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

beginning of the year	
AGENDA	ACTION TAKEN
Training faculty member from each Department on web developments	The e-Governance workshop and development programme was conducted.
To shift towards Energy Saving	A committee has been formed to monitor activities, massive utilization of LED lights are in place
Water Treatment	Hi end water purifier has been installed
Waste Management	Well planned waste management including e waste have been started.
Organize training programmes in Personality development and soft skills more intensively.	Tie Up with expert bodies, BCL Training programs are integrated QEEE programme initiated
IQAC to be made more effective with the help of software.	IQAC has been reconstructed and efforts are being made make it more effective.
Promote research	Faculty members and students are publishing papers and students are successfully participating at national level projects contests.

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

Mentorship Programme
Promotion of Research and innovations at all levels
Energy Efficient systems
Continuous performance Evaluation

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

- 7.4 Contribution to environmental awareness / protection
  - 1. To increase awareness among the students and local community people, road shows and poster presentation are conducted by students in and outside the campus.
  - 2. Special stress is given to energy conservation, hazardous and e-waste management and sizeable plantation of trees.
  - 3. Usage of LED Lamps and Solar Lighting.
  - 4. Usage of repellents to combat airborne diseases.
  - 5. Saving water and practicing paperless culture.

7.5	Whether environmental audit was conducted?	Yes	No
			V

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

### Four UG (B.Tech in CSE, ECE, EE and AEIE) programs got NBA accreditation in 2009 STRENGTH WEAKNESS • There is scarcity of very well qualified senior professors mainly in core engineering. However, there is continuous effort made by management Excellent reputation for high quality programs, faculty and research Commitment of students, faculty, and staff towards quality, dedication, positive morale, and work ethic team to recruit very senior level faculty from reputed institutions · Students come with various vernacular Well maintained state of art infrastructure and ethnic backgrounds causing the and laboratories heterogeneous students groups, which Eco-friendly and amicable working creates problems initially but corrected towards the end. atmosphere Beyond syllabus curriculum to impart futuristic technical education to improve the student's standard in today's global R&D and Consultancy work in collaboration with national agencies and industries as resource of funding need to be improved. Constant encouragement given for faculty members in pursuing research leading to PhD Student Life activities, mentoring, faculty appraisal, online students feedback system. A strong Training and Placement Cell to groom students industry ready through continuous training on soft skill, special technical training, industry visit and provide assistance in placement. CHALLENGE OPPORTUNITY Risk of losing prominent faculty and staff for genuinely better oppurtunities at other nearby colleges Increase national and regional recognition ·Communicate with students and communicate about student performance within departments Growing competition from nearby • Involve more faculty members in research through incentives. To build strong alliances with national organizations for academic and R&D activities in thrust areas of Engineering ·Increase external funding to increase activities in utrust areas of Engineering and Technology. •Training rural-based Bengali and/or Hindi medium students in English Language and developing communication skills of them is really a challenging Job •Collaboration with foreign universities to promote study abroad and student revenue through indirect cost recovery Strengthen the industry-institution interaction for better placements of Enter into collaborative projects with industries and other Institutes for better exposure to students. promote study-abroad and student-exchange programme for higher semester •Preparing students for GATE, GRE and government/public sector competitive examinations. Scope for PG students to pursue PhD under the supervision of faculty members of the Institute in association with the affiliating University

### 8. Plans of institution for next year

- Green Initiative at campus and making it plastic free zone.
- Promotion of research and innovation through multiple industry tie ups.
- ❖ Making education industry oriented and outcome based.
- Inculcating professional mindset development
- Environment sustainability in all practices
- Making governance electronic and transparent.
- Enhance the functioning of the Grievance Redressal Committee, Disciple Committee, Anti-Ragging Committee.

- Organizing International Conferences.
- ❖ To get more funds from external agencies.

Name Prof(Dr.) Arun Kumar Mondal

Name Prof(Dr.) Santanu Kumar Sen

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Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

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### Annexure I

### **Abbreviations:**

CAS - Career Advanced Scheme

CAT - Common Admission Test

CBCS - Choice Based Credit System

CE - Centre for Excellence

COP - Career Oriented Programme

CPE - College with Potential for Excellence

DPE - Department with Potential for Excellence

GATE - Graduate Aptitude Test

NET - National Eligibility Test

PEI - Physical Education Institution

SAP - Special Assistance Programme

SF - Self Financing

SLET - State Level Eligibility Test

TEI - Teacher Education Institution

UPE - University with Potential Excellence

UPSC - Union Public Service Commission

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