

Submission of Annual Quality Assurance Report (AQAR) for the A.Y. 2015-2016

To



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

From



HALDIA INSTITUTE OF TECHNOLOGY

Haldia, West Bengal, Pin-721657.

On 23/03/2018

The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

I. Details of the Institution

1.1 Name of the Institution	Haldia Institute of Technology
1.2 Address Line 1	HIT Campus, ICARE Complex,
Address Line 2	Hatiberia, Haldia
City/Town	Haldia, Purba Medinipur
State	West Bengal
Pin Code	721657
Institution e-mail address	admn@hithaldia.in
Contact Nos.	03224-255616 / 252900 / 253061
Name of the Head of the Institution:	Prof. Asit Kumar Saha.
Tel. No. with STD Code:	03224-252800
Mobile:	+919433912523
Name of the IQAC Co-ordinator:	Prof. Tarun Kanti Jana
Mobile:	+91 9434102354

IQAC e-mail address:

admin@hithaldia.in

1.3 NAAC Track ID (For ex. MHCOGN 18879) __ **WBCOGN12359** _____

1.4 Website address:

www.hithaldia.in

Web-link of the AQAR:

http://hithaldia.in/hit_resource/naac/aqar_2015_16.pdf

For ex. <http://www.ladykeanecollege.edu.in/AQAR201213.doc>

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	68	2005	5
2	2 nd Cycle	A	3.31	2016	5
3	3 rd Cycle				
4	4 th Cycle				

1.6 Date of Establishment of IQAC: DD/MM/YYYY

11/08/2011

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

2015-16

1.8 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__2015-16__: 31/03/2018 _____ (DD/MM/YYYY)

1.9 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 (AICTE) 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

1.10 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

MCA

1.11 Name of the Affiliating University (for the Colleges)

Maulana Abul Kalam Azad University of
Technology, West Bengal

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

NOT APPLICABLE

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (Specify)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="21"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="05"/>
2.3 No. of students	<input type="text" value="01"/>
2.4 No. of Management representatives	<input type="text" value="01"/>
2.5 No. of Alumni	<input type="text" value="01"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="01"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="01"/>
2.8 No. of other External Experts	<input type="text" value="01"/>
2.9 Total No. of members	<input type="text" value="32"/>
2.10 No. of IQAC meetings held	<input type="text" value="02"/>
2.11 No. of meetings with various stakeholders:	No. <input type="text" value="02"/> Faculty <input type="text" value="01"/>
	Non-Teaching Staff <input type="text" value="01"/> Students <input type="text" value="01"/> Alumni <input type="text" value="01"/> Others <input type="text" value="01"/>
2.12 Has IQAC received any funding from UGC during the year?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If yes, mention the amount	<input type="text" value="0"/>
2.13 Seminars and Conferences (only quality related)	
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC	
Total Nos.	<input type="text" value="11"/> International <input type="text" value="2"/> National <input type="text" value="4"/> State <input type="text" value=""/> Institution Level <input type="text" value="5"/>
(ii) Themes	<input type="text" value="Collaborative research / In-house training"/>

2.14 Significant Activities and contributions made by IQAC

1. Establishing man-power requirements (teaching and non-teaching staff) and facilitating recruitment process.
2. Up gradation of faculty and staff members in different departments under CAS
3. Up gradation of laboratory, equipment, and Class rooms etc.
4. Formation of routine committee.
5. Improvement of teaching-learning process by adopting ICT based teaching.
6. Preparing study materials and uploading in the institute website
7. Introduction of Collaborative and Cooperative teaching-learning.
8. Syllabus and Curricula reforms
9. Organising different seminars, conferences, workshop etc to promote quality education.
10. Academic progress monitoring.
11. End semester result analysis and taking corrective measure for improvement.

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
Publishing advertisement for recruitment of faculty members in leading news papers.	Faculties recruited through selection committee.
Procedure for purchase according to institutes' norms.	Phase-wise procurement of different items was made.
3-4 meetings with the HODs for subject distribution.	Routine was framed before commencement of the semester and followed accordingly.
Proposal for remedial / grooming and tutorial classes in the daily routine.	Necessary grooming / remedial classes was arranged.
Proposal to all department for organising conference / seminars / workshops at least once in a year.	Seminars /conference/workshops were organised by different department.
Encouraging research work to foster quality education.	Quite a number of project proposals were sent to different agencies and few were granted.
Proposal for introduction of Career Advancement Scheme for faculty and non-teaching staff members.	Hon'ble BOG has approved the proposal.

* Attach the Academic Calendar of the year as Annexure.

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body

Provide the details of the action taken

Proposals were submitted to the Academic Council and subsequently to the BOG and the necessary actions were taken as detailed in 2.15

Part – B

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	00	00	00	00
PG	07	00	07	00
UG	12	00	12	00
PG Diploma	00	00	00	00
Advanced Diploma	00	00	00	00
Diploma	00	00	00	00
Certificate	00	00	00	00
Others	00	00	00	00
Total	19			
Interdisciplinary	00	00	00	00
Innovative	00	00	00	00

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

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	19
Trimester	00
Annual	00

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.

No. It is under the purview of affiliated university.

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

NO

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty	Total	Asst. Professors	Associate Professors	Professors	Others
	242	176	23	22	-

2.2 No. of permanent faculty with Ph.D.

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
	186	0	25	17	21	8	-	-	232	25

2.4 No. of Guest and Visiting faculty and Temporary faculty

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	13	5	-
Presented papers	13	5	-
Resource Persons	NA	4	NA

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

The present days teaching-learning is characterised by “Outcome based teaching”, implying that the incumbents would be able to demonstrate their knowledge and skill commensurable to the requirements of the industry and the society. The faculty members are therefore adopt innovative teaching-learning method to ensure that students acquire requisite knowledge and skill so as to solve real-life complex problems. In this attempt, faculty members follow ICT based teaching, emphasize on complex engineering problem solving, resort to collaborative and cooperative teaching, introduce mini projects, make use of modern tools etc. as a part of innovative methods of teaching-learning. Such practices instil team work; encourage innovative approaches to problem solving, boost confidence, and help develop a sense of commitment towards the industry and the society at large.

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

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

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

80

2.11 Course/Programme wise
distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
ICE	56	30.36	41.07	10.71	17.86	100
AEIE	55	27.27	36.36	27.27	9.09	100
ME	65	29.23	32.31	29.23	9.23	100
PE	53	16.98	41.51	28.30	13.21	100
CHE	61	26.23	29.51	18.03	26.23	100
EE	75	46.67	30.67	14.67	8	100
CE	79	41.77	39.24	5.06	3.80	100
ECE	148	29.73	25	25	2.70	100
CSE	143	18.18	27.97	41.26	6.99	100
IT	62	14.52	37.10	37.10	4.84	100
BT	45	11.11	46.67	17.78	24.44	100
FT	40	12.50	55	17.50	15	100
MCA	37	13.51	70.27	16.22	0	100
MBA						100

Note : Distinction above 75%, First Class above 60%

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

The HODs, Deans, Principal, Director closely monitor the day to day teaching learning- activities of different departments. The shortcomings/difficulties, if any, are addressed suitably to improve the process. The students feedback and analysis helps to improve teaching-learning process,

The results of the intermediate tests are evaluated by HODs and subject teachers and weaker students are encouraged to attend remedial/extra classes to mitigate the lags,

Progress of classes on different subjects are reported to the Academic Council for necessary corrective actions,

New and innovative approaches are suggested by different members of IQAC and adopted by the teachers to make the teaching-learning process more effective.

IQAC members emphasize on project work, seminars, etc so as to be acquainted with current developments and emerging and thrust areas.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	-
UGC – Faculty Improvement Programme	-
HRD programmes	-
Orientation programmes	-
Faculty exchange programme	-
Staff training conducted by the university	-
Staff training conducted by other institutions	22
Summer / Winter schools, Workshops, etc.	24
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	142	39	39	-
Technical Staff	64	6	6	-

Criterion – III

3. Research, Consultancy and Extension

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

- Faculty members are encouraged by providing weights in appraisal system for research papers publication in national and international journals.
- Faculty members submit research projects to various funding agencies like, AICTE, DBT, DST, AICTE etc.
- Addressing various research schemes through Project Monitoring Committee.
- Encouraged to organize various seminar/conference FDP etc. in the Institute.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	2	8	-	-
Outlay in Rs. Lakhs	28.01	182.26	-	-

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	-	-	-
Outlay in Rs. Lakhs	-	-	-	-

3.4 Details on research publications

	International	National	Others
Peer Review Journals	120	54	-
Non-Peer Review Journals	-	-	-
e-Journals	-	-	-
Conference proceedings	40	32	-

3.5 Details on Impact factor of publications:

Range Yes Average Yes h-index Yes Nos. in SCOPUS Yes

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	2014-15	SERB	28.30 Lac	Yes
	2014-15	CSIR	36.20 Lacs	Yes
	2014-15	DST	161.47 Lacs	Yes
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored				
Projects sponsored by the University/ College	-	-	-	-
Students research projects <i>(other than compulsory by the University)</i>	-	-	-	-

Any other(Specify)	-	-	-	-
Total				-

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

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	2	7	-	-	5
Sponsoring agencies	DRDO, ISRO, IChE, SERB, DST	DST			In house, DST

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

3.16 No. of patents received this year

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

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

Total	International	National	State	University	Dist	College
-	-	-	-	-	-	-

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

5

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

12

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

JRF SRF Project Fellows Any other

3.21 No. of students Participated in NSS events:

University level State level

National level International level

3.22 No. of students participated in NCC events:

University level State level

National level International level

3.23 No. of Awards won in NSS:

University level State level

National level International level

3.24 No. of Awards won in NCC:

University level State level

National level International level

3.25 No. of Extension activities organized

University forum College forum
NCC NSS Any other

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

- The Institute conducted various short term courses with subsidized fees under Services to Community.
- The Institute conducted various activities like, cleanliness in Coastal zone in association with Indian Coast Guard, Blood donation camp, tree plantation, eye check up plan, various social awareness programmes with the assistance of Haldia Municipality, Thalassemia detection camp etc. under NSS Activities.

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	36.98	-	-	36.98
Class rooms	64	-	-	64
Tutorial Room	14	-	-	14
Drawing Hall	02	2	-	4
Laboratories	90	19	-	119
Seminar Halls	02	06	-	08
No. of important equipments purchased (\geq 1-0 lakh) during the current year.				
Value of the equipment purchased during the year (Rs. in Lakhs)		41.26 lacs		
Others				

4.2 Computerization of administration and library

- The Central Library is digitized with LIBSYS Software. In addition to that, WEB OPEC is available.
- Use of computer and data storage in all the administrative departments / section and Central Library section.
- Use of Tally Software for Accounts Department.
- 10 Mbps BSNL lease line available all through the campus by Campus wide networking introduced under TEQIP Project.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	82919	2624240	2800	1094784	85719	27337184
Reference Books	6645		1592		8237	
e-Books	-	-	21567	276896	21567	276896
Journals	110	347973	-	-	103	347873
e-Journals	1786	945591	19354	878521	21140	1824112
Digital Database	-	-	-	-	-	-
CD & Video	231	1562659	-	-	231	1562659
Others (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1561	21	20 Mbps	1	1	35	1436	0
Added	0	0	00 Mbps	0	0	20	60	0
Total	1561	21	20 Mbps	1	1	55	1506	0

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

- Awareness programme were organized by the Institute for use of Internet and e-governance amongst the employees and students.
- Access to internet and computer facilities to teachers and students of the Institute.
- Access to internet in all the students' hostels, Library Reading rooms

4.6 Amount spent on maintenance in lakhs :

i) ICT	1221000
ii) Campus Infrastructure and facilities	7946000
iii) Equipments	722000
iv) Others	885000
Total :	10774000

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

The IQAC has contributed a lot in enhancing awareness about students support services and provides various supports to students:

- i. Training and Placement assistance through Training & Placement Cell.
- ii. GATE Coaching Classes.
- iii. Common Computer Centre for surfing.
- iv. Provision of Hi-tech Gymnasium.
- v. Health Centre Facilities.
- vi. Grievance Redressal Cell.
- vii. Organizing seminar and workshops for students.
- viii. Arrangement of industrial visit to enhance practical knowledge.

5.2 Efforts made by the Institution for tracking the progression

The Institute has adopted various mechanisms to monitor the student's progression regularly.

- i. Conducting Career Development programmes for students.
- ii. Transparent admission procedure.
- iii. Highlighting achievements of students in College Newsletter.
- iv. The Institute arranges transport facilities on industrial visits.
- v. Parent teachers meeting on the progression of their ward.
- vi. Allocation of Class Mentors for each class in each programme for progression in academic as well as extra-curricular activities.
- vii. Professional Students Counsellors have been appointed on regular basis.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
4289	354	-	-

(b) No. of students outside the state

2333

(c) No. of international students

0

Men	No	%	Women	No	%
	3675	81.09		878	18.91

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2760	689	79	500	21	4049	2905	672	64	811	-	4452

Demand ratio : 95% Dropout %: %

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

- i. Technical Aptitude Test
- ii. Technical Seminar
- iii. Group Discussion
- iv. Aptitude classes for placement
- v. Conference/seminar/workshop
- vi. Soft skill Development Programme

No. of students beneficiaries

5.5 No. of students qualified in these examinations

NET	<input type="text"/>	SET/SLET	<input type="text"/>	GATE	<input type="text" value="64"/>	CAT	<input type="text" value="5"/>
IAS/IPS etc	<input type="text"/>	State PSC	<input type="text"/>	UPSC	<input type="text"/>	Others	<input type="text" value="XAT -1, GMAT – 2, MAT - 1"/>

5.6 Details of student counselling and career guidance

Faculty members act as mentor to counsel and guide the students

Orientation programme is organized for 1st year students

Aptitude Training Programme is organized to enhance employability

GATE coaching classes are organized

Student counselling by counsellors to get rid of mental stresses and other psychological problems

Seminars and Conferences are organized regularly for students

PD classes are organized to improve soft skills.

No. of students benefitted

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
106	734	531	73

5.8 Details of gender sensitization programmes

“Anti-Sexual Harassment Committee” was constituted in the College. The Institute authority keeps sensitizing the students about gender issues whenever address to the students.

5.9 Students Activities

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

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

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

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	302	6777000
Financial support from government	1063	15438380
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: NA

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision

To achieve Centre of Excellence in the field of Science, Technology and Management Education for creating dynamic human resources of global standards with capabilities of accepting new challenges

Mission

- To impart quality and value based education to raise satisfaction level of all stake-holders.
- To create competent, creative professionals, and great entrepreneurs who can work as individual or in group in multi-cultural global environments.
- To prepare citizens who would grow to be competent enough to contribute significantly with personal integrity and civic responsibility for the betterment of mankind throughout their careers and profession

6.2 Does the Institution has a management Information System

Yes, the Institute has Management Information System.

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

6.3.1 Curriculum Development

Curriculum development is under the purview of the affiliating University. However, necessary suggestions are forwarded to the University taking into the consideration the requirements of the industries. Few senior faculty members from different departments are members of BOS of different programmes to represent the department.

6.3.2 Teaching and Learning

Implementing outcome based teaching
ICT based teaching
Emphasis on complex engineering problem solving
Collaborative and Cooperative teaching-learning
Mini-Projects
Tutorial and remedial classes
Vocational training and industrial tour
Mentoring
Projects on emerging topics and/or industrial problems
Group discussion, seminars, and workshops
Modern tool usage
Personality Development classes for pre-final and final year students

6.3.3 Examination and Evaluation

Evaluation of marks comprises internal marks obtained from continuous assessment and external marks secured in End semester examination.
Internal tests (Class tests) as well as end semester examination is organized by the office of the Controller of Examination.
The final grade is determined by considering marks obtained both in internal tests and end semester examination.
For sessional papers, evaluation is based on report, presentations, viva etc.
Mentoring system is in force to improve the performance of the students.

6.3.4 Research and Development

Research has been envisaged as one of the important components of Academic Leadership. Seminars and workshops are organized regularly to foster research. Faculty members are encouraged to undertake sponsored research and a good number of such projects are under execution. The institution facilitates faculty participation in research by granting leave and providing financial assistance for attending seminars, conferences, FDPs etc. Adequate infrastructure like well equipped laboratory, computing facilities and library are made available to carry out research. Faculty members also act as PhD supervisor for internal and external candidates.

6.3.5 Library, ICT and physical infrastructure / instrumentation

The institute has a central library with adequate titles and volumes cater to different subjects and disciplines. The library also holds a number of international journals. It has also provision of accessing e-journals. The library utilizes delnet and other modern tools compatible to the present day's requirements. The volumes and titles are augmented every year to keep pace with the changing needs of the students and the faculties. Besides, each department is also having departmental library with number of titles to supplement the central library.

Each department is well-equipped with laboratories conforming to the syllabus. Students are given adequate exposure and opportunities to conduct experiments and develop skills through hands on training. The facilities are also augmented time to time for better learning of the students. Smart class rooms are also made available for ICT based teaching.

The institute is also having Central Computing facility to enhance the modern tool usage skill. This facility is also utilized for on-line mock test for final year students to improve employability.

6.3.6 Human Resource Management

In the Institution, assessment of manpower requirement is done routinely. Any requirement is advertised in national dailies and in the institute website, as per the AICTE and the affiliating University norms.

ERP has been implemented partially.

Various welfare scheme, like EPF, Group Gratuity Scheme. Group Mediclaim Policy for employee and dependent (Spouse and children) have been implemented.

Service Rules for employees have been implemented.

Effective appraisal systems are followed to assess the faculty performance.

6.3.7 Faculty and Staff recruitment

- i. Releasing the advertisement in the Leading daily newspapers.
- ii. Scrutinizing of Application as per the college norms.
- iii. Conducting Interview in the presence of External Experts and University Nominees.
- iv. Selection of Candidates as per the norms of staff selection committee.

6.3.8 Industry Interaction / Collaboration

Industry Institute Partnership Cell (IIPC) and Training & Placement cell are in constant touch with different industries for mutual benefits. Various activities that are taking place are invited lectures by industry experts, industrial visits and vocational training, student's projects on industrial problems, grooming classes by industry people, establishing industry need for curriculum reform, and organizing various national/international seminars with joint collaborations.

Campus connect/training programme by various industries like, Infosys Campus Connect, Tech Mahindra, AMCAT etc.

6.3.9 Admission of Students

- Admission process of students is carried out strictly as per norms of the Govt. Of West Bengal and AICTE / Affiliating University, followed by WBJEE /JEE (Mains) Entrance, PGET, and MAT/JEMAT, JECA and lateral entry.
- TFW @5% on sanctioned intake are done.

6.4 Welfare schemes for

Teaching	CAS facilities as per norms of AICTE/UGC Leave facilities Maternity leave for Female employee Leave Encashment EPF facilities Group Mediciclaim Facility Group Gratuity scheme On duty leave for Pursuing Ph.D. and higher studies. On duty leave for attending various seminar /conference for paper presentation with Registration fee and other admissible allowance like TA/DA as per norms.
Non teaching	CAS facilities as norms of the State Govt. Leave facilities Maternity leave for Female employee Leave Encashment EPF facilities Group Mediciclaim Facility / ESI Group Gratuity scheme On duty leave for attending various workshop with Registration fee and other admissible allowance like TA/DA as per norms.
Students	Student concession (Extended by the Indian Railway for attending various national/international seminars/Tech fest/or any such other cultural events/sports event. Various Student Chapters

	NSS Scheme. Book Bank facility in library
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6.5 Total corpus fund generated

NIL

6.6 Whether annual financial audit has been done

Yes

YES

No

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	YES (ISO)	-	YES	IQAC
Administrative	Yes (Accounts)	M/s. K R Sriram & Co	YES	IQAC

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

For UG Programmes

Yes

YES

No

For PG Programmes

Yes

YES

No

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

Conducting examinations and declaration of results are under the purview of the affiliating university.
However, Class tests are conducted by the Institute as per schedule and guidelines of the university.

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

The Alumni of the institute, having a very strong network across the globe and many of them holding prestigious portfolios in industry, academia, and research, contribute significantly for the overall development of their alma mater. Alumni meet is organized every year, where a grand meet takes place to exchange views on different frontier issues. The alumni of the institute provide valuable inputs regarding present industrial scenarios and upcoming needs that would be considered for educating and grooming the existing students. They also help significantly in the training and recruitment of budding engineers.

6.12 Activities and support from the Parent – Teacher Association

Parents are considered as one of the important stake-holder of the academic institution. The feedback from the parents is extremely useful for the overall development of the institute. In this regard, parents-teachers meet takes place in the department on regular basis to hold discussion on different issues related to their ward such as class attendance and performance, examination results, hostel life, behavioural pattern, participation in cultural/sports activities etc. Parents are advised to contact the respective HOD and faculty mentor and visit the institute for keeping track of their ward on academic and personal matters. Suggestions/complains are also sought on infrastructures, teaching methodology etc. for further improvement.

6.13 Development programmes for support staff

Staff development programme by the Institute is also organized. In addition, responsible officer from Administration and Library are sent to various workshops with financial support.

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

The Institute has implemented Rain Water Harvesting Project partially. Efforts are being taken to introduce solar power partially. Test of Drinking water are done by the authorized govt. Laboratories every year.

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.

Soft Skill	PDP classes
Analytical skill	Aptitude classes
Core subject and advanced knowledge (Industry oriented)	Various joint activities are done with the local industries. Trg. Programme are conducted by Infosys, Tech Mahindra, AMCAT etc.

ICT based teaching-learning,
Uploading study materials and other LRs in the institute website
Encouraging students to undergo NPTEL courses
Special classes are organized to improve the communication skill and computer proficiency of the students.
Short term courses under Services to Community and Economy are conducted with the subsidized fees for the rural students.
Coaching classes are conducted for the students for various competitive exams.
STTPs, workshops, Guest lecturers (by experts from industry and academia) etc. are organized.

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

Submission for SSR for re-accreditation	On expiry, the Institute has proposed to submit SSR for re-accreditation with higher grade.
Organizing Seminar/conference/conference	The Institute has organized various seminar/conference/FDP for employees.
To conduct competitive exams.	Aptitude classes and coaching classes are conducted for the students for appearing in GATE/JAM and other competitive exams.

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

- Preparation of lecture notes, Study materials, LRs for round the clock access through institute website.
- Implementing Outcome based teaching.

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

7.4 Contribution to environmental awareness / protection

- Rain water Harvesting System is built in the Campus.
- Plantation: Each building and playgrounds are surrounded by large green gardens and plants to maintain the healthy and balance environment.
- Activities pertaining to cleanliness in Campus, Coastal area cleaning, tree plantation, blood donation, Thalassemia detection camp, eye testing, etc. are conducted under NSS (National Service Scheme) of the Institute, every year.
- The Institute has been awarded Environment certificate from ISO, vide 14001:2004.
- Energy Conservation: The institute has been very conscious about the energy conservation. The College has gradually moved on from normal light bulbs (list required watt) to tube lights, CFLs, LEDs and the Institute also replaced most of the CRT monitors to LCD monitors.
- The College also promotes procurement and installation of efficient electrical system to save electricity. Besides, setting up an Energy Audit Committee, retrofitting job of existing 40 watt and 20 watt F.L. fittings with use of 30 and 17 watt electronics ballast against replacement of old defective fittings /electrical chokes as energy saving measures are undertaken.

7.5 Whether environmental audit was conducted? Yes Yes No

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

Strength

- The Institute possesses a good combination of young and experienced faculties having Masters and PhD degrees,
- The Institute is proud of having lush green sprawling campus with state-of-the-art academic infrastructure,
- The residential nature of the Institute Campus makes it one of the most attractive destinations for students all across India.
- The Institute and all its constituent Departments contribute significantly towards improvement of students' employability (% of recruitment is about 60 – 70% in the last 4 – 5 years) as well as their performance in competitive exams like GATE, GRE, TOEFL, CAT, MAT, etc.
- Many of the faculties have been actively engaged in research with the research grants obtained from DST, DBT, CSIR etc. and other Government agencies.
- A number of the faculties have been actively publishing in reputed national/international journals and written books, book chapters, monographs etc.
- Students passing out from the Institute have been strengthening the alumni association, who are achieving excellent heights as professionals in academics, business and industries of national and international repute.
- Mentoring, guidance, counselling, enhanced student-teacher communication in the Campus, and financial assistance to brilliant students from economically backward families has enhanced the reputation of the Institute.

Weakness

- The Institute is located far away from Kolkata and the number of trains plying between Haldia and Kolkata are only a few. This limits the opportunities to collaborate with distinguished professionals and organizations of national and international repute.
- Lack of research orientation among some of the relatively inexperienced faculties,
- The institute doesn't have the academic autonomy and therefore updating and enrichment of course curriculum cannot be made independently.

Opportunities

- More employment opportunities for engineering graduates in the context of rapid modernization and emerging technologies in different sectors
- Ample opportunities for research through the existing M. Tech. programmes and Ph D. research through collaboration with Institutes / Universities of national and international repute
- The extra-ordinary pool of the Institute alumni, and future prospects of the Institute's collaboration and network building
- Innovative approaches towards teaching-learning process to enhance and enrich learning outcomes
- State-of-the-art infrastructure and computing facilities coupled with other academic and campus ambience and availability of highly qualified and dedicated professionals serving the Institute is conducive for further development and growth of the Institute in near future.
- Being located in the heart of Haldia industrial hub and the Haldia Port, the Institute enjoys tremendous opportunities of Industry-Academia collaboration.

Challenges

- Up gradation of Institute infrastructures (e.g. laboratory facilities and space, library and other academic infrastructures) to keep pace with emerging technological development.
- Upgrading skills of Faculty members to match rapid growth and technology advancements in industries
- Attracting more students with outstanding academic records towards engineering education and future prospects
- Routine up gradation and improvement on curriculum
- Training and development of English communication skills, and other aspects of professional communication and team work in students from rural / semi-urban background
- Overall stagnation / recession in global manufacturing businesses
- To uplift the consultancy services to the industries.
- To uplift the status of Entrepreneurship development

8. Plans of institution for next year

- Introduction of M. Tech. courses in Electrical Engineering
- Introduction of Second Shift courses in B. Tech. courses
- Introduction of PIO seats.
- In addition to the existing CCF, creation of additional CCF labs with 500 seat capacity.
- To develop a new workshop
- Application to NBA for re-accreditation of NBA accredited courses.
- Preparation of SSR for re-accreditation of NAAC accreditation.
- To sign MOU with industries and institutes for students training and higher studies respectively.
- To organize national and international seminars/conferences in the Institute
- To conduct industrial visits for students.
- To achieve higher placement for students in comparison to previous years.
- To conduct classes for competitive exams in both semester in regular time tables.
- More students' participation in national /state level/international competition.

Name : Prof. Tarun Kanti Jana

Name : Prof. A.K. Saha

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

TWO BEST PRACTISES

- Practice 1: Preparation of lecture notes, Study materials, LRs for round the clock access through institute website.

Innovations by the Faculty in Teaching and Learning

In tune with the growing need of innovations in teaching learning process, the faculty members would contribute significantly and explore the different mechanism to make the process highly effective (value-additive) and attractive. Innovation is inevitable for sustainable socio-economic development. The teaching – learning process in the 21st Century has undergone a revolutionary change - thanks to the rapid proliferation of Information and Communication Technologies (ICT). With the advancement of ICT and computer technology, it is imperative that teachers would adopt and adapt these modern technologies to groom the students with different capabilities commensurable to the present day's business requirements. However, it would be misnomer to consider that while harnessing the teaching methodology by modern amenities, traditional way of teaching by chalk and talk would be discarded completely.

The institute practices following approaches in the teaching-learning process.

1. **Self-learning:** Self-learning is rather a new approach towards teaching-learning and in the present context the concept is intertwined with e-learning. The faculty members (subject teachers) prepare the study materials and upload in the institute website. The students according to his/her convenience can access it round the clock and study different topics of a subject as an individual or in a small group. In view of any clarification/ambiguity/illustration, the students can post their comment, which subsequently is addressed by the respective faculty members. This helps the students to enhance their knowledge and inculcate a sense of independent and innovative thinking. The study materials are also updated and augmented from time to time, thereby making the LR's highly comprehensive and enriched. Additionally, assignments consisting with varieties of questions and problems are also made available to the students to answer varieties of questions and solve numerical problems to bolster their knowledge gain and problem solving ability.
2. **Classroom Lectures and laboratory work:** The faculty members and the students adhere to class room lectures and tutorial sessions as per the routine. The faculty members explain the importance and relevance of various topics of the courses to real-life situations and their linkage with other subjects. While teaching a particular course, due emphasis is given on basic concept building, mathematical and quantitative analysis, complex numerical problem solving (by more than one

technique, if applicable) result/data analysis, data interpretation, comparison with the real-life data, limitations, if any, and consideration of subsequent advanced/additional topics. The faculty members make use of presentations through PPTs, chalk and board, handouts, design data tables/handbooks, models, catalogues, animation videos etc. to make the session attractive as well as fruitful. The classroom sessions are made highly interactive so that students can clear their doubts and at the same time faculty members can evaluate the learning abilities of the students so that corrective measures can be taken thereafter.

During laboratory classes, the objectives of the experiments are explained to the students so that they can understand the importance of specific experiment and map it with the corresponding theoretical part. Due importance is also given on the hands on experience gain, skill developed in handling equipments, circuitry development, program writing etc. and concluding remarks.

Practice 2: Implementing Outcome based teaching.

1. **Collaborative and Cooperative learning:** “Collaborative learning” is a term coined with varieties of educational approaches involving joint intellectual effort by a small group of students, or students and teachers together. Collaborative learning represents a paradigm shift from the typical teacher centric lectures in classrooms. In collaborative teaching-learning methods, the traditional lectures and note-taking process is fortified with active work with the course material. The approach is implemented through the tutorial classes, and mini projects (for example, a small design problem on circuitry, or algorithm writing). Cooperative learning is a specific kind of collaborative learning. In cooperative learning, students work together in small groups on a structured activity. In this approach, student’s performance and contributions are assessed as an individual as well as a team. Cooperative groups work face-to-face and learn to work as a team. During such process, the students develop academic skills along with social skills. The approaches help to solve a complex real-life problem as a team considering the financial, environmental, societal and ethical issues.
2. **Project work:** Each final year student is supposed to carry out project work (normally in a small group) under the supervision of faculty members. In this context, students would explore the emerging areas or typical industrial problems to establish the scope of work and adopt new approaches/tools/techniques for providing solution. Due credit is given to the novelty in methodology/process/design, use of superior and advanced techniques/approaches, improvement in results (in comparison to the earlier work), and finally, publication of work in international journal/conferences.

3. **Reforms of Syllabus and Curricula:** This is one of the key attributes of present day's teaching-learning process. To keep pace with the latest developments, it is imperative that academic fraternity would update themselves continuously with the latest developments that are taking place all over the globe for their sustenance and to have a competitive edge over others. However, being a Tier II institute, the HIT doesn't have the flexibility of reforming the curricula and syllabus. Notwithstanding this fact, the department and the faculty members analyze the syllabus and curricula gap and incorporate different courses/topics to educate the students so as to provide them with additional inputs and equip themselves with added potential to perform well in the real world situations.

Annexure-III

Academic Calendar of 15-16

WEST BENGAL UNIVERSITY OF TECHNOLOGY			
ACADEMIC CALENDAR OF UG AND PG COURSES FOR THE YEAR 2015-16			
Odd Semester		For Ensuing New Batch	For Continuing Batch
1	Commencement of Academic Programme	August 4, 2015	July 14, 2015
2	Admission activities (for ensuing new students) will be closed on	August 31, 2015	N.A.
3	Registration activities (for ensuing newly admitted students for the session 2015-16) will be closed on	Will be informed in due course	N.A.
4	First Test Slot	September 21 to 26, 2015	September 21 to 26, 2015
5	Mid Semester Break Examination for the courses BHMCT (5A Semester) & BBM (H) in Hospitality Management (3A Semester)	September 21 to 26, 2015	September 21 to 26, 2015
6	Second Test Slot	November 14 to 21, 2015	November 14 to 21, 2015
7(a)	Practical Examinations & Viva-Voce	November 23 to 30, 2015	November 23 to 30, 2015
7(b)	Theory Examinations	December 3 to 24, 2015	December 3 to 24, 2015
8	Inter Semester Break	December 25, 2015 to January 14, 2016	December 25, 2015 to January 14, 2016
Separate Supplementary Examination will be held on September 8 to 18, 2015. Details will be available in the University website in due course.			
Announcement regarding Registration & Examinations activities, will be available in the University websites in due course			
Even Semester		For continuing batch	
Will be informed later on			


REGISTRAR