SELF ASSESSMENT REPORT (SAR) FORMAT

UNDERGRADUATE ENGINEERING PROGRAMS (TIER-II)

FIRST TIME ACCREDITATION

(Applicable for all the programs, except those granted full accreditation for 5 years as per Jan 2013 Manual)

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(December, 2015)

SAR Contents

PART A: Institutional Information

1. **Name and Address of the Institution:**

2. **Name and Address of the Affiliating University:**

3. **Year of establishment of the Institution:**

4. **Type of the Institution:**

University ☐
Deemed University ☐
Government Aided ☐
Autonomous ☐
Affiliated ☐

5. Ownership Status:

Central Government ☐
State Government ☐
Government Aided ☐
Self - Financing ☐
Trust ☐
Society ☐
Section 25 Company ☐
Any Other (Please specify) ☐

Provide Details:

6. **Other Academic Institutions of the Trust/Society/Company etc., if any:**

Name of the Institution(s)	Year of Establishment	Programs of Study	Location

Table A.6 **Note:** Add rows as needed.

7. Details of all the programs being offered by the institution under consideration:

S. No.	Program Name	Name of the Department	Year of Start	Intake	Increase in intake, if any	Year of increase	AICTE Approval	Accreditation Status*

Table A.7

**** Write applicable one:***

- Applying first time
- Granted provisional accreditation for two /three years for the period(specify period)
- Granted accreditation for 5 /6 years for the period (specify period)
- Not accredited (specify visit dates, year)
- Withdrawn (specify visit dates, year)
- Not eligible for accreditation
- Eligible but not applied

Note: Add rows as needed.

8. Programs to be considered for Accreditation vide this application:

S. No.	Program Name
1.	
N.	

Table A.8

9. Total number of employees in the institution:

A. Regular Employees (Faculty and Staff):

Items		CAY		CAY*m*1		CAY*m*2	
		Min	Max	Min	Max	Min	Max
Faculty in Engineering	M						
	F						
Faculty in Maths, Science & Humanities	M						
	F						
Non-teaching staff	M						
	F						

Table A.9a

Note: **Minimum 75% should be Regular/Full Time faculty and the remaining shall be Contractual Faculty as per AICTE norms and standards.**

The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Student Faculty Ratio

CAY – Current Academic Year

CAYm1- Current Academic Year minus1 = Current Assessment Year

CAYm2 - Current Academic Year minus2=Current Assessment Year minus 1

B. Contractual Staff Employees (Faculty and Staff): (Not covered in Table A):

Items		**CAY**		**CAY*m*1**		**CAY*m*2**	
		Min	**Max**	**Min**	**Max**	**Min**	**Max**
Faculty in Engineering	**M**						
	F						
Faculty in Maths, Science & Humanities	**M**						
	F						
Non-teaching staff	**M**						
	F						

Table A.9b

10. Total number of Engineering Students:

Item	**CAY**	**CAY*m*1**	**CAY*m*2**
Total no. of boys			
Total no. of girls			
Total no. of students			

Table A.10

(Instruction: The data may be categorized in tabular form separately for undergraduate, postgraduate engineering, other program, if applicable)

Note: *In case the Institution is running AICTE approved additional courses such as MBA, MCA in the first shift, engineering courses in the second shift, Polytechnic in Second shift etc., separate tables with the relevant heading shall be prepared.*

11. Vision of the Institution:

12. Mission of the Institution:

13. Contact Information of the Head of the Institution and NBA coordinator, if designated:

i. Name:

Designation:

Mobile No:

Email id:

ii. NBA coordinator, if designated:

Name:

Designation:

Mobile No:

Email id:

PART B: Criteria Summary

Name of the program: _____

Criteria No.	Criteria	Mark/Weightage
	Program Level Criteria	
1.	Vision, Mission and Program Educational Objectives	60
2.	Program Curriculum and Teaching – Learning Processes	120
3.	Course Outcomes and Program Outcomes	120
4.	Students' Performance	150
5.	Faculty Information and Contributions	200
6.	Facilities and Technical Support	80
7.	Continuous Improvement	50
	Institute Level Criteria	
8.	First Year Academics	50
9.	Student Support Systems	50
10.	Governance, Institutional Support and Financial Resources	120
	Total	**1000**

CRITERION 1	Vision, Mission and Program Educational Objectives	60

1. VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

1.1. State the Vision and Mission of the Department and Institute (5)

(Vision statement typically indicates aspirations and Mission statement states the broad approach to achieve aspirations)

(Here Institute Vision and Mission statements have been asked to ensure consistency with the department Vision and Mission statements; the assessment of the Institute Vision and Mission will be taken up in Criterion 10)

1.2. State the Program Educational Objectives (PEOs) (5)

(State the PEOs (3 to 5) of program seeking accreditation)

1.3. Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

(Describe where (websites, curricula, posters etc.) the Vision, Mission and PEOs are published and detail the process which ensures awareness among internal and external stakeholders with effective process implementation)

(Internal stakeholders may include Management, Governing Board Members, faculty, support staff, students etc. and external stakeholders may include employers, industry, alumni, funding agencies, etc.)

1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

(*Articulate the process for defining the Vision and Mission of the department and PEOs of the program)*

1.5. Establish consistency of PEOs with Mission of the Department (15)

(*Generate a "Mission of the Department – PEOs matrix" with justification and rationale of the mapping*)

PEO Statements	M1	M2	….	Mn
PEO1:				
PEO2:				
PEO5:				

Table B.1.5

Note: M1, M2,... Mn are distinct elements of Mission statement. Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

It there is no correlation, put "-"

Note: In this document wherever the term 'Process' has been used its meaning is process formulation, notification and implementation.

2. PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

2.1. Program Curriculum (20)

2.1.1. State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

(State the process details; also mention identified curricular gaps).

Note: *In case all POs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 20.*

2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

(Provide details of the additional course/learning material/content/laboratory experiments/projects etc., arising from the gaps identified in 2.1.1 in a tabular form in the format given below)

CAYm1

S.No.	Gap	Action taken	Date-Month-Year	Resource Person with designation	% of students	Relevance to POs, PSOs

Table B.2.1.2a

CAY*m2*

S.No.	Gap	Action taken	Date-Month-Year	Resource Person with designation	% of students	Relevance to POs, PSOs

Table B.2.1.2b

CAY*m3*

S.No.	Gap	Action taken	Date-Month-Year	Resource Person with designation	% of students	Relevance to POs, PSOs

Table B.2.1.2c

Note: Please mention *in detail* whether the Institution has given such inputs and suggestions to the Affiliating University regarding curricular gaps and possible addition of new

content/add-on courses in the curriculum, to bridge the gap and to better attain program outcome(s).

2.2. Teaching - Learning Processes (100)

2.2.1. Describe Processes followed to improve quality of Teaching & Learning (25)

(Processes may include adherence to academic calendar and improving instruction methods using pedagogical initiatives such as real world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data etc. encouraging bright students, assisting weak students etc. The implementation details and impact analysis need to be documented)

2.2.2. Quality of internal semester Question papers, Assignments and Evaluation (20)

(Mention the initiatives, implementation details and analysis of learning levels related to quality of semester question papers, assignments and evaluation)

2.2.3. Quality of student projects (25)

(Quality of the project is measured in terms of consideration to factors including, but not limited to, environment, safety, ethics, cost, type (application, product, research, review etc.) and standards. Processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working prototypes and enhancing the relevance of projects. Mention Implementation details including details of POs and PSOs addressed through the projects with justification)

2.2.4. Initiatives related to industry interaction (15)

(Give details of the industry involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts etc. Mention the initiatives, implementation details and impact analysis)

2.2.5. Initiatives related to industry internship/summer training (15)

(Mention the initiatives, implementation details and impact analysis)

CRITERION 3	Course Outcomes and Program Outcomes	120

3. COURSE OUTCOMES AND PROGRAM OUTCOMES (120)

3.1. Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

(Program Outcomes as mentioned in Annexure I and Program Specific Outcomes as defined by the Program)

3.1.1. Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (05)

Note: Number of Outcomes for a Course is expected to be around 6.

Course Name: Ciii Year of Study: YYYY – YY; for ex. C202 Year of study 2013-14

C202.1	<Statement>
C202.2	<Statement>
C202.3	<Statement>
…	<Statement>
C202.N	<Statement>

Table B.3.1.1

C202 is the second course in second year and '.1' to '.6' are the outcomes of this course.

3.1.2. CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from 3rd to 8th semester) (05)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C202.1												
C202.2												
C202.3												
…												
C202.N												
C202												

Table B.2.1.2

Note:

1. Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

It there is no correlation, put "-"

2. Similar table is to be prepared for PSOs

3.1.3. Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101												
C202												
C303												
….												
….												
C4…												

Table B.3.1.3

Note:

1. Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

It there is no correlation, put "-"

* It may be noted that contents of Table 3.1.2 must be consistent with information available in Table 3.1.3 for all the courses.

2. *Similar table is to be prepared for PSOs*

3.2. Attainment of Course Outcomes (50)

3.2.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

(Examples of data collection processes may include, but are not limited to, specific exam/tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

3.2.2. Record the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

Program shall have set Course Outcome attainment levels for all courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect to the Course Outcomes of a course in addition to the performance in the University examination)

Measuring Course Outcomes attained through University Examinations

Target may be stated in terms of percentage of students getting more than the university average marks or more as selected by the Program in the final examination. For cases where the university does not provide useful indicators like average or median marks etc., the program may choose an attainment level on its own with justification.

Example related to attainment levels Vs. targets: (The examples indicated are for reference only. Program may appropriately define levels)

Attainment Level 1: ***60%*** *students scoring more than University average percentage marks or set attainment level in the final examination.*

Attainment Level 2: ***70%*** *students scoring more than University average percentage marks or set attainment level in the final examination.*

Attainment Level 3: ***80%*** *students scoring more than University average percentage marks or set attainment level in the final examination.*

- *Attainment is measured in terms of actual percentage of students getting set percentage of marks.*
- *If targets are achieved then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.*
- *If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.*

Measuring CO attainment through Internal Assessments: (The examples indicated are for reference only. Program may appropriately define levels)

Target may be stated in terms of percentage of students getting more than class average marks or set by the program in each of the associated COs in the assessment instruments (midterm tests, assignments, mini projects, reports and presentations etc. as mapped with the COs)

Example

Mid-term test 1 addresses C202.1 and C202.2. Out of the maximum 20 marks for this test 12 marks are associated with C202.1 and 8 marks are associated with C202.2.

Examples related to attainment levels Vs. targets:

Attainment Level 1: ***60%*** *students scoring more than 60% marks out of the relevant maximum marks.*

Attainment Level 2: ***70%*** *students scoring more than 60% marks out of the relevant maximum marks.*

Attainment Level 3: ***80%*** *students scoring more than 60% marks out of the relevant maximum marks.*

- *Attainment is measured in terms of actual percentage of students getting set percentage of marks.*
- *If targets are achieved then the C202.1 and C202.2 are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.*
- *If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.*

Similar targets and achievement are to be stated for the other midterm tests/internal assessment instruments

Course Outcome Attainment:

For example:

Attainment through University Examination: Substantial i.e. 3

Attainment through Internal Assessment: Moderate i.e. 2

Assuming 80% weightage to University examination and 20% weightage to Internal assessment, the attainment calculations will be (80% of University level) + (20% of Internal level) i.e. 80% of 3 + 20% of 2 = 2.4 + 0.4 = 2.8

Note: Weightage of 80% to University exams is only an example. Programs may decide weightages appropriately for University exams and internal assessment with due justification.

3.3. Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1. Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used to gather the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

3.3.2. Provide results of evaluation of each PO & PSO (40)

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course – PO & PSO matrix as indicated).

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101												
C102												
…												
….												
….												
C409												
Direct Attainment												
Indirect Attainment												

Table B.3.3.2

Note: *Similar table is to be prepared for PSOs*

C101, C102 are indicative courses in the first year. Similarly, C409 is final year course. First numeric digit indicates year of study and remaining two digits indicate course nos. in the respective year of study.

- Direct attainment level of a PO & PSO is determined by taking average across all courses addressing that PO and/or PSO. Fractional numbers may be used for example 1.55.
- Indirect attainment level of PO & PSO is determined based on the student exit surveys, employer surveys, co-curricular activities, extracurricular activities etc.

Example:

1. It is assumed that a particular PO has been mapped to four courses C2O1, C3O2, C3O3 and C4O1

2. The attainment level for each of the four courses will be as per the examples shown in 3.2.2
3. PO attainment level will be based on attainment levels of direct assessment and indirect assessment
4. For affiliated, non-autonomous colleges, it is assumed that while deciding on overall attainment level 80% weightage may be given to direct assessment and 20% weightage to indirect assessment through surveys from students(largely), employers (to some extent). Program may have different weightages with appropriate justification.
5. Assuming following actual attainment levels:

   Direct Assessment

   C201 –High (3)

   C302 – Medium (2)

   C303 – Low (1)

   C401 – High (3)

   Attainment level will be summation of levels divided by no. of courses 3+2+1+3/4= 9/4=2.25

   Indirect Assessment

   Surveys, Analysis, customized to an average value as per levels 1, 2 & 3.

   Assumed level - 2

6. PO Attainment level will be 80% of direct assessment + 20% of indirect assessment i.e. 1.8 + 0.4 = 2.2.

Note: Similarly for PSOs

CRITERION 4	Students' Performance	150

4. STUDENTS' PERFORMANCE (150)

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY	CAY*m*1	CAY*m*2
Sanctioned intake of the program (*N*)			
Total number of students admitted in first year *minus* number of students migrated to other programs/institutions plus no. of students migrated to this program (*N*1)			
Number of students admitted in 2nd year in the same batch via lateral entry (*N*2)			
Separate division students, if applicable (*N3*)			
Total number of students admitted in the Program (*N*1 + *N*2 + N3)			

Table B.4a

CAY – Current Academic Year

CAYm1- Current Academic Year minus1= Current Assessment Year

CAYm2 - Current Academic Year minus2=Current Assessment Year minus 1

LYG – Last Year Graduate minus 1

LYGm1 – Last Year Graduate minus 1

LYGm2 – Last Year Graduate minus 2

Year of entry	***N*1 + *N*2 + N3 (As defined above)**	**Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study)**			
		I Year	II Year	III Year	IV Year
CAY					
CAY*m*1					
CAY*m*2					
CAY*m3*					
CAY*m4* (LYG)					
CAY*m5* (LYG*m*1)					
CAY*m6* (LYG*m*2)					

Table B.4b

Year of entry	***N*1 + *N*2 + N3 (As defined above)**	**Number of students who have successfully graduated (Students with backlog in stipulated period of study)**			
		I Year	II Year	III Year	IV Year
CAY					
CAY*m*1					
CAY*m*2					
CAY*m*3					
CAY*m*4 (LYG)					
CAY*m*5 (LYG*m*1)					
CAY*m*6 (LYG*m*2)					

Table B.4c

For Example from data entry perspective:

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	**CAY (2016-17)**	**CAY*m*1 (2015-16)**	**CAY*m*2 (2014-15)**
Sanctioned intake of the program (*N*)	120	120	120
Total number of students admitted in first year *minus* number of students migrated to other programs/institutions plus no. of students migrated to this program (*N*1)	100	100	110
Number of students admitted in 2nd year in the same batch via lateral entry (*N*2)	Nil	24	24
Separate division (*N3)*	Nil	Nil	Nil
Total number of students admitted in the Program (*N*1 + *N*2 + N3)	124	124	134

Year of entry	***N*1 + *N*2 + N3 (As defined above)**	**Number of students who have successfully graduated without backlogs in any semester/year of study**			
		I Year	II Year	III Year	IV Year
CAY (2016-17)	100 (100+0+0)				
CAY (2015-16)	124(100+24+0)	60			
CAY*m*1 (2014-15)	124 (100+24+0)	50	40+20		
CAY*m*2 (2013-14)	134 (110+24+0)	90	80+20	70+20	
CAY*m*3 (LYG) (2012-13)	124 (100+24+0)	100	90+20	85+18	85+15
CAY*m*4 (LYG*m*1) (2011-12)	130 (120+10+0)	80	70+10	60+10	50+10
CAY*m*5 (LYG*m*2) (2010-11)	144 (120+24+0)	70	60+15	54+10	50+10

Year of entry	***N*1 + *N*2 + N3 (As defined above)**	**Number of students who have successfully graduated (Students with backlog in stipulated period of study)**			
		I Year	II Year	III Year	IV Year
CAY (2016-17)	124 (100+0+0)				
CAY (2015-16)	124 (100+24+0)	40			
CAY*m*1 (2014-15)	124 (100+24+0)	50	45+4		
CAY*m*2 (2013-14)	134 (110+24+0)	20	20+4	15+3	

CAY*m*3 (LYG) (2012-13)	124 (100+24+0)	0	0+4	5+4	5+4
CAY*m*4 (LYG*m*1) (2011-12)	130 (120+10+0)	30	30+10	25+4	50+10
CAY*m*5 (LYG*m*2) (2010-11)	144 (120+24+0)	30	25+5	25+5	20+5

4.1. Enrolment Ratio (20) Enrolment Ratio= N1/N

Item (Students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year)	**Marks**
>=90% students enrolled	20
>=80% students enrolled	18
>=70% students enrolled	16
>=60% students enrolled	14
>=50% students enrolled	12
Otherwise	0

Table B.4.1

4.2. Success Rate in the stipulated period of the program (40)

4.2.1. Success rate without backlogs in any semester/year of study (25)

SI= (Number of students who have graduated from the program without backlog)/ (Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI = Mean of Success Index (SI) for past three batches

Success rate without backlogs in any year of study = 25 × Average SI

Item	Last Year of Graduate, LYG (CAY*m4*)	Last Year of Graduate minus 1, LYG*m*1 (CAY*m5*)	Last Year of Graduate minus 2, LYG*m*2 (CAY*m6*)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable			
Number of students who have graduated without backlogs in the stipulated period			
Success Index (SI)			
Average SI			

Table B.4.2.1

4.2.2. Success rate with backlog in stipulated period of study (15)

SI= (Number of students who graduated from the program in the stipulated period of course duration)/ (Number of students admitted in the first year of that batch and actual admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI = mean of Success Index (SI) for past three batches

Success rate = 15 × Average SI

Item	Last Year of Graduate(LYG) (CAY*m4*)	Last Year of Graduate minus 1, LYG*m*1(CAY*m5*)	Last Year of Graduate minus 2 LYG*m*2(CAY*m6*)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable			
Number of students who have graduated with backlog in the stipulated period			
Success Index (SI)			
Average Success Index			

Table B.4.2.2

Note: If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3. Academic Performance in Third Year (15)

*Academic Performance = 1.5 * Average API (Academic Performance Index)*

***API** = ((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/10)) x (number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the final year.

Academic Performance	**CAYm1**	**CAY*m2***	**CAY*m3***
Mean of CGPA or Mean Percentage of all successful students (X)			
Total no. of successful students (Y)			
Total no. of students appeared in the examination (Z)			

API = x* (Y/Z)	AP 1	AP 2	AP 3
Average API = (AP1 + AP2 + AP3)/3			

Table B.4.3

4.4. Academic Performance in Second Year (15)

*Academic Performance Level = 1.5 * Average API (Academic Performance Index)*

***API** = ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/10)) x (number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the Third year.

Academic Performance	**CAYm1**	**CAY*m2***	**CAY*m3***
Mean of CGPA or Mean Percentage of all successful students (X)			
Total no. of successful students (Y)			
Total no. of students appeared in the examination (Z)			
API = X* (Y/Z)	AP 1	AP 2	AP 3
Average API = (AP1 + AP2 + AP3)/3			

Table B.4.4

4.5. Placement, Higher Studies and Entrepreneurship (40)

Assessment Points = 40 × average placement

Item	**CAY*m1***	**CAY*m2***	**CAY*m3***
Total No. of Final Year Students (N)			
No. of students placed in companies or Government Sector (x)			
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)			
No. of students turned entrepreneur in engineering/technology (z)			
x + y + z =			
Placement Index : (x + y + z)/N	P1	P2	P3
Average placement= (P1 + P2 + P3)/3			

Table B.4.5

4.5a. Provide the placement data in the below mentioned format with the name of the program and the assessment year:

Programs Name and Assessment Year				
S.no.	**Name of the student placed**	**Enrollment no.**	**Name of the Employer**	**Appointment letter reference no. with date**

Table B.4.5a

4.6. Professional Activities (20)

4.6.1. Professional societies/chapters and organizing engineering events (5)

(The Department shall provide relevant details)

4.6.2. Publication of technical magazines, newsletters, etc. (5)

(The Department shall list the publications mentioned earlier along with the names of the editors, publishers, etc.)

4.6.3. Participation in inter-institute events by students of the program of study (10)

(The Department shall provide a table indicating those publications, which received awards in the events/conferences organized by other institutes.)

CRITERION 5	Faculty Information and Contributions	200

5. FACULTY INFORMATION AND CONTRIBUTIONS (200)

Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date on which Designated as Professor/ Associate Professor	Date of Joining the Institution	Department	Specialization	Academic Research			Currently Associated (Y/N) Date of Leaving (In case Currently Associated is ("No")	Nature of Association (Regular/Contract)
	Degree (highest degree)	University	Year of attaining higher qualification							Research Paper Publications	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		

Table B.5

Note: *Please provide details for the faculty of the department, cumulative information for all the shifts for all academic years starting from current year in above format in Annexure - II.*

5.1. Student-Faculty Ratio (SFR) (20)

(To be calculated at Department Level)

No. of UG Programs in the Department (n): _____
No. of PG Programs in the Department (m): _____
No. of Students in UG 2nd Year= **u1**
No. of Students in UG 3rd Year= **u2**
No. of Students in UG 4th Year= **u3**
No. of Students in PG 1st Year= **p1**
No. of Students in PG 2nd Year= **p2**

No. of Students = Sanctioned Intake + Actual admitted lateral entry students

(The above data to be provided considering all the UG and PG programs of the department)

S=Number of Students in the Department = UG1 + UG2 +… +UGn + PG1 + …PGn

F = Total Number of Faculty Members in the Department (excluding first year faculty)

Student Teacher Ratio (STR) = S / F

Year	CAY	CAYm1	CAYm2
u1.1			
u1.2			
u1.3			
UG1	**u1.1+u1.2+u1.3**	**u1.1+u1.2+u1.3**	**u1.1+u1.2+u1.3**
…			
u_n.1			
u_n.2			
u_n.3			
UGn	**u_n.1+u_n.2+u_n.3**	**u_n.1+u_n.2+u_n.3**	**u_n.1+u_n.2+u_n.3**
p1.1			
p1.2			
PG1	**p1.1+p1.2**	**p1.1+p1.2**	**p1.1+p1.2**
…..			
pm.1			
pm.2			
PGm	**pn.1+pn.2**	**pn.1+pn.2**	**pn.1+pn.2**
Total No. of Students in the Department **(S)**	**UG1 + UG2 +.. +UGn + PG1 + …PGn**	**UG1 + UG2 + .. +UGn + PG1+… + PGn**	**UG1 + UG2 + .. +UGn + PG1+… + PGn**
No. of Faculty in the Department **(F)**	**F1**	**F2**	**F3**
Student Faculty Ratio (SFR)	**SFR1=S1/F1**	**SFR2= S2/F2**	**SFR3= S3/F3**
Average SFR	**SFR=(SFR1+SFR2+SFR3)/3**		

Table B.5.1

Note: Marks to be given proportionally from a maximum of 20 to a minimum of 10 for average SFR between 15:1 to 25:1, and zero for average SFR higher than 25:1. Marks distribution is given as below:

< = 15 - 20 Marks
< = 17 - 18 Marks
< = 19 - 16 Marks
< = 21 - 14 Marks
< = 23 - 12 Marks
< = 25 - 10 Marks
> 25.0 - 0 Marks

- **Minimum 75% should be Regular/ full time faculty and the remaining shall be Contractual Faculty as per AICTE norms and standards.**
- **The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Student Faculty Ratio.**

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY		
CAYm1		
CAYm2		

Table 5.1.1

5.2. Faculty Cadre Proportion (25)

The reference Faculty cadre proportion is 1(F1):2(F2):6(F3)

F1: Number of Professors required = 1/9 x Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F2: Number of Associate Professors required = 2/9 x Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F3: Number of Assistant Professors required = 6/9 x Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY						
CAY*m*1						
CAY*m*2						
Average Numbers	RF1=	AF1=	RF2=	AF2=	RF3=	AF3=

Table B.5.2

$$\text{Cadre Ratio Marks} = \left[\left(\frac{AF1}{RF1} \right) + \left(\frac{AF2 \times 0.6}{RF2} \right) + \left(\frac{AF3 \times 0.4}{RF3} \right) \right] \times 12.5$$

- If AF1 = AF2= 0 then zero marks
- Maximum marks to be limited if it exceeds 25

Example: Intake = 60 (i.e. total no. of students= 180); Required number of Faculty: 9; RF1= 1, RF2=2 and RF3=6

Case 1: AF1/RF1= 1; AF2/RF2 = 1; AF3/RF3 = 1; Cadre proportion marks = (1+0.6+0.4) x 12.5 = 25

Case 2: AF1/RF1= 1; AF2/RF2 = 3/2; AF3/RF3 = 5/6; Cadre proportion marks = (1+0.9+0.3) x 12.5 = limited to 25

Case 3: AF1/RF1=0; AF2/RF2=1/2; AF3/RF3=8/6; Cadre proportion marks = (0+0.3+0.53) x 12.5 = 10.4

5.3. Faculty Qualification (25)

FQ =2.5 x [(10X +4Y)/F)] where x is no. of regular faculty with Ph.D., Y is no. of regular faculty with M.Tech. F is no. of regular faculty required to comply 20:1 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Years	X	Y	F	FQ=2.5 x [(10X +4Y)/F)]
CAY				
CAY*m*1				
CAY*m*2				
Average Assessment				

Table B.5.3

5.4. Faculty Retention (25)

No. of regular faculty members in CAY*m*2= CAY*m*1= CAY=

Item (% of faculty retained during the period of assessment keeping CAYm3 as base year)	**Marks**
>=90% of required Faculty members retained during the period of assessment keeping CAYm3 as base year)	25
>=75% of required Faculty members retained during the period of assessment keeping CAYm3 as base year)	20
>=60% of required Faculty members retained during the period of assessment keeping CAYm3 as base year)	15
>=50% of required Faculty members retained during the period of assessment keeping CAYm3 as base year)	10
<50% of required Faculty members retained during the period of assessment keeping CAYm3 as base year)	0

Table B.5.4

5.5. Innovations by the Faculty in Teaching and Learning (20)

Innovations by the Faculty in teaching and learning shall be summarized as per the following description.

Contributions to teaching and learning are activities that contribute to the improvement of student learning. These activities may include innovations not limited to, use of ICT, instruction delivery, instructional methods, assessment, evaluation and inclusive class rooms that lead to effective, efficient and engaging instruction. Any contributions to teaching and learning should satisfy the following criteria:

- *The work must be made available on Institute website*
- *The work must be available for peer review and critique*

•*The work must be reproducible and developed further by other scholars*

The department/institution may set up appropriate processes for making the contributions available to the public, getting them reviewed and for rewarding. These may typically include statement of clear goals, adequate preparation, use of appropriate methods, significance of results, effective presentation and reflective critique

5.6. Faculty as participants in Faculty development/training activities/STTPs (15)

•A Faculty scores maximum five points for participation

•Participation in 2 to 5 days Faculty development program: 3 Points

• Participation>5 days Faculty development program: 5 points

Name of the Faculty	**Max. 5 per Faculty**		
	CAYm1	**CAY*m2***	**CAYm3**
Sum			
***RF*= Number of Faculty required to comply with 20:1 Student-Faculty ratio as per 5.1**			
Assessment = 3 × (Sum/0.5RF) (Marks limited to 15)			
Average assessment over three years (Marks limited to 15) =			

Table B.5.6

5.7. Research and Development (30)

5.7.1. Academic Research (10)

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period.

• Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6)

• Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute (4)

All relevant details shall be mentioned.

5.7.2. Sponsored Research (5)

- Funded research:

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during CAYm1, CAYm2 and CAYm3):

Amount > 20 Lakh	– 5 Marks
Amount >= 16 Lakh and <= 20 Lakh	– 4 Marks
Amount >= 12 Lakh and < 16 Lakh	– 3 Marks
Amount >= 8 Lakh and < 12 Lakh	– 2 Marks
Amount >= 4 Lakh and < 8 Lakh	– 1 Mark
Amount < 4 Lakh	– 0 Mark

5.7.3. Development activities (10)

Provide details:

- Product Development
- Research laboratories
- Instructional materials
- Working models/charts/monograms etc.

5.7.4. Consultancy (from Industry) (5)

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during CAY*m1*, CAY*m2* and CAY*m3*):

Amount > 10 Lakh	– 5 Marks
Amount >= 8 Lakh and <= 10 Lakh	– 4 Marks
Amount >= 6 Lakh and < 8 Lakh	– 3 Marks
Amount >= 4 Lakh and < 6 Lakh	– 2 Marks
Amount >= 2 Lakh and < 4 Lakh	– 1 Mark
Amount < 2 Lakh	– 0 Mark

5.8. Faculty Performance Appraisal and Development System (FPADS) (30)

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, Faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real life problems in industry. Another role relates to the shouldering of administrative responsibilities and co-operation with other Faculty, Heads-of-Departments and the Head of Institute. An effective performance appraisal system for Faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

The assessment is based on:

- A well-defined system for faculty appraisal for all the assessment years (10)
- Its implementation and effectiveness (20)

5.9. Visiting/Adjunct/Emeritus Faculty etc. (10)

Adjunct faculty also includes Industry experts. Provide details of participation and contributions in teaching and learning and /or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years:

- Provision of inviting/having visiting/adjunct/emeritus faculty (1)
- Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.

  (Minimum 50 hours interaction in a year will result in 3 marks for that year; 3 marks x 3 years = 9 marks)

CRITERION 6	Facilities and Technical Support	80

6. FACILITIES AND TECHNICAL SUPPORT (80)

6.1. Adequate and well equipped laboratories, and technical manpower (30)

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1.							
N.							

Table B.6.1

6.2. Additional facilities created for improving the quality of learning experience in laboratories (25)

Sr. No.	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Relevance to POs/PSOs
1.						
N.						

Table B.6.2

6.3. Laboratories: Maintenance and overall ambiance (10)

(Self-Explanatory)

6.4. Project laboratory (5)

(Mention facilities & Utilization)

6.5. Safety measures in laboratories (10)

Sr. No.	Name of the Laboratory	Safety measures
1.		
2.		
N.		

Table B.6.5

CRITERION 7	Continuous Improvement	50

7. CONTINUOUS IMPROVEMENT (50)

7.1. Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attainment levels for the assessment years.

Actions to be written as per table in 3.3.2.

Examples of analysis and proposed action

Sample 1-Course outcomes for a laboratory course did not measure up, as some of the lab equipment did not have the capability to do the needful (e.g., single trace oscilloscopes available where dual trace would have been better, or, non-availability of some important support software etc.). Action taken-Equipment up-gradation was carried out (with details of up-gradation)

Sample 2-In a course on EM theory student performance has been consistently low with respect to some COs. Analysis of answer scripts and discussions with the students revealed that this could be attributed to a weaker course on vector calculus.

Action taken-revision of the course syllabus was carried out (instructor/text book changed too has been changed, when deemed appropriate).

Sample 3-In a course that had group projects it was determined that the expectations from this course about PO3 (like: "to meet the specifications with consideration for the public health and safety, and the cultural, societal, and environmental considerations") were not realized as there were no discussions about these aspects while planning and execution of the project. Action taken-Project planning, monitoring and evaluation included in rubrics related to these aspects.

POs & PSOs Attainment Levels and Actions for improvement – CAY

POs	Target Level	Attainment Level	Observations
PO1: Statement as mentioned in Annexure I			
PO1			
Action 1: **Action N:**			
PO2:Statement as mentioned in Annexure I			
PO2			
Action 1: **Action N:**			

PO3: Statement as mentioned in Annexure I			
PO3			
Action 1: **Action N:**			
PO4: Statement as mentioned in Annexure I			
PO4			
Action 1: **Action N:**			
PO5: Statement as mentioned in Annexure I			
PO5			
Action 1: **Action N:**			
PO6 :Statement as mentioned in Annexure I			
PO6			
Action 1: **Action N:**			
PO7:Statement as mentioned in Annexure I			
PO7			
Action 1: **Action N:**			
PO8:Statement as mentioned in Annexure I			
PO8			
Action 1: **Action N:**			
PO9 :Statement as mentioned in Annexure I			
PO9			
Action 1: **Action N:**			
PO10 :Statement as mentioned in Annexure I			

PO10				
Action 1: **Action N:**				
PO11 :Statement as mentioned in Annexure I				
PO11				
Action 1: **Action N:**				
PO12 :Statement as mentioned in Annexure I				
PO12				
Action 1: **Action N:**				
Similar information is to be provided for PSOs				

Table B.7.1

Similar Tables should be presented for CAY*m*1 and CAY*m*2

7.2. Academic Audit and actions taken thereof during the period of Assessment (10)

(Academic Audit system/process and its implementation in relation to Continuous Improvement)

7.3. Improvement in Placement, Higher Studies and Entrepreneurship (10)

Assessment is based on improvement in:

- *Placement: number, quality placement, core industry, pay packages etc.*
- *Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier institutions*
- *Entrepreneurs*

7.4. Improvement in the quality of students admitted to the program (10)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Item		**CAY**	**CAY*m*1**	**CAY*m*2**
National Level Entrance Examination (Name of the	**No. of Students admitted**			
	Opening Score/Rank			

Entrance Examination)	**Closing Score/Rank**			
State/University/Level Entrance Examination/Others (Name of the Entrance Examination)	**No. of Students admitted**			
	Opening Score/Rank			
	Closing Score/Rank			
Name of the Entrance Examination for Lateral Entry or lateral entry details	**No. of Students admitted**			
	Opening Score/Rank			
	Closing Score/Rank			
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Maths)				

Table B.7.4

CRITERION 8	First Year Academics	50

8. FIRST YEAR ACADEMICS (50)

8.1. First Year Student-Faculty Ratio (FYSFR) (5)

Data for first year courses to calculate the FYSFR:

Year	Number of students (approved intake strength)	Number of faculty members (considering fractional load)	FYSFR	*Assessment = (5 ×20)/ FYSFR (Limited to Max. 5)
CAY				
CAY*m*1				
CAYm2				
Average				

Table B.8.1

***Note:** If FYSFR is greater than 25, then assessment equal to zero.

8.2. Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = (5*x* +3*y*)/*RF, x*= Number of Regular Faculty with Ph.D, *y* = Number of Regular Faculty with Post-graduate qualification *RF*= Number of faculty members required as per SFR of 20:1, Faculty definition as defined in 5.1

Year	*x*	*Y*	*RF*	Assessment of faculty qualification (5*x* + 3*y*)/*RF*
CAY				
CAY*m*1				
CAY*m*2				
Average Assessment				

Table B.8.2

8.3. First Year Academic Performance (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10)) x *(number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the second year.

8.4. Attainment of Course Outcomes of first year courses (10)

8.4.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

(Examples of data collection processes may include, but are not limited to, specific exam questions, laboratory tests, internally developed assessment exams, oral exams assignments, presentations, tutorial sheets etc.)

8.4.2. Record the attainment of Course Outcomes of all first year courses (5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect the COs of a subject plus the performance in the University examination)

Refer to 3.2.2 for further details

8.5. Attainment of Program Outcomes from first year courses (20)

8.5.1. Indicate results of evaluation of each <u>relevant</u> PO and/or PSO, if applicable (15)

The relevant program outcomes that are to be addressed at first year need to be identified by the institution.

Program Outcome attainment levels shall be set for all relevant POs and/or PSOs *through first year courses.*

(Describe the assessment processes that demonstrate the degree to which the Program Outcomes are attained through first year courses and document the attainment levels. Also include information on assessment processes used to gather the data upon which the evaluation of each Program Outcome is based indicating the frequency with which these processes are carried out)

PO Attainment: Mention first year details from table 3.1.3

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101												
C102												
…												

….												
Direct Attainment*												

Table B.8.5.1

* Direct attainment level of a PO is determined by taking average across all courses addressing that PO. Fractional numbers may be used for example 1.55.

Note: Add PSOs; if applicable

8.5.2. Actions taken based on the results of evaluation of relevant POs (5)

(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

PO Attainment Levels and Actions for improvement - CAY – Mention for relevant POs

POs	**Target Level**	**Attainment Level**	**Observations**
PO1: Statement as mentioned in Annexure I			
PO1			
Action 1: **Action N:**			
PO2:Statement as mentioned in Annexure I			
PO2			
Action 1: **Action N:**			
PO3: Statement as mentioned in Annexure I			
PO3			
Action 1: **Action N:**			
PO4: Statement as mentioned in Annexure I			
PO4			
Action 1: **Action N:**			
PO5: Statement as mentioned in Annexure I			

PO5			
Action 1: **Action N:**			
PO6 :Statement as mentioned in Annexure I			
PO6			
Action 1: **Action N:**			
PO7:Statement as mentioned in Annexure I			
PO7			
Action 1: **Action N:**			
PO8:Statement as mentioned in Annexure I			
PO8			
Action 1: **Action N:**			
PO9 :Statement as mentioned in Annexure I			
PO9			
Action 1: **Action N:**			
PO10 :Statement as mentioned in Annexure I			
PO10			
Action 1: **Action N:**			
PO11 :Statement as mentioned in Annexure I			
PO11			
Action 1: **Action N:**			
PO12 :Statement as mentioned in Annexure I			
PO12			

Action 1:
Action N:

Table B.8.5.2

Note: PSOs, if applicable to be added appropriately.

Similar Tables should be presented for CAY*m*1 and CAY*m*2

CRITERION 9	Student Support Systems	50

9. STUDENT SUPPORT SYSTEMS (50)

9.1 Mentoring system to help at individual level (5)

Type of mentoring: Professional guidance/career advancement/course work specific/laboratory specific/all-round development. Number of faculty mentors: Number of students per mentor: Frequency of meeting:

(The institution may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system)

9.2. Feedback analysis and reward /corrective measures taken, if any (10)

Feedback collected for all courses: YES/NO; Specify the feedback collection process; Average Percentage of students who participate; Specify the feedback analysis process; Basis of reward/ corrective measures, if any; Indices used for measuring quality of teaching & learning and summary of the index values for all courses/teachers; Number of corrective actions taken.

9.3. Feedback on facilities (5)

Assessment is based on student feedback collection, analysis and corrective action taken.

9.4. Self-Learning (5)

(*The institution needs to specify the facilities, materials and scope for self-learning / learning beyond syllabus, Webinars, Podcast, MOOCs etc. and evaluate their effectiveness)*

9.5. Career Guidance, Training, Placement (10)

(*The institution may specify the facility, its management and its effectiveness for career guidance including counseling for higher studies, campus placement support, industry interaction for training/internship/placement, etc.)*

9.6. Entrepreneurship Cell (5)

(*The institution may describe the facility, its management and its effectiveness in encouraging entrepreneurship and incubation*) *(Success stories for each of the assessment years are to be mentioned)*

9.7. Co-curricular and Extra-curricular Activities (10)

(*The institution may specify the co-curricular and extra-curricular activities*) *(Quantify activities such as NCC, NSS etc.)*

10. GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

10.1. Organization, Governance and Transparency (40)

10.1.1. State the Vision and Mission of the Institute (5)

(Vision statement typically indicates aspirations and Mission statement states the broad approach to achieve aspirations)

10.1.2. Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein, in a tabular form. A few sample minutes of the meetings and action-taken reports should be annexed.

The published rules including service rules, policies and procedures; year of publication shall be listed. Also state the extent of awareness among the employees/students.

10.1.3. Decentralization in working and grievance redressal mechanism (10)

List the names of the faculty members who have been delegated powers for taking administrative decisions. Mention details in respect of decentralization in working. Specify the mechanism and composition of grievance redressal cell including Anti Ragging Committee & Sexual Harassment Committee.

10.1.4. Delegation of financial powers (10)

Institution should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges. Demonstrate the utilization of financial powers for each year of the assessment years.

10.1.5. Transparency and availability of correct/unambiguous information in public domain (5)

(Information on policies, rules, processes and dissemination of this information to stakeholders is to be made available on the web site)

10.2. Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years.

Total Income at Institute level: For CFY, CFY*m*1, CFY*m*2 & CFY*m*3

CFY: Current Financial Year, CFY*m*1 (Current Financial Year minus 1), CFY*m*2 (Current Financial Year minus 2) and CFY*m*3 (Current Financial Year minus 3)

For CFY

Total Income:				**Actual expenditure (till …):**			**Total No. of students**:
Fee	**Govt.**	**Grant(s)**	**Other Sources (specify)**	**Recurring including Salaries**	**Non-recurring**	**Special Projects/Any other, specify**	**Expenditure per student**

Table B.10.2a

Note: Similar tables are to be prepared for CFY*m*1, CFY*m*2 & CFY*m*3.

Items	Budgeted in CFY	Actual expenses in CFY (till …)	Budgeted in CFY*m*1	Actual Expenses in CFY*m*1	Budgeted in CFY*m*2	Actual Expenses in CFY*m*2	Budgeted in CFY*m*3	Actual Expenses in CFY*m*3
Infrastructure Built-Up								
Library								
Laboratory equipment								
Laboratory consumables								
Teaching and non-teaching staff salary								
Maintenance and spares								

R&D								
Training and Travel								
Miscellaneous expenses *								
Others, specify								
Total								

Table B.10.2b

*** Items to be mentioned.**

10.2.1. Adequacy of budget allocation (10)

(The institution needs to justify that the budget allocated during assessment years was adequate)

10.2.2. Utilization of allocated funds (15)

(The institution needs to state how the budget was utilized during assessment years)

10.2.3. Availability of the audited statements on the institute's website (5)

(The institution needs to make audited statements available on its website)

10.3. Program Specific Budget Allocation, Utilization (30)

Total Budget at program level: For CFY, CFY*m*1, CFY*m*2 & CFY*m*3

CFY: Current Financial Year, CFY*m*1 (Current Financial Year minus 1), CFY*m*2 (Current Financial Year minus 2) and CFY*m*3 (Current Financial Year minus 3).

For CFY

Total Budget:		**Actual expenditure (till …):**		**Total No. of students**:
Non recurring	**Recurring**	**Non Recurring**	**Recurring**	**Expenditure per student**

Table B.10.3a

Note: Similar tables are to be prepared for CFY*m*1, CFY*m*2 & CFY*m*3.

Items	Budgeted in CFY	Actual expenses in CFY (till …)	Budgeted in CFY*m*1	Actual Expenses in CFY*m*1	Budgeted in CFY*m*2	Actual Expenses in CFY*m*2	Budgeted in CFY*m*3	Actual Expenses in CFY*m*3
Laboratory equipment								
Software								
Laboratory consumable								
Maintenance and spares								
R & D								
Training and Travel								
Miscellaneous expenses *								
Total								

Table B.10.3b

*** Items to be mentioned.**

10.3.1. Adequacy of budget allocation (10)

(Program needs to justify that the budget allocated over the assessment years was adequate for the program)

10.3.2. Utilization of allocated funds (20)

(Program needs to state how the budget was utilized during the last three assessment years)

10.4. Library and Internet (20)

(Indicate whether zero deficiency report was received by the Institution for all the assessment years. Effective availability/purchase records and utilization of facilities/equipment etc. to be documented and demonstrated)

10.4.1. Quality of learning resources (hard/soft) (10)

- Relevance of available learning resources including e-resources
- Accessibility to students
- Support to students for self-learning activities

10.4.2. Internet (10)

- Name of the Internet provider:
- Available bandwidth:
- Wi Fi availability:
- Internet access in labs, classrooms, library and offices of all Departments:
- Security arrangements:

Declaration

(The head of the institution needs to make a declaration as per the format given)

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institute shall fully abide by them.

It is submitted that information provided in this Self Assessment Report is factually correct. I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA, in case any false statement/information is observed during pre-visit, visit, post visit and subsequent to grant of accreditation.

Date: **Signature & Name**

Place: **Head of the Institution with seal**

ANNEXURE I:

(A) PROGRAM OUTCOMES(POs)

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOMES (PSOs)

Program shall specify 2-4 program specific outcomes.