

# **NATIONAL BOARD OF ACCREDITATION**

## **FORMAT FOR SELF ASSESSMENT REPORT (SAR) FOR ACCREDITATION OF MCA PROGRAMME (TIER-I)**



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# Self - Assessment Report (SAR)

## Part A

### I. Institutional Information

*I.1. Name and address of the institution and affiliating university:*

(Instruction: Name, address of the institution, and name of the university which has given affiliation to this institution are to be listed here.)

*I.2. Name, designation, telephone number, and e-mail address of the contact person for the NBA:*

(Instruction: The name of the contact person, with other details, is to be listed here.)

*I.3. History of the institution (including the date of introduction and number of seats of various programmes of study alongwith the NBA accreditation, if any) in a tabular form:*

Year	Description
.....	Institution started with the following programmes (intake strength)
	Date of NBA accreditation visits and accreditation granted, if any
.....	Addition of new programmes, increase in intake strength of the existing programmes and/or accreditation status

(Instruction: History of the institution and its chronological development along with the past accreditation records need to be listed here.)

*I.4. Ownership status: Govt. (central/state) / trust / society (Govt./NGO/private) / private/ other:*

(Instruction: Ownership status of the institute is to be listed here.)

*I.5. Mission and Vision of the Institution:*

(The institution needs to specify its Mission and Vision.)

*I.6. Organisational Structure:*

(Organisational chart showing the hierarchy of academics and administration is to be included.)

*I.7. Financial status: Govt. (central/state) / grants-in-aid / not-for-profit / private self-financing / other:*

(Instruction: Financial status of the institute is to be mentioned here.)

*I.8. Nature of the trust/society:*

Also, list other institutions/colleges run by the trust/society

(Instruction: Way of functioning and activities of the trust/society have to be listed here.)

Name of the Institution	Year of Establishment	Location

*I.9. External sources of funds:*

Name of the external source	CFYm1	CFYm2	CFYm3

(Instruction: The different sources of the external funds over the last three financial years are to be listed here.)

*I.10 Internally acquired funds:*

Name of the internal source	CFY <sub>m1</sub>	CFY <sub>m2</sub>	CFY <sub>m3</sub>
Students' fee			

(Instruction: The different sources of the internal funds over the last three financial years are to be listed here.)

*I.11 Scholarships or any other financial assistance provided to students*

(Instruction: If any scholarship or financial assistance has been provided to the students, then the details of such assistance over the last three financial years has to be listed here. Also mention need to be made of the basis for the award of such scholarship.)

Details	CFY <sub>m1</sub>	CFY <sub>m2</sub>	CFY <sub>m3</sub>
Category			
Scholarship Assistance			
Amount			

*I.12 Basis/criterion for admission to the institution:*

All India entrance / state-level entrance / university entrance / 12th standard mark sheet / others:

(Instruction: The basis/criterion for student intake is to be listed here.)

*I.13 Total number of students:*

	CAY	CAY <sub>m1</sub>	CAY <sub>m2</sub>	CAY <sub>m3</sub>
Total no. of boys:				
Total no. of girls:				
Total no. of students:				

Total number of other students, if any

(Instruction: Total number of students, both boys and girls, is to be listed here. The data may be categorised in a tabular form, MCA, MBA, CSE/IT or other programme, if applicable.)

***I.14 Total number of employees***

(Instruction: Total number of employees, both men and women, has to be listed here. The data may be categorised in a tabular form as teaching and supporting staff.)

Minimum and maximum number of staff on roll in the institution, during the CAY and the previous CAYs (1st July to 30th June):

**A. Regular Staff**

Items		CAY		CAY <sub>m1</sub>		CAY <sub>m2</sub>		CAY <sub>m3</sub>	
		Min	Max	Min	Max	Min	Max	Min	Max
Teaching staff in MCA	M								
	F								
Teaching staff in MBA	M								
	F								
Teaching staff in engineering	M								
	F								
Teaching staff in science & humanities	M								
	F								
Non-teaching staff	M								
	F								

(Instruction: Staff strength, both teaching and non-teaching, over the last three academic years is to be listed here.)

B. Contract Staff

Items		CAY		CAY <sub>m1</sub>		CAY <sub>m2</sub>		CAY <sub>m3</sub>	
		Min	Max	Min	Ma	Min	Max	Min	Max
Teaching staff in MCA	M								
	F								
Teaching staff in MBA	M								
	F								
Teaching staff in engineering	M								
	F								
Teaching staff in science & humanities	M								
	F								
Non-teaching staff	M								
	F								

## II. Departmental Information

*II.1. Name and address of the department:*

*II.2. Name, designation, telephone number, and e-mail address of the contact person for the NBA:*

*II.3. History of the department including date of introduction and number of seats of various programmes of study alongwith the NBA accreditation ,if any:*

Programme	Description
UG in.....	
PG in.....	..... .....
MCA.....	

*II.4. Mission and Vision of the Department*

(The department is required to specify its Mission and Vision).

*II.5. List of the programmes/ departments which share human resources and/or the facilities of this programmes/ departments (in %):*

*(Instruction: The institution needs to mention the different programmes being run in the department which share the human resources and facilities with this department/programme being accredited.)*



II.6. Total number of students:

MCA:

II.7. Minimum and maximum number of staff on roll during the current and three previous academic years (1st July to 30th June) in the department:

Items	CAY		CAY <sub>m1</sub>		CAY <sub>m2</sub>		CAY <sub>m3</sub>	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Teaching staff in the department								
Non-teaching staff								
Technical Staff								
Total								

II.7.1. Summary of budget for the CFY and the actual expenditure incurred in the CFY<sub>m1</sub>, CFY<sub>m2</sub> and CFY<sub>m3</sub> (for the Department):

Items	Budgeted in CFY <sub>m1</sub>	Actual Expenses in CFY <sub>m1</sub>	Budgeted in CFY <sub>m2</sub>	Actual Expenses in CFY <sub>m2</sub>	Budgeted in CFY <sub>m3</sub>	Actual Expenses in CFY <sub>m3</sub>
Laboratory equipment						
Software						
Laboratory consumables						
Maintenance and spares						
Training and Travel						
Miscellaneous expenses for academic activities						
Total						

### III. Programme Specific information

III.1. *Name of the Programme*

III.2. *Title of the Degree*

(List name of the degree title, as it appears on the graduate's certificate, and transcript and abbreviation used for the degree.)

III.3. *Name, designation, telephone number, and e-mail address of the Programme coordinator for the NBA:*

III.4. *History of the programme along with the NBA accreditation, if any:*

Program	Description
MCA	Started with .....seats in..... Intake increased to ..... in..... Intake increased to ..... in..... Accredited in .....

III.5. *Deficiencies, weaknesses/concerns from previous accreditations:*

III.6. *Total number of students in the programme:*

III.7. *Minimum and maximum number of staff for the current and three previous academic years (1st July to 30th June) in the programme:*

Items	CAY		CAY <sub>m1</sub>		CAY <sub>m2</sub>		CAY <sub>m3</sub>	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Teaching staff with the programme								
Non-teaching staff								

*III.8. Summary of budget for the CFY and the actual expenditure incurred in the CFY<sub>m1</sub>, CFY<sub>m2</sub> and CFY<sub>m3</sub> (exclusively for this programme in the department):*

Items	Budgeted in CFY <sub>m1</sub>	Actual Expenses in CFY <sub>m1</sub>	Budgeted in CFY <sub>m2</sub>	Actual Expenses in CFY <sub>m2</sub>	Budgeted in CFY <sub>m3</sub>	Actual Expenses in CFY <sub>m3</sub>
Laboratory equipment						
Software						
Laboratory consumables						
Maintenance and spares						
Travel						
Miscellaneous expenses for academic activities						
Total						

## **PART B**

### **1. Vision, Mission and Programme Educational Objectives (75)**

#### *1.1. Vision and Mission (5)*

1.1.1. State the Vision and Mission of the institute and department (1)

(List and articulate the vision and mission statements of the institute and department)

1.1.2. Indicate how and where the Vision and Mission are published and disseminated (2)

(Describe in which media, e.g. websites, curricula, books, etc. the vision and mission are published and how these are disseminated among stakeholders)

1.1.3. Mention the process for defining Vision and Mission of the department (2)

(Articulate the process involved in defining the vision and mission of the department from the vision and mission of the institute)

#### *1.2. Programme Educational Objectives (10)*

1.2.1. Describe the Programme Educational Objectives (PEOs) (1)

(List and articulate the programme educational objectives of the programme being considered for accreditation)

1.2.2. State how and where the PEOs are published and disseminated (1)

(Describe in which media, e.g. websites, curricula, books, etc. the PEOs are published and how these are disseminated among stakeholders)

1.2.3. List the stakeholders of the programme (1)

(List stakeholders of the programme under consideration for accreditation and articulate their relevance)

1.2.4. State the process for establishing the PEOs (3)

(Describe the process that periodically documents and demonstrates that the PEOs are based on the needs of the programme's various stakeholders.)

1.2.5. Establish consistency of the PEOs with the Mission of the institute (4)

(Describe how the Programme Educational Objectives are consistent with the Mission of the department.)

### *1.3. Achievement of Programme Educational Objectives (25)*

#### **1.3.1. Justify the academic factors involved in achievement of the PEOs (15)**

(Describe the broad curricular components that contribute towards the **achievement** of the Programme Educational Objectives)

#### **1.3.2. Explain how the administrative system helps in ensuring the achievement of the PEOs (10)**

(Describe the committees and their functions, working process and related regulations)

### **1.4. Assessment of the achievement of Programme Educational Objectives (30)**

#### **1.4.1. Indicate tools and processes used in assessment of the achievement of the PEOs (5)**

Describe the assessment process that periodically documents and demonstrates the degree to which the Programme Educational Objectives are attained. Also, include information on:

- a) Listing and description of the assessment processes used to gather the data upon which the evaluation of each programme educational objective is based. Examples of data collection processes may include, but are not limited to, employer surveys, graduate surveys, focus groups, industrial advisory committee meetings, or other processes that are relevant and appropriate to the programme;
- b) The frequency with which these assessment processes are carried out.

#### **1.4.2. Provide the evidences for the achievement of the PEOs (25)**

- a) The expected level of attainment for each of the programme educational objectives;
- b) Summaries of the results of the evaluation processes and an analysis illustrating the extent to which each of the programme educational objectives is being attained; and
- c) How the results are documented and maintained.

### **1.5. Indicate how the PEOs have been redefined in the past (5)**

(Articulate with rationale how the results of the evaluation of the PEOs have been used to review/redefine the PEOs)

## 2. Programme Outcomes (175)

### 2.1. Describe and Validation of Course Outcomes and Programme Outcomes (20)

#### 2.1.1. List the Course Outcomes(COs) and Programme Outcomes (POs) (1)

(List the course outcomes of the courses in programme curriculum and programme outcomes of the programme under accreditation)

#### 2.1.2. State how and where the POs are published and disseminated (1)

(Describe in which media, e.g. websites, curricula books, the POs are published and how these are disseminated among stakeholders)

#### 2.1.3. Indicate processes employed for evolving of the POs (3)

(Describe the process that periodically documents and demonstrates that the POs are defined in alignment with the graduate attributes prescribed by the NBA)

#### 2.1.4. Indicate how these POs are aligned to the Graduate Attributes prescribed by the NBA (10)

(Indicate how the POs defined for the programme are aligned with the Graduate Attributes of NBA as articulated in the accreditation manual)

#### 2.1.5. Establish the correlation between the POs and the PEOs (5)

(Explain how the defined POs of the programme correlate with the PEOs)

### 2.2. Attainment of Programme Outcomes (30)

#### 2.2.1. Illustrate how course outcomes contribute to the POs (10)

(Provide the correlation between the course outcomes and the programme outcomes. The strength of the correlation may also be indicated)

#### 2.2.2. Explain how modes of delivery of courses help in attainment of the POs (5)

(Describe the different course delivery methods/modes (e.g. lecture interspersed with discussion, asynchronous mode of interaction, group discussion, project etc.) used to deliver the courses and justify the Effectiveness of these methods for the attainment of the POs. This may be further justified using the indirect Assessment methods such as course-end surveys.)

2.2.3. Indicate how assessment tools used to assess the impact of delivery of course/course content contribute towards the attainment of course outcomes/programme outcomes (5)

(Describe different types of course assessment and evaluation methods, both direct and indirect, in practice and their relevance towards the attainment of POs. )

2.2.4. Indicate the extent to which the laboratory and project course work are contributing towards attainment of the POs (10)

(Justify the balance between theory and practical for the attainment of the POs . Justify how the various project works (a sample of 20% best and average projects from total projects) carried as part of the programme curriculum contribute towards the attainment of the POs.)

### **2.3. Evaluation of the attainment of the Programme Outcomes (100)**

2.3.1. Describe assessment tools and processes used for assessing the attainment of each PO (20)

Describe the assessment process that periodically documents and demonstrates the degree to which the Programme Outcomes are attained. Also, include information on:

- a) Listing and description of the assessment processes used to gather the data upon which the evaluation of each the programme outcome is based. Examples of data collection processes may include, but are not limited to, specific exam questions, student portfolios, internally developed assessment exams, project presentations, nationally-normed exams, oral exams, focus groups, industrial advisory committee;
- b) The frequency with which these assessment processes are carried out.

2.3.2. Indicate results of evaluation of each PO (80)

- c) The expected level of attainment for each of the programme outcomes;
- d) Summaries of the results of the evaluation processes and an analysis illustrating the extent to which each of the programme outcomes are attained; and
- e) How the results are documented and maintained.

### **2.4. Use of evaluation results towards improvement of the programme (25)**

2.4.1. Indicate how the results of evaluation used for curricular improvement (5)

(Articulate with rationale the curricular improvement brought in after the review of the attainment of the POs.)

2.4.2. Indicate how results of evaluation used for improvement of course delivery and assessment (10)

(Articulate with rationale the curricular delivery and assessment of improvement brought in after the review of the attainment of the POs)

2.4.3. State the process used for revising/redefining the POs (10)

(Articulate with rationale how the results of the evaluation of the POs have been used to review/redefine the POs in line with the Graduate Attributes of the NBA.)

### 3. Programme Curriculum (125)

#### 3.1. Curriculum (20)

##### 3.1.1. Describe the Structure of the Curriculum (5)

Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical# (P)	Total Hours	
.....	.....					
Total						

#Seminars, project works may be considered as practical. %course in maths, ICT and Management

##### 3.1.2. Give the prerequisite flow chart of courses (5)

(Draw the schematic of the prerequisites of the courses in the curriculum)

##### 3.1.3. Justify how the programme curriculum satisfies the programme specific criteria (10)

(Justify how the programme curriculum satisfies the programme specific criteria specified by the American professional societies relevant to the programme under accreditation)

#### 3.2. State the components of the curriculum and their relevance to the POs and the PEOs (15)

Programme curriculum grouping based on different components

Course Component	Curriculum Content (% of total number of credits of the programme )	Total number of contact hours	Total Number of credits	POs	PEOs
Mathematics					
Management					
ICT					
Humanities					
.....					
.....					



### 3.3. State how the professional core courses are contributing towards Programme Outcomes (60)

(Describe how the core courses in the curriculum lend a learning experience to attain the programme outcomes)

### 3.4. Industry interaction/internship (10)

(Give the details of industry involvement in the programme such as industry-attached laboratories and partial delivery of courses and internship opportunities for students)

### 3.5. Curriculum Development (15)

#### 3.5.1. State the process for designing the programme curriculum (5)

(Describe the process that periodically documents and demonstrates how the programme curriculum is evolved considering the PEOs and the POs)

#### 3.5.2. Illustrate the measures and processes used to improve courses and curriculum (10)

(Articulate the process involved in identifying the requirement for improvement in courses and curriculum and provide the evidence of continuous improvement of courses and curriculum)

### 3.6. *Course Syllabi* (5)

(Include, in appendix, a syllabus for each course used. Syllabi format should be consistent and shouldn't exceed two pages.)

The syllabi format may include:

- Department, course number, and title of course
- Designation as a required or elective course
- Pre-requisites
- Contact hours and type of course (lecture, tutorial, seminar, project etc.,)
- Course Assessment methods (both continuous and semester-end assessment)
- Course outcomes
- Topics covered
- Text books, and/or reference material

## 4. Students' Performance (100)

### Admission intake in the programme

Item	CAY	CAY <sub>m1</sub>	CAY <sub>m2</sub>	CAY <sub>m3</sub>
Sanctioned intake strength in the programme ( <i>N</i> )				
Total number of admitted students in first year <i>minus</i> number of students migrated to other programmes at the end of 1st year ( <i>N1</i> )				
Total number of admitted students in the programme ( <i>N1</i> )				

### 4.1. Success Rate (30)

Provide data for the past batches of students

Year of entry (in reverse chronological order)	Number of students admitted in 1st year ( <i>N1</i> )	Number of students who have successfully completed*		
		1st year	2nd year	3rd year
CAY				
CAY <sub>m1</sub>				
CAY <sub>m2</sub>				
CAY <sub>m3</sub> (LYG)				
CAY <sub>m4</sub> (LYG <sub>m1</sub> )				
CAY <sub>m5</sub> (LYG <sub>m2</sub> )				

\* successfully completed implies zero backlogs

Success rate=  $30 \times$  mean of success index (SI) for past three batches

SI= (Number of students who graduated from the programme in the stipulated period of course duration)/(Number of students admitted in the first year of that batch)

Item	LYG (CAY <sub>m3</sub> )	LYG <sub>m1</sub> (CAY <sub>m4</sub> )	LYG <sub>m2</sub> (CAY <sub>m5</sub> )
Number of students admitted in the corresponding First Year			
Number of students who have graduated in the stipulated period			
Success index (SI)			

Average SI = .....

Success rate =  $30 \times$  Average SI = .....

#### 4.2.Academic Performance (30)

Academic Performance =  $2 * \text{API}$

Where API = Academic Performance Index

= Mean of Cumulative Grade Point Average of all successful Students on a 10 point CGPA System

OR

= Mean of the percentage of marks of all successful students / 10

Item	LYG (CAY <sub>m4</sub> )	LYG <sub>m1</sub> (CAY <sub>m5</sub> )	LYG <sub>m2</sub> (CAY <sub>m6</sub> )
Approximating the API by the following mid-point analysis			
9 < Number of students with CGPA < 10.0	0	0	0
8 < Number of students with CGPA < 9.0	18	29	7
7<=8	42	63	28
6<=7	36	28	17
5<=6	5	1	3
Total	101	121	55
Approximating API by Mid-CGPA			
<b>Mean of CGPA/Percentage of all the students (API)</b>	<b>7.72</b>	<b>7.4</b>	<b>7.17</b>

Av. API = 7.43

Academic Performance =  $2 \times \text{Av. API} = 14.86$

### 4.3 Placement and Higher Studies (20)

$$\text{Assessment Points} = 20 \times (x + 1.25y)/N$$

where,  $x$  = Number of students placed

$y$  = Number of students admitted for higher studies with valid qualifying scores/ranks, and

$N$  = Total number of students who were admitted in the batch subject to maximum assessment points = 20.

Item	LYG	LYGm1	LYGm2
Number of admitted students corresponding to LYG ( $N$ )			
Number of students who obtained jobs as per the record of placement office ( $x_1$ )			
Number of students who found employment otherwise at the end of the final year ( $x_2$ )			
$x = x_1 + x_2$			
Number of students who opted for higher studies with valid qualifying scores/ranks ( $y$ )			
Assessment points			

Average assessment points = \_\_\_\_\_

### 4.4 Professional Activities (20)

#### 4.4.1 Professional societies / chapters and organised events (3)

(Instruction: The institution may provide data for past three years).

#### 4.4.2 Organisation of paper contests, design contests, etc. and achievements (3)

(Instruction: The institution may provide data for past three years).

#### 4.4.3 Publication of technical magazines, newsletters, etc. (3)

(Instruction: The institution may list the publications mentioned earlier along with the names of the editors, publishers, etc.).

#### 4.4.4 Entrepreneurship initiatives, product designs, and innovations (3)

(Instruction: The institution may specify the efforts and achievements.)

#### 4.4.5 Publications and awards in inter-institute events by students of the programme of study (8)

(Instruction: The institution may provide a table indicating those publications for which students were awarded in the events/conferences organised by other institutes. A tabulated list of all other student publications may be included in the appendix.)

## 5 Faculty Contributions (175)

### List of Faculty Members: Exclusively for the Programme / Shared with other Programmes

Name of the Faculty	Qualifications, University and year of graduation	Designation and Date of Joining the Institution	Distribution of teaching load (%)		Number of research publications in journals and conferences since joining	IPRs	R & D and Consultancy work with amount	Holding an incubation unit	Interaction with outside world
			MCA course	Other courses					

### 5.1 Student Teacher Ratio (STR) (20)

STR is desired to be 20 or superior

Assessment =  $20 \times 20/STR$ ; subject to maximum assessment of 20

STR =  $(x + y + z)/N1$

Where,  $x$  = Number of students in 1st year of the programme

$y$  = Number of students in 2nd year of the programme

$z$  = Number of students in 3rd year of the programme

$N1$  = Total number of faculty members in the programme (by considering Fractional load)

Year	$x$	$y$	$Z$	$x + y + z$	$N1$	STR	Assessment (max. = 20)
CAY $m3$							
CAY $m2$							
CAY $m1$							
CAY							
Average assessment							

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:

$\leq 15$	-	20 Marks
$\leq 17$	-	18 Marks
$\leq 19$	-	16 Marks
$\leq 21$	-	14 Marks
$\leq 23$	-	12 Marks
$\leq 25$	-	10 Marks
$>25.0$	-	0 Marks

For item nos. 5. 2 to 5. 8, the denominator term ( $N$ ) is computed as follows:

$$N = \text{Maximum } \{N1, N2\}$$

$N1$  = Total number of faculty members in the programme (considering the fractional load)

$N2$  = Number of faculty positions needed for student-teacher ratio of 15.

Year	$N1$	$N2$	$N = \text{Max. } (N1, N2)$
CAY $m_2$			
CAY $m_1$			
CAY			

### 5.2 Faculty Cadre Ratio (20)

Assessment	=	$20 \times \text{CRI}$
where, CRI	=	Cadre ratio index
	=	$2.25 \times (2x + y + 0.5z)/N$ ; subject to max. CRI = 1.0
where, $x$	=	Number of professors in the programme
$y$	=	Number of associate professors in the programme
$z$	=	Number of assistant professors in the programme

Year	$x$	$y$	$z$	$N$	CRI	Assessment
CAY $m_2$						
CAY $m_1$						
CAY						
Average assessment						

### 5.3 Faculty Qualifications (30)

Assessment	=	$3 \times \text{FQI}$
where, FQI	=	Faculty qualification index
	=	$(10x + 6y)/N2$
where, $x$	=	Number of faculty members with PhD
$y$	=	Number of faculty members with MCA/ ME/ M Tech

	$x$	$y$	$z$	$N$	FQI	Assessment
CAY $m_3$						
CAY $m_2$						
CAY1						
	Average assessment					

#### 5.4 Faculty Competencies correlation to Programme Specific Criteria (15)

(Provide evidence that the programme curriculum satisfies the applicable programme criteria specified by the appropriate professional associations. You may list the programme specific criteria and the competencies, such as specialisation, research publication, course developments etc., of faculty to correlate the programme specific criteria and competencies.)

#### 5.5 Faculty as participants/resource persons in faculty development/training activities (15)

(Instruction: A faculty member scores maximum five points for a participant/ resource person.)

Participant/resource person in two week faculty development programme : 5 points

Participant/resource person in one week faculty development programme : 3 Points

Name of the faculty	max. 5 per faculty		
	CAY $m_3$	CAY $m_2$	CAY $m_1$
Sum			
$N$ (Number of faculty positions required for an STR of 15)			
Assessment = $3 \times \text{Sum}/N$			
Average assessment			

#### 5.6 Faculty Retention (15)

Assessment =  $3 \times \text{RPI}/N$   
 where RPI = Retention point index  
 = Points assigned to all faculty members



Where, points assigned to a faculty member = 1 point for each year of experience at the institute but not exceeding 5.

Item	CAY <sub>m3</sub>	CAY <sub>m2</sub>	CAY <sub>m1</sub>
Number of faculty members with experience of less than 1 year ( $x_0$ )			
Number of faculty members with 1 to 2 years of experience			
Number of faculty members with 2 to 3 years of experience			
Number of faculty members with 3 to 4 years of experience			
Number of faculty members with 4 to 5 years of experience			
Number of faculty members with more than 5 years of experience ( $x_5$ )			
$N$			
$RPI = x_1 + 2x_2 + 3x_3 + 4x_4 + 5x_5$			
Assessment			
Average assessment			

### 5.7 Faculty Research Publications (FRP) (20)

Assessment of FRP =  $4 \times (\text{Sum of the research publication points scored by each faculty member})/N$

(Instruction: A faculty member scores maximum five research publication points depending upon the *quality* of the research papers and books published in the past three years.)

The research papers considered are those (i) which can be located on the internet and/or are included in hard-copy volumes/proceedings, published by reputed publishers, and (ii) the faculty member's affiliation, in the published papers/books, is of the current institution.

Include a list of all such publications and IPRs along with details of DOI, publisher, month/year, etc.

Name of the faculty (contributing to FRP)	FRP points (max. 5 per faculty)		
	CAY <sub>m3</sub>	CAY <sub>m2</sub>	CAY <sub>m1</sub>
Sum			
<i>N</i> (Number of faculty positions required for an STR)			
Assessment of FRP = $4 \times \text{Sum}/N$			
Average assessment			

**5.8 Faculty Intellectual Property Rights (FIPR) (10)**

Assessment of FIPR =  $2 \times (\text{Sum of the FIPR points scored by each faculty member})/N$

(Instruction: A faculty member scores maximum five FIPR points each year. FIPR includes awarded national/international patents, design, and copyrights.)

Name of faculty member (contributing to FIPR)	FIPR points (max. 5 per faculty member)		
	CAY <sub>m3</sub>	CAY <sub>m2</sub>	CAY <sub>m1</sub>
.....			
.....			
.....			
Sum			
<i>N</i>			
Assessment of FIPR = $2 \times \text{Sum}/N$			
Average assessment			

**5.9 Funded R&D Projects and Consultancy (FRDC) Work (20)**

Assessment of R&D and consultancy projects =  $4 \times (\text{Sum of FRDC by each faculty member})/N$

(Instruction: A faculty member scores maximum 5 points depending upon the amount.) A suggested scheme is given below for a minimum amount of Rs. 1 lakh:

Five points for funding by national agency,

Four points for funding by state agency/private sector, and

Two points for funding by the sponsoring trust/society.

Name of faculty member (contributing to FRDC)	FRDC points (max. 5 per faculty member)		
	CAY <sub>m3</sub>	CAY <sub>m2</sub>	CAY <sub>m1</sub>
.....			
.....			
Sum			
<i>N</i>			
Assessment of FRDC = $4 \times \text{Sum}/N$	Average assessment		

**5.10 Faculty Interaction with Outside World (10)**

FIP = Faculty interaction points

Assessment =  $2 \times (\text{Sum of FIP by each faculty member})/N$

(Instruction: A faculty member gets maximum five interaction points depending upon the type of institution or R&D laboratory or industry as follows)

Five points for interaction with a reputed institution abroad, institution of eminence in India, or national research laboratories,

Three points for interaction with institution/industry (not covered earlier).

Points to be awarded, for those activities, which result in joint efforts in publication of books/research paper, pursuing externally funded R&D / consultancy projects and/or development of semester-long course / teaching modules.

Name of faculty member (contributing to FIP)	FIP		
	$CAY_{m3}$	$CAY_{m2}$	$CAY_{m1}$
.....			
.....			
Sum			
$N$			
Assessment of FIP = $2 \times \text{Sum}/N$			
Average assessment			

## 6 Facilities and Technical Support (75)

Description of classrooms, faculty rooms, seminar, and conference halls: (Entries in the following table are sample entries)

Room description	Usage	Shared/ Exclusive	Capacity	Rooms equipped with PC, Internet, Book rack, meeting space, etc.
No. of Classrooms	Classroom for 2nd year			
Tutorial rooms				
No. of Seminar rooms				
No. of Meeting rooms				
No. of Faculty rooms				

### 6.1 Classrooms in the Department (20)

6.1.1 Adequate number of rooms for lectures (core/electives), seminars, tutorials, etc., for the programme (10)

(Instruction: Assessment based on the information provided in the preceding table.)

6.1.2 Teaching aids---multimedia projectors, etc. (5)

(Instruction: List the various teaching aids available.)

6.1.3 Acoustics, classroom size, conditions of chairs/benches, air circulation, lighting, exits, ambience, and such other amenities/facilities (5)

(Instruction: Assessment based on the information provided in the preceding table and the inspection thereof.)

### 6.2 Faculty Rooms in the Department (15)

6.2.1 Availability of individual faculty rooms (5)

(Instruction: Assessment based on the information provided in the preceding table.)

6.2.2 Room equipped with white/black board, computer, internet, discussion space and such other amenities/facilities (5)

(Instruction: Assessment based on the information provided in the preceding table)

6.2.3 Usage of room for counselling/discussion with students (5)

(Instruction: Assessment based on the information provided in the preceding table and the inspection thereof.)

6.3 *Laboratories in the Department to meet the Curriculum Requirements and the POs (25)*

6.3.1 Adequate, well-equipped laboratories to meet the curriculum requirements and the POs (15)

(Instruction: Assessment based on the information provided in the preceding table.)

Laboratory description in the curriculum	Exclusive use / shared	Space, number of students	Number of experiments	Quality of instruments	Laboratory manuals

6.3.2 Availability of laboratories with technical support within and beyond working hours (5)

(Instruction: Assessment based on the information provided in the preceding table.)

6.3.3 Equipment to run experiments and their maintenance, number of students per experimental setup, size of the laboratories, overall ambience, etc. (5)

(Instruction: Assessment based on the information provided in the preceding table.)

**6.4 Technical Manpower Support in the Programme (15)**

Name of the technical staff	Designation	Pay-scale	Exclusive / shared work	Date of joining	Qualification		Other technical skills gained	Responsibility
					At Joining	Now		

**6.4.1 Availability of adequate and qualified technical supporting staff for programme-specific laboratories (10)**

(Instruction: Assessment based on the information provided in the preceding table.)

**6.4.2 Incentives, skill-upgrade, and professional advancement (5)**

(Instruction: Assessment based on the information provided in the preceding table.)

## 7 Academic Support Units and Teaching-Learning Process (100)

### 7.1 Academic Support Units (50)

#### 7.1.1 Admission Intake (5)

Item	CAY	CAYm1	CAYm2	CAYm3
Sanctioned Intake Strength of the institute (N)				
Number of students, admitted on merit (N1)				
Number of students, admitted on management quota/otherwise (N2)				
Number of total admitted students in the institute (N1 + N2)				

#### 7.1.2 Admission Quality (10)

Divide the total admitted student ranks (or percentage-marks) into 5 or a few more meaningful ranges

Rank Range	CAY	CAYm1	CAYm2	CAYm3
Above 95 %				
90 – 95 %				
80 – 90 %				
.....				
.....				
Admitted without rank				

#### 7.1.3 Language Laboratory (10)

Language laboratory	Space, number of students	Software used	Type of experiments	Quality of instruments	Guidance

(Instruction: The institution may provide the details of the language laboratory. The descriptors as listed here are not exhaustive).



#### 7.1.4 Career Guidance, Training, Placement, and Entrepreneurship Cell (10)

(Instruction: The institution may specify the facility and management to facilitate career guidance including counselling for higher studies, industry interaction for training/internship/placement, entrepreneurship cell and incubation facility and impact of such systems.)

#### 7.1.5 Co-curricular and Extra-curricular Activities (10)

(Instruction: The institution may specify the co-curricular and extra-curricular activities, e.g., NCC/NSS, cultural activities, etc)

#### 7.1.6 Sports grounds, facilities, and qualified sports instructors (5)

(Instruction: The institution may specify the facilities available and their usage in brief.)

### 7.2 Teaching – Learning Process(50)

#### 7.2.1 Tutorial classes to address student questions: size of tutorial classes, hours per subject given in the timetable (10)

Provision of tutorial classes in timetable: YES/NO

Tutorial sheets provided: YES/NO

Tutorial classes taken by faculty / teaching assistants / senior students / others.....

Number of tutorial classes per subject per week:

Number of students per tutorial class:

Number of subjects with tutorials: 1st year..... 2nd year..... 3rd year.....

(Instruction: Here, the institution may report the details of the tutorial classes that are being conducted on various subjects and also state the impact of such tutorial classes).

#### 7.2.2 Mentoring system to help at individual levels (10)

Type of mentoring: Professional guidance / career advancement / course work specific / laboratory specific / total development

Number of faculty mentors:

Number of students per mentor:

Frequency of meeting:

(Instruction: Here, 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.)

### 7.2.3 Feedback analysis and reward / corrective measures taken, if any (10)

Feedback collected for all courses: YES/NO

Specify the feedback collection process:

Percentage of students participating:

Specify the feedback analysis process:

Basis of reward / corrective measures, if any:

Number of corrective action taken in the last three years:

(Instruction: The institution needs to design an effective feedback questionnaire. It needs to justify that the feedback mechanism it has developed really helps in evaluating teaching, and contributes to the overall quality of instruction.)

### 7.2.4 Scope for self-learning (10)

(Instruction: The institution needs to specify the scope for self-learning / learning beyond syllabus and creation of facilities for self-learning / learning beyond syllabus.)

### 7.2.5 Generation of self-learning facilities, and availability of materials for learning beyond syllabus (10)

(Instruction: The institution needs to specify the facilities for self-learning / learning beyond syllabus.)

## 8 Governance, Institutional Support and Financial Resources (75)

### 8.1 Campus Infrastructure and Facility (10)

#### 8.1.1 Maintenance of academic infrastructure and facilities (4)

(Instruction: Specify distinct features.)

#### 8.1.2 Hostel (boys and girls), transportation facility, and canteen (2)

Hostels	No. of rooms	No. of students accommodated
Hostel for Boys:		
Hostel for Girls:		

#### 8.1.3 Electricity, power backup, telecom facility, drinking water, and security (4)

(Instruction: Specify the details of installed capacity, quality, availability, etc.)

### 8.2 Organisation, Governance, and Transparency (10)

#### 8.2.1 Governing body, administrative setup, and functions of various bodies (2)

(Instruction: 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.)

#### 8.2.2 Defined rules, procedures, recruitment, and promotional policies, etc. (2)

(Instruction: List the published rules, policies, and procedures; year of publications; and state the extent of awareness among the employees/students. Also comment on its availability on the internet, etc.)

**8.2.3 Decentralisation in working including delegation of financial power and grievance redressal system (3)**

(Instruction: List the names of the faculty members who are administrators/decision makers for various responsibilities. Specify the mechanism and composition of grievance redressal system, including faculty association, staff-union, if any.)

**8.2.4 Transparency and availability of correct/unambiguous information (3)**

(Instruction: Availability and dissemination of information through the internet. Information provisioning in accordance with the Right to Information Act, 2005).

**8.3 Budget Allocation, Utilisation, and Public Accounting (10)**

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

Items	Budgeted in CFY	Actual expenses in CFY (till ...)	Budgeted in CFY <sub>m1</sub>	Actual Expenses in CFY <sub>m1</sub>	Budgeted in CFY <sub>m2</sub>	Actual Expenses in CFY <sub>m2</sub>	Budgeted in CFY <sub>m3</sub>	Actual Expenses in CFY <sub>m3</sub>
Laboratory equipment								
Software								
Laboratory consumables								
Maintenance and spares								
Training and Travel								
Miscellaneous expenses for academic activities								
Total								

(Instruction: The preceding list of items is not exhaustive. One may add other relevant items if applicable.)

### 8.3.1 Adequacy of budget allocation (4)

(Instruction: Here, the institution needs to justify that the budget allocated over the years was adequate.)

### 8.3.2 Utilisation of allocated funds (5)

(Instruction: Here the institution needs to state how the budget was utilised during the last three years.)

### 8.3.3 Availability of the audited statements on the institute's website (1)

(Instruction: Here, the institution needs to state whether the audited statements are available on its website.)

## 8.4 Programme Specific Budget Allocation, Utilisation (10)

Summary of budget for the CFY and the actual expenditure incurred in the CFY<sub>m1</sub>, CFY<sub>m2</sub> and CFY<sub>m3</sub> (exclusively for this programme in the department):

Items	Budgeted in CFY <sub>m1</sub>	Actual Expenses in CFY <sub>m1</sub>	Budgeted in CFY <sub>m2</sub>	Actual Expenses in CFY <sub>m2</sub>	Budgeted in CFY <sub>m3</sub>	Actual Expenses in CFY <sub>m3</sub>
Laboratory equipment						
Software						
Laboratory consumables						
Maintenance and spares						
Training and Travel						
Miscellaneous expenses for academic activities						
Total						

#### 8.4.1 Adequacy of budget allocation (5)

(Instruction: Here, the institution needs to justify that the budget allocated over the years was adequate.)

#### 8.4.2 Utilisation of allocated funds (5)

(Instruction: Here the institution needs to state how the budget was utilised during the last three years.)

### 8.5 Library (20)

#### 8.5.1 Library space and ambience, timings and usage, availability of a qualified librarian and other staff, library automation, online access, networking, etc. (5)

(Instruction: Provide information on the following items.)

Carpet area of library (in m<sup>2</sup>)

Reading space (in m<sup>2</sup>)

Number of seats in reading space

Number of users (issue book) per day

Number of users (reading space) per day

Timings: During week days, weekend, and vacation

Number of library staff

Number of library staff with degree in Library

Management

Computerisation for search, indexing, issue/return records

Bar coding used

Library services on Internet/Intranet INDEST or other similar membership archives

### 8.5.2 Titles and volumes per title (4)

Number of titles ..... Number of volumes .....

	Number of new titles added	Number of new editions added	Number of new volumes added
CFY <sub>m3</sub>			
CFY <sub>m2</sub>			
CFY <sub>m1</sub>			
CFY			

### 8.5.3 Scholarly journal subscription (3)

Details		CFY	CFY <sub>m1</sub>	CFY <sub>m2</sub>	CFY <sub>m3</sub>
Science	As soft copy				
	As hard copy				
Engg. and Tech.	As soft copy				
	As hard copy				
Management	As soft copy				
	As hard copy				
.....	As soft copy				
	As hard copy				
	As soft copy				
	As hard copy				

### 8.5.4 Digital Library (3)

Availability of digital library contents:

If available, then mention number of courses, number of e-books, etc.

Availability of an exclusive server:

Availability over Intranet/Internet:

Availability of exclusive space/room:

Number of users per day:

8.5.5 Library expenditure on books, magazines/journals, and miscellaneous content (5)

Year	Expenditure				Comments, if any
	Book	Magazines/journals (for hard copy subscription)	Magazines/journals (for soft copy subscription)	Misc. Content	
CFY <sub>m3</sub>					
CFY <sub>m2</sub>					
CFY <sub>m1</sub>					
CFY					

8.6 Internet (5)

Name of the Internet provider:

Available bandwidth:

Access speed:

Availability of internet in an exclusive lab:

Availability in most computing labs:

Availability in departments and other units:

Availability in faculty rooms:

Institute's own e-mail facility to faculty/students:

Security/privacy to e-mail/internet users:

*(Instruction: The institute may report the availability of internet in the campus and its quality of service.)*

8.7 Safety Norms and Checks (5)

8.7.1 Checks for wiring and electrical installations for leakage and earthing (1)

8.7.2 Fire-fighting measurements: Effective safety arrangements with emergency / multiple exits and ventilation/exhausts in auditoriums and large classrooms/laboratories, fire-fighting equipment and training, availability of water, and such other facilities (1)



### 8.7.3 Safety of civil structure (1)

### 8.7.4 Handling of hazardous chemicals and such other activities (2)

(Instruction: The institution may provide evidence that it is taking enough measures for the safety of the civil structures, fire, electrical installations, wiring, and safety of handling and disposal of hazardous substances. Moreover, the institution needs to show the effectiveness of the measures that it has developed to accomplish these tasks.)

## *8.8 Counselling and Emergency Medical Care and First-aid (5)*

Availability of counselling facility (1)

Arrangement for emergency medical care (2)

Availability of first-aid unit (2)

(Instruction: The institution needs to report the availability of the facilities discussed here.)

## 9 Continuous Improvement (100)

This criterion essentially evaluates the improvement of the different indices that have already been discussed in earlier sections.

From 9.1 to 9.5 the assessment calculation can be done as follows

If a, b, c are percentage of performance during three successive years respectively then, assessment can be calculated as

$$\text{Assessment} = (b-a)/(100-\min(b,a)) + (c-b)/(100-\min(c,b))$$

If a, b, c are above 75% and a decline is within 5%, then the performance does not fall below 75% and the performance is considered sustainable.

### 9.1 Improvement in Success Index of Students (10)

From 4. 1

Items	LYG	LYG <sub>m1</sub>	LYG <sub>m2</sub>	Assessment
Success index				

### 9.2 Improvement in Academic Performance Index of Students (10)

From 4. 2

Items	LYG	LYG <sub>m1</sub>	LYG <sub>m2</sub>	Assessment
API				

### 9.3 Improvement in Student-Teacher Ratio (10)

From 5. 1

Items	CAY	CAY <sub>m1</sub>	CAY <sub>m2</sub>	CAY <sub>m3</sub>	Assessment
STR					

### 9.4 Enhancement of Faculty Qualification Index (10)

From 5. 3

Items	LYG	LYG <sub>m1</sub>	LYG <sub>m2</sub>	Assessment
FQI				

**9.5 Improvement in Faculty Research Publications, R&D Work and Consultancy Work (10)**

**From 5.7 and 5.9**

Items	LYG	LYG <sub>m1</sub>	LYG <sub>m2</sub>	Assessment
FRP				
FRDC				

**9.6 Continuing Education (10)**

In this criterion, the institution needs to specify the contributory efforts made by the faculty members by developing the course/laboratory modules, conducting short-term courses/workshops, etc., for continuing education during the last three years.

Module description	Any other contributory institute/ industry	Developed/ organised by	Duration	Resource persons	Target audience	Usage and citation, etc.
.....						
.....						

Assessment =

**9.7 New Facility Created (15)**

Specify new facilities created during the last three years for strengthening the curriculum and/or meeting the POs:

**9.8 Overall improvement since last accreditation, if any, otherwise, since the commencement of the programme (25)**

Specify the overall improvement:

Specify the strengths/ weakness	Improvement brought in	Contributed by	List the PO(s), which are strengthened	Comments, if any
CAY				
CAY <sub>m1</sub>				
CAY <sub>m2</sub>				
.....				
.....				

## Declaration

The head of the institution needs to make a declaration as per the format given below:

This Self-Assessment Report (SAR) is prepared for the current academic year (\_\_\_\_\_) and the current financial year (\_\_\_\_\_) on behalf of the institution.

I certify that the information provided in this SAR is extracted from the records and to the best of my knowledge, is correct and complete.

I understand that any false statement/information of consequence may lead to rejection of the application for the accreditation for a period of two or more years. I also understand that the National Board of Accreditation (NBA) or its sub-committees will have the right to decide on the basis of the submitted SAR whether the institution should be considered for an accreditation visit.

If the information provided in the SAR is found to be wrong during the visit or subsequent to grant of accreditation, the NBA has right to withdraw the grant of accreditation and no accreditation will be allowed for a period of next two years or more and the fee will be forfeited.

I undertake that the institution shall co-operate the visiting accreditation team, shall provide all desired information during the visit and arrange for the meeting as required for accreditation as per the NBA's provision.

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

Place:  
Date:

Signature, Name, and Designation of the  
Head of the Institution with seal