

<b>CRITERION 5</b>	<b>Faculty Information and Contributions</b>	<b>200</b>
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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 2<sup>nd</sup> Year= **u1**

No. of Students in UG 3<sup>rd</sup> Year= **u2**

No. of Students in UG 4<sup>th</sup> Year= **u3**

No. of Students in PG 1<sup>st</sup> Year= **p1**

No. of Students in PG 2<sup>nd</sup> 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+UG3+PG1+PG2

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

**Student Faculty Ratio (SFR) = S / F**

<b>Year</b>	<b>CAY</b>	<b>CAYm1</b>	<b>CAYm2</b>
u1.1			
u1.2			
u1.3			
UG1	<b>u1.1+u1.2+u1.3</b>	<b>u1.1+u1.2+u1.3</b>	<b>u1.1+u1.2+u1.3</b>
...			
u <sub>n</sub> .1			
u <sub>n</sub> .2			
u <sub>n</sub> .3			
UG <sub>n</sub>	<b>u<sub>n</sub>.1+u<sub>n</sub>.2+u<sub>n</sub>.3</b>	<b>u<sub>n</sub>.1+u<sub>n</sub>.2+u<sub>n</sub>.3</b>	<b>u<sub>n</sub>.1+u<sub>n</sub>.2+u<sub>n</sub>.3</b>
p1.1			
p1.2			
PG1	<b>p1.1+p1.2</b>	<b>p1.1+p1.2</b>	<b>p1.1+p1.2</b>
.....			
pm.1	<b>pm.1+pm.2</b>		
pm.2			
PG <sub>m</sub>		<b>pm.1+pm.2</b>	<b>pm.1+pm.2</b>
Total No. of Students in the Department <b>(S)</b>	<b>UG1 + UG2 + .. +UG<sub>n</sub> + PG1 + ...PG<sub>m</sub>=S1</b>	<b>UG1 + UG2 + .. +UG<sub>n</sub> + PG1+... + PG<sub>m</sub>=S2</b>	<b>UG1 + UG2 + .. +UG<sub>n</sub> + PG1+... + PG<sub>m</sub>=S3</b>
No. of Faculty in the Department <b>(F)</b>	<b>F1</b>	<b>F2</b>	<b>F3</b>
Student Faculty Ration (SFR)	<b>SFR1=S1/F1</b>	<b>SFR2= S2/F2</b>	<b>SFR3= S3/F3</b>
Average SFR	<b>SFR=(SFR1+SFR2+SFR3)/3</b>		

**Table B.5.1**

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

**Note:**

All the faculty whether regular or contractual (except Part-Time or paid hourly based), will be considered. 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 Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

Example:

**Table 5.1.1.** Student-faculty ratio.

Year	CAY	CAYm1	CAYm2
u1.1	$120(N)+12(N2)+0(N3)$	$120(N)+5(N2)+0(N3)$	$120(N)+0(N2)+0(N3)$
u1.2	$120(N)+5(N2)+0(N3)$	$120(S)+0(N2)+0(N3)$	$120(S)+8(N2)+0(N3)$
u1.3	$120(N)+0(N2)+0(N3)$	$120(S)+8(N2)+0(N3)$	$120(S)+12(N2)+0(N3)$
UG	$377(360+17+0)$	$373(360+13+0)$	$380(360+20+0)$
p1.1	0	0	18
p1.2	0	18	18
PG	0	18	36
Total No.of Students in Dept(S)	377	391	416
No. of Faculty in Dept(F)	30	30	30
Student Faculty Ratio (SFR)	12.56	13.03	13.87
Average SFR	$(12.56+13.03+13.87) / 3 = 13.15.$		

N, N2, N3 are being defined in Table B.4a

**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 (20)

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

F1: Number of Professors required =  $1/9 \times$  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 =  $2/9 \times$  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 =  $6/9 \times$  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

<b>CAY</b>						
<b>CAYm1</b>						
<b>CAYm2</b>						
<b>Average Numbers</b>	RF1=	AF1=	RF2=	AF2=	RF3=	AF3=

$$\text{Cadre Ratio Marks} = \left[ \left[ \frac{\text{AF1}}{\text{RF1}} \right] + \left[ \frac{\text{AF2} \times 0.6}{\text{RF2}} \right] + \left[ \frac{\text{AF3} \times 0.4}{\text{RF3}} \right] \right] \times 10$$

**Table B.5.2**

• If AF1 = AF2= 0 then zero marks

• Maximum marks to be limited if it exceeds 20

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 10 = 20

**Case 2:** AF1/RF1= 1; AF2/RF2 = 3/2; AF3/RF3 = 5/6; Cadre proportion marks = (1+0.9+0.3) x 10 = limited to 20

**Case 3:** AF1/RF1=0; AF2/RF2=1/2; AF3/RF3=8/6; Cadre proportion marks=(0+0.3+0.53)x10= 8.3

### 5.3. Faculty Qualification (20)

FQ = 2.0 x [(10X + 4Y)/F] where x is no. of faculty with Ph.D., Y is no. of faculty with M. Tech., F is no. of 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)

	<b>X</b>	<b>Y</b>	<b>F</b>	<b>FQ = 2.0 x [(10X + 4Y)/F]</b>
CAY				
CAYm1				
CAYm2				
Average Assessment				

**Table B.5.3**

### 5.4. Faculty Retention (10)

**No. of faculty members in CAYm1=**

**CAY=**

<b>Item</b> (% of faculty retained during the period of assessment keeping CAYm2 as base year)	<b>Marks</b>
>= 90% of required Faculty members retained during the period of assessment keeping CAYm2 as base year	10

>=75% of required Faculty members retained during the period of assessment keeping CAYm2 as base year	08
>= 60% of required Faculty members retained during the period of assessment keeping CAYm2 as base year	06
>= 50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year	04
< 50% of required Faculty members retained during the period of assessment keeping CAYm2 as base year	0

**Table B.5.4**

Example:

Item	CAY	CAYm1	CAYm2
No of Faculty Retained	29	28	30
Total No. of Required Faculty	33	33	33
% of Faculty Retained	88	85	Not applicable
Faculty Retained	$86.5\%(88+85)/2$		

### 5.5. Faculty competencies in correlation to Program Specific Criteria (10)

*(List the program specific criteria and the competencies (specialization, research publications, course developments etc.,) of faculty to correlate the program specific criteria and competencies.)*

### 5.6. Innovations by the Faculty in Teaching and Learning (10)

*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.*

### 5.7. 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/ Faculty development program: 3 Points
- Participation >5 days Faculty/ Faculty development program: 5 points

Name of the Faculty	Max. 5 per Faculty		
	CAYm1	CAYm2	CAYm3
Sum			
<b>RF= Number of Faculty required to comply with 20:1 Student-Faculty ratio as per 5.1</b>			
<b>Assessment = <math>3 \times (\text{Sum}/0.5 \text{ RF})</math></b> <b>(Marks limited to 15)</b>			
<b>Average assessment over last three years (Marks limited to 15) =</b>			

**Table B.5.7**

### 5.8. Research and Development (75)

#### 5.8.1. Academic Research (20)

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. (15)
- Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute (5)

All relevant details shall be mentioned.

#### 5.8.2. Sponsored Research (20)

- Funded research from outside:  
(Provide a list with Project Title, Funding Agency, Amount and Duration)  
Funding Amount (Cumulative during CAYm1, CAYm2 and CAYm3):  
Amount > 50 Lakh – 20 Marks,  
Amount > 40 and  $\leq$  50 Lakh – 15 Marks,  
Amount > 30 and  $\leq$  40 Lakh – 10 Marks,  
Amount  $\geq$  15 and  $\leq$  30 Lakh – 5 Marks,  
Amount < 15 Lakh – 0 Marks

CAYm1			
SN	Project title	Funding agency name	Amount
1			
2			
..			
CAYm2			
1			
2			
..			
CAYm3			
1			
2			
..			
Total amount for past 3 years			

### 5.8.3. Development activities (15)

Provide details:

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

### 5.8.4. Consultancy (from Industry) (20)

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

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

Amount >10 Lacs – 20 Marks,

Amount  $\leq 10$  and  $\geq 8$  Lakh – 15 Marks,

Amount < 8 and  $\geq 6$  Lakh – 10 Marks,

Amount < 6 and  $\geq 4$  Lakh – 5 Marks,

Amount < 4 and  $\geq 2$  Lakh – 2 Marks,

Amount < 2 Lakh – 0 Mark

CAYm1			
SN	Project title	Funding agency name	Amount
1			
2			
..			
CAYm2			
1			

2			
..			
<b>CAYm3</b>			
1			
2			
..			
<b>Total amount for past 3 years</b>			

### 5.9. Faculty Performance Appraisal and Development System (FPADS) (10)

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 (5)
- Its implementation and effectiveness (5)

### 5.10. 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 visiting/adjunct faculty (1)
- Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.(9)  
(Minimum 50 hours interaction in a year will result in 3 marks for that year; 3marks x 3years= 9marks)