Format for
Self Assessment Report (SAR)
for NBA Accreditation of Undergraduate Engineering Programme

_____

(Name of the Programme)

_____

_____

_____

(Name and Address of the College / Institute /University)
(hereinafter, referred by Institute)

National Board of Accreditation
New Delhi, India

May 2011

Organization of the SAR :

The Self Assessment Report should be submitted using the format which is organized in the following four parts:

Part I: Institutional Summary for Criteria I, II and III.

Part II: Department/Programme Summary for Criteria IV to X.

Part III: Curriculum and syllabi for the degree programme along with Programme Educational Objectives (PEOs), Programme Outcomes and Assessment.

Part IV: List of Documents to be made available during the accreditation visit.

Abbreviations :

CAY	--	Current Academic Year	e.g., __2010 – 11___
CAY*m*1	---	Current Academic Year *minus* one	e.g., __2009 – 10___
CAY*m*2	---	Current Academic Year *minus* two	e.g., __2008 – 09___
LYG	--	Latest Year of Graduation	e.g., __2007 – 08___
LYG*m*1	---	Latest Year of Graduation *minus* one	e.g., __2006 – 07___
CFY	--	Current Financial Year	e.g., __2010 – 11___
CFY*m*1	---	Current Financial Year *minus* one	e.g., __2009 – 10___

Notes :

1. It would be greatly appreciated if precise and specific details, as requested in this format, are provided in tabular form and/or using bullets as far as possible. No detailed description should be included anywhere; do not include any detail/information which is not asked for. In case, you wish to add any data/information which is not asked for, kindly add in the annexures.
2. Include data for three consecutive years, unless otherwise specified.
3. Information sought is mostly meant to be the "*Average*" over sufficient samples, as applicable.
4. In this manuscript, "Institution" is used interchangeably for college/Institute/ University and "Head of the Institution" for Principal/Director/Vice-Chancellor.

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CAY _____	LYG _____	CFY _____

Declaration

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 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 of consequence was found to be wrong during the visit or subsequent to grant of accreditation, NBA has right to withdraw the accreditation granted, if any, and no accreditation will be allowed for a period of next two years or more.

Place:
Date:

Signature, Name, Designation of the Head of the Institution with Seal

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PART I

INSTITUTIONAL SUMMARY
(Criteria I, II and III)

I.0.1. Name and Address of the Institution :

I.0.2. Name, Designation, Telephone Numbers and E-mail ids of the contact person for NBA:

I.0.3. History of the Institution (including dates of introduction and number of seats of various programmes of study along with NBA accreditation, if any), in tabular form:

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

I.0.4. Ownership Status : Govt.(Central/State) / Trust / Society (Govt. / NGO / Private) / Private/ Other (specify)_____

I.0.5. Financial Status : Govt.(Central/State) / Grants-in-aid / Not-for-profit / Private-Self financing / Other(specify)_____

I.0.6. Nature of Trust / Society : _____
List other Institutions/colleges run by the Trust/Society

I.0.7. External Sources of Funds :

Name of external sources	CFY	CFYm1	CFYm2
. . . . .			
. . . . .			

I.0.8. Internally Acquired Funds :

Name of internal sources	CFY	CFYm1	CFYm2
Students' fee			
. . . . .			

I.0.9. Scholarships or any Financial Assistance provided to Students ? YES NO
if provided, basis of scholarship/assistance : Merit/Merit-cum-means/other _____
Total number _____ Amount _____ in CFY
Total number _____ Amount _____ in CFY *minus* 1

Evaluators' Space

Total number _____ Amount _____ in CFY *minus* 2

I.0.10. Basis/Criterion for Admission to the Institution:
All India entrance / State level entrance / University entrance / 12th level / other *(specify)* _____

I.0.11. Total Number of Engineering Students _____ Boys _____ Girls _____
Total Number of other Students, if any _____ Boys _____ Girls _____

I.0.12. Total Number of Employees _____ Male _____ Female _____

I.0.13. Minimum and Maximum Number of Faculty and Staff on roll in the Engineering Institution, during the CAY and the previous CAYs (1st July to 30th June):

Items	CAY		CAYm 1		CAYm2	
	Min	Max	Min	Max	Min	Max
Teaching faculty in Engineering						
Teaching faculty in Science and Humanities						
Non-teaching staff						

Criterion I: Organization and Governance, Resources, Institutional Support, Development and Planning (100)

I-I.1 Campus Infrastructure and Facility (20)

I-I.1.1 Land, built-up area and academic infrastructure (**4**)

- Physical resources available

A. Exclusive for this college Land ____ acres Built-up floor space _____ sq m.
B. Shared with other colleges in this campus, if any Land ____ acres Built-up floor space _____ sq m.

I-I.1.2 Maintenance of academic infrastructure and facilities (**4**)

Specify distinct features . . .

I-I.1.3 Ambience, green cover, water harvesting, environment preservation, barrier-free structure, etc. (**4**)

Specify distinct features . . .

I-I.1.4 Hostel (Boys and girls), Transportation facility and canteen (**4**)

Hostel for Boys? Yes/No Exclusive/Shared/Rented
Number of Rooms _____ Number of accommodated students _____ Number in waiting _____

Hostel for Girls? Yes/No Exclusive/Shared/Rented
Number of Rooms _____ Number of accommodated students _____ Number in waiting _____

Transport? Yes/No Exclusive/Public transport
Number of Buses _____ Facility availed by _____

Canteen? Yes/No
Number of Canteen _____ Sitting space _____ Daily Usage _____

I-I.1.5 Electricity, power backup, telecom facility, drinking water and security (**4**)
-- specific details regarding installed capacity, quality, availability, etc.

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I-I.2 Organization, Governance and Transparency (20)

I-I.2.1 Governing body, administrative setup and functions of various bodies (**5**)

List Governing, Senate and all other Academic and Administrative bodies, their memberships, functions and responsibilities, frequency of the meetings and attendance therein, in tabular form. A few sample minutes of the meetings and action taken reports should be annexed.

I-I.2.2 Defined rules, procedures, recruitment and promotional policies etc (**5**)

List of the published rules, policies and procedures, year of publications, awareness among the employees/students, availability on web etc.

I-I.2.3 Decentralization in working and grievance redressal system (**5**)

- List of faculty members who are administrators/decision makers for various responsibilities, any performance feedback taken
- Specify the mechanism and composition of grievance redressal system, including faculty association, staff-union and other forums

I-I.2.4 Transparency and availability of correct/unambiguous information (**5**)

- Dissemination and Availability of institute/programme specific information through the web
- Information provisioning in accordance with Right To Information Act (RTI), 2005; provide details of the number of applications received, disposed and pending; number of appeals received, disposed and pending.

I-I.3 Budget Allocation, Utilization and Public Accounting (15)

Summary of current financial year's budget and the actual expenditures incurred (exclusively for the institution) for three preceding financial years

Item	Budgeted in CFY	Expenses in CFY (till . . . …)	Expenses in CFYm1	Expenses in CFYm2
Acquisition of land; new buildings and infrastructural built-up				
Library				
Laboratory Equipment				
Laboratory consumables				
Teaching and Non-Teaching staff salary				
Travel				
Other, specify . . .				

I-I.3.1 Adequacy of budget allocation (**5**)

I-I.3.2 Utilization of allocated funds (**5**)

I-I.3.3 Availability of the audited statements through Institute's web-site (**5**)

CFY*m*3	…….	No	Yes	URL……
CFY*m*2	…….	No	Yes	URL……
CFY*m*1	…….	No	Yes	URL……

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I-I.4 Library (20)

I-I.4.1 Library space and ambience, timings and usage, availability of a qualified librarian and other staff, Library automation, online access, networking (**4**)

Carpet area of library ____ sq m. Reading space _____ sq m Number of seats in reading space ___
Number of users (issue book) _____ per day Number of users (Reading space) _____ per day

Timings : Academic (Working day) _____ Academic (Weekend) _____
Vacation _____

Number of library staff _____ Number of library staff with degree in Library Mgmt. _____

Computerization for search, indexing, issue/return records ?	Yes	No
Bar-coding used ?	Yes	No
Lib services on internet/intranet ?	Yes	No
INDEST or other similar membership ? specify _____	Yes	No
Archival of precious/rare/heritage books/publication	Yes	No

I-I.4.2 Titles and volumes per title (**4**)

Number of titles _____ Number of volumes _____

Year	Number of New Titles added	Number of New Editions added	Number of New Volumes added
CFYm2			
CFYm1			
CFY			

I-I.4.3 Scholarly journal subscription (**4**)

Year	Number of Technical Magazines/ Periodicals	Number of Total Technical Journals subscribed		Scholarly journal titles (in originals, reprints)
		in Hardcopy	In Softcopy	
CFYm2				
CFYm1				
CFY				

I-I.4.4 Digital library (**4**)

Availability of Digital Library contents ? Yes No

If available,
Number of Courses _____ Number of Books _____ Any other ?
Availability of an exclusive server ? Yes No
Availability over intranet/internet ? Yes No
Availability of exclusive space/room ? Yes No
Number of Users _____ per day.

I-I.4.5 Library expenditures on books, magazines/journals, and miscellaneous contents (**4**)

Year	Expenditures				Comments
	Books	Magazines/Journals (for hard copy subscription)	Magazines/Journals (for soft copy subscription)	Misc. Contents	

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CFYm2					
CFYm1					
CFY					

I-I.5 Internet (5)

Internet Provider _____ BW _____
Access Speed ? Poor Good Excellent

Availability

Availability in an exclusive lab for Internet use ?	Yes	No
Availability in most computing labs ?	Yes	No
Availability in departments and other units ?	Yes	No
Availability in faculty rooms ?	Yes	No
Institute's own Email facility to faculty/students	Yes	No
Security/privacy to Email/Internet users?	Yes	No

I-I.6 Safety Norms and Checks (10)

I-I.6.1 Checks for wiring and electrical installations for leakage and earthing (**3)**

Specify . . ..

I-I.6.2 Fire fighting measurements : Effective safety arrangements with emergency/multiple exits and ventilation/exhausts in auditoriums and large class rooms/labs, Fire fighting equipments and training, Availability of water, and such other facilities (**3**)

Specify . . . .

I-I.6.3 Safety of civil structures/buildings/catwalks/hostels etc. (**2)**

Specify . . .

I-I.6.4 Handling of hazardous chemicals and such other hazards (**2)**

Specify . . . .

I-I.7 Counseling and Emergency Medical Care and First-aid (10)

I-I.7.1 Availability of psychological and psychiatric counseling (**5**)

Specify the counselor(s), their qualifications and availability

Specify umber of cases handled on per month basis

I-I.7.2 Medical staff to provide first-aid/medical help in emergency, and Availability of ambulance services (**5**)

Number of Medical practitioners _____ Number of nursing staff _____

Specify Medical facility within the Institution ?

Medical facility nearby ?

Availability of ambulance services (response times and medical facility, critical care);

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Number of ambulances within the Institution _____ Facility in ambulances _____
Response-time in calling ambulance services from outside _____

Criterion II: Teaching and Learning Processes (100)

II-I.1 Academic Process (15)

II-I.1.1 Published time-table with sufficient hours for lectures, labs, self-learning and extra-curricular activities (**5**)

Specify the time-table contents

II-I.1.2 Published schedule in academic calendar for assignments/tests/examinations and distribution of corrected scripts (**5**)

Items in Academic Calendar	Conduct during the period or in the academic week	Performance Feedback / Distribution of Scripts during the period or in the academic week
Assignments . . .		
Tests . . .		
Mid-sem. examination		
End-sem. examination		
Other activities . . .		

II-I.1.3 Attendance Monitoring : Reward for good attendance and penalty for poor (**5**)

System of attendance and how it is monitored and analyzed. Produce cases of rewards and penalty to students (may be to faculty too)

II-I.2 Academic Support Units and Common facilities for First Year Courses (20)

II-I.2.1 Basic Science/Engineering laboratories (Adequacy of space, number of students per batch, quality and availability of measuring instruments, laboratory manuals, list of experiments) (**10)**

Lab Description	Space, Number of Students	Number of experiments	Quality of instruments	Lab manuals
. . .				
. . . .				

II-I.2.2 Central computing laboratory (**4**)

Computing Lab	Space	Number of Computers	Variety of SWs	Usage/Timings	Lab Assistance?
. . .					
. . . .					

II-I.2.3 Manufacturing practices (mechanical/electrical) workshop (**4**)

Workshop Description	Space, Number of Students	Number of experiments	Quality of instruments	Lab manuals
. . .				

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. . . .				

II-I.2.4 Language laboratory (**2)**

Language Lab	Space, Number of Students	Type of experiments	Quality of instructions	Guidance/Learning
. . .				
. . . .				

II-I.3 Tutorial Classes/ Remedial Classes/ Mentoring (15)

II-I.3.1 Tutorial classes to address personal level doubts and queries : size of tutorial classes, hours per subject in timetable (**5**)

Provision of Tutorial classes in time-table ? YES NO
Tutorial Sheets ? YES NO
Tutorial classes taken by : Faculty/Teaching Assistants/Senior Students/Other (specify)_____
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 _____ 4th year _____

II-I.3.2 Remedial classes and additional make-up tests to help academically weaker students : list of remedial classes, schedule of classes/tests and students' lists (**5**)

Provision of Remedial Classes in Time Table ? YES NO
Number of subjects having Remedial Classes ____ subjects out of total _____ subjects per semester
Number of students having Remedial Classes _____ students out of total _____ students in a semester
Number of hours of Remedial classes _____ per-subject per week

Provision of Makeup Tests in Academic Calendar ? YES NO
Number of subjects having Makeup Tests _____ subjects out of total _____ subjects per semester
Number of students having Makeup Tests _____ students out of total _____ students in a semester
Number of hours of Makeup Tests _____ per-subject per week

II-I.3.3 Mentoring system to help at individual levels (**5**)

Type of Mentoring : Professional guidance/Career advancement/Course work specific/
Lab specific/Total development/
Number of faculty mentors _____ Number of students _____ per mentor
Frequency of Meeting: Weekly/ Monthly/ . . . . .per semester/ Need based/ other

II-I.4 Teaching Evaluation Process : Feedback System (15)

II-I.4.1 Design of proforma and process for feedback evaluation (**5**)

Number of Feedback Items _____ Number of Feedback levels_____
Space for descriptive feedback/suggestion etc. ? YES NO
Any consistency check? YES NO
Any performance/attendance profile ? YES NO
Frequency of feedback collection : Once/Twice in a semester
Feedback collection : Hard-copy/Web-based

II-I.4.2 Feedback analysis and reward/corrective measures taken, if any (**5**)

Feedback collected for all courses ? YES NO
Specify the feedback collection process _____

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Who collects the feedback? _____
When feedback is collected ? _____
Percentage of students participating _____

Specify the feedback analysis process _____
Is this done manually ? YES NO
What metrics are calculated ? _____
What is inferred from the metrics ? _____
How are the comments used ?_____

Basis of reward/corrective measures, if any, _____
Were extraneous factors, like hard-/soft-attitude of the instructor considered ? YES NO
Was result considered? YES NO
Number of awards in CAY _____ in CAYm1 _____ in CAYm2 _____
Number of corrective actions in CAY _____ in CAYm1 _____ in CAYm2 _____

II-I.4.3 Feedback mechanism from alumni, parents and industry, if any (**5**)

Specify the mechanism of feedback collection and analysis _____
_____

Number of feedback received in CAY _____ in CAYm1 _____ in CAYm2 _____

Specify typical corrective actions taken, if any _____

II-I.5 Self Learning and Learning beyond Syllabus (15)

II-I.5.1 Flexibility in academics with scope for self-learning – provisions for advanced level and reading courses (**5**)

Specify flexibility_____

II-I.5.2 Generation of self-learning facilities, and availability of materials for learning beyond syllabus (**5**)

Specify self-learning modes and modules _____

II-I.5.3 Possibility, motivation and scope for learning-beyond-syllabus (**5**)

Specify _____

II-I.6 Career Guidance, Training, Placement and Entrepreneurship Cell (10)

II-I.6.1 Effective career guidance services including counseling for higher studies (**4**)

Specify – facility, management and impact

II-I.6.2 Training and placement facility with training and placement officer (TPO), industry interaction for training/internship/placement (**4**)

Specify – facility, management and impact

II-I.6.3 Entrepreneurship cell and incubation facility (**2**)

Specify – facility, management and impact

II-I.7 Co-curricular and Extra Curricular Activities (10)

II-I.7.1 Co-curricular and extra-curricular activities, e.g., NCC/ NSS, cultural activities etc. (**5**)

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Specify – facilities and usages in brief

II-I.7.2 Sports grounds, facilities and qualified sports instructors (**5**)

Specify – facility, management and usages

Criterion III: Students' Admission and First Year Performance (75)

III-I.1 Students Admission (15)

III-I.1.1 Admission Intake (**5**)

Items	CAY	CAYm1	CAYm2	CAYm3
Sanctioned Intake Strength in the Institute (N)				
Number of students, admitted on merit (N1)				
Number of students, admitted on non-merit (N2)				
Number of total admitted students in the Institute (N1 + N2)				

III-I.1.2 Admission Quality (**10**)

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

Rank Range	CAY	CAYm1	CAYm2	CAYm3
Upto 98 percentile				
95 – 98 percentile				
90 – 95 percentile				
80 – 90 percentile				
. . . . .				
. . . .				
Admitted without rank				

Tabular data for estimating Student Teacher Ratio and Faculty Qualification for FIRST YEAR Common Courses

List of faculty members teaching first year courses:

Name of Faculty	Qualification	Designation	Date of joining institution	Department with which associated	Distribution of teaching load (%-age)		
					1st Year	UG	PG
. . .							
. . . .							

III-I.2 Assessment of First-Year Student Teacher Ratio (FYSTR) of 25 or Superior (20)

Three years of data for first year courses to calculate the Student Teacher Ratio (FYSTR):

Year	Number of students (Approved intake strength)	Number of faculty members (considering fractional load)	FYSTR	Assessment = 20 * 25 * 0.8 / FYSTR (Max. is 20)

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CAYm2				
CAYm1				
CAY				
			Av. Assessment	

III-I.3 Assessment of Faculty Qualification teaching First Year Common Courses (FYFQ) (20)

Assessment of Qualification = 2*(10 * x + 6 * y + 4 * z) / N

Where x = Number of Faculty Members with Ph. D
y = Number of Faculty Members with M. E / M. Tech./NET-Qualified
z = Number of Faculty Members with B. E / B. Tech./M.Sc./M.C.A./M.A
N = Total Number Faculty Members (considering fractional load) or Number of Faculty needed for FYSTR of 25, whichever is higher.

Year	x	y	z	N	Assessment of faculty Qualification
CAYm2					
CAYm1					
CAY					
				Average Assessment of Faculty Qualification (FYFQ)	

.

III-I.4 Academic Performance in First Year Common Courses (20)

Academic Performance = 20 * FYSI

where FYSI = First Year Success Index
= (No. of students who have cleared all the subjects in a single attempt
+ 0.5 * Number of students who cleared all but one subject in a single attempt)
DIVIDED BY (Total Number of students admitted in the first year)

Items	CAYm1	CAYm2	CAYm3
Number of students admitted in First Year (**N**)			
Number of students who have cleared all subjects in single attempt (x)			
Number of students who have cleared all subjects but one subject in single attempt (y)			
First Year Success Index (FYSI) = (x + 0.5y) / N			

Av. FYSI = _____

Academic Performance = 20 * Av. FYSI = _____

Evaluators' Space

PART II
Department / Programme Summary
(Criteria IV to X)

D.0.1. Name and Address of the Department:

D.0.2. Name, Designation, Telephone Numbers and E-mail ids of the contact person for NBA:

D.0.3. History of the Department (including dates of introduction and Number of seats of various programmes of study, which are run by the department along with NBA accreditation, if any), in tabular form:

Programme of Study	Description
UG in	Started with _____ seats in _____ Intake increased to _____ in _____ Intake increased to _____ in _____
	Accredited by NBA-AICTE in _____ for __ years Accredited by NBA-AICTE in _____ for __ years
UG	. . . .
	. . . . .
MCA	. . . . .
PG	. . . . .

D.0.4. List the Names of the Programmes/Departments which share human resources and/or the facilities of this Department/Programmes

D.0.5. Total Number of Students _____ Boys _____ Girls _____
D.0.6. Total Number of Employees _____ Male _____ Female _____

D.0.7. Minimum and Maximum number of faculty and staff on roll during the current and previous two academic years (1st July to 30th June) in the Department :

	CAY		CAY minus 1		CAY minus 2	
	Min	Max	Min	Max	Min	Max
Teaching faculty in the Department						
Teaching faculty with the Programme						
Non-teaching staff						

D.0.8. Summary of Budget for the CFY and the Actual Expenditures Incurred in the CFYm1 and CFYm2 (exclusively for this Programme in the Department)

Items	Budgeted in CFY	Actual expenses in CFY (till . . . . . …)	Actual Expenses in CFYm1	Actual Expenses in CFYm2
Laboratory equipments				

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SW purchase				
Laboratory consumables				
Maintenance and spares				
Travel				
Miscellaneous expenses for academic activities				

Criterion IV : Students' Performance in the Programme (75)

Admission Intake in the Programme

Items	CAY	CAYm1	CAYm2	CAYm3
Sanctioned Intake Strength in the program (N)				
Number of total admitted students in First year *minus* Number of students migrated to other programmes at the end of 1st year (N1)				
Number of laterally admitted students in 2nd year in the same batch (N2				
Number of total admitted students in the program (N1 + N2)				

IV-P.1 Success Rate (20)

Provide data for the past 7 batches of students (Successfully completed implies Zero Backlogs)

Year of Entry (in reverse chronological order)	Number of Students Admitted in 1st year + Admitted laterally in 2nd year (N1 + N2)	Number of Students successfully completing 1st year	Number of Students successfully completing 2nd year	Number of Students successfully completing 3rd year	Number of Students successfully earning their degree in just 4 years
CAY					
CAYm1					
CAYm2					
CAYm3					
CAYm4 (LYG)					
CAYm5 (LYGm1)					
CAYm6 (LYG m2)					

Success Rate = 20 * Mean of Success Index (SI) for past 3 batches
SI = (Number of students who cleared the program in the minimum period of course duration) DIVIDED BY (Number of students admitted in the first year of that batch and laterally admitted in 2nd year)

Items	LYG (CAYm4)	LYGm1 (CAYm5)	LYGm2 (CAYm6)
Number of students admitted in the corresponding First Year + laterally admitted in 2nd year			
Number of students who have graduated in 4 years			
Success Index (**SI**)			

Av. SI = _____

Success Rate = 20 * Av. SI = _____

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IV-P.2 Academic Performance (20)

Academic Performance = 2 * API
Where API = Academic Performance Index
= Mean of Cumulative Grade Point Average of all the Students on a 10 point CGPA System
OR
= Mean of the percentage of marks of all students / 10

Items	LYG (CAYm4)	LYGm1 (CAYm5)	LYGm2 (CAYm6)
Approximating the API by the following mid-point analysis			
Number of students in 10.0 <= CGPA < 9.0			
Number of students in 9.0 <= CGPA < 8.0			
. . .			
Total			
Approximating API by Mid-CGPA			
Exact Mean of CGPA/Percentage of all the students (**API**)			

Av. API = _____

Academic Performance = 2 x Av. API = _____

IV-P.3 Placement and Higher Studies (20)

Assessment Points = 20 * (x + 1.25 * y) / N
Where x = Number of students placed,
y = Number of students admitted for higher studies with valid qualifying scores/ranks,
N = Total number of students who were admitted in the batch including lateral entry.
subject to Max. Assessment Points = 20.

Items	LYG	LYGm1	LYGm2
Number of Admitted students corresponding to LYG including lateral entry (N)			
Number of students who obtained jobs as per the record of placement office (x1)			
Number of students who found employment otherwise at the end of the final year (x2)			
x = x1 + x2			
Number of students who went for higher studies with valid qualifying scores/ranks (y)			
Assessment Points			

Av. Assessment Points = _____

Evaluators' Space

IV-P.4 Professional Activities (15)

Provide data for the past 3 years – CAY, CAYm1 and CAYm2

IV-P.4.1 Professional societies/ chapters and organizing engineering events (**3**)

List the above in Tabular form

IV-P.4.2 Organization of paper contests, design contests etc., and their achievements (**3**)

List the above in Tabular form

IV-P.4.3 Publication of technical magazines, newsletters etc. (**3**)

List the above publications along with the names of the editors, publishers etc.

IV-P.4.4 Entrepreneurship initiatives, product designs, innovations (**3**)

Specify the efforts and achievements

IV-P.4.5 Publications and awards in inter institute events by students of the programme of study (**3**)

Include a Table having those publications, which fetch awards by students in the events/conferences organized by other institutes. Include a tabulated list of all other student publications in a separate annexure.

Criterion V: Faculty (150)

List of Faculty : Exclusively for the Program / Shared with other Programs

Name of the Faculty	Qualification, University and year of graduation	Designation and Date of Joining the Institution	Distribution of teaching load (%-age)			Number of research publications in journals and conferences since joining	IPRs	R & D and Consultancy work with amount	Interaction with Outside world
			1st Y	UG	PG				
. . . .						(nJ, nC)			
. . .									

V-P.1 Student Teacher Ratio (STR) (20) : STR is desired to be 15 or superior

Assessment = 20 * 15 * 0.8 / STR ;subject to Max. Assessment of 20.

Where STR = Student Teacher Ratio

= $(x + y + z) / N_1$

Where x = Number of students in 2nd year of the program

y = Number of students in 3rd year of the program

z = Number of students in 4th year of the program

N_1 = Total Number Faculty Members in the program (by considering fractional load)

Year	x	y	z	x+y+z	N_1	STR	Assessment (Max. is 20)
CAYm2							
CAYm1							
CAY							
						Av. Assessment	

Evaluators' Space

For Item Nos. V-P.2 to V-P.8, the denominator term (N) is computed as follows:--

N = Maximum {N_1, N_2},

where N_1 = Total Number of Faculty Members in the programme (considering the fractional load),

N_2 = Number of Faculty positions needed for Student Teacher Ratio (STR) of 15.

Year	N_1	N_2	N = Max. (N_1, N_2)
CAYm2			
CAYm1			
CAY			

V-P.2 Faculty Cadre Ratio (20)

Assessment = 20 * CRI

Where CRI = Cadre Ratio Index

= 2.25 (2x + y) / N ;subject to Max. CRI = 1.0;

where x = Number of professors in the programme

y = Number of associate professors in the programme

Year	x	y	N	CRI	Assessment
CAYm2					
CAYm1					
CAY					
				Av. Assessment	

V-P.3 Faculty Qualifications (30)

Assessment = 3 * FQI

Where FQI = Faculty Qualification Index

= (10 * x + 6 * y + 4 * z) / N

Where x = Number of Faculty Members with Ph. D.

y = Number of Faculty Members with M. E / M. Tech

z = Number of Faculty Members with B. E / B. Tech./M.Sc.

Year	x	y	z	N	FQI	Assessment
CAYm2						
CAYm1						
CAY						
					Av. Assessment	

V-P.4 Faculty Retention (20)

Assessment = 4 * RPI / N

Where RPI = Retention Point Index

= Points assigned to all Faculty

Where Points assigned to a faculty = 1 point for each year of experience at the Institute but not exceeding 5.

Item	CAYm2	CAYm1	CAY
Number of faculty with less than 1y (x0)			
Number of faculty with 1y <= period < 2y (x1)			
Number of faculty with 2y <= period < 3y (x2)			
Number of faculty with 3y <= period < 4y (x3)			
Number of faculty with 4y <= period < 5y (x4)			
Number of faculty with more than 5 y (x5)			
N			
RPI = x1 + 2x2 + 3x3 + 4x4 +5x5			
Assessment			
			Av. Assessment

Evaluators' Space

V-P.5 Faculty Research Publications (20)

Assessment of FRP = 4 * Sum of the Research Publication Points scored by each Faculty member *DIVIDED BY* (N)

Guidelines: A faculty member scores at most 5 Research publication points, each year, depending upon the *quality* of the research papers published in the past 3 years.

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

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

Name of faculty (contributing to FRP)	FRP Points (Max. 5 per year per faculty)		
	CAYm2	CAYm1	CAY
. . .			
. . . . .			
. . . . .			
Sum			
N (Number of faculty positions required for an STR of 15)			
Assessment FRP = 4 x Sum/N			
		Av. Assessment	

V-P.6 Faculty Intellectual Property Rights (10)

Assessment of FIPR = 2 * Sum of the FIPR points scored by each Faculty member *DIVIDED BY* (N)

Guidelines: A faculty member scores at most 5 FIPR points, each year. FIPR includes awarded national/international patents, books and copyrights.

Name of faculty (contributing to FIPR)	FIPR Points (Max. 5 per year per faculty)		
	CAYm2	CAYm1	CAY
. . .			
. . . . .			
. . . . .			
Sum			
N			
Assessment FIPR = 2 x Sum/N			
		Av. Assessment	

V-P.7 Faculty R & D and Consultancy Work (20)

Assessment of Faculty R&D and Consultancy Work
= 4 * Sum of FRDC by each faculty *DIVIDED BY* (N)

Guidelines : A faculty member gets at most 5 points, each year, depending upon the amount and/or the contribution made. A suggestive scheme is given below for a minimum amount of Rs. 1 lakh, :--
5 points for funding by National Agency,
4 points for funding by State Agency,
3 points for funding by private sector, and
2 points for funding by the sponsoring Trust/Society.

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Name of faculty (contributing to FRDC)	FPPC Points (Max. 5 per year per faculty)		
	CAYm2	CAYm1	CAY
. . .			
. . . . .			
. . . . .			
Sum			
N			
Assessment FRDC = 4 x Sum/N			
			Av. Assessment

V-P.8 Faculty Interactions with Outside World (10)

Assessment = 2 * Sum of FIP by each faculty *DIVIDED BY* (N)

Guidelines : A faculty member gets at the most 5 Interaction Points, each year, depending upon the type of Institution or R&D Lab or Industry, as given below:

5 points for interaction with a well known Institution abroad, Institution of Eminence in India or National Research Labs,
3 points for interaction with Institution/Industry (not covered) above,
2 points for interaction with State Level Institutions and others.

Point to be awarded are for activities that result in joint efforts in the publication of books/technical papers, pursuing R & D/consultancy work and/or development of semester-long course/teaching modules.

Name of faculty (contributing to FIP)	FIP Points		
	CAYm2	CAYm1	CAY
. . .			
. . . . .			
. . . . .			
Sum			
N			
Assessment FIP = 2 x Sum/N			
			Av. Assessment

Criterion VI: Facilities and Technical Support (75)

Description of Class rooms, tutorial rooms, examination halls, faculty rooms, seminar and conference halls: (Entries in the following table are sampler entries)

Room Description	Usage	Shared / Exclusive ?	Capacity	Rooms Equipped with
Class Room Number	Class room for 2nd year			
. . . .				
Tutorial rooms				
Examination hall				
Seminar Room Number	. . . . .			
Meeting room Number	. . . .			
Faculty rooms (n)	. . .		. . . .	PC, Internet, Book rack, ...

Evaluators' Space

VI-P.1 Class Rooms in the Department (20)

VI-P.1.1 Adequate number of rooms for lectures (core/electives), seminars, tutorials, examinations, etc. for the program (**10**)

Assessment based on the information provided in the above table

VI-P.1.2 Teaching aids – black/white-board, multimedia projectors, etc. (**5**)

Assessment based on the information provided in the above table

VI-P.1.3 Acoustics, class room size, conditions of chairs/benches, air circulation, lighting, exits, ambiance, and such other amenities/facilities (**5**)

Assessment based on the information provided in the above table and the inspection thereof

VI-P.2 Faculty Rooms in the Department (15)

VI-P.2.1 Availability of individual faculty rooms (**5**)

Assessment based on the information provided in the above table

VI-P.2.2 Room equipped with white/black board, computer, internet, and such other amenities/facilities (**5**)

Assessment based on the information provided in the above table

VI-P.2.3 Usage of room for discussion/counseling with students (**5**)

Assessment based on the information provided in the above table and the inspection thereof

VI-P.3 Laboratories in the Department to Meet the Curriculum Requirements as well as the PEOs (25)

Curriculum Laboratory Description	Exclusive use/Shared?	Space, Number of Students	Number of experiments	Quality of instruments	Laboratory manuals
. . .					
. . . .					

VI-P.3.1 Adequate well equipped laboratories to run all the program specific curriculum (**10)**

Assessment based on the information provided in the above table

VI-P.3.2 Availability of computing facilities available exclusively in the department (**5**)

Assessment based on the information provided in the above table

VI-P.3.3 Availability of laboratories with technical support within and beyond working hours (**5)**

Assessment based on the information provided in the above table

Evaluators' Space

VI-P.3.4 Equipments to run experiments and their maintenance, Number of students per experimental set up, Size of the laboratories, overall ambience etc. (**5)**

Assessment based on the information provided in the above table

VI-P.4 Technical Manpower Support in the Department (15)

Name of the Tech Staff	Designation (Pay-scale)	Exclusive /Shared Work?	Date of Joining	Qualification		Other Technical Skills gained?	Responsi bility
				At Joining	Now ?		
. . .							
. . . .							

VI-P.4.1 Availability of adequate and qualified technical supporting staff for program specific laboratories (**10)**

Assessment based on the information provided in the above table

VI-P.4.2 Incentives, skill-up gradation and professional advancement (**5)**

Assessment based on the information provided in the above table

Criterion VII: Continuous Improvements (75)

VII-P.1 Improvement in Success Index of Students (10)

From IV-P.1

Items	LYG	LYGm1	LYGm2	Aggregate
Success Index				

VII-P.2 Improvement in Academic Performance Index of Students (10)

From IV-P.2

Items	LYG	LYGm1	LYGm2	Aggregate
API				

VII-P.3 Improvement in Student Teacher Ratio (10)

From V-P.1

Items	CAY	CAYm1	CAYm2	Aggregate
STR				

VII-P.4 Enhancement of Faculty Qualification Index (10)

From V-P.3

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Items	CAY	CAYm1	CAYm2	Aggregate
FQI				

VII-P.5 Improvement in Faculty Research Publications, R & D and Consultancy work (10)

From V-P.5 and V-P.7

Items	CAY	CAYm1	CAYm2	Aggregate
FRP				
FRDC				

VII-P.6 Continuing Education (10)

Specify the contributory efforts made by the faculty by developing the course/laboratory modules, conducting short-term courses/workshops etc., for continuing education :

Module Description	Any other contributory Inst./Industry	Developed/ organized by	Duration	Resource Persons	Target Audience	Usages and citation etc.
. . .						
. . . .						

VII-P.7 New Facility Created (10)

Specify new facilities created for strengthening the curriculum and/or meeting the PEOs:

Module Description	Any other contributory Inst./Industry	Developed by	Duration of Development	Resources consumed	Target Audience	Usages and citation etc.
In CAYm2						
. . .						
In CAYm1						
. . . . .						
In CAY						
. . . .						

VII-P.8 Overall Improvements since last Accreditation, if any, otherwise, since Establishment (5)

Specify the overall improvements:

Specify the strengths/ weaknesses	Improvement brought in	Contributed by	List the PEO(s), which are strengthened	Comments, if any
In CAYm2				
. . .				
In CAYm1				
. . . . .				
In CAY				
. . . .				
. . . . .				

Evaluators' Space

Criterion VIII: Curriculum (100)

List all the course modules along with their objectives and outcomes (Ref. Part III):

Course	Units		Science/HSS/ Professional Core, Elective or Breadth?	PEOs specified by Affiliating Institution ?	Additional theory/lab/ assignments/ tests needed to meet objectives?	Comments
	Theory	Lab				
. . .						
. . . . .						
. . . .						

VIII-P.1 Contents of Basic Science, Humanities and Professional Courses – Core, Elective, and Breadth (30)

Assessment must evaluate the balance in the composition of basic science, humanities, professional courses and their distribution in core and elective and breadth offerings, so that the PEOs are satisfied.

If such components are not included in the curriculum provided by the affiliated university then the Institution should make additional efforts to impart such knowledge by covering such aspects through "contents beyond syllabi".

VIII-P.2 Content Delivery (30)

Assessment must evaluate the effectivity of teaching content and delivery. Innovation, if any should be specified.

VIII-P.3 Laboratory and Project Work (20)

Assessment must evaluate the balance between laboratory /project work and theory, so that the PEOs are satisfied.

If enough laboratory/design/experimentation components are not included in the curriculum provided by the affiliated university then the Institution should make additional efforts to impart such knowledge by covering such aspects through "contents beyond syllabi".

VIII-P.4 Additional Contents to Bridge Curriculum Gaps (20)

Assessment must evaluate program specific contents which are added to bridge curriculum gaps across the courses in order to achieve PEOs and the specific course objectives.

Criterion IX: Programme Educational Objectives (PEOs) (150)

List all the course modules along with their PEOs (Ref. Part III) along with Course-files etc.:

Course	Units (Theory - Tutorial - Lab)	PEOs Assessment (Poor /Average/ Good/ Excellent)				Comments (e.g., needs, re-working, strengthening, etc.)			
		Theory	Lab	Assignments / Tests / Exams	Project / Independent Study	Theory	Lab	Assignments / Tests / Exams	Project / Independent Study
	. . .								
	. . . . .								
	. . . .								

IX-P.1 PEOs Mapping with Curriculum (30)

Assessment must be based on the PEOs defined for a course or a set of courses, and their mapping with the curriculum.

IX-P.2 PEOs Mapping with Content Delivery – Theory and Labs (30)

Assessment must be based on the PEOs defined for a course or a set of courses, and their mapping with (i) content delivery and (ii) knowledge gained through theory classes and laboratory work.

Produce sample course files (best and average quality), handouts showing course deliveries mapped to the identified PEOs. In case of an affiliated institution, there may be a provision for teaching additional topics and holding supplementary tests/examinations in order to achieve the identified PEOs. Produce sample laboratory assignment sheets (best and average quality).

This exercise is aimed at assessing the possibility and provision for PEOs' mapping with content delivery and the capability of the Institution to do so.

IX-P.3 PEOs Mapping with Evaluation (Examinations/Tests/Assignments) (30)

Assessment must be based on the PEOs defined for a course or a set of courses, and their mapping with examinations, class tests, and take-home work (assignments and independent study).

Produce sample (best and average quality) examination/tests question papers, assignment sheets along with model solutions to assess how the PEOs are achieved through such evaluations. In case of an affiliated institution, there may be a provision for additional/supplementary tests/examinations in order to cater to additional subject topics, required for achieving the identified PEOs.

This exercise is aimed at assessing the possibility, provision and capability of the institution to do the above in order to achieve the stated PEOs.

IX-P.4 PEOs Mapping with Final Year Project work (30)

Assessment of final year students' projects must be done considering criteria such as – (i) their quality, (ii) the state-of-the-art technology used in execution, (iii) their relevance to industry and academics, (iv) the use and development of theoretical and experimental methods, and (v) the coverage of border areas of the programme.

Include a list of five best and average projects from each of the three years – CAY, CAYm1 and CAYm2 – along with their contributions.

Name of the Student(s)	Project Title	Areas of Specialization	Project Supervisor(s)	Contribution/ Achievements / Research Output	Matching with the stated PEOs	Publication
In CAYm2						
. . . .						
In CAYm1						
In CAY						
. . .						

IX-P.5 Continuous Improvement in the Process of PEOs Mapping and Assessment (30)

Viewing the process of PEOs' mapping to the above mentioned criteria as a continuously improving process over the years, attempts must be made to document the effectivity of the mapping processes. This continuous process may also refine/revise the targeted PEOs and their mappings.

Evaluators' Space

Criterion X: Programme Outcomes and Assessment (100)

X-P.1 Demonstration of Attainment of the Mandatory *a*-to-*k* outcomes (Ref. Part III) **(50)**

Evaluation is based on outcome assessment from students, faculty and placement attainments.

X-P.1.1 Assessment of outcomes from students' attainment (**15**)

Academic and professional achievements by students in terms of *a*-*to*-*k*-outcomes must be evaluated out as per documented processes.

X-P.1.2 Assessment of outcomes due to faculty contributions and achievements (**15**)

Academic and professional contributions of the faculty leading to *a*-*to*-*k*-outcomes and their achievements must be evaluated as per documented processes.

X-P.1.3 Assessment of outcomes from placement (**10**)

Assessment of achieved objectives as revealed through placement data (type of jobs, nature of companies, higher studies etc.) must be evaluated as per documented processes.

X-P.1.4 Assessment of achievements as disseminated in media/public fora (**10**)

Assessment of achievements, as published in the media/public fora of repute (excluding the internal publications of the Institute, its media partners) must be done based on their impact.

X-P.2 Assessment of Outcomes by External Stakeholders (30)

X-P.2.1 Documented process and assessment from Industries (**10**)

Evaluation must be done based on documented processes for repeatedly assessing the outcomes by the relevant industries.

X-P.2.2 Documented process and assessment from Almuni (**10**)

Evaluation must be done based on documented processes for repeatedly assessing the outcomes by the qualified and relevant alumni.

X-P.2.3 Documented process and assessment from Professional Bodies (**10**)

Evaluation must be done based on documented processes for repeatedly assessing the outcomes by the applicable and recognized national/international professional bodies.

X-P.3 Effectivity and Efficiency of the Mechanism/Procedure for Continuous Review and Outcome Measurements (20)

Viewing the review and outcome measurement processes as continuously improving, attempts must be made to document the effectivity and efficiency of the mechanism/procedures.

Evaluators' Space

PART III
Curriculum, Syllabi, PEOs and Outcomes

In this part of SAR, the course modules and/or groups of course modules in the programme, should provide the following information:

1. Programme Educational Objectives (PEOs) and Course Objectives,
2. Programme Outcomes as attainable through a course module or a group of course modules,
3. Defined outcomes vis-à-vis the subset of achievable outcomes for a course module and/or group of course modules,
4. Additional contents beyond the syllabi, if needed, to be provided to meet the outcomes with the course objectives, and
5. How to make provisions for the additional contents, if needed to bridge the gaps, in the academic calendar.

The following excerpts are taken from the **ABET's Criteria for Accrediting Engineering Programmes**:--

Programme Educational Objectives (PEOs) – Programme educational objectives are broad statements that describe the career and professional accomplishments that the programme is preparing the graduates to achieve.

Each programme for which an institution seeks accreditation or reaccreditation must have in place:

(a) published educational objectives that are consistent with the mission of the institution and these criteria,
(b) a process that periodically documents and demonstrates that the objectives are based on the needs of the programme's various constituencies, and
(c) an assessment and evaluation process that periodically documents and demonstrates the degree to which these objectives are attained.

Programme Outcomes – Programme outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire in their matriculation through the programme.

Engineering programmes must demonstrate that their students attain the following outcomes:

(a) an ability to apply knowledge of mathematics, science, and engineering,
(b) an ability to design and conduct experiments, as well as to analyze and interpret data,
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability,
(d) an ability to function on multidisciplinary teams,
(e) an ability to identify, formulate, and solve engineering problems,
(f) an understanding of professional and ethical responsibility,
(g) an ability to communicate effectively,
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context,
(i) a recognition of the need for, and an ability to engage in life-long learning,
(j) a knowledge of contemporary issues, and
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Programme outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the programme. Programme outcomes must foster attainment of programme educational objectives.

Assessment – Assessment is one or more processes that identify, collect, and prepare data to evaluate the achievement of programme outcomes and programme educational objectives.

Evaluation – Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment practices. Evaluation determines the extent to which programme outcomes or programme educational objectives are being achieved and results in decisions and actions to improve the programme.

There must be an assessment and evaluation process that periodically documents and demonstrates the degree to which the programme outcomes are attained.

Evaluators' Space

PART IV
List of documents/records to be made available during the visit
(Records of three years to be made available, wherever applicable)

Institute Specific

I.1. Land papers, built-plan and approval etc.
I.2. Composition of GC/GB, Senate and other Academic and Administrative bodies, their functions and responsibilities. List of all the meetings held in the past 3 years along with the attendance records. Representative minutes and action-taken reports of a few meetings of such bodies along with the list of current faculty members who are members of such bodies.
I.3. Rules, policies and procedures published by the Institution including service book and academic regulations and other along with the proof that the employees/students are aware of the rules and procedures.
I.4. Budgeted allocation and utilization : Audited statement of accounts
I.5. Informative web site
I.6. Library resources – books and journal holdings,
I.7. Listing of core, computing and manufacturing etc. labs
I.8. Records of T & P and career and guidance cells
I.9. Records of safety checks and critical installations
I.10. Medical care records and usages of ambulance etc.
I.11. Academic calendar, schedule of tutorial and makeup classes
I.12. Course handouts/files along with PEOs; list of additional topics to meet PEOs and outcomes.
I.13. Set of question papers, assignments, evaluation schemes etc.
I.14. Feedback proforma, analysis and corrective actions
I.15. Documented feedback received from the stake-holders (e.g., Industries, Parents, Alumni, Financiers etc.) of the Institution
I.16. List of faculty who teach first year courses along with their qualifications
I.17. First year results.

Programme Specific

P.1 NBA accreditation reports of the past visits, if any
P.2 Department budget and allocations of the past 3 years
P.3 Admission – seats filled and ranks (3y data)
P.4 List/Number of students who clear the programme in 4y (3y data)
P.5 Av. Grade point (CGPA) (3y data of students CGPA/percentage)
P.6 Placement and higher studies data (3y data)
P.7 Professional society activities, events, conferences organized etc.
P.8 List of students' papers along with hard-copies of the publications; professional society publications/magazines etc.
P.9 Sample best and average project reports/theses
P.10 Details of faculty student ratio
P.11 Faculty details with their service books, salary details, sample appointment letters, promotion and award letters/certificates
P.12 Faculty list with designation, qualification, joining date, publication, R & D, interaction details
P.13 List of faculty publications along with DOIs and publication/citation details
P.14 List of R & D and consultancy projects along with approvals and project completion reports
P.15 List and proofs of faculty interaction with outside world
P.16 List of class rooms, faculty rooms,
P.17 List of programme specific labs and computing facility within dept.
P.18 List of non-teaching staff with their appointment letters etc
P.19 List of short-term courses, workshop arranged and course-modules developed
P.20 Records of new programme specific facility created, if any
P.21 Records of overall programme specific improvements, if any
P.22 Curriculum, PEO/Course objectives and Outcomes,
P.23 Known gaps in the curriculum vis-à-vis PEOs and Outcomes
P.24 List of contents beyond syllabi and schedule in academic calendar, if any
P.25 Course files, plan of course delivery, question papers, assignments, list of experiments etc.

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Evaluators' Space