

Part B-Program Assessment Worksheet
Program Level Criteria- To Be Assessed by Evaluator

Name of the Institution :

Name of the Program :

Criterion 1: Vision, Mission and Program Educational Objectives (50)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
1.1	State the Vision and Mission of the Department and Institute	5	A. Availability of statements of the Department (1)					
			B. Appropriateness/Relevance of the Statements (2)					
			C. Consistency of the Department statements with the Institute statements (2)					
1.2	State the Program Educational Objectives (PEOs)	5	Program Educational Objectives (3 to 5) (5) Availability & correctness					
1.3	Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders	15	A. Adequacy in respect of publication & dissemination (3)					
			B. Process of dissemination among stakeholders (3)					
			C. Extent of awareness of Vision, Mission & PEOs among the stakeholder (9)					
1.4	State the process for defining the Vision and Mission of the Department, and PEOs of the program	15	A. Description of process for defining the Vision, Mission of the Department (7)					
			B. Description of process for defining the PEOs of the program (8)					
1.5	Establish consistency of PEOs with Mission of the Department	10	A. Preparation of a matrix of mapping PEOs and elements of Mission statement (5)					
			B. Consistency/justification of co-relation parameters of the above matrix (5)					
Total of Criterion 1:		50	Overall Marks and Grade for Criterion 1:					

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Criterion 2: Program Curriculum and Teaching – Learning Processes (100)								
SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
2.1	Program Curriculum	30						
2.1.1	State the process for designing the program curriculum	10	Process used to demonstrate how the program curriculum is evolved and periodically reviewed considering the POs and PSOs. Also consider the involvement of the Industry					
2.1.2	Structure of the Curriculum	5	Refer to SAR: Expectation in 2.1.2 & 2.1.3 is that the curriculum is well balanced structure & appropriate for a degree program					
2.1.3	State the components of the curriculum	5	Refer to SAR: Expectation in 2.1.2 & 2.1.3 is that the curriculum is well balanced structure & appropriate for a degree program					
2.1.4	State the process used to identify extent of compliance of the curriculum for attaining the Program Outcomes (POs) & Program Specific Outcomes (PSOs)	10	Process used to identify extent of compliance of curriculum for attaining POs & PSOs					
2.2	Teaching-Learning Processes	70						
2.2.1	Describe the Process followed to improve quality of Teaching Learning	15	A. Adherence to Academic Calendar (2)					
			B. Pedagogical initiatives (2)					
			C. Methodologies to support weak students and encourage bright students (2)					
			D. Quality of classroom teaching (Observation in a Class) (2)					
			E. Conduct of experiments (Observation in Lab) (2)					
			F. Continuous Assessment in the laboratory (3)					

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			G. Student feedback on teaching learning process and actions taken (2)					
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SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
2.2.2	Quality of internal semester question papers, assignments and evaluation	15	A. Process for internal semester question paper setting, evaluation and effective process implementation (3)					
			B. Process to ensure questions from outcomes/learning levels perspective (2)					
			C. Evidence of COs coverage in class test / mid-term tests (5)					
			D. Quality of Assignment and its relevance to COs (5)					
2.2.3	Quality of student projects	20	A. Identification of projects and allocation methodology to Faculty (2)					
			B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs (2)					
			C. Project related to Industry (3)					
			D. Process for monitoring and evaluation (2)					
			E. Process to assess individual and team performance (3)					
			F. Quality of completed projects/working prototypes (5)					
			G. Evidences of papers published /Awards received by projects etc. (3)					
2.2.4	Initiatives related to industry interaction.	10	A. Industry supported laboratories (2)					
			B. Industry involvement in the program curriculum (3)					
			C. Industry involvement in partial delivery of any regular courses for students (3)					
			D. Impact analysis of industry institute interaction and actions taken thereof (2)					
2.2.5	Initiatives related to	10	A. Industrial training/tours for students (2)					

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	industry internship/ summer training		B. Industrial /internship /summer training of more than two weeks and post training Assessment (3)					
			C. Impact analysis of industrial training (2)					
			D. Student feedback on initiative (3)					
Total of Criterion 2:		100	Overall Marks and Grade for Criterion 2:					
Criterion 3: Course Outcomes and Program Outcomes (175)								
SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
3.1	Establish the correlation between the courses and the POs & PSOs	25	A. Evidence of COs being defined for every course (5)					
			B. Availability of COs embedded in the syllabi (5)					
			C. Explanation of Course Articulation Matrix table to be ascertained (5)					
			D. Explanation of Program Articulation Matrix tables to be ascertained (10)					
3.2	Attainment of Course Outcomes	75						
3.2.1	Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based	10	A. List of assessment processes (2)					
			B. The quality /relevance of assessment processes & tools used (8)					
3.2.2	Record the attainment of Course Outcomes of all courses with respect to set attainment levels	65	Verification attainment levels as per the bench mark set for all courses (65)					
3.3	Attainment of Program Outcomes and Program Specific Outcomes	75						
3.3.1	Describe assessment tools and processes used for assessing the attainment of each of	10	A. List of assessment tools & processes (5)					
			B. The quality/relevance of assessment tools/processes used					

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	the POs & PSOs		(5)					
3.3.2	Provide results of evaluation of each PO & PSO	65	A. Verification of documents, results and level of attainment of each PO/PSO(50)					
			B. Overall levels of attainment (15)					
Total of Criterion 3:		175	Overall Marks and Grade for Criterion 3:					

Criterion 4: Students' Performance (100)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)			
				Marks	Total	Marks	Grade (Y,C,W,D)				
4.1	Enrolment Ratio	20	A. >=90% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (20) B. >=80% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (18) C. >=70% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (16) D. >=60% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (14) E. Otherwise '0'						CAY	CAYm1	CAYm2
								Sanctioned intake			
								Students enrolled at first year level			
								Enrolment ratio			
								Average enrolment ratio (ER)			
								Comments (if any): ❖			
4.2	Success Rate in the stipulated period of the program	20									
4.2.1	Success rate without backlogs in any Semester/year of study	15	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2 nd year via lateral entry and separate division, if						LYG	LYGm1	LYGm2
	Without Backlog							Success Index (SI)			
								Average			

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means compartment no or failures in any semester/year of study	applicable) Average SI = Mean of success index (SI) for past three batches Success rate without backlogs in any year of study = $15 \times \text{Average SI}$							Success Index (SI) Comments (if any): ❖
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SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)			
				Marks	Total	Marks	Grade (Y,C,W,D)		LYG	LYGm1	LYGm2
4.2.2	Success rate in stipulated period (actual duration of the program) (Total of with backlog +without backlog)	5	SI= (Number of students who graduated from the program with backlog in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2 nd year via lateral entry and separate division, if applicable) Average SI = mean of success index (SI) for past three batches Success rate = 5 × Average SI						LYG	LYGm1	LYGm2
								Success Index (SI)			
								Average Success Index (SI)			
								Comments (if any): ❖			
4.3	Academic Performance in Second Year	10	Academic Performance Level = Average API (Academic Performance Index) API = ((Mean of 2 nd Year Grade Point Average of all successful Students on a 10-point scale) or (Mean of the percentage of marks of all successful students in Second Year/10)) x (number of successful students /students appeared in the examination)					Average API for past 3 years: Comments (if any): ❖			

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4.4	Placement, studies Entrepreneurship	Higher and	30	Assessment Points=30×average placement, i.e., (P1+P2+P3)/3							CAYm1	CAYm2	CAYm3
				Placement index (P)=[(x+y+z)/N] where,									
				x=Number of students placed in companies or Government sector through on/off campus recruitment									
				y=Number of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National level tests, GRE, GMAT etc.)									
				z=No. of students turned entrepreneur in engineering/technology.						Comments (if any): ❖			
				N =Total number of final year students									

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
4.5	Professional Activities	20						
4.5.1	Professional societies/chapters and organizing engineering events	5	A. Availability & activities of professional societies/chapters (3)					
			B. Number, quality of engineering events (organized at Institute level-Institute/State/National/International) (2)					
4.5.2	Publication of technical magazines, newsletters, etc.	5	A. Quality & Relevance of the contents and Print Material (3)					
			B. Participation of Students from the program (2)					
4.5.3	Participation in inter-institute events by students of the program of study (at other	10	A. Events within the state (2)					
			B. Events outside the state (3)					

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	institutions)						
			C. Prizes/awards received in such events (5)				
Total of Criterion 4:		100	Overall Marks and Grade for Criterion 4:				

Criterion 5: Faculty Information and Contributions (200)											
SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)			
				Marks	Total	Marks	Grade (Y,C,W,D)				
5.1	Student-Faculty Ratio (SFR)	20	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 given as below ❖ <=15 --20 marks ❖ <=17 --18 marks ❖ <=19 --16 marks ❖ <=21 --14 marks ❖ <=23 --12 marks ❖ <=25 --10 marks ❖ >25 --0 mark						CAY	CAYm1	CAYm2
								Total No.of students(2,3,4 years) in UG programs in Dept.			
								Total No.of students (1,2 years) in PG programs in Dept.			

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			<p>Note: All the faculty whether regular or contractual (except Part- Time or 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:</p> <p>1. Shall have the AICTE prescribed qualifications and experience.</p> <p>2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.</p> <p>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</p>					<table><tr><td>S=Number of Students in the Department = UG1 + UG2 +... +UGn + PG1 + ...PGn</td><td></td><td></td><td></td></tr><tr><td>F = Total no.of faculty members in the Dept.(excluding first year faculty)</td><td></td><td></td><td></td></tr><tr><td>SFR</td><td></td><td></td><td></td></tr><tr><td>Average SFR for past 3 years</td><td colspan="3"></td></tr></table> <p>Comments (if any):</p> <p>❖</p>	S=Number of Students in the Department = UG1 + UG2 +... +UGn + PG1 + ...PGn				F = Total no.of faculty members in the Dept.(excluding first year faculty)				SFR				Average SFR for past 3 years			
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				Marks	Total	Marks	Grade (Y,C,W,D)																	
5.2	Faculty Cadre Proportion	20	<p>Cadre Proportion Marks:</p> $\left[\frac{AF1}{RF1} + \frac{AF2 \times 0.6}{RF2} + \frac{AF3 \times 0.4}{RF3} \right] \times 10$ <p>• If AF1 = AF2= 0, then zero mark</p> <p>• Maximum marks to be limited if it exceeds 25(Refer calculation in SAR)</p>					<table><tr><td></td><td>CAY</td><td>CAYm1</td><td>CAYm2</td></tr><tr><td>No.of Professors</td><td></td><td></td><td></td></tr><tr><td>No.of Associate Professors</td><td></td><td></td><td></td></tr><tr><td>No.of Assistant Professors</td><td></td><td></td><td></td></tr></table> <p>Comments (if any):</p> <p>❖</p>		CAY	CAYm1	CAYm2	No.of Professors				No.of Associate Professors				No.of Assistant Professors			
	CAY	CAYm1	CAYm2																					
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5.3	Faculty Qualification	20	FQ=2.0x[{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 1:20 Faculty Student ratio (no. of faculty and no. of students required to be calculated as per 5.1)							CAY	CAYm1	CAYm2
									No.of Ph.D:			
									No.of M.Tech:			
									Faculty Qualification (FQ)			
									Average FQ for past 3 years			
Comments (if any): ❖												
5.4	Faculty Retention	10	A. ≥ 90% of required Faculties retained during the period of assessment keeping CAYm2 as base year (10) B. ≥ 75% of required Faculties retained during the period of assessment keeping CAYm2 as base year (8) C. ≥ 60% of required Faculties retained during the period of assessment keeping CAYm2 as base year (6) D. ≥ 50% of required Faculties retained during the period of assessment keeping CAYm2 as base year (4) E. Otherwise (0)						CAY		CAYm1	
									No.of Faculty Retained			
									Total No.of Required Faculty in CAYm2			
									Percentage of faculty retained			
									Average faculty retained for past 2 years			
Comments (if any): ❖												
SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/Reasons)				
				Marks	Total	Marks	Grade (Y,C,W,D)					
5.5	Faculty competencies in correlation to Program Specific Criteria	10	A. Specialization B. Research Publications C. Course Developments D. Other relevant points									

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5.6	Innovations by the Faculty in Teaching and Learning	10	A. Statement of clear goals, use of appropriate methods, significance of results, effective presentation and reflective presentation (4)																	
			B. Availability of work on Institute Website (2)																	
			C. Availability of work for peer review and critique (2)																	
			D. Reproducibility and Reusability by other scholars for further development (2)																	
5.7	Faculty as participants in Faculty development /training activities / STTPs	15	For each year: Assessment= 3×Sum/0.5RF Average assessment over three years starting from CAYm1 (Marks limited to 15)					<table><tr><td></td><td>CAYm1</td><td>CAYm2</td><td>CAYm3</td></tr><tr><td>Assessment points are:</td><td></td><td></td><td></td></tr><tr><td>Average assessment points for past 3 years</td><td colspan="3"></td></tr></table> Comments (if any): ❖		CAYm1	CAYm2	CAYm3	Assessment points are:				Average assessment points for past 3 years			
	CAYm1	CAYm2	CAYm3																	
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Average assessment points for past 3 years																				

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall		Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total	Marks	Grade (Y,C,W,D)	
5.8	Research and Development	75						
5.8.1	Academic Research	20	A. Number of quality publications in refereed/ SCI Journals, citations, Books/Book Chapters etc. (15)					

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			B. Ph.D awarded during the assessment period while working in institute (5)																					
5.8.2	Sponsored Research	20	Funded research from outside; Cumulative CAYm1, CAYm2, CAYm3: Amount >50 Lakhs- 20 Marks Amount>40 Lakhs and <=50 Lakhs – 15 Marks Amount >30 Lakhs and <= 40 Lakhs – 10 Marks Amount >= 15 Lakhs and <= 30 Lakhs – 5 Marks Amount < 15 Lakhs- 0 Mark					<table><tr><td></td><td>CAYm1</td><td>CAYm2</td><td>CAYm3</td></tr><tr><td>No.of projects</td><td></td><td></td><td></td></tr><tr><td>Amount (Rs.In Lakhs)</td><td></td><td></td><td></td></tr><tr><td>Total amount for past 3 years (Rs.In Lakhs)</td><td colspan="3"></td></tr></table> Comments (if any): ❖		CAYm1	CAYm2	CAYm3	No.of projects				Amount (Rs.In Lakhs)				Total amount for past 3 years (Rs.In Lakhs)			
	CAYm1	CAYm2	CAYm3																					
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5.8.3	Development Activities	15	A. Product development B. Research laboratories C. Instructional materials D. Working models/ charts/monograms etc.																					
5.8.4	Consultancy (From Industry)	20	Consultancy; Cumulative CAYm1, CAYm2, CAYm3: Amount >10 Lakhs- 20 Marks Amount>8 Lakhs and <=10 Lakhs – 15 Marks Amount >6 Lakhs and <8 Lakhs – 10 Marks Amount >=4 Lakhs and <6 Lakhs – 5 Marks Amount >=2 Lakhs and <4 Lakhs – 2 Marks Amount < 2 Lakhs- 0 Mark					<table><tr><td></td><td>CAYm1</td><td>CAYm2</td><td>CAYm3</td></tr><tr><td>No.of projects</td><td></td><td></td><td></td></tr><tr><td>Amount (Rs.In Lakhs)</td><td></td><td></td><td></td></tr><tr><td>Total amount for past 3 years (Rs.In Lakhs)</td><td colspan="3"></td></tr></table> Comments (if any): ❖		CAYm1	CAYm2	CAYm3	No.of projects				Amount (Rs.In Lakhs)				Total amount for past 3 years (Rs.In Lakhs)			
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				Marks	Total	Marks	Grade (Y,C,W,D)																	

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5.9	Faculty Appraisal Development (FPADS) Performance and System	10	A. A well-defined performance appraisal and development system instituted for all the assessment years (5)									
			B. Its implementation and effectiveness (5)									
5.10	Visiting/Adjunct/Emeritus Faculty etc.	10	A. Provision of Visiting /Adjunct/Emeritus faculty etc.(1)							CAY/m1	CAYm1/m2	CAYm2/m3
				No.of hours								
			B. Minimum 50 hours per year interaction per year to obtain three marks :3x3=9						Comments (if any): ❖			
Total of Criterion 5:		200	Overall Marks and Grade for Criterion 5:									

Criterion 6: Facilities and Technical Support (80)

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				Marks	Total	Marks	Grade (Y,C,W,D)	
6.1	Adequate and well-equipped laboratories, and technical manpower	40	A. Adequate well-equipped laboratories to run all the program-specific curriculum (25)					
			B. Availability of adequate and qualified technical supporting staff (15)					
6.2	Laboratories: Maintenance and overall ambience	10	Maintenance and overall ambience (10)					
6.3	Safety measures in laboratories	10	Safety measures in laboratories (10)					
6.4	Project laboratory/ facilities	20	Facilities & Utilization (20)					
Total of Criterion 6:		80	Overall Marks and Grade for Criterion 6:					

Criterion 7: Continuous Improvement (75)

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				Marks	Total	Marks	Grade (Y,C,W,D)	
7.1	Actions taken based on the results of evaluation of each of the POs and PSOs	30	A. Documentation of POs and PSOs attainment levels (15)					
			B. Identification of gaps/ short falls (5)					
			C. Plan of action to bridge the gap and its Implementation (10)					
7.2	Academic Audit and actions taken during the period of Assessment	15	Assessment shall be based on conduct and actions taken in relation to continuous improvement (15)					
7.3	Improvement in Placement, Studies Higher and Entrepreneurship	10	A. Improvement in Placements numbers, quality, core hiring industry and pay packages (5)					
			B. Improvement in Higher Studies admissions (3)					
			C. Improvement in number of Entrepreneurs (2)					
7.4	Improvement in the quality of students admitted to the program	20	Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage Physics, Chemistry and Mathematics marks in 12th Standard and percentage marks of the lateral entry students					
Total of Criterion 7:		75	Overall Marks and Grade for Criterion 7:					

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