

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 (60)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
1.1.	State the Vision and Mission of the Department and Institute	5	A. Availability of statements of the Departments (1) B. Appropriateness/Relevance of the Statements (2) C. Consistency of the Department statements with the Institute statements (2)			Overall Marks for 1.1	
1.2.	State the Program Educational Objectives (PEOs)	5	Program Educational Objectives (3 to 5) (5) Appropriateness			Overall Marks for 1.2	
1.3.	Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders	10	A. Adequacy in respect of publication & dissemination (2) B. Process of dissemination among stakeholders (2) C. Extent of awareness of Vision, Mission & PEOs among the stakeholder (6)			Overall Marks for 1.3	
1.4.	State the process for defining the Vision and Mission of the Department, and PEOs of the program	25	A. Description of process for defining the Vision, Mission of the Department (10) B. Description of process for defining the PEOs of the program (15)			Overall Marks for 1.4	
1.5.	Establish consistency of PEOs with Mission of the Department	15	A. Preparation of a matrix of PEOs and elements of Mission statement (5) B. Consistency/justification of co-relation parameters of the above matrix (10)			Overall Marks for 1.5	
Total of Criterion 1:		60		Overall Marks for Criterion 1:			

Criterion 2: Program Curriculum and Teaching – Learning Processes (120)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
2.1.	Program Curriculum	20				Overall Marks for 2.1	
2.1.1.	State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes (POs) & Program Specific Outcomes (PSOs), mention the identified curricular gaps, if any	10	A. Process used to identify extent of compliance of University curriculum for attaining POs & PSOs (6)				
			B. List the curricular gaps for the attainment of defined POs & PSOs (4)				
2.1.2.	State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs	10	A. Steps taken to get identified gaps included in the curriculum.(letter to university/BOS) (2)				
			B. Delivery details of content beyond syllabus (5)				
			C. Mapping of content beyond syllabus with the POs & PSOs (3)				
2.2.	Teaching-Learning Processes	100				Overall Marks for 2.2	
2.2.1	Describe the Process followed to improve quality of Teaching Learning	25	A. Adherence to Academic Calendar (3)				
			B. Use of various instructional methods and pedagogical initiatives (3)				
			C. Methodologies to support weak students and encourage bright students(4)				
			D. Quality of classroom teaching (Observation in a Class) (3)				
			E. Conduct of experiments (Observation in Lab)(3)				
			F. Continuous Assessment in the laboratory (3)				
			G. Student feedback on teaching learning process and actions taken (6)				
2.2.2.	Quality of internal semester Question papers, assignments and Evaluation	20	A. Process for internal semester question paper setting, evaluation and effective process implementation (5)				
			B. Process to ensure questions from outcomes/learning levels perspective (5)				
			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	25	A. Identification of projects and allocation methodology to Faculty (3)			
			B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs(5)			
			C. Process for monitoring and evaluation (5)			
			D. Process to assess individual and team performance(5)			
			E. Quality of completed projects/working prototypes (5)			
			F. Evidences of papers published /Awards received by projects etc. (2)			
2.2.4.	Initiatives related to industry interaction	15	A. Industry supported laboratories (5)			
			B. Industry involvement in the program design and partial delivery of any regular courses for students (5)			
			C. Impact analysis of industry institute interaction and actions taken thereof (5)			
2.2.5.	Initiatives related to industry internship/summer training	15	A. Industrial training/tours for students (3)			
			B. Industrial /internship /summer training of more than two weeks and post training Assessment (4)			
			C. Impact analysis of industrial training (4)			
			D. Student feedback on initiative (4)			
Total of Criterion 2:		120	Overall Marks for Criterion 2:			

Criterion 3: Course Outcomes and Program Outcomes (120)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
3.1.	Establish the correlation between the courses and the POs & PSOs	20				Overall Marks for 3.1	
3.1.1.	Course Outcomes	5	Evidence of COs being defined for every course (5)				
3.1.2.	CO-PO/PSOs matrices of courses selected in 3.1.1 (six matrices)	5	Explanation of table to be ascertained (5)				
3.1.3.	Program level Course-PO/PSOs matrix of ALL courses including first year courses	10	Explanation of tables to be ascertained (10)				
3.2.	Attainment of Course Outcomes	50				Overall Marks for 3.2	
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	40	Verify the attainment levels as per the benchmark set for all courses (40)				
3.3.	Attainment of Program Outcomes and Program Specific Outcomes	50				Overall Marks for 3.3	
3.3.1.	Describe assessment tools and processes used for assessing the attainment of each of the POs & PSOs	10	A. List of assessment tools & processes (5)				
			B. The quality/relevance of assessment tools/processes used (5)				
3.3.2.	Provide results of evaluation of each PO & PSO	40	A. Verification of documents, results and level of attainment of each PO/PSO (24)				
			B. Overall levels of attainment (16)				
Total of Criterion 3:		120		Overall Marks for Criterion 3:			

Criterion 4: Students' Performance (150)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
4.1.	Enrolment Ratio (20)	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)			Overall Marks for 4.1	
			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. >= 50% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (12)				
			F. Otherwise '0'.				
4.2.	Success Rate in the stipulated period of the program	40				Overall Marks for 4.2	
4.2.1.	Success rate without backlogs in any Semester/year of study Without Backlog means no compartment or failures in any semester/year of study	25	SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry and separate division, if applicable) Average SI = Mean of success index (SI) for past three batches Success rate without backlogs in any year of study = 25 × Average SI				Mention Numbers
4.2.2.	Success rate in stipulated period (actual duration of the program) [Total of with backlog + without backlog]	15	SI= (Number of students who graduated from the program in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry and separate division, if applicable) Average SI = mean of success index (SI) for past three batches Success rate = 15 × Average SI				Mention Numbers
4.3.	Academic Performance in Third Year	15	Academic Performance = 1.5 * Average API (Academic Performance Index) API = ((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/10)) × (successful students/number of students appeared in the examination) Successful students are those who are permitted to proceed to the final year			Overall Marks for 4.3	Mention Numbers

4.4.	Academic Performance in Second Year	15	Academic Performance Level = 1.5 * Average API (Academic Performance Index) API = ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful student sin Second Year/10)) x (successful students/number of students appeared in the examination)			Overall Mark for 4.4	Mention Numbers
4.5.	Placement, Higher studies and Entrepreneurship	40	Assessment Points = 40 × average of three years of [(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 N = Total number of final year students			Overall Marks for 4.5	Mention Numbers alongwith the calculation
4.6.	Professional Activities	20				Overall Marks for 4.6	
4.6.1.	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)				
4.6.2.	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)				
4.6.3.	Participation in inter-institute events by students of the program of study (at other institutions)	10	A. Events within the state (2) B. Events outside the state (3) C. Prizes/awards received in such events (5)				
Total of Criterion 4:		150	Overall Marks for Criterion 4:				

Criterion 5: Faculty Information and Contributions (200)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
5.1.	Student-Faculty Ratio (SFR)	20	<p>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:</p> <p>< = 15 - 20 Marks < = 17 - 18 Marks < = 19 - 16 Marks < = 21 - 14 Marks < = 23 - 12 Marks < = 25 - 10 Marks > 25 - 0 Marks</p> <p>Note: All the faculty whether regular or contractual (except Part-Time), 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> <ol style="list-style-type: none"> 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 			Overall Marks for 5.1	
5.2.	Faculty Cadre Proportion	25	<p>Cadre Proportion Marks =</p> $\left[\left(\frac{AF1}{RF1} \right) + \left(\frac{AF2 \times 0.6}{RF2} \right) + \left(\frac{AF3 \times 0.4}{RF3} \right) \right] \times 12.5$ <ul style="list-style-type: none"> • If AF1 = AF2= 0 then zero marks • Maximum marks to be limited if it exceeds 25 <p>(Refer calculation in SAR)</p>			Overall Marks for 5.2	Mention numbers
5.3.	Faculty Qualification	25	<p>FQ = 2.5 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 1:20 Faculty Student ratio (no. of faculty and no. of students required to be calculated as per 5.1)</p>			Overall Marks for 5.3	Mention numbers
5.4	Faculty Retention	25	<p>A. ≥ 90% of required Faculties retained during the period of assessment keeping CAYm2 as base year (25)</p> <p>B. ≥ 75% of required Faculties retained during the period of assessment keeping CAYm2 as base year (20)</p> <p>C. ≥ 60% of required Faculties retained during the period of assessment keeping CAYm2 as base year (15)7</p>			Overall Marks for 5.4	

Signature (Program Evaluator 1)

Signature (Program Evaluator 2)

		D. $\geq 50\%$ of required Faculties retained during the period of assessment keeping CAYm2 as base year (10)				
		E. Otherwise (0)				

5.5.	Innovations by the Faculty in Teaching and Learning	20	A. The work must be made available on Institute Website (4)		Overall Marks for 5.5		
			B. The work must be available for peer review and critique (4)				
			C. The work must be reproducible and developed further by other scholars (2)				
			D. Statement of clear goals, use of appropriate methods, significance of results, effective presentation and reflective critique (10)				
5.6	Faculty as participants in Faculty development /training activities /STTPs	15	For each year: Assessment = $3 \times \text{Sum} / 0.5\text{RF}$ Average assessment over last three years starting from CAYm1 (Marks limited to 15)		Overall Marks for 5.6	Mention numbers	
5.7.	Research and Development	30			Overall Marks for 5.7		
5.7.1.	Academic Research	10	A. Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6) B. PhD guided /PhD awarded during the assessment period while working in the institute (4)				
5.7.2	Sponsored Research	5	Funded research from outside; Cumulative CAYm1, CAYm2 and CAYm3: Amount > 20 Lakh – 5 Marks Amount >= 16 Lakh and <= 20 Lakh – 4 Marks Amount >= 12 Lakh and < 16 Lakh – 3 Marks Amount >= 8 Lakh and < 12 Lakh – 2 Marks Amount >= 4 Lakh and < 8 Lakh – 1 Mark Amount < 4 Lakh – 0 Mark				Mention numbers
5.7.3	Development Activities	10	A. Product Development B. Research laboratories C. Instructional materials D. Working models/charts/monograms etc.				
5.7.4.	Consultancy (From Industry)	5	Consultancy; Cumulative CAYm1, CAYm2 and CAYm3: Amount > 10 Lakh – 5 Marks Amount >= 8 Lakh and <= 10 Lakh – 4 Marks Amount >= 6 Lakh and < 8 Lakh – 3 Marks Amount >= 4 Lakh and < 6 Lakh – 2 Marks Amount >= 2 Lakh and < 4 Lakh – 1 Mark Amount < 2 Lakh – 0 Mark				Mention numbers
5.8.	Faculty Performance Appraisal and Development System (FPADS)	30	A. A well defined performance appraisal and development system instituted for all the assessment years (10)		Overall Marks for 5.8		
			B. Its implementation and effectiveness (20)				
5.9.	Visiting/Adjunct/Emeritus Faculty etc.	10	Provision of Visiting /Adjunct/Emeritus faculty etc.(1)		Overall Marks for 5.9		
			Minimum 50 hours per year interaction per year to obtain three marks : $3 \times 3 = 9$				
Total of Criterion 5:		200	Overall Marks for Criterion 5:				

Criterion 6: Facilities and Technical Support (80)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
6.1.	Adequate and well equipped laboratories, and technical manpower	30	A. Adequate well-equipped laboratories to run all the program-specific curriculum (20)			Overall Marks for 6.1	
			B. Availability of adequate technical supporting staff (5)				
			C. Availability of qualified technical supporting staff (5)				
6.2.	Additional Facilities created for improving the quality of learning experience in Laboratories	25	A. Availability and relevance of additional facilities(10)			Overall Marks for 6.2	
			B. Facilities utilization and effectiveness (10)				
			C. Relevance to POs and PSOs (5)				
6.3.	Laboratories: Maintenance and overall ambience	10	Maintenance and overall ambience (10)			Overall Marks for 6.3	
6.4.	Project laboratory	5	Facilities & Utilization (5)			Overall Marks for 6.4	
6.5.	Safety measures in laboratories	10	Safety measures in laboratories (10)			Overall Marks for 6.5	
Total of Criterion 6:		80		Marks for Criterion 6:			

Criterion 7: Continuous Improvement (50)							
S.No.	Sub Criteria	Max. Marks	Evaluation Guidelines	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
7.1.	Actions taken based on the results of evaluation of each of the POs and PSOs	20	A. Documentation of POs and PSOs attainment levels (5)			Overall Marks for 7.1	
			B. Identification of gaps/shortfalls (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	10	Assessment shall be based on conduct and actions taken in relation to continuous improvement (10)			Overall Marks for 7.2	
7.3.	Improvement in Placement, Higher Studies and Entrepreneurship	10	A. Improvement in Placements numbers, quality, core hiring industry and pay packages (5)			Overall Marks for 7.3	
			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	10	Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrance tests, percentage Physics, Chemistry and Mathematics marks in 12th Standard and percentage marks of the lateral entry students			Overall Marks for 7.4	
Total of Criterion 7:		50			Marks for Criterion 7:		