

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

Name of the Institution _____

Name of the Program _____

Criterion 1: Course Outcomes and Program Outcomes (100)								
S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
1.1.	State the Vision and Mission of the Department and Institute	05	A. Availability of the Vision and Mission statements of the Department (1)			Overall for 1.1	Overall Grade for 1.1	
			B. Appropriateness/Relevance of the Statements (1)					
			C. Consistency of the Department statements with the Institution statements (1)					
			D. PEO statements and their appropriateness (2)					
1.2.	Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders	05	A. Adequacy in respect of publication and dissemination (1)			Overall Marks for 1.2	Overall Grade for 1.2	
			B. Process of dissemination among stakeholders (1)					
			C. Extent of awareness of Vision, Mission & PEOs among the stakeholders (3)					
1.3.	Establish consistency of PEOs with Mission of the Department	05	A. Preparation of a matrix of PEOs and elements of Mission statement (2)			Overall Marks for 1.3	Overall Grade for 1.3	
			B. Consistency/justification of co-relation parameters of the above matrix (3)					
1.4	Establish the correlation between the courses and the POs & PSOs	10	A. Evidence of COs being defined for every course (2)			Overall Marks for 1.4	Overall Grade for 1.4	
			B. Availability of COs embedded in the syllabi (2)					
			C. Explanation of Course Articulation Matrix table to be ascertained (2)					
			D. Explanation of Program Articulation Matrix tables to be ascertained (4)					
1.5.	Attainment of Course Outcomes	25				Overall Marks for 1.5	Overall Grade for 1.5	
1.5.1.	Describe the assessment tools and processes used to gather the data upon which the evaluation of Course Outcome is based	05	A. List of assessment processes (1)					
			B. The quality /relevance of assessment processes & tools used (4)					
1.5.2.	Record the attainment of Course Outcomes of all courses with respect to set attainment levels	20	A. Verify the attainment levels as per the benchmark set for all courses (20)					
1.6.	Attainment of Program Outcomes and Program Specific Outcomes	25				Overall Marks for 1.6	Overall Grade for 1.6	
1.6.1.	Describe assessment tools and processes used for measuring the attainment of each	2	A. List of assessment tools & processes (2)					
		3	B. The quality/relevance of assessment tools/processes used (3)					
1.6.2.	Provide results of evaluation of each PO & PSO	15	A. Verification of documents, results and level of attainment of each PO/PSO (15)					
		5	B. Overall levels of attainment (5)					
1.7.	Evidence of Solving Complex Engineering Problems	25	A. Verification of documents related to mini projects/major projects/ term projects/ independent study/ problem-based learning approach adopted or any other activities conducted specifically which reflect the solving of complex engineering problems (25)			Overall Marks for 1.6	Overall Grade for 1.6	
Total of Criterion 1:		100	Overall Marks for Criterion 1:					

Criterion 2: Program Curriculum and Teaching-Learning Processes (75)								
S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
2.1.	Program Curriculum	15						
2.1.1	Structure of the Curriculum	5	Refer to SAR: Expectation in 2.1.1 is that the curriculum is well balanced & appropriate for a degree program.(5)			Overall Marks for 2.1	Overall Grade for 2.1	
2.1.2	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 (10)					
2.2.	Teaching-Learning Processes	60						
2.2.1.	Describe the Process followed to improve quality of Teaching Learning	15	Adherence to Academic Calendar (2)			Overall Marks for 2.2	Overall Grade for 2.2	
			Pedagogical initiatives (2)					
			Methodologies to support weak students and encourage bright students(2)					
			Quality of classroom teaching (Observation in a Class) (2)					
			Conduct of experiments (Observation in Lab) (2)					
			Continuous Assessment in the laboratory (3)					
	Student feedback of teaching learning process and action taken (2)							
2.2.2.	Quality of end semester examination, internal semester question papers, assignments and evaluation	15	Process for internal semester question paper setting and evaluation and effective process implementation (3)					
			Process to ensure questions from outcomes/learning levels perspective (2)					
			Evidence of COs coverage in class test / mid-term tests (5)					
			Quality of Assignment and its relevance to COs (5)					
2.2.3.	Quality of student projects	15	Identification of projects and allocation methodology to Faculty Members (1)					
			Types and relevance of the projects and their contribution towards attainment of POs and PSOs (2)					
			Project related to Industry (2)					
			Process for monitoring and evaluation (2)					
			Process to assess individual and team performance (2)					
			Quality of completed projects/working prototypes (4)					
			Evidences of papers published /Awards received by projects, etc. (2)					
2.2.4.	Initiatives related to industry interaction /industry/ internship/summer training	10	Industry supported laboratories (2)					
			Industry involvement in the Curriculum design and in partial delivery of any regular courses for students (2)					
			Industrial /internship /summer training of more than two weeks and post training Assessment (2)					
			Impact analysis of industry institute interaction & industrial training and actions taken there of (2)					
			Student feedback on initiative (2)					
2.2.5.	Initiatives towards the New Education Policy	5	Initiatives towards the New Education Policy (5)					
	Total of Criterion 2:	75		Overall Marks for Criterion 2:				

Criterion 3: Students' Performance (75)									
S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)	
				Marks	Total				
3.1.	Enrolment Ratio	15	>= 90% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (15) >= 80% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (12) >= 70% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (10) >= 60% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (08) Otherwise '0'.			Overall Marks for 3.1.	Overall Grade for 3.1.		
3.2.	Success Rate in the stipulated period of the program	15							
3.2.1.	Success rate without backlog in any Semester/year of study Without Backlog means: No repeat(s) in any course in any semester/year of study	10	SI= (Number of students who graduated from the program without repeat(s) in any course)/(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 = $10 \times \text{Average SI}$			Overall Marks for 3.2.	Overall Grade for 3.2.		
3.2.2.	Success rate in stipulated period of study (actual duration of the program) [Total of with backlog + without backlog]	5	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 = $5 \times \text{Average SI}$						
3.3	Academic Performance in Second Year	5	Academic Performance Level = $0.5 * \text{Average API}$ (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 students in Second Year/10)) x (successful students/number of students appeared in the examination) Successful students are those who are permitted to proceed to the Third year					Overall Marks for 3.3.	Overall Grade for 3.3.
3.4.	Academic Performance in Third Year	5	Academic Performance Level = $0.5 * \text{Average API}$ (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)) x (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 3.4.	Overall Grade for 3.4.		
3.5.	Placement, Higher studies and Entrepreneurship	15	Assessment Points = $15 \times \text{average of three years of } [(x + y + z)/N]$ 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 3.5.	Overall Grade for 3.5.		
3.6.	Professional Activities	20				Overall Marks for 3.6.	Overall Grade for 3.6.		
3.6.1.	Professional societies / chapters and organizing engineering events	05	Availability & activities of professional societies/chapters (3) Number, quality of engineering events (organized at institute) (2) (Level: Institution / State / National / International)						
3.6.2.	Publication of technical magazines, newsletters, etc.	05	Quality & Relevance of the contents and Print Material (3) Participation of Students from the program (2)						
3.6.3.	Participation in inter-institute events by students of the program of study (at other institutions)	05	Events within the state (1) Events outside the state (1) Prizes/awards received in such events (3)						
3.6.4.	Participation in national/international competitive events by students of the program of study	05	Participation in national competitive events (2) Participation in international competitive events (3)						
	Total of Criterion 3:	75		Overall Marks for Criterion 3:					

Criterion 4: Faculty Information and Contributions (100)

S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
4.1.	Student-Faculty Ratio (SFR)	15	<p>Marks to be given proportionally from a maximum of 15 to a minimum of 03 for average SFR between 20:1 to 25:1, and zero for average SFR higher than 25:1. Marks distribution is given as below:</p> <p>< = 20 -15 Marks < = 21 -12 Marks < = 22 -09 Marks < = 23 -06 Marks < = 25 -03 Marks > 25 - 0 Marks</p> <p><i>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:</i></p> <p>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.</p>			Overall Marks for 4.1.	Overall Grade for 4.1.	
4.2.	Faculty Cadre Proportion	10	<p>Cadre Proportion Marks =</p> $\left[\left\{ \frac{AF1}{RF1} \right\} + \left\{ \frac{AF2}{RF2} \times 0.6 \right\} + \left\{ \frac{AF3}{RF3} \times 0.4 \right\} \right] \times 5$ <p>If AF1 = AF2= 0 then zero marks Maximum marks to be limited if it exceeds 10 (Refer calculation in SAR)</p>			Overall Marks for 4.2.	Overall Grade for 4.2.	
4.3.	Faculty Qualification	10	<p>FQ = (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 4.3.	Overall Grade for 4.3.	
4.4.	Faculty Retention	5	<p>A. >= 90% of required Faculties retained during the period of assessment keeping CAYm2 as base year (5) B. >= 75% of required Faculties retained during the period of assessment keeping CAYm2 as base year (4) C. >= 60% of required Faculties retained during the period of assessment keeping CAYm2 as base year (3) D. >= 50% of required Faculties retained during the period of assessment keeping CAYm2 as base year (2) E. Otherwise (0)</p>			Overall Marks for 4.4.	Overall Grade for 4.4.	
4.5.	Faculty competencies in correlation to Curriculum	5	<p>A.Specialization B.Research Publications C.Course Developments D.Other relevant points</p>			Overall Marks for 4.5.	Overall Grade for 4.5.	
4.6.	Innovations by the Faculty in Teaching and Learning	5	<p>Statement of clear goals, use of appropriate methods, significance of results, effective presentation (2) Availability of work on the Institute Website (1) Availability of work for peer review and critique (1) Reproducibility and Reusability by other scholars for further development (1)</p>			Overall Marks for 4.6.	Overall Grade for 4.6.	
4.7.	Faculty as participants in Facultydevelopment /training activities /STPs	10	<p>For each year: Assessment = 2×(Sum/0.5RF) Average assessment over last three years starting from CAYm1 (Marks limited to 10)</p>			Overall Marks for 4.7.	Overall Grade for 4.7.	

S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
4.8.	Research and Development	30				Overall Marks for 4.8.	Overall Grade for 4.8.	
4.8.1.	Academic Research	10	Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (7)					
			PhD awarded during the assessment period while working in the institute (3)					
4.8.2.	Sponsored Research	10	Funded research from outside; Cumulative during CAYm1, CAYm2 and CAYm3 Amount > 50 Lakh – 10 Marks, Amount >40 and < 50 Lakh – 07 Marks, Amount >30 and < 40 Lakh – 05 Marks, Amount >15 and < 30 Lakh – 03 Marks, Amount < 15 Lakh – 0 Marks					
4.8.3.	Development Activities	5	A.Product Development B.Research laboratories C.Working models/charts/monograms, etc.					
4.8.4.	Consultancy (From Industry)	5	Consultancy; Cumulative during CAYm1, CAYm2 and CAYm3 Amount >10 Lakh – 05 Marks, Amount <10 and > 8 Lakh – 04 Marks, Amount < 8 and > 6 Lakh – 03 Marks, Amount < 6 and > 4 Lakh – 02 Marks, Amount < 4 and > 2 Lakh – 01 Marks, Amount < 2 Lakh – 0 Mark					
4.9.	Faculty Performance Appraisal and Development System (FPADS)	5	A well-defined performance appraisal and development system instituted for all the assessment years (2)			Overall Marks for 4.9.	Overall Grade for 4.9.	
			Its implementation and effectiveness (3)					
4.10.	Visiting/Adjunct/Emeritus Faculty etc.	5	Provision of Visiting /Adjunct/Emeritus faculty etc. (1)			Overall Marks for 4.10.	Overall Grade for 4.10.	
			Minimum 50 hours per year interaction (2 marks each for last two years: 2 x 2 = 4)					
Total of Criterion 4:		100	Overall Marks for Criterion 4:					

Criterion 5: Resources (75)								
S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
5.1.	Adequate and well-equipped laboratories, and technical manpower	25	Adequate well-equipped laboratories to run all the program-specific curriculum (15)			Overall Marks for 5.1.	Overall Grade for 5.1.	
			Availability of adequate and qualified technical supporting staff (10)					
5.2.	Laboratories: Maintenance and overall ambience	5	Maintenance and overall ambience (5)			Overall Marks for 5.2.	Overall Grade for 5.2.	
5.3.	Safety measures in laboratories	5	Safety measures in laboratories (5)			Overall Marks for 5.3.	Overall Grade for 5.3.	
5.4.	Project laboratory	15	Facilities & Utilization (15)			Overall Marks for 5.4.	Overall Grade for 5.4.	
5.5.	Feedback analysis and reward / corrective measures taken, if any	5	Feedback collected for all courses: YES/NO (1)			Overall Marks for 5.5.	Overall Grade for 5.5.	
			Feedback collection process (1)					
			Average Percentage of students who participate (1)					
			Feedback analysis process (1)					
5.6.	Program Specific Budget Allocation, Utilization	10				Overall Marks for 5.6.	Overall Grade for 5.6.	
			5.6.1.	Adequacy of budget allocation				
5.6.2.	Utilization of allocated funds	5	Budget utilization for three years (5)					
5.7.	Library and Internet	10				Overall Marks for 5.7.	Overall Grade for 5.7.	
5.7.1.	Quality of learning resources (hard/soft)	6	Availability of relevant learning resources including e-resources and Digital Library, (4)					
			Accessibility to students (1)					
			Support for self-learning (1)					
5.7.2.	Internet	2	Available bandwidth and Wi Fi availability (2)					
		2	Internet access in labs, classrooms, library and offices of all Departments and Security mechanism (2)					
Total of Criterion 5:		75			Overall Marks for Criterion 5:			

Criterion 6: Continuous Improvement (75)								
S.No.	Sub Criteria	Max Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Overall Grade	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total			
6.1.	Actions taken based on the results of evaluation of each of the POs and PSOs	30	Documentary evidences of POs and PSOs attainment levels (15)			Overall Marks for 6.1.	Overall Grade for 6.1.	
			Identification of gaps/shortfalls (05)					
			Plan of action to bridge the gap and its Implementation (10)					
6.2.	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 6.2.	Overall Grade for 6.2.	
6.3.	Improvement in Placement, Higher Studies and Entrepreneurship	15	Assessment is based on improvement in: (Refer placement index 4.5) (Marks to be given proportionately considering nos. in the base year CAYm3) Improvement in Placement numbers, quality, core hiring industry and pay packages (5)			Overall Marks for 6.3.	Overall Grade for 6.3.	
			Improvement in Higher Studies admissions for pursuing PhD. in premier institutions(5)					
			Improvement in number of Entrepreneurs (5)					
6.4.	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 entrances tests, percentage Physics, Chemistry and Mathematics marks in 12th Standard and percentage marks of the lateral entry students (10)			Overall Marks for 6.4.	Overall Grade for 6.4.	
6.5.	Remedial action taken on the observations made during last accreditation visit /New initiatives taken/New Facilities Introduced /Improvement made after last visit.	10	New initiatives taken/New Facilities Introduced/Improvement made after last visit. (10)			Overall Marks for 6.5.	Overall Grade for 6.5.	
Total of Criterion 6:		75	Overall Marks for Criterion 6:					