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 (75)

SN	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 and Program Educational Objectives**	5	A. Availability of vision and mission statements of the Department (1)				
			B. Appropriateness/Relevance of the Statements (1)				
			C. Consistency of the Department statements with the Institute statements (1)				
			D. PEO statements and their appropriateness (2)				
1.2	**Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders**	5	A. Adequacy in respect of publication & dissemination (1)				
			B. Process of dissemination among stakeholders (1)				
			C. Extent of awareness of Vision, Mission & PEOs among the stakeholder (3)				
1.3	**Establish consistency of PEOs with Mission of the Department**	5	A. Preparation of a matrix of PEOs and elements of Mission statement (2)				
			B. Consistency/justification of co-relation parameters of the above matrix (3)				
1.4	**Establish the correction between the courses and the POs & PSOs**	15	A. Evidence of COs being defined for every course (5)				
			B. Explanation of course articulation matrix table to be ascertained (5)				
			C. Explanation of program articulation matrix tables to be ascertained (5)				

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons
				Marks	Total		
1.5	**Attainment of Course Outcomes**	**20**					
1.5.1	Describe the assessment tools and processes used to gather the data upon which the evaluation of Course Outcome is based	5	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	15	A. Verification attainment levels as per the bench mark set for all courses (15)				
1.6	**Attainment of Program Outcomes and Program Specific Outcomes**	**20**					
1.6.1`	Describe assessment tools and processes used for assessing the attainment of each of the POs & PSOs	5	A. List of assessment tools & processes (2)				
			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 (10)				
			B. Overall levels of attainment (5)				
1.7	**Evidence of Solving Complex Engineering Programs**	**5**	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 (5)				
	Total of Criterion 1:	**75**	**Overall Marks for Criterion 1:**				

Criterion 2: Program Curriculum and Teaching – Learning Processes (75)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
2.1	**Program Curriculum**	**15**					
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	5	A. Process used to identify extent of compliance of University curriculum for attaining POs & PSOs (3)				
			B. List the curricular gaps for the attainment of defined POs & PSOs (2)				
2.1.2	State the delivery details of the content beyond the syllabus for the attainment of POs and 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**	**60**					
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)				
			G. Student feedback on teaching learning process and actions taken (2)				
2.2.2	Quality of end semester examination, 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)				

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons
				Marks	Total		
2.2.3	Quality of student projects	15	A. Identification of projects and allocation methodology to faculty members (1)				
			B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs (3)				
			C. Process related to Industry (2)				
			D. Process for monitoring and evaluation (2)				
			E. Process to assess individual and team performance (2)				
			F. Quality of completed projects/working prototypes (3)				
			G. Evidences of papers published /Awards received by projects etc. (2)				
2.2.4	Initiatives related to industry interaction/ industry / internship/summer training	10	A. Industry supported laboratories (2)				
			B. Industry involvement in the curriculum design and in partial delivery of any regular courses for students (2)				
			C. Industrial /internship /summer training of more than two weeks and post training Assessment (2)				
			D. Impact analysis of industry institute interaction and industry training and actions taken there of (2)				
			E. Student feedback on initiative (2)				
2.5	Initiatives related 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)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded Marks	Total	Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
3.1	**Enrolment Ratio**	15	A. >=90% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (15) B. >=80% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (12) C. >=70% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (10) D. >=60% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (8) E. >=50% students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year (6) F. Otherwise '0'				See table below
3.2	**Success Rate in the stipulated period of the program**	15					
3.2.1	Success rate without backlogs in any Semester/year of study Without Backlog means: **No repeat(s) in any course in semester/ year of study**	10	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 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 * Average SI				See table below

Observations table for 3.1:

	CAY	CAYm1	CAYm2
Sanctioned intake			
Students enrolled at first year level			
Enrolment ratio			
Average enrolment ratio(ER)			

Comments (if any):
❖

Observations table for 3.2.1:

	LYG	LYGm1	LYGm2
Success Index (SI)			
Average Success Index (SI)			

Comments (if any):
❖

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
3.2.2	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 2nd 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				<table><tr><td></td><td>**LYG**</td><td>**LYGm1**</td><td>**LYGm2**</td></tr><tr><td>Success Index (SI)</td><td></td><td></td><td></td></tr><tr><td>**Average Success Index (SI)**</td><td colspan=3></td></tr></table> Comments (if any): ❖
3.3	**Academic Performance in Second Year**	5	Academic Performance Level =0.5*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 students in 2nd Year / 10)) * (number of successful students/number of students appeared in the examination) Successful students are those who are permitted to proceed to the 3rd year.				<table><tr><td></td><td>**CAYm1**</td><td>**CAYm2**</td><td>**CAYm3**</td></tr><tr><td>API</td><td></td><td></td><td></td></tr><tr><td>**Average API**</td><td colspan=3></td></tr></table> Comments (if any): ❖
3.4	**Academic Performance in Third Year**	5	Academic Performance Level=0.5* Average API (Academic Performance Index) API = ((Mean of 3nd 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 3rd Year / 10)) * (number of successful students /students appeared in the examination) Successful students are those who are permitted to proceed to the final year				<table><tr><td></td><td>**CAYm1**</td><td>**CAYm2**</td><td>**CAYm3**</td></tr><tr><td>API</td><td></td><td></td><td></td></tr><tr><td>**Average API**</td><td colspan=3></td></tr></table> Comments (if any): ❖

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons			
				Marks	Total					
3.5	**Placement, Higher studies and Entrepreneurship**	15	Assessment Points = 15 * 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				<table><tr><td></td><td>**CAYm1**</td><td>**CAYm2**</td><td>**CAYm3**</td></tr><tr><td>Placement Index</td><td></td><td></td><td></td></tr><tr><td>**Average Placement Index for past 3 years**</td><td colspan="3"></td></tr></table> Comments (if any): ❖			
3.6	**Professional Activities**	20								
3.6.1	Professional societies/ chapters and organizing engineering events	5	A. Availability & activities of professional societies/chapters (3)							
			B. Number, quality of engineering events (2) (organized at Institute level- Institute/State/National/International)							
3.6.2	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)							
3.6.3	Participation in inter-institute events by students of the program of study (**at other institutions**)	5	A. Events within the state (1)							
			B. Events outside the state (1)							
			C. Prizes/awards received in such events (3)							
3.6.4	Participation in national/ International competitive events by students of the program of study	5	A. Participation in National competitive events (2)							
			B. Participation in International competitive events (3)							
	Total of Criterion 3:	75	**Overall Marks for Criterion 3:**							

Criterion 4: Faculty Information and Contributions (125)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
4.1	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 - 0 Marks **Note:** All the faculty whether regular or contractual (except part-time or hourly based), will be considered. The contractual faculty appointed with any terminology whatsoever, who have taught for 2 consecutive semesters with or without break between the 2 semesters in corresponding academic year on full-time basis shall be considered for the purpose of calculation in the faculty student ratio. However, following will be ensured in case of contractual faculty: 1. Shall have the AICTE prescribed qualifications and experience. 2. Shall be appointed on full time basis and worked for consecutive two semesters with or without break between the 2 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				(see sub-table below)

	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.			
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			

Comments (if any):
❖

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
4.2	**Faculty Cadre Proportion**	15	Cadre Proportion Marks: $$\left[\frac{AF1}{RF1} + \frac{AF2*0.6}{RF2} + \frac{AF3*0.4}{RF3}\right] * 7.5$$ ❖ If AF1 = AF2= 0, then zero mark ❖ Maximum marks to be limited if it exceeds 15(Refer calculation in SAR)				<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> Comments (if any): ❖
4.3	**Faculty Qualification**	15	FQ=1.5 * [{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 4.1)				<table><tr><td></td><td>CAY</td><td>CAYm1</td><td>CAYm2</td></tr><tr><td>No.of **Ph.D**</td><td></td><td></td><td></td></tr><tr><td>No.of **M.Tech**</td><td></td><td></td><td></td></tr></table> Comments (if any): ❖
4.4	**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)				<table><tr><td></td><td>CAY</td><td>CAYm1</td></tr><tr><td>No.of **Faculty Retained**</td><td></td><td></td></tr><tr><td>Total No.of **Faculty** in Dept in **CAYm2**</td><td></td><td></td></tr><tr><td>**Percentage** of faculty retained</td><td></td><td></td></tr><tr><td>**Average faculty retained for past 2 years**</td><td></td><td></td></tr></table> Comments (if any): ❖
4.5	**Faculty competencies in correlation to curriculum**	5	A. Specialization B. Research publications C. Course development D. Other relevant points				

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
4.6	**Innovations by the Faculty in Teaching and Learning**	**5**	A. Statement of clear goals, use of appropriate methods, significance of results, effective presentation (2)				
			B. Availability of work on Institute Website (1)				
			C. Availability of work for peer review and critique (1)				
			D. Reproductivity and reusability by other scholars for further development (1)				

| 4.7 | **Faculty as participants in Faculty development /training activities/ STTPs** | **15** | For each year: Assessment = $2\times Sum/0.5RF$ Average assessment over three years starting from CAYm1(Marks limited to 15) | | | |

		CAYm1	CAYm2	CAYm3
	Assessment points are:			
	Average assessment points for past 3 years			

Comments (if any):
❖

| 4.8 | **Research and Development** | **30** | | | | | |

| 4.8.1 | Academic Research | 10 | A. Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (7) B. Ph.D awarded during the assessment period while working in the institute (3) | | | |

		CAYm1	CAYm2	CAYm3
No. of **Ph.Ds** awarded				
No. of **Scopus** indexed papers published				
No. of **Web** of Science indexed papers published				

Comments (if any):
❖

| 4.8.2 | Sponsored Research | 10 | Funded research from **outside**; Cumulative CAYm1, CAYm2, CAYm3: Amount>50 Lakhs– 10 Marks Amount>40 to $\leq$50 Lakhs–7 Marks Amount>30 to $\leq$40 Lakhs–5 Marks Amount$\geq$15 to $\leq$30 Lakhs–3 Marks Amount<15 Lakhs– 0 Mark | | | |

		CAYm1	CAYm2	CAYm3
No.of **projects**				
Amount (Rs.In Lakhs)				
Total amount for past 3 years				

Comments (if any):
❖

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
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 CAYm1, CAYm2, CAYm3: Amount >10 Lakhs – 5 Marks Amount $\leq$10 and $\geq$ 8 Lakhs–4 Marks Amount <8 and $\geq$ 6 Lakhs–3 Marks Amount <6 and $\geq$ 4 Lakhs –2 Marks Amount <4 to $\geq$ 2 Lakhs –1 Mark 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**</td><td colspan="3"></td></tr></table> Comments (if any): ❖
4.9	**Faculty Performance Appraisal and Development System (FPADS)**	5	A. A well-defined performance appraisal and development system instituted for all the assessment years (2)				
			B. Its implementation and effectiveness (3)				
4.10	**Visiting/Adjunct/Emeritus Faculty etc.**	5	A. Provision of Visiting /Adjunct/Emeritus faculty etc. (1)				<table><tr><td></td><td>CAY/m1</td><td>CAYm1/m2</td><td>CAYm2/m3</td></tr><tr><td>No.of **hours**</td><td></td><td></td><td></td></tr></table> Comments (if any): ❖
			B. Minimum 50 hours per year interaction (2 marks for last 2 years: 2*2=4)				
	Total of Criterion 4:	125	**Overall Marks for Criterion 4:**				

Criterion 5: Resource (75)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
5.1	**Adequate and well-equipped laboratories, and technical manpower**	**25**	A. Adequate well-equipped laboratories to run all the program-specific curriculum (15)				
			B. Availability of adequate and qualified technical supporting staff (10)				
5.2	**Laboratories: Maintenance and overall ambience**	**5**	Maintenance and overall ambience (5)				
5.3	**Safety measures in laboratories**	**5**	Safety measures in laboratories (5)				
5.4	**Project laboratory**	**15**	Facilities & Utilization (15)				
5.5	**Feedback analysis and reward/ corrective measures taken, if any**	**5**	A. Feedback collected for all courses: YES/NO (1)				
			B. Feedback collection process (1)				
			C. Average Percentage of students who participate (1)				
			D. Feedback analysis process (1)				
			E. Number of corrective actions taken (1)				

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	Observations of Evaluators (Provide Justifications/ Reasons)
				Marks	Total		
5.6	**Program Specific Budget Allocation, Utilization**	**10**					
5.6.1	Adequacy of Budget allocation	5	A. Quantum of budget allocation for three years (3)				
			B. Justification of budget allocated for three years (2)				
5.6.2	Utilization of allocated funds	5	A. Budget utilization for three years (5)				
5.7	**Library and Internet**	**10**					
5.7.1	Quality of learning resource (hard/soft)	6	A. Availability of relevant learning resource including e-resource and digital library (4)				
			B. Accessibility to students (1)				
			C. Support for self-learning (1)				
5.7.2	Internet	4	A. Available bandwidth and Wi-Fi availability (2)				
			B. 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)

SN	Sub Criteria	Max. Marks	Evaluation Guidelines (Marks)	Marks Awarded		Overall Marks	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	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)				
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)				
6.3	**Improvement in Placement, Higher Studies and Entrepreneurship**	15	A. Assessment is based on improvement in: (Refer placement index 3.5) (Marks to begiven proportionately considering nos. in the base year CAYm3) Improvement in Placement numbers, quality, core hiring industry and pay packages (5)				
			B. Improvement in Higher Studies admissions (5)				
			C. 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)				
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)				
	Total of Criterion 6:	75	**Overall Marks for Criterion 6:**				

Signature (Program Evaluator 1)   14   **Signature (Program Evaluator 2)**