

BDP2 REPORT EVALUATION (30%)

(RE1) Abstract (Weightage: 1) (Items: Background, problem statement, objectives, results, and conclusion)	PO1: Knowledge SK1 – SK4
Excellent abstract that states the background, problem, objectives, results and conclusion concisely.	10 9
Good abstract that covers all items, with one stated only briefly.	8 7 6
Fair abstract that omits one or two items, or reads as an introduction.	5 4 3
Poor abstract that omits most items and gives no results.	2 1
No abstract is provided.	0
(RE2) Chapter 1: Introduction – Project Background (Weightage: 1) (Items: Rationale, key problem statement, and comprehensive overview of the project context)	PO1: Knowledge SK1 – SK4
Excellent background that explains the technology and context with cited support, leading clearly to the problem.	10 9
Good background that explains the context with some support, leading to the problem.	8 7 6
Fair background that describes the topic generally, with a weak link to the problem.	5 4 3
Poor background that is unfocused and not related to the problem.	2 1
Project background is not provided.	0
(RE3) Chapter 1: Introduction – Problem Statement (Weightage: 1) (Items: Explanation of issue/challenge, proposed engineering solution, stakeholder impact, supporting regulations/policies)	PO2: Problem analysis SK3, SK5 SP1, SP2
Excellent problem statement that defines the issue, its constraints, the stakeholders affected, and the engineering solution proposed.	10 9
Good problem statement that defines the issue and the solution, with constraints or stakeholders only partly covered.	8 7 6
Fair problem statement that describes the issue broadly, without constraints or stakeholder impact.	5 4 3
Poor problem statement that is vague and does not identify an engineering problem.	2 1
Problem statement is not provided.	0
(RE4) Chapter 1: Introduction – Objectives (Weightage: 1) (Items: Maximum 3 clear, measurable objectives encompassing design, development, and analytical validation)	PO2: Problem analysis SK3, SK4 SP1, SP3, SP4
Excellent objectives, up to three, all specific, measurable and technically demanding.	10 9
Good objectives, up to three, measurable, with minor ambiguity in scope.	8 7 6

Fair objectives that are partly measurable or too broad, with limited technical depth.	5	4	3
Poor objectives that are vague, not measurable and without technical focus.	2	1	
Objectives are not provided.	0		
(RE5) Chapter 1: Introduction – Scope (Weightage: 1) <i>(Items: Boundaries, limitations, methodology constraints, and experimental setup parameters)</i>	PO2: Problem analysis SK3,SK4 SP1, SP3, SP4		
Excellent scope that states the boundaries, limitations and constraints, and what the project will not cover.	10	9	
Good scope that states the boundaries clearly, with some limitations missing.	8	7	6
Fair scope that gives broad boundaries only, with limitations left unstated.	5	4	3
Poor scope that is vague, with no boundaries or limitations given.	2	1	
Scope is not provided.	0		
(RE6) Chapter 2: Literature Review (Weightage: 3) <i>(Items: Investigation of existing systems/techniques, comparative analysis table, critical synthesis of technological state-of-the-art)</i>	PO4: Investigation SK3, SK6, SK8 SP1, SP2, SP3		
Excellent literature review that covers relevant work broadly, compares it in a table, and justifies the selected technique.	10	9	
Good literature review that covers relevant work and compares it in a table, but justifies the selection weakly.	8	7	6
Fair literature review that covers limited work, describes more than it compares, and does not link to the selection.	5	4	3
Poor literature review that uses few or irrelevant sources, makes no comparison, and has no link to the project.	2	1	
Literature review is not provided.	0		
(RE7) Chapter 3: Methodology – Design of Procedures (Weightage: 2) <i>(Items: Design of engineering procedures, hardware/software implementation, and flowcharts)</i>	PO3: Design/ development of solutions SK3, SK5 SP1, SP3, SP7		
Excellent design in which the procedures and flowcharts are complete, correct and justified against the objectives.	10	9	
Good design in which the procedures and flowcharts are complete, with justification only partly given.	8	7	6
Fair design in which the procedures are outlined but steps or flowcharts are incomplete.	5	4	3
Poor design in which the procedures are unclear, incomplete or technically flawed.	2	1	
Design of procedures is not provided.	0		
(RE8) Chapter 3: Methodology – Tools Selection and Integration (Weightage: 2) <i>(Items: Selection of technical tools and software, justification of choice, and integration logic)</i>	PO5: Tool Usage SK2, SK3, SK6 SP1, SP2, SP3		

Excellent selection in which all tools are named and justified, and their integration is clearly explained.	10	9	
Good selection in which the tools are named and integrated, with justification only partly given.	8	7	6
Fair selection in which the tools are named but the integration or justification is missing.	5	4	3
Poor selection in which the tools are largely unspecified and the integration is not explained.	2	1	
Tools selection and integration are not provided.	0		
(RE9) Chapter 4: Results (Weightage: 5) (Items: Results produced from simulation and/or experiments aligned with project objectives and scope)	PO4: Investigation SK3, SK6, SK8 SP1, SP2, SP3		
Excellent results that cover all objectives, with the data validated and correctly presented.	10	9	
Good results that cover most objectives, with the data valid but incompletely verified.	8	7	6
Fair results that cover some objectives, with validity unverified and presentation inconsistent.	5	4	3
Poor results that are few, misaligned with the objectives, and unverified.	2	1	
Results are not provided.	0		
(RE10) Chapter 4: Analysis & Discussion of Results (Weightage: 7) (Items: In-depth engineering analysis, validation, performance evaluation, discussion of findings, and critical comparisons)	PO4: Investigation SK3, SK6, SK8 SP1, SP2, SP3		
Excellent analysis that applies correct techniques, explains unexpected results, and compares findings with previous studies.	10	9	
Good analysis that applies correct techniques and interprets results soundly, with minor over-claiming in the discussion.	8	7	6
Fair analysis that is mainly descriptive, explaining what happened but not why, with weak comparison.	5	4	3
Poor analysis that misapplies techniques, offers little interpretation, and draws conclusions unsupported by the data.	2	1	
No analysis and discussion of results are provided.	0		
(RE11) Chapter 5: Conclusion (Weightage: 1) (Items: Concise summary of the achievement of each project objective and its significance)	PO4: Investigation SK3, SK6, SK8 SP1, SP2, SP3		
Excellent conclusion that concisely summarises the achievement of every objective and its significance.	10	9	
Good conclusion that summarises achievements against most objectives, without stating their significance.	8	7	6
Fair conclusion that covers only some objectives and mostly repeats the results.	5	4	3
Poor conclusion that is barely linked to the objectives and is unsupported.	2	1	
No conclusion is provided.	0		
(RE12) Chapter 5: Recommendations (Weightage: 1) (Items: Actionable recommendations, future improvements, and potential technical extensions supported by recent literature or practice)	PO1: Knowledge SK1 – SK4		

Excellent recommendations that are specific, arise from the findings, and refer to recent literature or practice.	<div>10</div> <div>9</div>		
Good recommendations that arise from the findings and refer to literature, but remain general.	<div>8</div>	<div>7</div>	<div>6</div>
Fair recommendations that are loosely linked to the findings, with little reference to literature.	<div>5</div>	<div>4</div>	<div>3</div>
Poor recommendations that are vague, unrelated to the findings, and unsupported.	<div>2</div> <div>1</div>		
No recommendations for future work are provided.	<div>0</div>		
(RE13) Project Potential – Societal, Commercial, Practical & Safety Considerations (Weightage: 1) <i>(Items: Evaluation of commercialisation potential, practical application, community needs and safety considerations of the proposed project)</i>	PO6: The Engineer and Society SK1, SK3, SK5,SK7 SP1, SP2, SP4		
Excellent evaluation of the project's commercialisation potential, practical application, community needs and safety considerations, with clear justification supported by relevant evidence, data, figures or cited sources	<div>10</div> <div>9</div>		
Good evaluation that describes the commercialisation potential, practical application, community needs and safety considerations, with some supporting evidence; however, the evaluation is not fully developed.	<div>8</div>	<div>7</div>	<div>6</div>
Fair evaluation that mentions commercial, practical, community or safety aspects in general terms, but provides limited explanation, justification or supporting evidence.	<div>5</div>	<div>4</div>	<div>3</div>
Poor evaluation that makes general claims about the project's benefits or potential without clearly relating them to commercialisation, practical application, community needs or safety.	<div>2</div> <div>1</div>		
No explanation or evaluation of the project's commercialisation potential, practical application, community needs or safety considerations is provided.	<div>0</div>		
(RE16) Citation and References (Weightage: 1) <i>(Items: Minimum 20 reliable references, minimum 30% published in the last 5 years. ALL references MUST be cited in the report)</i>	PO1: Knowledge SK1 – SK4		
Excellent referencing with 25 or more reliable references, over 50% recent, all cited.	<div>10</div> <div>9</div>		
Good referencing with 20 or more reliable references, at least 30% recent, all cited.	<div>8</div>	<div>7</div>	<div>6</div>
Fair referencing with 15 to 19 references, under 30% recent, and a few not cited.	<div>5</div>	<div>4</div>	<div>3</div>
Poor referencing with fewer than 15 references, under 10% recent, and many not cited.	<div>2</div> <div>1</div>		
No references are provided.	<div>0</div>		
(RE17) Report Formatting & Structure (Weightage: 1) <i>(Items: Adherence to report writing guidelines, figure/table captions, numbering, and layout standards)</i>	PO1: Knowledge SK1 – SK4		
Excellent formatting that follows the template fully, with all figures and tables captioned, numbered and referenced.	<div>10</div> <div>9</div>		
Good formatting that follows the template, with minor caption, numbering or typographical errors.	<div>8</div>	<div>7</div>	<div>6</div>
Fair formatting that partly follows the template, with several caption or numbering errors.	<div>5</div>	<div>4</div>	<div>3</div>
Poor formatting that rarely follows the template, with captions and numbering mostly missing.	<div>2</div> <div>1</div>		
Does not follow standard formatting.	<div>0</div>		
(RE18) Language, Academic Tone & Clarity (Weightage: 1)	PO1: Knowledge		

<i>(Items: Clear, precise, direct academic prose; correct grammar, spelling, technical punctuation, and terminology)</i>	SK1 – SK4		
Excellent writing that is clear and precise, uses correct terminology, and has almost no grammar or spelling errors.	10	9	
Good writing that is clear, with minor errors that do not affect the meaning.	8	7	6
Fair writing that is understandable, but awkward phrasing and frequent errors slow reading.	5	4	3
Poor writing with frequent errors and unclear phrasing that obscure the meaning.	2	1	
Report is largely unintelligible.	0		

***SP1 – The final report applies fundamental engineering knowledge together with specialist knowledge in the work carried out. (Problem statement, objectives, scope, methodology, results)**

***SP2 – The work carried out considers a variety of factors that impose conflicting constraints, such as the required technical specification and the available budget. These constraints are identified in the problem statement and addressed in the methodology and cost analysis. (Problem statement, scope, methodology, cost analysis)**

***SP3 – The work carried out is demonstrated through the application of well-proven analysis techniques and is solved in well-accepted ways. (Methodology, results, analysis and discussion)**

***SP4 – The work carried out belongs to families of familiar problems which are solved in well-accepted ways. (Problem statement, scope, literature review, conclusion)**

***SP5 – The work carried out addresses problems that may be partially outside those encompassed by standards or codes of practice. (Methodology)**

***SP7 – The work carried out addresses components of, or systems within, complex engineering problems. (Methodology, results)**