

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION SP/2025)

CLASS: BTECH
BRANCH: PIE

SEMESTER : IV
SESSION : SP/2025

SUBJECT: PE219 PROJECT ENGINEERING

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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		CO	BL
Q.1(a)	Differentiate between a project and a program with relevant examples.	[2] 1	2
Q.1(b)	Define project scope. How does project creep affect project success, and what strategies can be used to control it?	[3] 1	1
Q.2(a)	Give real-world examples of companies that have adopted forward and backward-integrated projects strategies?	[2] 1	1
Q.2(b)	Explain the stages of the project life cycle and their significance in project management?	[3] 1	2
Q.3(a)	Explain how modified matrix structure address the limitations of a traditional matrix structure in managing complex projects?	[2] 2	2
Q.3(b)	List the key responsibilities of a project manager in ensuring project success?	[3] 2	1
Q.4(a)	A business is choosing between two contracts: <ul style="list-style-type: none">• Contract X: 80% chance of earning ₹6,00,000 and 20% chance of losing ₹2,00,000.• Contract Y: 60% chance of earning ₹8,00,000 and 40% chance of losing ₹3,00,000. Which contract is better based on EMV?	[2] 2	3
Q.4(b)	A firm has the option to either make a product internally at a total cost of ₹4,00,000 (including ₹1,20,000 fixed costs) or outsource it at ₹90 per unit. If the demand is 3,500 units, should the company make or buy?	[3] 2	3
Q.5(a)	Discuss environmental considerations in project evaluation, and why are they important?	[2] 3	2
Q.5(b)	Explain how primary environmental issues differ from secondary environmental issues in a feasibility study?	[3] 3	2

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