U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

June 2025 Semester End Main Examinations

Programme: B.E. **Semester: VI**

Branch: Chemical Engineering **Duration: 3 hrs.**

Course Code: 23CH6AEPMF **Max Marks: 100**

Course: Project Management and Finance

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.
3. Use of normal distribution table is permitted.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

		UNIT - I	CO	PO	Marks
1	a)	Discuss the life cycle of a project. Comment on key characteristics of a project:	CO1	PO 9	**10**
	b)	Explain the project life cycle. Discuss on its phases in details.	CO1	PO9	**10**
		OR			
2	a)	Discuss the roles and responsibilities of a project manager.	CO1	PO9	**7**
	b)	Compare the project management and functional management.	CO1	PO9	**6**
	c)	How do the triple constraints affect the projects discuss.	CO1	PO9	**7**
		UNIT - II			
3	a)	Explain resource allocation strategies with relevance to a project.	CO2	PO10	**10**
	b)	Elucidate the concept of technical analysis related to project management.	CO2	PO10	**10**
		OR			
4	a)	Discuss how to carry out market and demand analysis for a project. Comment on their inter relationship.	CO2	PO10	**10**
	b)	Explain about source of financing for a project.	CO2	PO10	**10**
		UNIT - III			
5	a)	What is capital budgeting? Explain about its significance and limitations.	CO3	PO11	**10**
	b)	Discuss about cost of capital, and enumerate on its significance.	CO3	PO11	**10**
		OR			
6	a)	Brief about capital budgeting decisions. Explain the importance of cost of capital in capital budgeting decisions.	CO3	PO11	**10**

		b)	Discuss on measurement of cost of capital considering cost of debt and equity.	*CO3*	*PO11*	**10**
			UNIT - IV			
	7	a)	Explain the concept of the time value of money. How does it impact financial decision-making in engineering projects? Illustrate your answer with an example showing the calculation of the present value and future value of a cash flow.	*CO3*	*PO11*	**10**
		b)	Define venture capital fund. Discuss about the analysis of the risks associated with venture capital investments.	*CO3*	*PO11*	**10**
			OR			
	8	a)	Enumerate and explain the various types of audits and audit reports used for the project performance evaluation.	*CO3*	*PO11*	**10**
		b)	What is a project? Explain the same with emphasis on elements of project appraisal.	*CO3*	*PO11*	**10**
			UNIT - V			
	9	a)	Discuss about ABC and VED analysis techniques for inventory management.	*CO4*	*PO4*	**10**
		b)	Discuss about the following i. Economic order equity ii. Work breakdown structure	*CO4*	*PO4*	**10**
			OR			
	10	a)	Discuss the advantages and limitations of PERT and CPM.	*CO4*	*PO4*	**08**
		b)	An insurance company has decided to modernize and refit one of its branch offices. Some of the existing office equipment's will be disposed of but the remaining will be returned to the branch after the completion of the renovation work. Tenders are invited from a number of selected contractors. The contractors would be responsible for all the activities in connection with the renovation work excepting the prior removal of the old equipment and its subsequent replacement. The major activities of the project have been identified, as follows, along with their durations and immediately preceding activity. *Activity* — *Description* — *Duration (weeks)* — *Immediate Predecessors* *A* — Design new premises — 14 — – *B* — Obtain tenders from the contractors — 4 — *A* *C* — Select the contractor — 2 — *B* *D* — Arrange details with selected contractor — 1 — *C* *E* — Decide which equipment is to be used — 2 — *A* *F* — Arrange storage of equipment — 3 — *E* *G* — Arrange disposal of other equipment — 2 — *E* *H* — Order new equipment — 4 — *E* *I* — Take delivery of new equipment — 3 — *H, L* *J* — Renovations take place — 12 — *K* *K* — Remove old equipment for storage or disposal — 4 — *D, F, G* *L* — Cleaning after the contractor has finished — 2 — *J* *M* — Return old equipment for storage — 2 — *H, L* (a) Draw the network diagram showing the interrelations between the various activities of the project. (b) Calculate the minimum time that the renovation can take from the design stage.	*CO4*	*PO4*	**12**

****