

Hall Ticket No.

Question Paper Code:BCSB28



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

MODEL QUESTION PAPER- I

M.TechIII Semester End Examinations (Regular), November – 2019

Regulations: IARE-R18

COST MANAGEMENT OF ENGINEERING PROJECTSD

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

Answer ONE Question from each Unit All Questions Carry Equal Marks All parts of the question must be answered in one place only

UNIT-I

1. (a) Write and explain about business strategy & strategic cost management. [7M]
(b) Explain about Strategic Cost Analysis - Target Costing, Life Cycle Costing and Kaizen Costing. [7M]
2. (a) Explain about Business processre-engineering (BPR) management.. [7M]
(b) Elaborate the following: [7M]
 - i) Lifecycle costing.
 - ii) Kaizen Costing.

UNIT-II

3. (a) What are the of databases and explain about Distributed Database and Operational Database with figure. [7M]
(b) Explain about Basic Principle of Inventory Valuation. [7M]
4. (a) What is Cost Management in Project management ,and Cost concepts in decision making [7 M]
(b) Explain about Strategic Cost Analysis - Target Costing, Life Cycle Costing and Kaizen Costing [7 M]

UNIT - III

5. (a) Project controlling and project control systems in project management. [7M]
(b) What are the basic phases of a project and their purposes. [7M]

6. (a) Elaborate the following, and duties of the same, [7M]
 i) Project Manager.
 ii) Project Team Member.
 iii) Project Sponsor.
- (b) List Reasons for Project Failure and how to avert disaster, and state cost control techniques. [7M]

UNIT-IV

- 7 (a) What are the basis comparison for marginal costing and Absorption Costing, and explain about 'Pricing Strategies'. [7M]
 (b) Distinction between Marginal Costing, Absorption Costing and explain about Pareto Analysis. [7M]
- 8 (a) Explain about Target costing and Life Cycle Costing. [7M]
 (b) Explain terms Flexible Budgets; Performance budgets, and Zero-based budgets. [7M]

UNIT-V

- 9 (a) i) What are the Quantitative techniques for cost management. [7M]
 ii) Explain about Early Start & Early Finish Calculation with example.
 (b) What are the direct expense's and selling over heads. [7M]
- 10 (a) What is the profit planning and basics of profit planning. [7M]
 (b) The following Table gives the activities of a construction project and other data. [7M]

Activity	Normal		Crash	
	Time (days)	Cost (Rs)	Time (days)	Cost (Rs)
1-2	6	50	4	80
1-3	5	80	3	150
2-4	5	60	2	90
2-5	8	100	6	300
3-4	5	140	2	200
4-5	2	60	1	80

If the indirect cost is Rs. 20 per day, crash the activities to find the minimum duration of the project and the project cost associated.



COURSE OBJECTIVES:

The course should enable the students to:

I	Establish systems to help streamline the transactions between corporate support departments and the operating units
II	Devise transfer pricing systems to coordinate the buyer-supplier interactions between decentralized organizational operating units
III	Use pseudo profit centers to create profit maximizing behavior in what were formerly cost centers

COURSE OUTCOMES (COs):

CO 1	Understand the concept of strategic cost management, Strategic Cost Analysis – Target Costing, Life Cycle Costing and Kaizen Costing and the cost drive concept
CO 2	Describe the decision-making; Relevant cost, Differential cost, Incremental cost and Opportunity cost. Objectives of a Costing System
CO 3	Understand the meaning and different types of project management and project execution, detailed engineering activities
CO 4	Design of short and long column, Axial loads, uni-axial and bi-axial bending I.S. Code provisions.
CO 5	Analyze by using Quantitative techniques for cost management like PERT/CPM

COURSE LEARNING OUTCOMES (CLOs):

BCSB28.01	Understand the Concept of Strategic Cost Management.
BCSB28.02	Target Costing, Life Cycle Costing & Kaizen Costing.
BCSB28.03	Analyze the decision Making and Pricing Strategies
BCSB28.04	Understand the concept of cost concepts in decision-making; Relevant cost, Differential cost, Incremental cost and Opportunity cost.
BCSB28.05	Determination of Costing System and Inventory valuation.
BCSB28.06	Creation of a Database for operational control.
BCSB28.07	Analyse the provision of data for decision making.
BCSB28.08	Understand the Project: meaning, Different types, why to manage, cost overruns centers, various stages of project execution.
BCSB28.09	Analyze the conception to commissioning. Project execution as conglomeration of technical and nontechnical activities.
BCSB28.10	Able to analyze the Detailed Engineering activities. Pre project execution main clearances and documents
BCSB28.11	Understand the data required with significance and Project contracts
BCSB28.12	Understand the Project contracts. Types and contents. Project execution Project cost control. Bar charts and Network diagram. Project commissioning;
BCSB28 .13	Understand the behavior and Profit Planning marginal Costing;, distinction between marginal costing and absorption costing; Break-even Analysis,
BCSB28 .14	Understand the material requirement, planning, enterprise resource planning, Total quality management and Theory of constraints..
BCSB28.15	Understand the thermal; Flexible Budgets; Performance budgets; Zero-based budgets. Measurement of Divisional profitability pricing decisions including transfer pricing
BCSB28.16	Analyze Quantitative techniques for cost management
BCSB28.17	Able to analyze the Linear Programming, PERT/CPM, Transportation Problems
BCSB28.18	Able to analyze the Simulation, Learning Curve Theory

MAPPING OF SEMESTER END EXAMINATION - COURSE OUTCOMES

SEE Question No.		Course Learning Outcomes	Course Outcomes	Bloom's Taxonomy Level	
1	a	BCSB28.01	Describe the basic concepts of RC design.	CO 1	Remember
	b	BCSB28.06	Design of singly reinforced, doubly reinforced sections.	CO 1	Understand
2	a	BCSB28.05	Design of T and L beam sections.	CO 1	Understand
	b	BCSB28.06	Design of T and L beam sections.	CO 1	Understand
3	a	BCSB28.07	Understand Limit state analysis and design of section for shear.	CO 2	Remember
	b	BCSB28.09	Concept of bond, anchorage.	CO 2	Understand
4	a	BCSB28.07	Understand Limit state analysis and design of section for shear.	CO 2	Understand
	b	BCSB28.010	Concept of development length.	CO 2	Understand
5	a	BCSB28.12	Understand the design concept of one-way slabs.	CO 3	Understand
	b	BCSB28.12	Understand the design concept of one-way slabs.	CO 3	Remember
6	a	BCSB28.13	Understand the design concept of two-way Slabs.	CO 3	Remember
	b	BCSB28.13	Understand the design concept of two-way Slabs.	CO 3	Understand
7	a	BCSB28.14	Discuss the concept of short and long column	CO 4	Remember
	b	BCSB28.17	Understand the concept of Axial loading.	CO 4	Understand
8	a	BCSB28.17	Discuss the concept of short and long column	CO 4	Understand
	b	BCSB28.15	Understand the concept of Axial loading.	CO 4	Understand
9	a	BCSB28.18	Design concept for isolated footing.	CO 5	Remember
	b	BCSB28.17	Design concept for Combined footing.	CO 5	Understand
10	a	BCSB28.17	Types of stair Case.	CO 5	Remember
	b	BCSB28.18	Understand the Design procedure for Stair Case.	CO 5	Understand

Signature of Course Coordinator

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