Hall Ticket No. | | | | | | | | | | | Question Paper Code:BCSB28

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

MODEL QUESTION PAPER- II

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 UnitAll Questions Carry Equal MarksAll parts of the question must be answered in one place only

UNIT–I

1.	(a)	What are the Concerns and Objectives of Strategic Cost Management, difference between Traditional Cost Management and Strategic Cost Management .	**[7M]**
	(b)	Elaborate the following i) Value chain analysis ii) Strategic positioning analysis iii) Cost driver analysis	**[7M]**
2.	(a)	What are the cost phases of a product and explain.	**[7M]**
	(b)	Explain about Target Costing and Life Cycle Costing, the concept of strategic cost management	**[7M]**

UNIT–II

3.	(a)	Provision of data for Decision Making, fundamental understanding of the nature of the data that thebusiness requires,how to become more data-driven in 5 Steps.	**[7M]**
	(b)	What are the typesof data warehouse, explain any four of them.	**[7M]**
4.	(a)	What are the basic principle of Inventory Valuation.	**[7 M]**
	(b)	Explain about Strategic Cost Analysis - Target Costing, Life Cycle Costing and Kaizen Costing required in the section.	**[7 M]**

UNIT – III **[7M]**

5. (a) What are the methods of project controllingand project control systems , explain Briefly.

(b) Explain role of a project managers, and Project management success criteria. **[7M]**

6. (a) Importance of Project Management for Organizations, reasons for project time, overruns across project life cycle. **[7M]**

(b) What are the valuable and essential techniques used for efficient project cost control. **[7M]**

UNIT–IV

7 (a) Explain about Operating Profit, Net Profit Formula and what is the importance of Net Profit. **[7M]**

(b) What is a pricing strategy and why is it important, different pricing strategies for your small business to consider. **[7M]**

8 (a) Differences between Marginal Costing and Absorption Costing, Facts Concerning Marginal Costing. **[7M]**

(b) Elaborate the following . **[7M]**

i) Geographical pricing.

ii) Promotional pricing.

ii) Value pricing.

UNIT–V

9 (a) Explain about PERT and CPM, what is a Learning Curve and Benefits of Using the Learning Curve. **[7M]**

(b) Explain about the following , **[7M]**

i) Head event slack and Tail event slack.

ii) Total Float.

iii) Free Float.

iv) Independent Float

10 (a) A project schedule has the following characteristics as shown in the table **[7M]**

Project Schedule

Activity	Name	Time	Activity	Name	Time (days)
1-2	A	4	5-6	G	4
1-3	B	1	5-7	H	8
2-4	C	1	6-8	I	1
3-4	D	1	7-8	J	2
3-5	E	6	8-10	K	5
4-9	F	5	9-10	L	7

i. Construct PERT network. **[7M]**
ii. Compute TE and TL for each activity.
iii. Find the critical path.

(b) What are the Key Differences Between PERT and CPM, and explain about Simulatin [7M]

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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 thedecision-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 **HOD, ME**