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Total No. of Printed Pages: [02]

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B. Architecture (Semester – 7th)
CONSTRUCTION MANAGEMENT
Subject Code: BARC1-751
Paper ID: [120143]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

- Question one is compulsory,
- Attempt four questions from Unit-I, II & III by selecting at least one from each unit.
Each question carry 12 marks.

Q1. Write short notes on the following:

(2 marks each)

- a. Direct and indirect cost
- b. Value engineering
- c. Functions of human resource management.
- d. Materials management
- b. Differentiate between PERT and CPM
- c. Float and its types

UNIT-I (12 marks each)

- Q2. Explain the significance of construction management for any nation. Discuss how an Architect can contribute in efficient Construction Management.
- Q3. Discuss the critical role of various types of resources in construction management, focusing on their allocation strategies, and impact on project success.

UNIT-II (12 marks each)

- Q4. For the project network shown in Fig. 1 and given data, determine the optimum cost, optimum time. Also plot a curve of total cost vs. time and indicate on it the optimum time and optimum cost.

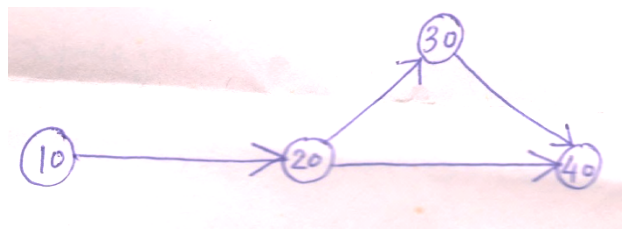


Fig.1

Activity	Normal time	Crash time	Normal cos (Rs)	Crash cost	Cost slope

10-20	4	3	400	600	200
20-30	5	2	300	750	150
20-40	7	5	360	540	90
30-40	4	2	500	1000	250

Note:* duration is in days and Indirect cost per day is Rs. 250/-.

Q5. From the given relation of activities and their duration (in days) do the following:

- prepare a network
- calculate project completion time
- identify critical activities and establish critical path

Activity	duration	Activity	duration
10-20	20	40-50	16
10-30	24	50-60	16
20-50	36	50-70	20
20-70	24	60-70	12
30-40	12	70-80	14
30-60	10		

UNIT-III (12 marks each)

Q6. A. What is the importance of safety on construction sites?

B. Discuss the role & purpose of Inventory Control

Q7. A. Explain the need for inspection and quality control in construction works.

B. Important points to be checked during inspection of RCC work and earthwork