

Seat
No.

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DAI1350

Construction Management - I (New) (1210)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** questions from each unit.
5. Answers to all the units should be written in the same answer book.
6. Assume additional suitable data if necessary and state it.
7. Use of non-programmable pocket calculator is allowed.
8. Draw neat sketches wherever necessary.

UNIT - I

1. a) i) Explain levels of management with neat sketch. 5
ii) Explain with neat sketch line organisation. 5
b) i) Explain different small scale industries in construction. 5
ii) Explain about "Entrepreneurship". 5
c) i) What is the importance of value engineering and value analysis. 5
ii) Explain the importance of Job layout. 5

UNIT - II

2. a) Draw the arrow diagram, mark critical path and find EST, EFT, LST, LFT, TF, IF, FF, Ind F in a tabular form for the activities listed below. 10

Activity	Duration in Days	Activity Which	
		Proceeds	Follows
A	4	None	D,E
B	12	None	F
C	10	None	G
D	8	A	G
E	6	A	H
F	8	B	None
G	10	C,D	None
H	10	E	None

- b) What is PERT ? When it is used ? Explain the three time estimates in PERT. 10
- c) i) Explain about bar charts. 5
ii) What are the advantages of network techniques. 5

UNIT - III

3. a) The table given below gives the data about duration and costs of various activities of the network. The indirect costs are Rs. 2000 per week. Carry out crashing of network and find optimum duration and optimum cost associated with it. 10

Activity	Normal		Crash	
	Duration in weeks	Cost in Rs.	Duration in weeks	Cost in Rs.
1-2	4	4000	2	12000
2-3	5	3000	2	7500
2-4	7	3600	5	6000
3-4	4	5000	2	10000

- b) i) Explain the importance of updating of network. 5
ii) Explain about resource levelling. 5
- c) i) Explain the importance of Line of balance. 5
ii) Differentiate between normal cost and crash cost. What is cost slope ? 5

UNIT - IV

4. a) i) Explain factors of production. 5
ii) Explain the factors governing elasticity of demand. 5
- b) i) Explain the law of supply. 5
ii) Explain the law of demand. 5
- c) Explain different types of banks and their functions in detail. 10

UNIT - V

5. a) List the types of crushers. Explain any one in detail with neat sketch. 10
- b) i) Explain about transit mixer. 5
ii) Write a short note on concrete pumps. 5
- c) What are different types of pile hammers ? Explain any one with neat sketch. 10
