



**Construction Management - I**  
**(New) (1210)**

**P. Pages : 3**

**Time : Three Hours**

**Max. Marks : 100**

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet 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. Assume suitable data if necessary.
6. Use of non - programmable calculator is allowed.
7. Draw neat sketches wherever necessary.
8. Answer all the questions of a unit at one place.

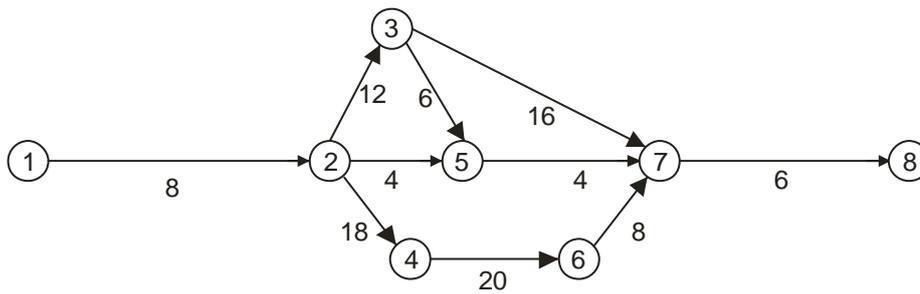
**UNIT - I**

1. a) What are the scopes of construction industry ? Describe the importance of construction management ? **10**
- b) Explain about value Engineering. Draw a Job - layout for construction of a public building. **10**
- c) What are the forms of organisation. Describe any one with suitable example. **10**

**UNIT - II**

2. a) Describe about Bar - Chart, its limitations & advantages. **10**
- b) Differentiate between CPM and PERT with examples. **10**

- c) Determine the critical path & project completion tree in the network of shown in fig.k1. 10



(Duration in weeks)

Fig.1.

### UNIT - III

3. a) Explain cost analysis and cost curve in detail. 10
- b) Explain concept of line of Balance and Resource levelling. 10
- c) For the project network shown in Fig 2 and data given below, determine the optimum time duration and optimum cost. 10

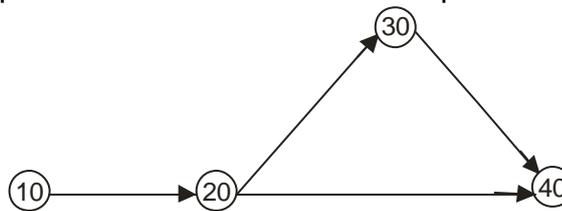


Fig.2.

Data

Activity	Normal Time (Tn) days	Crash Time (Tc) days	Normal Cost (Cn) Rs.	Crash cost (Cc) Rs.	Cost Slope Rs. per day
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

Indirect Cost = Rs. 250/- per day.

### UNIT - IV

4. a) Explain the importance of Engineering economics what are the factors affecting demand and supply. 10
- b) What are the types of Banks. Explain their uses and functions. 10

- c) Explain profit and loss account. What do you understand by appreciation and depreciation of money. **10**

**UNIT - V**

5. a) How will you select a pile driving Hammer. Explain any one type of pile driving equipment. **10**
- b) Explain about crushess and state the types of crushess and their uses. **10**
- c) Describe about concrete pumps and ready mixed concrete plants. **10**

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