



Term Evaluation (Even) Semester Examination March 2025

Roll no.

Name of the Course: B.Tech Civil Engineering

Semester: VIII

Name of the Paper: Construction Planning & Scheduling

Paper Code: TCE 801

Time: 1.5 hour

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

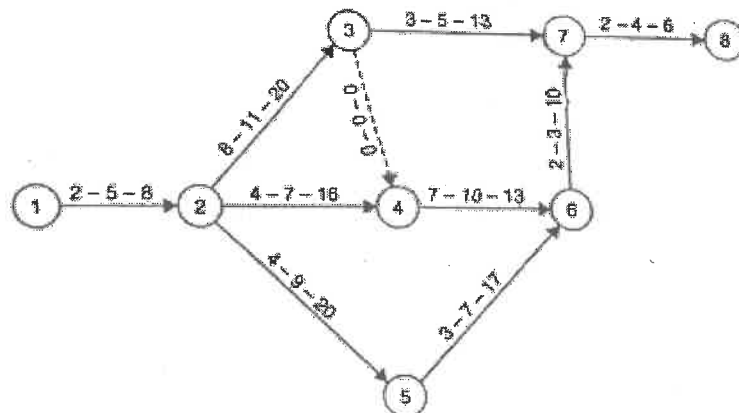
Q1.

CO1 (10 Marks)

- a. Explain Bar charts, milestone charts? Describe the advantages of milestone chart over bar charts.

OR

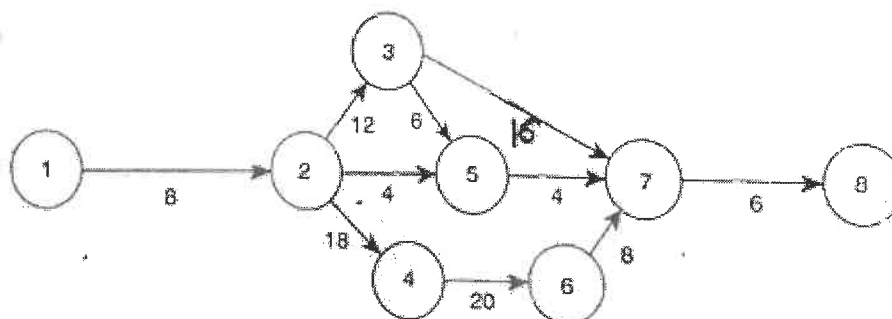
- b. Determine Critical path and its standard deviation for the below network for a constructional project with the three time estimates of each activity marked.



Q2.

CO1 (10 Marks)

- a. Determine the critical path in the network given below and determine the project completion time (Duration in week).



OR

- b. Explain the difference between Activity-on-node and Activity -on-Arrow in tabular form.



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Q3.

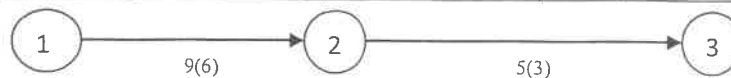
CO1 (10 Marks)

- a. Explain scheduling describe various steps involved in scheduling.

OR

- b. Table gives the information about various activities of network shown in fig below

Activity	Normal duration	Normal cost	Crash duration	Crash cost
1-2	9 days	Rs 8000	6 days	Rs 9500
2-3	5 days	Rs 5000	3 days	Rs 5500



The project overhead cost is @ Rs 300 per day. Determine

a) Direct cost –duration relationship

b) Total cost duration relationship and the corresponding least cost plan network

Q4.

CO2 (10 Marks)

- a. Explain in detail Construction plant and equipment and there needs in construction works.

OR

- b. Describe the factors affecting selection of bulldozer and dumpers in construction works.

Q5.

CO2 (10 Marks)

- a. Explain in detail various Factors affecting selection of hoe, hoists.

OR

- b. Explain in detail working of piling hammers in construction site.