

**EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, MAY 2012****CE 04 802 - CONSTRUCTION ENGINEERING & MANAGEMENT  
(2004 Admission)****Time: Three Hours****Maximum : 100 Marks****Part A***Answer all questions*

1. State Fulkerson's rule for numbering nodes in a network.
2. What are the limitations of bar charts.
3. What are the factors to be considered in the selection of construction equipments?
4. What is ready-mix concrete? How is it useful in construction.
5. What are the details to be included in notice inviting tenders.
6. What are the functions of ISO.
7. Write short note on objective of material management.
8. Discuss the Role of professional bodies in construction industry.

(8x 5 = 40)

**Part B***Answer any One question completely from each module*

9. Following table lists the jobs of a network along with their time estimates

Activity	1-2	1-6	2-3	2-4	3-5	4-5	6-7	5-8	7-8
$t_o$	3	2	6	2	5	3	3	1	4
$t_m$	6	5	12	5	11	6	9	4	19
$t_p$	15	14	30	8	17	15	27	7	28

- a) Draw the network
- b) Tabulate for each activity the event times and slack values.
- c) Determine the critical path and project completion time.

**OR**

10. Following are the duration of activities in a network for a small project

Activity	1-2	1-3	2-4	3-4	3-5	4-6	5-6
Duration (weeks)	10	6	9	12	8	8	9

- a) Draw the network.
  - b) Tabulate for each activity the activity times and Float values.
  - c) Determine the critical path and project completion time.
11. a. Discuss the factors to be considered on the selection of the types earth moving equipments.

- b. With the help of neat sketch, describe the working of an Earth moving Equipment.

**OR**

- 12 a. Discuss the factors to be considered on the selection of pile types  
b. With the help of neat sketch, describe the working of pile driving equipment.

13. What are the important conditions of contract included in contract documents.

**OR**

- 14.a. What are the various methods of recording progress of Work?  
b. Write a note on labour measures adopted in construction?  
15. Explain the objectives of the materials management departments. Give a typical organization structure of materials management department

**OR**

16. What is the importance of safety measures in construction. Outline the safety measures that should be taken before anyone is allowed, in a trench for excavation.

(4×15 = 60)

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