



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, November 2015
(2008 Scheme)
CIVIL ENGINEERING
08.805 : Construction Management**

Time : 3 Hours

Max. Marks : 100

Instructions : Answer **all** questions from Part **A** and **one** question from **each** Module of Part **B**.

PART – A

1. Who constitutes the construction team ? What are the responsibilities of the members in the team ?
2. List the various applications of computers in the construction industry.
3. Explain the concept of rate of return.
4. What are the different types of tenders ?
5. Explain the importance of liquidated damages in construction contracts.
6. What is an M-Book ? What is its importance ?
7. What is the significance of three time estimates used in PERT analysis ?
8. Discuss the relevance of time-cost trade-off in scheduling operations. **(8×5=40 Marks)**

PART – B

Module – 1

9. Discuss the life cycle of a construction project, in detail, with the help of an example. **20**
- OR
10. Discuss the principles of scientific management advocated by Henri Fayol. **20**



P.T.O.



Module – 2

11. Explain the process of tendering a civil engineering project starting from inviting tenders to signing the contract document. **20**
- OR
12. Write a note on any five popular types of contracts used in civil engineering works. **20**

Module – 3

13. a) How do Bar charts differ from milestone charts ? **5**
- b) Develop a network diagram for a job with the following activities and logical sequence.
- A is the first operation
 - B follows A
 - C, D, E and F follow B
 - G follows E
 - H follows D but cannot start until E is over
 - I and J succeed G
 - F and J precede K
 - H and I precede L
 - M succeeds L and K
 - The last operation N succeeds M and C
- 10**
- Also number the events according to Fulkerson's rule. **5**

OR

14. a) Define activity and event. What is the significance of dummy activity in a network ? **(4+3=7)**
- b) A small maintenance project consists of the following ten jobs whose procedure relationships are identified by their node numbers.

Job	a	b	c	d	e	f	g	h	i	j
(Initial Node, Final Node)	1, 2	2, 3	2, 4	3, 5	3, 6	4, 6	4, 7	5, 8	6, 8	7, 8
Estimated duration	2	3	5	4	1	6	2	8	7	4

- i) Draw the network diagram representing the project.
- ii) Calculate the total float of the activities and thus the critical path of the network. **(5+3=8)**