

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

## TEST -1 EXAMINATION

M.Tech. (CM) I<sup>st</sup> Semester

COURSE CODE: 10M11CE113

MAX. MARKS: 15

COURSE NAME: Construction Planning and Control

COURSE CREDITS: 03

MAX. TIME: 1Hour

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q.1. The activity breakdown for a certain project is-

Activity	Duration (weeks)
1	1
2	2
3	4
4	3
5	1
6	2
7	4

Activity 2 and activity 3 can be done concurrently, and both must follow activity 1. Activity 2 must precede activity 4. Activity 5 cannot begin until both activities 2 and 3 are completed. Activity 6 can be started only after activity 4 and 5 are completed.

Activity 7 is the last activity which can be started only after completion of activity 5. Prepare the bar chart for project and also find out total duration of the project. Also draw the network diagram for the project. (4)

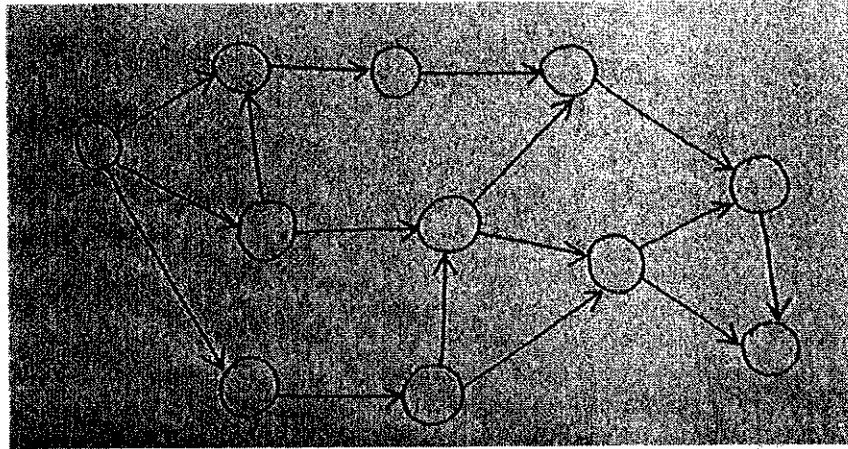
Q.2. Differentiate between PERT and CPM. (2)

Q.3 Draw a network diagram for a project having 9 activities with the following inter-relationships:

- i. C follows D but precedes F
- ii. C follows B but precedes H
- iii. G follows F but precedes I
- iv. E follows A but precedes I
- v. D follows A
- vi. H and I terminate at the same time
- vii. A and B start at the same time

(4)

**Q.4.** Number the events in the network shown below according to the Fulkerson rule. **(2)**



**Q.5.** From any building construction site, make the list of various professionals involved. Also list the equipment used in construction of building heavy infrastructural and industrial projects.

**(3)**