

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

B.Tech-VIII SEMESTER (Civil)

COURSE CODE: 21B1WCE832

MAX. MARKS: 25

COURSE NAME: CONSTRUCTION PLANNING AND CONTROL

COURSE CREDITS: 3

MAX. TIME: 1 Hour 30 Min

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Explain various stages of tendering process with the help of flowchart. [3 marks]

Q2. Draw the flowchart showing tendering process for contractor. [2 marks]

Q3. Prepare a material schedule (week wise) in standard format for the construction of a temporary shed (8m x 20m). [3 marks]

Q4. List the limitations of the bar chart and explain how these limitations can be overcome. [4 marks]

Q5. The activity breakdown for a certain project is as under.

Activity No.	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 complete. Activity 7 is the last activity which can be started only after completion of activity 5.

Prepare the bar chart for the project.

[5 marks]

Q6. A project consists of eight activities M,N,O,P,Q,R,S and T. Draw the network using AOA and number the events if:

- (a) Activities M,N and Q can start concurrently.
- (b) Activities O and P are concurrent, and depend on the completion of both M and N.
- (c) Activities R and S are concurrent and depend on the completion of Q.
- (d) Activity T depends on the completion of P,Q and R.
- (e) The project is complete when S and T are done.

[5 marks]

Q7. For a particular activity of a project, time estimates received from two engineers X and Y are as follows:

	Optimistic Time	Most Likely Time	Pessimistic Time
Engineer X	4	6	8
Engineer Y	3	5	8

State who is more certain about the time of completion of the job.

[3 marks]
