

Code: CE8T1

**IV B.Tech - II Semester – Regular/Supplementary
Examinations – July 2021**

**CONSTRUCTION TECHNOLOGY AND PROJECT
MANAGEMENT
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1. a) Why do projects need planning?
- b) What are the objectives and principles of project planning?
- c) Define free float. What is its importance?
- d) Mention the advantages of cost control.
- e) What is slack? What are the different types of slack?
- f) What are the different types of scrapers and write its purpose.
- g) Highlight the limitations of Earthmoving equipments.
- h) What are the different types of form work and their uses?
- i) What is the significance of quality control?
- j) What is the difference between quality control and quality assurance?
- k) What is ABC classification of materials?

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Describe the classification of scheduling. 6 M

b) Describe the stages and types of planning in construction management. 6 M

c) Bring out the differences between bar chart and mile stone chart. 4 M

3. a) The network for a construction project is shown in Fig.1. The three time estimates for each activity are given along each activity arrow. 12 M

Compute (i) expected time of completion of each activity, (ii) earliest expected time for each event, (iii) latest allowable occurrence time for each event.

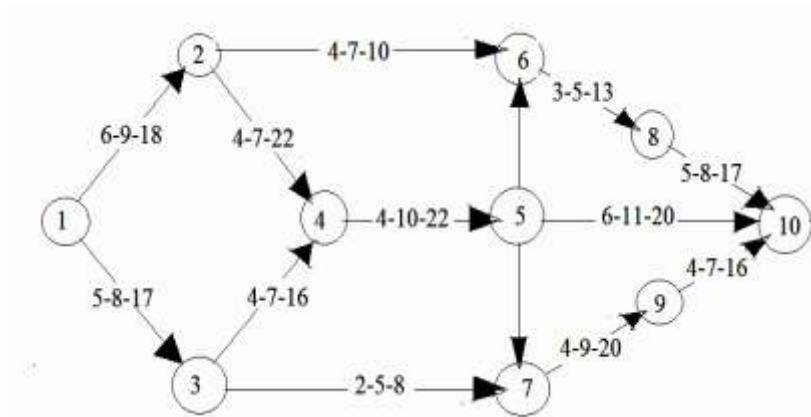


Fig.1

- b) What do you understand by a dummy? What are its uses? 4 M
4. a) What do you understand about cost optimisation? Write about the essential steps in optimisation of cost. 10 M
- b) Explain the steps involved in cost duration analysis. 6 M
5. a) Name the equipment's used for earth moving operations. 8 M
- b) Explain briefly about total quality management. 8 M
6. a) Explain about the factors lead to accidents in construction projects and describe the different approaches to improve safety in construction. 10 M
- b) Write short note on principles of quality management ISO 9000:2015. 6 M