

III B. Tech I Semester Regular/Supplementary Examinations, December -2023
CONSTRUCTION TECHNOLOGY & MANAGEMENT
 (Civil Engineering)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**
 All Questions Carry Equal Marks

UNIT-I

1. a) What do you understand by 'earliest start time' and 'latest start time of an activity'? How are these determined? [7M]

- b) Discuss about monitoring and controlling in project planning. [7M]

(OR)

2. a) Describe the stages and types of planning in construction management. [7M]

- b) Describe in detail about the different construction methods. Discuss their merits and demerit. [7M]

UNIT-II

3. a) Explain about Project evaluation and review technique with one example? [7M]

- b) Explain in detail about the functions and limitations of PERT. [7M]

(OR)

4. a) Draw a PERT network for the following and find expected mean time, variance and SD of the project [7M]

Activity	Three-time estimates (days)
0-1	2-3-10
0-2	4-5-6
1-2	0-0-0
1-3	6-7-8
1-4	1-5-9
2-5	3-5-19
3-4	0-0-0

- b) Explain the use of PERT [7M]

UNIT-III

5. a) Write short notes on following. [7M]

1. Crawler tractor 2. Wheel tractor

- b) What are the different types of cranes? Explain the types in detail. [7M]

(OR)

6. a) Draw a neat sketch of a crawler mounted bulldozer and show various parts. [7M]

- b) Discuss factors affecting output of a drag line. [7M]

UNIT-IV

7. a) Discuss in detail different factors affecting selection of construction equipment [7M]

- b) Explain about placing of concrete? [7M]

(OR)

8. a) Discuss about screening of aggregate. [7M]

- b) Explain about consolidating and finishing. [7M]

UNIT-V

9. a) Discuss importance of safety in construction sites. [7M]

- b) State and describe various causes of accidents at the construction site. [7M]

(OR)

10. a) Discuss about quality control and safety engineering. [7M]

- b) Explain the different Construction methods. [7M]