

III B. Tech I Semester Supplementary Examinations, June/July-2022
CONSTRUCTION TECHNOLOGY & MANAGEMENT

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions **ONE** Question from **Each unit**

All Questions Carry Equal Marks

UNIT-I

1. a) Write short notes on scope of construction management. [6M]
b) What is work break down structure in construction project? [9M]
Draw work break down structure of a residential building project.

(OR)

2. a) What is bar chart? Explain with the help of suitable example [9M]
the method of preparing a bar chart.
b) Explain the classification of schedules and explain each of [6M]
them in detail.

UNIT-II

3. a) Define the following: (i) PERT, (ii) Optimistic time, [8M]
(iii) Pessimistic time, (iv) Most likely time, and (v) free float.
b) For an activity the optimistic time, pessimistic time and most [7M]
likely time estimates are 6, 16, and 10 days respectively.
Calculate the Expected time, standard deviation and variance
of activity.

(OR)

4. a) Explain cash flow diagram with simple example. [8M]
b) Write short notes on Network Updating. [7M]

UNIT-III

5. a) Write short notes on (i) Crawler tractor (ii) Wheel tractor. [6M]
b) Write about Excavators? Write about the working mechanism [9M]
of power shovel, backhoe & mention their characteristics.

(OR)

6. a) What is mechanized construction? Explain the factors on [8M]
which the deployment of construction equipment and
equipment selection depends.
b) What are rollers? Differentiate them depending upon the [7M]
operation and mention about any 1 of them in detail with neat
sketches.

UNIT-IV

7. a) What is the difference between jaw crushers and gyratory crushers? Discuss. [8M]
b) Write short notes on concrete mixer. [7M]

(OR)

8. a) What is concreting? Explain about different types of concreting methods and mention their effects in each type. [8M]
b) How screening of aggregates is done? Explain. [7M]

UNIT-V

9. a) What is piling? Write about the methods of pile driving and mention the causes for failure of piles. [9M]
b) Discuss in detail the various units in concrete production plants. [6M]

(OR)

10. a) Describe safety requirements for demolition works, and safety measures to be adopted for excavation. [6M]
b) What are hauling equipment? Write about their classification, uses, and advantages, with neat sketches. [9M]
