

III B. Tech I Semester Supplementary Examinations, June/July-2022

ELEMENTS OF CIVIL ENGINEERING

(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) Explain the scopes of branches: [8M]
(i) Transportation Engineering (ii) Geotechnical Engineering.
b) Explain intersection & radiation method of plane tabling? [7M]

(OR)

2. a) Explain relevance of Civil engineering in the overall [8M]
infrastructural development of the country.
b) Define surveying. What are the primary divisions of surveying? [7M]

UNIT-II

3. a) What are the two methods of measuring the horizontal angle [8M]
using a Theodolite? When each method is advantageously
used?
b) Differences between prismatic compass and a surveyor's [7M]
compass.

(OR)

4. a) Explain the difference between tangential and stadia [8M]
tachemetry. How will you determine the stadia constants?
b) Describe the methods of locating contours by indirect method. [7M]

UNIT-III

5. a) Explain the various tests performed on timber as per Indian [8M]
standards.
b) Discuss briefly the defects and preservation of stones. [7M]

(OR)

6. a) Explain about the paints commonly used in buildings? [8M]
b) Describe with neat sketches the manufacturing process of [7M]
conventional bricks.

UNIT-IV

7. a) How height of building is evaluated? Explain the factor [8M]
associated with this?
b) What is meant by flexibility, circulation and sanitation? [7M]
Explain its importance?

(OR)

8. a) Explain different features of hospitals, institutional, and buildings for recreation? [8M]
b) Explain different principles used in planning a residential building along with minimum dimensions of each room? [7M]

UNIT-V

9. a) What is runoff? What are the factors affecting Runoff? [8M]
b) What is Consumptive use of water? List the methods by which it is determined? [7M]

(OR)

10. a) What are the factors affecting selection of site for a reservoir? [8M]
b) What are the methods adopted for controlling silting of a reservoir? [7M]
