

I B. Tech II Semester Regular/Supplementary Examinations, August- 2022
BUILDING MATERIALS AND CONCRETE TECHNOLOGY
(Only for CE)

Time: 3 hours

Max. Marks: 70

Answer any five Questions one Question from Each Unit
All Questions Carry Equal Marks

UNIT-I

1. a) Describe in brief about the different types of tiles. (7M)
- b) Explain the different ways of classification of timber (7M)

Or

2. a) Explain defects in timber due to fungi. (7M)
- b) How moisture content of timber is determined. (7M)

UNIT-II

3. a) Define Fineness Modulus? Explain grading of aggregates into different grades based on fineness modulus (7M)
- b) Explain procedure to assess fineness modulus of fine aggregate (7M)

Or

4. a) Explain about Alkali-Aggregate reaction (7M)
- b) What is Grading curves? Draw different types of grading curves (7M)

UNIT-III

5. a) Explain about mixing and vibration of concrete (7M)
- b) Explain about Segregation and bleeding (7M)

Or

6. a) Explain about the manufacture of concrete (7M)
- b) Explain how to determine workability with neat sketch (7M)

UNIT-IV

7. a) What are the factors that affect the creep and shrinkage of concrete? (7M)
- b) How does strength of concrete influence the modulus of elasticity and Poisson's ratio of concrete? (7M)

Or

8. a) Define the term Gel/space ratio and explain its relation with strength of concrete. (7M)
- b) What is shrinkage of concrete? Write factors affecting shrinkage (7M)

UNIT-V

9. a) Write the factors affecting properties of hardened concrete (7M)
- b) What are the different tests to be conducted to find hardened properties of concrete explain any one test (7M)

Or

- 10 a) What are the techniques of measuring pulse velocity through concrete and factors affecting the measurement of pulse velocity? (7M)
- b) Explain with neat diagram non-destructive testing of concrete using Pulse Velocity Method. (7M)

