

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

May-24-0376  
CE-304 (Building Materials)  
B.Tech. 3rd (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all selecting one question each from section A, B, C, D and section E is compulsory.

#### SECTION - A

- (a) What are the various tests conducted for determining the different properties of stones? Explain. (7)
- (b) Discuss the effects of different type of pozzolanic materials used in concrete. (3)
- Explain in detail about the properties and uses of different type of floor and wall materials. (10)

#### SECTION - B

- What is seasoning of timber? Explain the methods for seasoning of timber. (10)
- (a) Discuss about the factors affecting physical and mechanical properties of steel. (6)
- (b) Discuss about the properties of aluminium. (4)

#### SECTION - C

- What are the different forms of bitumen? Explain their properties and applications. (10)

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- What is bitumen emulsion and what are its applications? Discuss about factors that are important in Grading Bitumen Emulsion. (10)

#### SECTION - D

- What is polymer? Discuss about the different types of polymers used in concrete construction and repair. (10)
- Discuss about the different types of fibre geotextile used for the earth reinforcement. (10)

#### SECTION - E (Compulsory)

- Answer the following:
  - Define slaking of lime.
  - What is composition of bitumen emulsion?
  - Differentiate between joint filler and joint sealant.
  - What is polymerization?
  - What is a resin and state its application?
  - Differentiate between quick lime and slaked lime.
  - State the composition of good brick earth.
  - What is polymer modified bitumen?
  - Differentiate between elasticity and plasticity.
  - What is the composition of plastic? (10×2=20)