

1632

April 2025

Time – Three hours
(Maximum Marks: 100)

[N.B. Answers all the questions, choosing any two subdivision from each question. Each subdivision carries 10 marks.]

1. (a) Write about any five eco friendly and green construction materials.
(b) Write about the effects of sulphate and chlorides present in water.
(c) Explain the factors affecting the durability of concrete.
(d) Define the following:
porosity, permeability, artificial aggregate, freezing and thawing.
2. (a) Explain the properties, characteristics and uses of ceramic tiles.
(b) Explain the constituents and classification of glasses used in construction.
(c) Explain the constituents, properties, characteristics and uses of fly ash brick.
(d) Explain the properties, characteristics and uses of porcelain and terracotta.
3. (a) Discuss the composition of ordinary portland cement.
(b) Discuss about the bituminous materials.
(c) List the types of lime used in construction. Also mention its applications.
(d) Explain about pozzolanic material.

4. (a) Explain the different methods of seasoning of timber.
 - (b) Write short notes on pest control and termite proof in buildings.
 - (c) Describe any two non-destructive test on concrete.
 - (d) Write the characteristics of ideal paint. List its types and uses.
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5. (a) Write about false ceiling and materials used in it.
 - (b) Discuss about aluminium composite panel, fiber cement and insulated glass.
 - (c) Explain about the types of roofing materials.
 - (d) List any five plastic products used in construction with its applications.