

Register No.:

2441

October 2024

Time – Three hours
(Maximum Marks: 100)

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

1. (a) Write about any five energy efficient and sustainable building materials.
(b) Explain any five properties of construction materials.
(c) Explain the classification of aggregates.
(d) (i) Write any five effects of sulphate in water. (5)
(ii) Write about the requirements of water in construction works. (5)

2. (a) (i) Write a note on composition of good brick. (5)
(ii) Write any five characteristics of good brick. (5)
(b) (i) Describe any five characteristics of fly ash bricks. (5)
(ii) Write any five uses of hollow block. (5)
(c) (i) Describe any five characteristics of terracotta. (5)
(ii) Write any five uses of roof tiles. (5)
(d) Explain the classification of glasses.

3. (a) Explain the composition of cement.
(b) (i) Write short notes on ground granulated blast furnace slag. (5)
(ii) Write short notes on silica fume. (5)

[Turn over.....

- (c) (i) Write short notes on slaking of lime. (5)
(ii) Explain any five uses of lime. (5)
 - (d) (i) Write short notes on Asphalt. (5)
(ii) Explain any five applications of bitumen. (5)
4. (a) Explain any five defects in timber with a neat diagram.
- (b) (i) Write short note on grouting. (5)
(ii) Write any five characteristics of good mortar. (5)
 - (c) Explain any two insulation materials with applications.
 - (d) Explain the various types of paint.
5. (a) Explain any two different forms of steel sections.
- (b) Explain any five PVC materials used in water supply, sanitary and electricity works.
 - (c) Explain any five types of roofing materials.
 - (d) Describe the importance of facade design in architecture.
