



Code : 20CE11T

1089

Register
Number

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I Semester Diploma Examination, August/September-2022

CONSTRUCTION MATERIALS

Time : 3 Hours]

[Max. Marks : 100

- Instructions :* (i) Answer ONE full question from each section.
(ii) ONE full question carries 20 marks.

SECTION – I

1. (a) Explain the chemical classification of rocks. 5
- (b) What are the characteristics of good building stones ? 5
- (c) State and explain the factors affecting the deterioration of stones. 10

2. (a) Write any five properties of Natural sand. 5
- (b) Write any five properties of M-sand. 5
- (c) With neat sketch explain the structure of an Exogenous Tree. 10

SECTION – II

3. (a) List any five advantages of Timber. 5
- (b) State the classification of coarse aggregates according to their size. Explain in brief. 5
- (c) State the application of Bamboo and Asphalt in Civil Engineering Construction. 10

4. (a) Explain the constituents of good brick earth. 5
- (b) What are the advantages of clamp burning ? 5
- (c) With a neat sketch explain the process of Tempering/Pugging of clay. 10



SECTION – III

5. (a) Write the properties of Aerated concrete blocks. 5
(b) What are the different types of Cement ? Mention its Engineering applications. 5
(c) Explain different varieties of Glazed tiles and Vitrified tiles. 10
6. (a) Write a typical flow diagram / chart for Dry process of manufacturing of cement. 5
(b) State and explain in brief about the Fibre Boards. 5
(c) Explain different types of glasses and their uses. 10

SECTION – IV

7. (a) What are the properties and uses of Cast Iron ? 5
(b) What are the properties and uses of Copper ? 5
(c) Write the properties and advantages of Aluminium. 10
8. (a) What are the uses of Plaster of Paris ? 5
(b) What are the characteristics of good paints ? 5
(c) Explain the process of Painting New Wood Work. 10

SECTION – V

9. (a) Explain the process of application of Distemper on a surface. 5
(b) Write and explain the different types of defects in Painting Works. 5
(c) Write short note on Geo-Synthetics and Ferro Crete. 10
10. (a) State the materials used in water proofing works in construction. 5
(b) Define Sound Insulating Materials and name some of the materials used as Sound Insulating Material. 5
(c) Write the uses/applications of Short Crete and Non-Shrink Grouts. 10

