

Register
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Code: 20CE11T

I Semester Diploma Examination, Nov/Dec 2024

CONSTRUCTION MATERIALS

TIME: 3 HOURS

MAX MARKS: 100

Instructions:

- (1) Answer **any ONE full** question from each section
- (2) **ONE full** question carries **20** marks

SECTION - I

- 1. a) List any five requirements of good building stone. 5
- b) Write Geological classification of rocks with examples. 5
- c) Define quarrying. Explain with a neat sketch the quarrying process of stones by blasting method. 10
- 2. a) What are the causes of deterioration of stones. Explain briefly. 10
- b) List properties & uses of Asphalt. 5
- c) Write any five objects of seasoning of Timber. 5

SECTION - II

- 3. a) Draw a neat sketch of Exogeneous Tree and Name its parts. 10
- b) State any three properties and uses of Sand. 6
- c) List any four defects in Timber. 4
- 4. a) With a neat sketch explain process of clamp burning of bricks. 10
- b) List field tests on Brick and explain any one. 10

SECTION - III

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| 5. a) | List the types of cement and explain any one type. | 10 |
| b) | Explain briefly Veneers. | 5 |
| c) | Define alloy and list the types of alloys. | 5 |
| 6. a) | State properties & uses of Sodalime glass and Borosilicate glass. | 10 |
| b) | Mention Properties and uses of Cast-Iron. | 10 |

SECTION - IV

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| 7. a) | List the different types of Tiles used in flooring. Explain any one. | 10 |
| b) | Explain properties and uses of aerated concrete blocks. | 10 |
| 8. a) | Explain constituents & uses of plaster of paris (POP). | 10 |
| b) | Explain briefly Distemper and Varnish. | 6 |
| c) | What is Terra-cotta? List any two uses of Terra-cotta. | 4 |

SECTION - V

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| 9. a) | What are the ingredients of paint? List the properties of Ideal paint. | 10 |
| b) | Explain the Manufacturing process of M-Sand (manufactured sand). | 10 |
| 10. a) | What are the different types of water proofing materials. Explain Cementitious coating. | 10 |
| b) | Write a short note on i) Gypsum ii) Geopolymer concrete. | 10 |
