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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech I Year I Semester Regular & Supplementary Examinations May-2022****ENGINEERING MATERIALS**

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 What are the substances which harm the qualities of good bricks in their manufacturing? Explain any five substances. L1 12M

OR

- 2 a What are the characteristics of good bricks? L2 6M
b What are the constituents of good brick earth? Explain shortly. L2 6M

UNIT-II

- 3 a What are the initial and final setting times of cement? What is their importance? L4 6M
b What precautions should be taken while storing cement? L5 6M

OR

- 4 What is meant by workability of concrete? How is it tested in field and in laboratory? L4 12M

UNIT-III

- 5 List the various forms of wood products and their characteristics. L2 12M

OR

- 6 a State the characteristics of good timber. L2 6M
b What are dry and wet rots? How are they caused and prevented? L2 6M

UNIT-IV

- 7 Explain any five rolled steel sections with neat sketches. L2 12M

OR

- 8 Write short notes on Electro-rheostatic and magneto rheostatic fluid. L2 12M

UNIT-V

- 9 Define bitumen, asphalt and tar and how do they differ. L1 12M

OR

- 10 a Discuss the characteristics of good aggregates. L1 6M
b Write short notes on M sand. L1 6M

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