

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech I Year I Semester Regular & Supplementary Examinations March-2023

ENGINEERING MATERIALS

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

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|-----|---|-----|----|----|
| 1 a | Write the various uses of stones. | CO1 | L2 | 6M |
| b | What are the Characteristics of good tiles. | CO2 | L2 | 6M |

OR

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|-----|--|-----|----|----|
| 2 a | What are the Methods of quarrying of stones. | CO1 | L1 | 6M |
| b | Explain the process involved in the manufacturing of bricks. | CO2 | L3 | 6M |

UNIT-II

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|-----|--|-----|----|----|
| 3 a | What is mortar? Briefly describe the various types of mortars. | CO3 | L1 | 6M |
| b | List the characteristics of good mortar. | CO3 | L2 | 6M |

OR

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|-----|---|-----|----|----|
| 4 a | Define water-cement ratio. How does it influence concrete strength? | CO3 | L5 | 6M |
| b | State the functions of ingredients in mortar. | CO3 | L2 | 6M |

UNIT-III

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|-----|--|-----|----|----|
| 5 a | Explain the procedure to prepare the oil paint. | CO4 | L2 | 6M |
| b | List the various forms of wood products and there Characteristics. | CO4 | L2 | 6M |

OR

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|-----|---|-----|----|----|
| 6 a | Explain the damage caused by insects to wood. | CO4 | L3 | 6M |
| b | What are dry and wet rots? How are they caused and prevented? | CO4 | L2 | 6M |

UNIT-IV

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|---|---|-----|----|-----|
| 7 | What is iron? Describe how cast iron is manufactured from iron ore. | CO5 | L3 | 12M |
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OR

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|---|---|-----|----|-----|
| 8 | Describe in detail testing of steel sections. | CO5 | L3 | 12M |
|---|---|-----|----|-----|

UNIT-V

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|---|--|-----|----|-----|
| 9 | Describe the specific gravity test on coarse aggregates. | CO6 | L4 | 12M |
|---|--|-----|----|-----|

OR

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|----|---|-----|----|-----|
| 10 | Explain mechanical properties of coarse aggregates. | CO6 | L2 | 12M |
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