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

B.Tech II Year II Semester Supplementary Examinations February-2022

MATERIALS, TESTING & EVALUATION

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|---|---|---|----|
| 1 | a | What are the precaution should be taken in blasting? | 2M |
| | b | Define Pig iron and Cast iron. | 2M |
| | c | List the different types of test for bitumen. | 2M |
| | d | What is the difference between Light weight concrete and High performance concrete. | 2M |
| | e | What is the temperature transition approach? | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|---|---|---|----|
| 2 | a | List the classifications of rocks and explain the classification based on geological formation. | 5M |
| | b | Describe the characteristics of good building stones. | 5M |

OR

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| 3 | a | Write about the classification of Trees. | 5M |
| | b | Describe the most common types of defects associated with timber. | 5M |

UNIT-II

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| 4 | a | Explain soundness and fineness test on cement. | 5M |
| | b | What is the test procedure for specific gravity of cement? | 5M |

OR

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| 5 | a | Explain chemical composition of paint. | 5M |
| | b | Give the Flowchart for the preparation of Paint. | 5M |

UNIT-III

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| 6 | Write about classification of aggregates. | 10M |
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OR

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| 7 | What are the bituminous mixes? | 10M |
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UNIT-IV

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| 8 | Explain in detail the slump test with the help of a neat sketch. Discuss its merits and limitations. | 10M |
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OR

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| 9 | Explain briefly self-compacting concrete including the advantages and disadvantages. | 10M |
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UNIT-V

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| 10 | Explain plastic deformation of metals and Tensile test. | 10M |
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OR

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| 11 | Write about strength of ceramic and internal friction of material. | 10M |
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END