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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech II Year I Semester Supplementary Examinations Feb-2021****INTRODUCTION TO CIVIL ENGINEERING**

(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 is a green building? | 2M |
| | b | Explain the load transfer mechanism of foundation from super structure. | 2M |
| | c | Draw the neat sketch of two paneled door and mention their parts. | 2M |
| | d | What are different types of arches based on their shape. | 2M |
| | e | What are measures to be taken regarding safety from fire. | 2M |

PART-B

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

UNIT-I

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| 2 | a | How do you interlink the structural engineering and geotechnical engineering in the construction field. | 10M |
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OR

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| 3 | a | Name three applications of remote sensing in solving civil engineering problems. | 3M |
| | b | What is the role of civil engineering in the development of a nation? | 7M |

UNIT-II

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| 4 | a | Explain the causes of foundation failures and its remedial measures to safeguard the super structure. | 10M |
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| 5 | a | What is significance of bonding in brick work? | 4M |
| | b | Explain various brick bonds used in the construction with neat sketches. | 6M |

UNIT-III

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| 6 | a | Mention the types of roofs. Explain with neat sketch King post and Queen post roofs. | 10M |
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| 7 | a | Explain different materials used for the flooring? | 7M |
| | b | What are uses of damp proof course? | 3M |

UNIT-IV

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| 8 | a | What do you understand about the lintels and explain them clearly with the help of neat sketches? | 5M |
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| | b | Explain different thumb rules for placing of stair case. | 5M |
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| 9 | a | What are the types of staircases? | 3M |
| | b | Explain the defects in plastering along with their remedial measures? | 7M |

UNIT-V

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| 10 | a | Explain in detail about Open Space Requirements of buildings | 6M |
| | b | What is meant by flexibility, circulation and sanitation? Explain its importance? | 4M |

OR

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| 11 | a | Explain clearly different principles involved in planning a residential building? | 10M |
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END