



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

II B.Tech II Sem Regular End Examination, July 2022

Building Materials Construction and Planning

(Civil Engineering)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part – A, answer all questions which carries 20 marks.

3. In Part – B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

PART- A

(10*2 Marks = 20 Marks)

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|-------|----------------------------------------------------------------------|----|-----|-----|
| 1. a) | Define quarrying of stones. | 2M | C01 | BL1 |
| b) | State the need of seasoning of timber. | 2M | C01 | BL1 |
| c) | Express chemical composition of cement. | 2M | C02 | BL1 |
| d) | What is the role of concrete properties? | 2M | C02 | BL1 |
| e) | Classify different types of foundation. | 2M | C03 | BL2 |
| f) | State the advantage of PVC pipes. | 2M | C03 | BL1 |
| g) | Differentiate between load bearing wall and non load bearing wall. | 2M | C04 | BL2 |
| h) | How mortar is made as fire proof? | 2M | C04 | BL1 |
| i) | List out different factors affecting the selection of site. | 2M | C05 | BL1 |
| j) | State the significance of orientation of building in planning stage. | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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|---|----|---------------------------------------------------------------------------------------------|----|-----|-----|
| 2 | a) | What is meant by 'Quarrying of stones'? Explain the detailed methods of quarrying of stone. | 5M | C01 | BL4 |
| | b) | Describe about various alternative materials used in the place of timber in construction. | 5M | C01 | BL2 |

OR

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|---|----|----------------------------------------------------------------------------------------------------|-----|-----|-----|
| 3 | | Explain the process involved in burning bricks using Hoffman's kiln with a neat sketch. | 10M | C01 | BL4 |
| 4 | a) | Explain the method of finding fineness and soundness of cement? | 5M | C02 | BL2 |
| | b) | What are Bouge's chemical compounds? Explain the chemical reaction of these compounds with cement? | 5M | C02 | BL4 |

OR

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|---|--|-----------------------------------------------------------------------------------------------------------|-----|-----|-----|
| 5 | | List out different type of mineral admixtures? Further, explain the properties of each type of admixture? | 10M | C02 | BL4 |
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- 6 a) Explain in detail about the important damp proofing methods. 5M C03 BL4
b) Classify different types of roof? Explain the features of all of them. 5M C03 BL2
- OR**
- 7 Explain the various types of plumbing services used in buildings. 10M C03 BL4
- 8 a) Explain the load transfer mechanism in structures. 5M C04 BL4
b) State the method of preparation of cement mortar. 5M C04 BL1
- OR**
- 9 Explain in detail various types of traditional and special finishing works in buildings. 10M C04 BL4
- 10 a) Explain about open spaces provided in buildings. 5M C05 BL4
b) As per building bye laws, how the buildings are classified? Explain in detail about all classifications. 5M C05 BL4
- OR**
- 11 What are the different limitations given for height and built up area of buildings? Explain as per building bye laws. 10M C05 BL3

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