



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 Supply End Examination, July 2022 Building Materials, Construction and Planning (CIVIL)

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) | What is dressing of stones? | 2M | C01 | BL1 |
| b) | What is the chemical composition of Brick Earth? | 2M | C01 | BL1 |
| c) | Enumerate various types of cement? | 2M | C02 | BL2 |
| d) | State 4 important uses of rapid hardening cement. | 2M | C02 | BL1 |
| e) | Define acoustic design. | 2M | C03 | BL1 |
| f) | Explain classification of fire resisting materials. | 2M | C03 | BL1 |
| g) | What is concrete block masonry? | 2M | C04 | BL1 |
| h) | Define pointing. | 2M | C04 | BL1 |
| i) | What is orientation? State the factors affecting orientation. | 2M | C05 | BL1 |
| j) | Classify the building based on their occupancy. | 2M | C05 | BL2 |

PART- B**(10*5 Marks = 50 Marks)**

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|-----------|--|-----|-----|-----|
| 2 a) | Explain the manufacturing process of aluminum. | 5M | C01 | BL4 |
| b) | Explain the classification of bricks with neat sketch. | 5M | C01 | BL4 |
| OR | | | | |
| 3 | What are the various methods of quarrying of stones? Explain each method briefly. | 10M | C01 | BL4 |
| 4 a) | Explain briefly about the tests to be conducted on cement to determine its properties. | 5M | C02 | BL4 |
| b) | Briefly explain the classification of admixtures. | 5M | C02 | BL4 |
| OR | | | | |
| 5 | What are air entraining agents? How these air entraining agents help in improving performance of cement? | 10M | C02 | BL1 |

- 6 a) Define the term foundation? Explain in detail various types of building foundations. 5M C03 BL4
b) State briefly the requirement of good stair. 5M C03 BL1
- OR**
- 7 What are different types of arches that are used for engineering construction? Describe any three types in detail with sketches. 10M C03 BL2
- 8 a) What is brick masonry? State and explain briefly the various classifications of brick masonry. 5M C04 BL4
b) What is form work? What are the stages involved in construction of form work? 5M C04 BL1
- OR**
- 9 Define the terms in masonry:
1) Header, 2) Stretcher, 3) Quoin, 4) Queen closer, 5) King closer 10M C04 BL1
- 10 a) State and explain the various basic principles of building planning? 5M C05 BL4
b) Explain various principles underlying building bye-laws. 5M C05 BL4
- OR**
- 11 What are the requirements for submission of drawing for issue of permission for construction? 10M C05 BL1

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