



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 I Sem Supplementary Examination, February-2022

Engineering Geology

(CIVIL)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Answer any FIVE questions.

2. Each question carries 14 marks and may have a, b as sub questions.

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| 1 | a) Discuss the importance of weathering with references dams, reservoirs and tunnels. | 7M | C01 | BL2 |
| | b) What is weathering? Mention and explain different types of weathering and discuss how it affects the strength of the rock | 7M | C01 | BL2 |
| 2 | Discuss a case history on failure of a civil engineering construction due to geological draw back. | 14M | C02 | BL1 |
| 3 | a) Explain the following with neat sketches.
a) dyke b) sill | 7M | C01 | BL2 |
| | b) Define texture and structure and discuss the Metamorphic rock structures and textures | 7M | C02 | BL |
| 4 | Explain in detail the physical properties to identify the following samples
a) Hematite b) galena c) graphite d) bauxite c) pyrite | 14M | C02 | BL1 |
| 5 | a) Differentiate groundwater and springs and their importance in serving the humans. | 7M | C01 | BL2 |
| | b) What are the different types of a faults? Explain with neat sketches | 7M | C01 | BL2 |
| 6 | Explain what are unconformities, how they form and describe types of unconformities with neat sketches | 14M | C02 | BL2 |
| 7 | a) Explain in detail the Seismic zones of India and the areas coming under each zone. | 7M | C02 | BL2 |
| | b) Explain the electrical resistivity method employed in geophysical exploration along with the principle involved. | 7M | C02 | BL2 |
| 8 | What are the geological factors contributing to the success of a reservoir | 14M | C01 | BL2 |