



R18 Regulation
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A+' Grade)

Subject code: 2P4AA

B.Tech IV Semester Supplementary Examinations, July 2024

**Engineering Geology
(CE)**

Maximum Marks: 70

Date: 18.07.2024 Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10X2M=20 Marks)

		CO	Bloom Tx
1	Define weathering.		
2	Explain the Geophysics	1	L1
3	What is meant by cleavage?	1	L1
4	Define the mineralogy.	2	L1
5	Differentiate lava and magma?	2	L1
6	Classify the sedimentary rocks.	3	L1
7	Differentiate the fault zone and share zone.	3	L1
8	What is soil stabilization?	4	L1
9	List out causes of landslides.	4	L1
10	Define the dam.	5	L1
		5	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

11	a) With neat sketch, explain the erosional action of the wind. [5M] b) Discuss in details failures of any dam in India. [5M]	1	L2
	OR		
12	What are the types of geological agents? Describe briefly the natural agencies. [10M]	1	L2
13	Describe the physical properties of minerals (i) Calcite (ii) Galena [10M]	2	L2
	OR		
14	Give the physical, chemical and optical properties of the Garnet group. [10M]	2	L2
15	a) Write petrographic characteristics of sedimentary rocks i) Sandstone ii) Shale [5M] b) What is metamorphic rock? Write the texture and structure of the metamorphic rock? [5M]	3	L2
	OR		
16	Describe the geological classification of igneous rock and give the characters of igneous rocks. [10M]	3	L2

17	Explain the types of faults with case study. [10M]	4	L2
	OR		
18	a) What is meant by STRIKE, DIP and OUTCROP? [6M] b) Define unconformity, mention different types of unconformities. [4M]	4	L2
19	What are the purposes of Dams? Explain types of the Dam with neat sketch. [10M]	5	L2
	OR		
20	Explain over break of tunneling with reference to civil engineering. [10M]	5	L2