



R20 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

Subject code: 3P4AB

B.Tech IV Semester Supplementary Examinations, February 2024

Engineering Geology

(Civil Engineering)

Maximum Marks: 70

Date: 19.02.2024 Duration: 3 hours

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

CO

Bloom
Tx

1	List the factors influencing pedogenesis.	CO1	L1
2	How are rocks classified according to scale of weathering?	CO1	L1
3	Differentiate between colour and streak of minerals.	CO2	L2
4	Compare Muscovite and Biotite.	CO2	L2
5	Mention the properties of basalt.	CO3	L2
6	What do you mean by granulation metamorphic petrology?	CO3	L1
7	Define fault.	CO4	L1
8	What is Richter's scale?	CO4	L1
9	What is overbreak in tunneling?	CO5	L1
10	Compare arch and gravity dams.	CO5	L2

Part-B

Answer All the following questions.

(5X10M=50Marks)

CO

L

11	Describe the internal structure and composition of earth with necessary diagrams. [10M]	CO1	L3
OR			
12	Explain the process of weathering in detail and comment on the role of weathering in influencing the strength of rocks. [10M]	CO1	L2
13	Describe the composition, properties and uses of feldspar and calcite. [10M]	CO2	L3
OR			
14	Discuss in detail the following properties of minerals (i) Specific Gravity (ii) Hardness (iii) Fracture (iv) Crystalline structure. [10M]	CO2	L3
15	Describe how the mineral textures of igneous rocks be used to infer its origin. [10M]	CO3	L3
OR			
16	Write a short note on the following rocks: (i) sandstone (ii) marble (iii) slate and (iv) dolerite. [10M]	CO3	L2
17	Explain in detail the electrical resistivity methods and their applications in civil engineering. [10M]	CO4	L2
OR			

18	Give an account of folding in rocks and describe the various types of folds. [10M]	CO4	L3
19	Discuss the geological criteria that are considered in construction of reservoir. [10M]	CO5	L3
	OR		
20	What do you understand by 'dam disaster'? Discuss the geological situations which when ignored could be the cause of possible dam disaster. [10M]	CO5	L3