



R20 Regulation

Subject code: 3P4AB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Supplementary Examinations, December 2025

ENGINEERING GEOLOGY (CE)

Maximum Marks: 70

Date: 18.12.2025

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.
 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)		Marks	CO	BTL
1	What is Geology?	2M	1	L1
2	Mention the weathering agents.	2M	1	L1
3	What is the crystallography?	2M	2	L1
4	Define the Moh's scale.	2M	2	L1
5	Classify the igneous rock.	2M	3	L1
6	Mention the structure of the sedimentary rock.	2M	3	L1
7	Differentiate the fault zone and share zone.	2M	4	L1
8	Write the Recumbent fold.	2M	4	L1
9	List out causes of landslides.	2M	5	L1
10	What is the impact of water table on tunnelling?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Write an essay on importance of geology in point of civil engineering view.	10M	1	L2
OR				
12	a) Write a note on geological work of river. b) Explain the process of Weathering in Granite.	5M 5M	1	L2
13	Give the physical, chemical and optical properties of the Garnet group.	10M	2	L2
OR				
14	Describe the physical properties of minerals Feldspar and Olivine.	10M	2	L2
15	a) Write petrographic characteristics of sedimentary rocks i) Sandstone ii) Shale b) What is metamorphic rock? Write the texture and structure of the metamorphic rock?	5M 5M	3	L2
OR				
16	How do you distinguish mineral from a rock? What are the major difference dykes and sills?	10M	3	L2

17	What are the parts of FAULTS and give their types with sketches.	10M	4	L2
	OR			
18	a) What is meant by STRIKE, DIP and OUTCROP? b) Define unconformity, mention different types of unconformities.	6M 4M	4	L2
19	What are the purposes of Dams? Explain types of the Dam with neat sketch.	10M	5	L2
	OR			
20	Define the term tunnel and give purposes of tunneling. Discuss in detail about the role of Geological consideration for proper tunneling.	10M	5	L2