

ANURAG Engineering College

(An Autonomous Institution)

II B.Tech I Semester Regular Examinations, Jan/Feb–2024

ENGINEERING GEOLOGY**(CIVIL ENGINEERING)****Time: 3 Hours****Max. Marks: 60****Section – A (Short Answer type questions)****(10 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. What is mean by Engineering geology?	CO1	L1	1M
2. Define the term geology and give their importance.	CO1	L1	1M
3. Explain physical properties of Talc.	CO2	L2	1M
4. What is metamorphic rock?	CO2	L1	1M
5. Explain the mechanism of folding?	CO3	L2	1M
6. Define Strike?	CO3	L1	1M
7. What are the causes of Earthquake?	CO4	L1	1M
8. Write applications of magnetic method	CO4	L1	1M
9. Give an account of geological investigation of Dam site.	CO5	L1	1M
10. Explain the construction of a Gravity Dam?	CO5	L2	1M

Section B (Essay Questions)**Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Briefly explain the different types of physical and chemical weathering.	CO1	L3	10M
OR			
B) Describe in detail, the process of weathering of rocks. Add a note on the effect of weathering on the strength of rocks.	CO1	L3	10M
12. A) i) Write different methods of study of Minerals? ii) Explain the physical properties of Feldspar group of Minerals.	CO2	L2	5M 5M
OR			
B) i) Define cleavage and fracture of a mineral with examples. ii) Explain the physical properties of Augite and Hornblende.	CO2	L2	5M 5M
13. A) Explain, with neat sketches, the principal types of Faults as recognized on the basis of apparent movement and mode of occurrence.	CO3	L3	10M
OR			
B) How are folds classified? Describe different types of folds.	CO3	L3	10M
14. A) What are the principles of geophysical exploration? Discuss any one method used for interpreting subsurface structures.	CO4	L3	10M
OR			
B) Comment on seismic exploration techniques for site investigation in civil engineering projects and for water exploration.	CO4	L3	10M
15. A) Explain the influence of geological structures, water table, and scope for preventive leakage for successful reservoir.	CO5	L2	10M
OR			
B) Discuss the influence of structural attitudes of sedimentary rocks on dam stability	CO5	L3	10M

