

ANURAG Engineering College

(An Autonomous Institution)

II B.Tech I Semester Supplementary Examinations, June/July-2024

ENGINEERING GEOLOGY

(CIVIL ENGINEERING)

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

1. What is the difference between structural geology and petrology?
2. List the classification of weathering.
3. List the physical properties of Olivine.
4. Distinguish between the properties of Granite and Basalt.
5. Differentiate between fold and fault.
6. What are the causes for the fluctuations in water table.?
7. What are the four seismic zones in India?
8. What are the two laws based on which gravitational method works?
9. List the various types of dams.
10. What is the purpose of reservoir.

	Course Outcome	B.T Level	(10 Marks) Marks
1.	CO1	L2	1M
2.	CO1	L1	1M
3.	CO2	L1	1M
4.	CO2	L2	1M
5.	CO3	L2	1M
6.	CO3	L2	1M
7.	CO4	L1	1M
8.	CO4	L1	1M
9.	CO5	L1	1M
10.	CO5	L2	1M

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

11. A) With the help of any three case studies discuss failure of Civil Engineering constructions due to neglecting the importance of geological considerations. 10M
CO1 L2

OR

- B) Explain the importance of weathering on tunnels and dams. 10M
CO1 L2
12. A) What is the importance of study of minerals? Describe the physical properties of i) Quartz ii) Biotite iii) Bauxite iv) Calcite 10M
CO2 L2

OR

- B) Describe the geological classification of rocks. 10M
CO2 L2
13. A) Illustrate different types of fold and faults with relevant sketches. 10M
CO3 L2

OR

- B) Describe different types of ground water springs and aquifers. 10M
CO3 L2
14. A) What are the causes and effects of landslides. What are the measures to be taken to prevent their occurrence. 10M
CO4 L2

OR

- B) Explain how the sub-surface features can be studied with the help of
i) Magnetic and electric methods. 10M
ii) Radio metric and geothermal methods. 10M
CO4 L2
15. A) Mention the purpose of tunneling also its effects on the ground. Discuss the role of geological considerations in tunneling works. 10M
CO5 L2

OR

- B) Explain how the geological factors influence about water tightness and life of reservoirs. 10M
CO5 L2