

**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)**

II - B.Tech II-Semester Supplementary Examinations (BR23), Aug - 2025

ENGINEERING GEOLOGY (CIVIL)

Time: 3 hours

Max. Marks: 70

*Question Paper consists of Part-A and Part-B
Answer ALL the question in Part-A and Part-B*

PART-A (10X2 = 20M)

	Marks	CO	BL
1. a) Interpret different branches of geology?	(2M)	CO1	BL2
b) Explain about biological weathering?	(2M)	CO1	BL2
c) Identify metamorphic rock with an example?	(2M)	CO2	BL2
d) Identify a Mineral and list out few commercial minerals?	(2M)	CO2	BL2
e) Ask about Unconformities in a rock?	(2M)	CO3	BL2
f) Express strike and Dip?	(2M)	CO3	BL2
g) Point out i) Aquifer ii) Aquiclude	(2M)	CO4	BL4
h) Infer the purpose of Richter scale?	(2M)	CO4	BL4
i) Classify various types of Dams?	(2M)	CO5	BL4
j) Conclude the purpose of Tunnel lining?	(2M)	CO5	BL4

PART-B (5X10 = 50M)

2a. Extend one case history of failure of civil engineering construction due to geological drawback?	5 (M)	CO1	BL2
2b. Identify with the help of a diagram about development of a river process?	5 (M)	CO1	BL2
(OR)			
3a. Extend the importance of Geology in Civil Engineering?	5 (M)	CO1	BL2
3b. Predict in detail about weathering of Rocks?	5 (M)	CO1	BL2
4a. Describe i) Hardness ii) Luster iii) Fracture iv) Cleavage V) Streak	5 (M)	CO2	BL2
4b. Identify the physical properties, uses, of the following minerals? a) QUARTZ b) MAGNETITE	5 (M)	CO2	BL2
(OR)			
5a. Associate different physical properties for identification of a mineral?	5 (M)	CO2	BL2
5b. Explain the formation and classification of igneous rocks?	5 (M)	CO2	BL2
6a. Discuss the geometry of discontinuities of joints?	5 (M)	CO3	BL2
6b. Infer about Fault and explain the effects of faulting with neat diagram?	5 (M)	CO3	BL2
(OR)			
7a. Extend the different parts and types of folds with sketches?	10(M)	CO3	BL2

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| 8a. | Point out the cone of depression and explain water table? | 5 (M) | CO4 | BL4 |
| 8b. | Explain various causes and effects of Earth quakes? | 5 (M) | CO4 | BL4 |
| (OR) | | | | |
| 9a. | Explain the causes and effects of landslides. | 5 (M) | CO4 | BL4 |
| 9b. | Conclude how the Electrical Resistivity surveys for ground water prospection helps? | 5 (M) | CO4 | BL4 |
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| 10a | Appraise in detail regarding the factors that are governing for the reservoir selection site? | 5 (M) | CO5 | BL4 |
| 10b | Explain the role and importance of Geological structures at tunnel site? | 5 (M) | CO5 | BL4 |
| (OR) | | | | |
| 11a | Prioritize the uses of a Dam, Explain briefly various types of Dams? | 5 (M) | CO5 | BL4 |
| 11b | Order the purposes of tunnelling, what are the effects of tunnelling on the ground? | 5 (M) | CO5 | BL4 |
