

I B. Tech I Semester Regular Examinations, April-2022
ENGINEERING GEOLOGY
(Only CE)

Time: 3 hours

Max. Marks: 70

Answer any five Questions one Question from Each Unit
All Questions Carry Equal Marks

UNIT I

- 1 a) What is meant by weathering? Discuss the role of geological agents in weathering of rocks (7M)
- b) Explain different types of river transport of sediments. (7M)

Or

- 2 What are the various branches of Geology and explain their relevance form Civil Engineering point of view. (14M)

UNIT II

- 3 a) Explain the following: (7M)
 (i) Mode of formation of minerals (ii) Structures of Silicates.
- b) Explain why granite is an ideal rock from civil engineering point of view. (7M)

Or

- 4 a) Describe any FIVE physical properties in identification of mineral with suitable mineral examples. (7M)
- b) Explain the quartz group of minerals (7M)

UNIT III

- 5 Describe the different types of unconformities encountered in the nature. Draw neat sketches. (14M)

Or

- 6 a) Explain the classification of earthquakes in to tectonic and nontectonic types. (7M)
- b) Write an essay on Earthquakes. (7M)

UNIT IV

- 7 a) What are the possible sources of ground water pollution (7M)
- b) Detail the three possible mechanisms of Arsenic release into ground water. (7M)

Or

- 8 What are landslides? What are the causes and effects of landslides? Add a note on the preventive measures for landslides. (14M)

UNIT V

- 9 a) Describe the geological consideration for successful tunneling. (7M)
- b) Write short notes on: i) BhakraDam ii) Hirakud Dam. (7M)

Or

- 10 Write short note on the following: (14M)
 (a) Effects of tunneling on the ground.
 (b) Lining of tunnel.
 (c) Over break.

