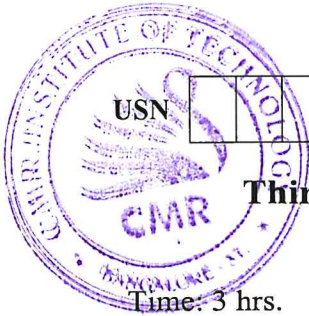


# CBCS SCHEME



17CV35

## Third Semester B.E. Degree Examination, July/August 2022 Engineering Geology

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

### Module-1

- 1 a. Describe internal structure of earth with neat sketch. (10 Marks)  
b. Discuss Mineral Hardness, Lustre, Colour, Streak and Specific gravity. (10 Marks)

OR

- 2 a. What is geology? Discuss the importance of geological concepts in civil engineering practices. (08 Marks)  
b. Define minerals. Write description of minerals: Asbestos, calcite, Hematite and Galena. (12 Marks)

### Module-2

- 3 a. With a neat sketch, explain forms of igneous rocks. (10 Marks)  
b. Write the descriptions of rocks granite sandstone, marble, slate, basalt. (10 Marks)

OR

- 4 a. With a neat sketch, explain parts and types of faults. Write the differences between Joints and Faults. (12 Marks)  
b. Write briefly geological requirements to selecting site for Dam. (08 Marks)

### Module-3

- 5 a. What is Earthquake? Explain causes and Earthquake resisting structures. (10 Marks)  
b. Define weathering and its types. (05 Marks)  
c. Write short note on Tsunami. (05 Marks)

OR

- 6 a. With a neat sketch, explain seismograph and write seismic zones of India. (10 Marks)  
b. Explain briefly flood and drainage pattern. (10 Marks)

### Module-4

- 7 a. Explain hydrological cycle and their process. (10 Marks)  
b. Discuss geological and geophysical investigation of ground water by electrical resistivity method. (10 Marks)

OR

- 8 a. With a neat sketch, explain types of aquifers. (10 Marks)  
b. Write the different rocks as aquifers. Explain various methods for artificial recharge of water. (10 Marks)

### Module-5

- 9 a. What is GIS? Discuss the components of GIS. (10 Marks)  
b. Define Remote Sensing. Write short note on electromagnetic spectrum. (10 Marks)

OR

- 10 a. Discuss briefly toposheet and GPS. (10 Marks)  
b. Explain impact of mining on environment. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.