

# CBCS SCHEME

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18CV36

## Third Semester B.E. Degree Examination, Dec.2019/Jan.2020 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. Discuss the scope of Geology in the field of Civil Engineering. (06 Marks)  
b. Explain the Internal structure and Composition of Earth, with neat sketch. (08 Marks)  
c. Write description of any two carbonate group of minerals. (06 Marks)

**OR**

- 2 a. Explain the physical properties of Mineral Hardness, Luster, Structure and Fracture. (12 Marks)  
b. Write the description of Minerals :  
i) Asbestos ii) Galena iii) Hematite iv) Gypsum. (08 Marks)

### Module-2

- 3 a. Define Igneous Rocks. Explain Formation and Forms of Igneous Rocks. (08 Marks)  
b. Write short note on Metamorphism. (06 Marks)  
c. Explain briefly Soil profile and Drainage patterns. (06 Marks)

**OR**

- 4 a. Write briefly selection of Rocks as materials for construction. (10 Marks)  
b. Explain the classification of sedimentary rocks and write the description of Sand stone and Conglomerate. (10 Marks)

### Module-3

- 5 a. Define Fault. With relevant sketch, explain parts and type of faults. (12 Marks)  
b. Write short note on Rock Quality Determination and Rock Structure Rating. (08 Marks)

**OR**

- 6 a. Define Dip and Strike. Discuss briefly selection of site for Dams. (12 Marks)  
b. Write difference between Faults and Joints. (08 Marks)

### Module-4

- 7 a. What is Aquifers? With neat sketch, explain types of Aquifers. (10 Marks)  
b. Discuss the Artificial Recharge and Rain Water Harvesting Methods. (10 Marks)

**OR**

- 8 a. Explain with a neat sketch, Ground Water Investigation by Electrical Resistivity Method. (10 Marks)  
b. Write short note on Hydrological cycle and Water pollution. (10 Marks)

### Module-5

- 9 a. Define Earthquake. With a neat sketch, explain Seismograph. (08 Marks)  
b. Write briefly Development of Remote Sensing. (06 Marks)  
c. Define Topography and Contour Maps. (06 Marks)

**OR**

- 10 Write short note on :  
a. Global positioning system  
b. Tsunami.  
c. Soil creep.  
d. Components of GIS. (20 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.