

# CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

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)

\* \* \* \* \*