

# CBCS SCHEME



USN

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

15CT/CV35

Third Semester B.E. Degree Examination, Dec.2018/Jan.2019

## Engineering Geology

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Describe the internal structure of the Earth based on the seismological evidences, with a neat sketch. (08 Marks)  
b. Describe any two minerals with respect to their physical properties and their engineering uses : i) Orthoclase ii) Calcite iii) Gypsum iv) Asbestos. (08 Marks)

OR

- 2 a. Define Mineral. Name the physical properties to identify the mineral with suitable examples. (08 Marks)  
b. Define Engineering geology. Write a brief note on importance of Geology in the field of Civil Engineering. (08 Marks)

### Module-2

- 3 a. Describe the geological aspects in the investigations of a good Dam site. (08 Marks)  
b. Describe the characters of good building stones. (08 Marks)

OR

- 4 a. Define Outcrop. Describe the terms Strike and Dip, with a neat sketch. (08 Marks)  
b. Define Fault. How are they formed and their effects in Civil Engineering? (08 Marks)

### Module-3

- 5 a. Define Weathering. Describe the different types of chemical weathering and its importance. (08 Marks)  
b. What is an Epicenter? Explain the causes and effects of an Earthquake. (08 Marks)

OR

- 6 a. Write a note on Tsunami. Describe briefly the causes and effects. (08 Marks)  
b. Define Watershed management. Explain briefly Floods and their control. (08 Marks)

### Module-4

- 7 a. Write a note on Ground water pollution and Sea water intrusion. (08 Marks)  
b. Define Aquifer. Write a note on confined and unconfined aquifer, with a neat sketch. (08 Marks)

OR

- 8 a. Explain Ground water investigation by Electrical Resistivity method. (08 Marks)  
b. Write a note on Rain water harvesting and discuss the various types of artificial recharge. (08 Marks)

### Module-5

- 9 a. Describe Remote Sensing. Discuss its application in Civil Engineering. (08 Marks)  
b. Write a note on impact of mining on Reservoirs and Environment. (08 Marks)

OR

- 10 a. Write a note on uses of topographic and geological maps. (08 Marks)  
b. Describe the application of Geographic Information System (GIS) and Global Positioning System (GPS). (08 Marks)

\*\*\*\*\*

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.