



CBCS SCHEME

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15CV35

Third Semester B.E. Degree Examination, June/July 2019 Engineering Geology

Time: 3 hrs.

Max. Marks: 80

- Note:** 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Write neat figures wherever necessary.

Module-1

- 1 a. What is Geology? Discuss its importance in Civil Engineering Project. (08 Marks)
b. With neat sketch, describe internal structure of the earth with its composition. (08 Marks)

OR

- 2 a. Define a Mineral. Explain Hardness, Streak and Cleavage with suitable examples. (08 Marks)
b. Write the physical properties, composition and uses of :
i) Biotitic ii) Asbestos iii) Calcite iv) Magnetite. (08 Marks)

Module-2

- 3 a. What is Petrology? Write the broad classification of rocks with examples and explain their formation. (08 Marks)
b. What are the essential characters of good building stones? And describe
i) Granite ii) Limestone iii) Marble. (08 Marks)

OR

- 4 a. What is Structural Geology? Define Fold, Fault and Joints and explain the mechanism of their formation. (08 Marks)
b. Define Dam and Tunnel. Write a note on Effect of Folds and Faults on dam and tunnel. (08 Marks)

Module-3

- 5 a. Briefly explain drainage system and its pattern. List major landforms formed by the action of river. (08 Marks)
b. What are epigene and hypogene geological agents? Explain briefly chemical weathering. (08 Marks)

OR

- 6 What is an Earthquake? Explain its causes and effects. Discuss in detail the precautionary measures followed in designing seismic resistant structures. (16 Marks)

Module-4

- 7 a. What are Aquifers? How are they classified? Briefly explain perched aquifer. (08 Marks)
b. Explain briefly Electrical Resistivity method in ground water exploration. (08 Marks)

OR

- 8 a. What is Artificial recharge for groundwater? Explain in brief the methods adopted. (08 Marks)
b. Write a note on sea water intrusion, causes and remedial measures. (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.

Module-5

- 9 a. What is Remote sensing? Explain its components and applications. (08 Marks)
b. What is GIS and GPS? Explain their importance in civil engineering. (08 Marks)

OR

10 Write short notes on :

- a. Topographic and Geological maps.
b. Satellite imageries.
c. Impact of mining.
d. Impact of quarrying.

(16 Marks)
