

CBCS SCHEME

15CV35



Third Semester B.E. Degree Examination, Dec.2019/Jan.2020 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. Discuss the importance of Geology in the field of Civil Engineering. (08 Marks)
b. What are Rock forming minerals? Explain the importance of streak and luster in identifying the minerals. (08 Marks)

OR

- 2 a. Explain the industrial applications of Kaolin and Gypsum by giving their physical properties and chemical composition. (08 Marks)
b. Describe internal structure and composition of the Earth. (08 Marks)

Module-2

- 3 a. What are Igneous Rocks? Describe their classification by giving suitable rock examples. (08 Marks)
b. What are Joints? Describe the different types of Joints noticed in the rocks of earth crust. (08 Marks)

OR

- 4 a. Why Acidic rocks are more durable than Basic and Ultra Basic rocks? (06 Marks)
b. Use of Calcareous rocks building stones in Industrial areas. (04 Marks)
c. Horst and Garden structure. (06 Marks)

Module-3

- 5 What is Earth Quake? Explain its causes and effects – Seismic waves, Engineer's problems related to Earth quake. (16 Marks)

OR

- 6 a. What are Landforms? Explain its classification in detail. (08 Marks)
b. What are Floods? Explain in detail the causes and effects and their control. (08 Marks)

Module-4

- 7 a. Describe the occurrence of ground water in different terrains. (06 Marks)
b. What is an Aquifer? Describe the different types of aquifers. (06 Marks)
c. Describe the hydro logical cycle. (04 Marks)

OR

- 8 a. Explain the procedure of Electric Resistivity survey in ground water exploration. (08 Marks)
b. Describe the artificial recharging of ground water and its benefits. (08 Marks)

Module-5

- 9 a. What is GIS? Describe the role and its applications in the field of Civil Engineering. (06 Marks)
b. Discuss the Environmental impact due to mining, quarrying. (06 Marks)
c. Railway Ballast. (04 Marks)

OR

- 10 a. What is Remote Sensing? Describe its importance in the field of Civil Engineering. (04 Marks)
b. Application of GPS in Civil Engineering. (04 Marks)
c. Porosity and Permeability. (04 Marks)
d. Write a note on Topographical maps. (04 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.

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