

310308Roll No. 18EMCCED72Total No of Pages: **2****310308****B. Tech. III Sem. (Main) Exam., Dec. - 2019****Civil Engineering****3CE4-08 Engineering Geology****Time: 2 Hours****Maximum Marks: 80****Instructions to Candidates:**

Part – A: Short answer questions (up to 25 words) 5×2 marks = 10 marks. All five questions are compulsory.

Part – B: Analytical/Problem Solving questions 4×10 marks = 40 marks. Candidates have to answer four questions out of seven.

Part – C: Descriptive/Analytical/Problem Solving questions 2×15 marks = 30 marks. Candidates have to answer two questions out of five.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting materials is permitted during examination. (Mentioned in form No. 205)

1. NIL2. NIL**PART - A**

Q.1 Differentiate between Abrasion and Attrition.

Q.2 What is Poisson's Ratio?

Q.3 Write note on Bowen's Reaction Series.

Q.4 Explain the Principle of Seismic methods of Geophysical Investigation.

Q.5 Define Remote Sensing.

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PART – B

- Q.1 Explain the diagnostic physical properties of minerals.
- Q.2 Discuss the morphology of Faults.
- Q.3 Define textures of igneous rocks. Describe factors used to explain the Igneous Texture.
- Q.4 Explain the Engineering Properties of Rocks used as building stone.
- Q.5 Write Brief note on Joints and their causes and effects on engineering quality of rocks.
- Q.6 Discuss the role of Geological Profile in a Tunnel Project. Explain the information to be gathered by Geological Profile.
- Q.7 Define GIS. Discuss the significance of application of GIS in civil engineering projects.

PART – C

- Q.1 Discuss the classification of Streams. What is Drainage Pattern? Describe types of Drainage Pattern.
- Q.2 Discuss the effects of Folding on engineering projects. Give suitable examples.
- Q.3 Define sedimentary textures. Explain Mechanical structures.
- Q.4 What are Geophysical Investigations? Describe Electrical method of Geophysical Investigations.
- Q.5 Explain the geological characters of investigation for selecting Dam Site.
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