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**3E1623****3E1623****B.Tech. III Semester (Main) Examination - 2014****Civil Engg.****3CE3A Engineering Geology****Time : 3 Hours****Maximum Marks : 80****Min. Passing Marks : 24****Instructions to Candidates:**

Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

**Unit - I**

1. a) Write an essay on "Geology", highlighting the main subdivisions and the allied sciences. (8)
- b) Discuss on "Importance of Geology for Civil Engineers." (8)

**OR**

1. a) Write short notes on
  - i) Internal structure of Earth (4)
  - ii) Types of Weathering (4)
- b) Describe Geological Work of River in various stages (8)

**Unit - II**

2. a) Describe Texture and structure of Igneous Rocks (8)
- b) Describe Various Forms of Igneous Rocks (8)

OR

2. a) Describe Texture and structure of Sedimentary rocks. (8)  
b) Discuss about "Engineering Properties of Rocks" (8)

Unit - III

3. Write an essay on classification of folds and how we recognize fold in the field (16)

OR

3. A bed dip at the rate of 1 in 15 direction S 30°W and at the rate of 1 in 12 direction East, Find the rate and direction of true dip. (16)

Unit - IV

4. Describe geological consideration for the site selection of Dam (16)

OR

4. Discuss about "Seismic Method" for Geological investigation of any area (16)

Unit - V

5. Application of Remote Sensing in various fields of Civil Engineering (16)

OR

5. Write short notes on any two
- a) Electromagnetic spectrum (8)  
b) Energy Interaction with Earth Surface (8)  
c) G.I.S System (8)