

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 (8)
a) Electromagnetic spectrum (8)
b) Energy Interaction with Earth Surface (8)
c) G.I.S System (8)