

**B.TECH.****THEORY EXAMINATION (SEM-IV) 2016-17****ENGINEERING GEOLOGY****Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.****SECTION – A****1. Explain the following:****10 x 2 = 20**

- (a) Rock and Mineral
- (b) Moh's scale of hardness of mineral
- (c) Luster and streak of mineral
- (d) Unconformity
- (e) Focus & epicenter of earth quake
- (f) Rock cycle
- (g) Pozzolanic material
- (h) Dips strike of Bed
- (i) Aquifer and aquiclude
- (j) Alkali Aggregate Reaction

**SECTION – B****2. Attempt any five of the following questions:****5 x 10 = 50**

- (a) What are faults? Give their terminology and their classification with suitable diagrams.
- (b) What is mass movement? Explain the causes of landslide and preventive measures.
- (c) Write a note on the importance of geology in civil engineering.
- (d) What are sedimentary rocks? How are they classified? Give a brief description of each class with examples.
- (e) How will you differentiate between Richter magnitude and Mercalli intensity scale of earth quake?
- (f) Write a detailed note on the ground water province of India.
- (g) What do you mean by building stones? Describe their engineering properties.
- (h) Define Seismic Zones? Briefly describe the different Seismic Zones of India.

**SECTION – C****Attempt any two of the following questions:****2 x 15 = 30**

- 3. Describe the Geology investigation for site selection of Dam and Reservoir.
- 4. Give a comparative account of Electrical and seismic methods of geological investigations.
- 5. What do you mean by minerals? Explain the physical and chemical properties of all rock forming minerals.