

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014**Fifth Semester**

Branch : Civil Engineering

ENGINEERING GEOLOGY (C)

(Old Scheme—Prior to 2010 Admissions)

[Supplementary/Mercy Chance]



Time : Three Hours

Maximum : 100 Marks

Part A

1. Write short notes on the following. Each question carries 4 marks :

- (a) Deltas.
- (b) Geologic time scale.
- (c) Benioff zone.
- (d) Magnitude of the earthquakes.
- (e) Specific gravity of the minerals.
- (f) Textures of metamorphic rocks.
- (g) Dip and strike.
- (h) Parts of a fold.
- (i) Classification of landslides.
- (j) Groundwater table.

(10 × 4 = 40 marks)

Part B*Answer all questions.**Each question carries 12 marks.*

2. (a) What is weathering? Describe the different type of weathering. Discuss soil formation and its classification.

Or

- (b) Describe in detail the geological work of oceans. Add a note on the shoreline control measures.

3. (a) Briefly describe the internal structure and composition of the earth.

Or

- (b) Give the causes and effect of earthquake. What measures are to be adopted in the construction of building in the earthquake prone area.

Turn over

4. (a) Write physical properties and chemical composition of the following minerals :
(i) Quartz ; (ii) Orthoclase ; (iii) Hypersthene ; and (iv) Serpentine.

Or

- (b) Write classification of igneous, sedimentary and metamorphic rocks.
5. (a) Describe classification of fault with neat sketches. Discuss the role of fault in the selection of sites for civil engineering projects.

Or

- (b) What are joints ? Explain different types of joints. Add a note on unconformities.
6. (a) Explain various geological conditions which are important in the selection of dam site.

Or

- (b) Define an aquifer. Explain different types of aquifers. Add a note on aquiclude, aquifuge and artesian wells.

(5 × 12 = 60 marks)

