

Code: 15A01504

B.Tech III Year I Semester (R15) Supplementary Examinations June 2018

**ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Explain importance of geology in civil engineering.
  - (b) Write a note on weathering agents.
  - (c) Describe mineral.
  - (d) Discuss cleavage and diaphinity.
  - (e) Enumerate the important silica based igneous rocks.
  - (f) Difference between insitu soil and drift soil.
  - (g) What is landslide?
  - (h) Write a note on springs.
  - (i) Discuss the application of grouting.
  - (j) Give the effects of earthquake.

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)**UNIT – I**

- 2 Discuss the importance of geology in civil engineering construction.

**OR**

- 3 Define weathering. Describe the process of mechanical weathering.

**UNIT – II**

- 4 Explain the physical properties of minerals.

**OR**

- 5 What is structure? Explain the type of primary structure noticed in sedimentary rocks.

**UNIT – III**

- 6 What is fold? Write types of folds with neat sketches.

**OR**

- 7 Write a note on ground water and ground water exploration technique.

**UNIT – IV**

- 8 Explain Richter scale and precautions to be taken for, building construction in seismic areas.

**OR**

- 9 Explain the principles of gravity & magnetic methods.

**UNIT – V**

- 10 Describe the geological factors to be considered in the selection of dam site.

**OR**

- 11 Explain role of geology in the construction of tunnel.

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