

B.Tech III Year I Semester (R13) Regular & Supplementary Examinations November/December 2016
ENGINEERING GEOLOGY
(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Enumerate the physical properties in mineral identification.
 - (b) How the weathered rocks can be identified?
 - (c) Write on the transported soils.
 - (d) Explain the importance of dykes in civil Engineering point of view.
 - (e) What is cone of depression and its significance?
 - (f) What are shield areas and seismic belts?
 - (g) Differentiate Wenner and Schlumberger electrode configuration.
 - (h) State the importance of Geo physical studies.
 - (i) What are the geological considerations that are to be kept in mind while selecting a dam site?
 - (j) Explain the purposes of tunneling.

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

UNIT – I

- 2 Explain the identification of minerals using physical properties.

OR

- 3 Write the physical properties of: (i) Quartz. (ii) Calcite. (iii) Hematite. (iv) Galena.

UNIT – II

- 4 Explain the structures and textures of Sedimentary rocks.

OR

- 5 Describe the types of unconformities and joints with their Civil Engineering significance.

UNIT – III

- 6 Explain the causes, effects and terminology of earthquakes.

OR

- 7 Explain the Engineering and Geological significance of ground water.

UNIT – IV

- 8 Explain the principle, operation and interpretation of Electrical Resistivity method.

OR

- 9 Briefly Explain about Magnetic and Gravity method of Geo physical surveys.

UNIT – V

- 10 What is 'life of reservoir'? Explain the methods to control reservoir silting.

OR

- 11 Explain the Geological considerations in tunneling.
