## CBCS SCHEME

Third Semester B.E. Degree Examination, Dec.2018/Jan.2019  Engineering Geology  Time: 3 hrs.  Note: Answer any FIVE full questions, choosing ONE full question from each module.  Module-1  a. Describe the role of geology in the Civil Engineering Projects.  b. With neat sketch, explain the different zones of the inferior of the EARTH.  c. Define a mineral with examples. Describe the following physical properties of minerals:  i) Lustre  ii) Cleavage.  OR.  Describe how the physical properties are helpful in their identification of minerals in the field with examples.  b. With the help of neat sketches, describe the forms of igneous rocks.  c. Describe any two rocks their geological properties and add their engineering uses:  ii) Granite  OR  What are folds? How are they caused? With neat sketch, mention the parts of the fold. Describe the different types of folds with figures. Also add a note on their civil engineering considerations.  Module-3  a. What is Weathering? Describe the mechanical and chemical weathering.  b. Give detailed account of geological work done by rivers.  OR  a. What is an Earthquake? Describe the tectonic causes of earthquake and write note on the effects of earthquakes.  OR  Wite note on causes of landslides.  OR  6  a. What is an Earthquake? Describe the tectonic causes of earthquake and write note on the effects of earthquakes.  b. Write note on causes of landslides.		TITE OF	
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O. With the Contract of International Courses		effects of earthquakes.	(10 Marks
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Define Ground water. Describe the hydrological cycle. Explain the factors influencing the surface runoff and infiltration.

Discuss the ground surface. 7 a.

b. Discuss the ground water survey by Electrical Resistivity method, with a circuit diagram. (10 Marks)

OR

- Write notes on:
  - Water table and perched water table.
  - Aquifer and its types.
  - Specific yield and retention.
  - Porosity and Permeability.

(20 Marks)

## Module-5

- What is Remote Sensing? Write its application in Civil Engineering. (08 Marks)
  - What is Geographical Information System? Name the different components of Geographical Information System. (06 Marks)
  - Write a note on Application of Global Positioning System (GPS) in Civil Engineering.

(06 Marks)

## OR

- 10 Write a note on:
  - a. Impact of Mining, Quarring on Environment.

b. Natural disasters and their mitigation.

(10 Marks)

BANGALORE - 560 037 (10 Marks)