

END TERM EXAMINATION

THIRD SEMESTER [B.TECH] NOVEMBER-DECEMBER 2018

Paper Code: ETCE 211

Subject: Engineering Geology

Time : 3 Hours

Maximum Marks : 75

Note: Attempt five questions in all including Q. No. 1 which is compulsory. Select one question from each unit.

Q1. Answer any five from the following: (5×5=25)

- Give a general view of the internal structure of earth as revealed by seismological evidence.
- Define the following:
 - Spheroidal weathering
 - Glacial erosion
- Define dip and strike.
- What are hot water springs? Give the geological conditions for the formation of hot water springs in otherwise cold climate conditions.
- Write notes on:
 - Application of photo-geology
 - Use of stereoscope
- What are the types of landslide? Briefly explain its preventive measures.

Unit-I

- Q2.
 - Explain briefly the importance of geological investigation in construction projects. (7)
 - Explain weathering of rocks. (5.5)
- Q3.
 - What are igneous rocks? How are they formed in nature? (8)
 - Explain the difference between colour and lusture. (4.5)

Unit-II

- Q4.
 - Write short notes: (2+3+3+4.5=12.5)
 - Unconformities
 - Primary and secondary structure in rocks
 - Geometric and Genetic Point
 - Stratification
- Q5. Describe with the help of neat sketches, various parts of faults and their causes as understood in structural geology? (12.5)

Unit-III

- Q6. Write short notes on: (3+3+3+3.5=12.5)
 - Types of aquifers
 - Safe yield
 - Salt water intrusion
 - Tectonic Earthquakes
- Q7. Write short notes on the following: (4+4+4.5=12.5)
 - Richter Magnitude
 - Epicentre
 - Seismogram

Unit-IV

- Q8. Give a broad account of geological conditions necessary for the proper location of a Dam. (12.5)
- Q9.
 - What are the common types of landslides? Give scientific reasons for the occurrence of landslides? (6)
 - Give a brief account of measures commonly adopted to combat the landslides. (6.5)
