

TICNI					
USN					

Third Semester B.E. Degree Examination, Dec.2018/Jan.2019 **Engineering Geology**

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- a. Describe the internal structure of the Earth based on the seismological evidences, with a neat sketch. (08 Marks)
 - b. Describe any two minerals with respect to their physical properties and their engineering uses: i) Orthoclase ii) Calcite iii) Gypsum iv) Asbestos. (08 Mark

OR

- 2 a. Define Mineral. Name the physical properties to identify the mineral with suitable examples.
 (08 Marks)
 - b. Define Engineering geology. Write a brief note on importance of Geology in the field of Civil Engineering. (08 Marks)

Module-2

- 3 a. Describe the geological aspects in the investigations of a good Dam site. (08 Marks)
 - b. Describe the characters of good building stones.

(08 Marks)

- 4 a. Define Outcrop. Describe the terms Strike and Dip, with a neat sketch. (08 Marks)
 - b. Define Fault. How are they formed and their effects in Civil Engineering? (08 Marks)

Module-3

- 5 a. Define Weathering. Describe the different types of chemical weathering and its importance.
 (08 Marks)
 - What is an Epicenter? Explain the causes and effects of an Earthquake. (08 Marks)

OR

- **6** a. Write a note on Tsunami. Describe briefly the causes and effects.
- (08 Marks)
- b. Define Watershed management. Explain briefly Floods and their control.
- (08 Marks)

Module-4

- 7 a. Write a note on Ground water pollution and Sea water intrusion.
- (08 Marks)
- b. Define Aquifer. Write a note on confined and unconfined aquifer, with a neat sketch.

(08 Marks)

OR

8 a. Explain Ground water investigation by Electrical Resistivity method.

(08 Marks)

b. Write a note on Rain water harvesting and discuss the various types of artificial recharge.

(08 Marks)

Module-5

- 9 a. Describe Remote Sensing. Discuss its application in Civil Engineering. (08 Marks)
 - b. Write a note on impact of mining on Reservoirs and Environment.

OR

10 a. Write a note on uses of topographic and geological maps.

(08 Marks)

(08 Marks)

b. Describe the application of Geographic Information System (GIS) and Global Positioning System (GPS). (08 Marks)

* * * * *