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THIRD SEMESTER B.TECH. (ENGINEERING) DEGREE [14 SCHEME] EXAMINATION, NOVEMBER 2015

CE 14 306 – ENGINEERING GEOLOGY

Time : Three Hours

Maximum : 100 Marks

Part A

I. Answer any *eight* questions out of ten :

1. Explain briefly the earthquake mechanism.

2. What do you understand by liquefaction?

3. Define Spheroidal weathering.

4. Write the brief description of dolerite.

5. State the uses and engineering properties of limestone.

6. Explain the megascopic characters of amphibole mineral.

7. Explain briefly the perched water table.

8. What is unconformity? And give its engineering significance.

9. Write the basic principles of remote sensing.

10. What are the important geological factors consider in the design of buildings?

(8 × 5 = 40 marks)

Part B

II. Answer *all* the questions :

11. Write in detail, the geological process of weathering, types, products and their engineering importance.

Or

12. Describe with the geological features resulting from erosion, transportation, deposition of wind and its engineering significance.

13. Discuss in detail the description, occurrence and engineering properties of granite.

Or

14. Bring out the distinguishing characters and properties of igneous, sedimentary and metamorphic rocks.

15. Describe with the help of neat sketches, various type of folds and its engineering significance.

Or

16. Write in detail account of Electrical resistivity methods for civil engineering investigation.

17. Describe the role of remote sensing in civil engineering and its various interpretation techniques in remote sensing.

Or

(b) Discuss the geological conditions necessary for construction of tunnels and its types.

(4 × 15 = 60 marks)