CE 221 (R-20)

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II/IV B. Tech. DEGREE EXAMINATIONS, AUGUST - 2024

Second Semester

CIVIL ENGINEERING

ENGINEERING GEOLOGY

Time : **Three Hours** Maximum : **70** Marks

Answer ONE question from each Unit. 5x14=70 M

All Questions carry equal marks.

UNIT - I

1. a) Define weathering. Add a note on engineering importance.

   b) Explain the process of Weathering in Granite.

(OR)

2. a) What are the geological agents ? Explain.

   b) Describe following mineral properties in detail :

   (i) Quartz (ii) Pyrite (iii) Feldspar.

UNIT - II

3. a) Explain civil engineering importance of petrology ?

   b) What is geological classifications of rocks ?

(OR)

4. a) Bring out the differences between muscovite and biotite.

   b) Types of metamorphism structures and textures of metamorphic rocks.

UNIT - III

5. How folds are classified ? Explain with the help of neat sketch important types of Folds as distinguished on the basis of a mode of occurrence.

(OR)

6. Enumerate the classification and causes of landslides and what are safety Measures of land slides.

P.T.O.

UNIT - IV

7. How to measure ground water flow and explain about water holding capacity.

(OR)

8. What are source and forms of ground water.

UNIT - V

9. a) Explain about seismic refraction method.

   b) Discuss the geological investigations that are carried out for tunnel site selection.

(OR)

10. a) Explain about any one case history of dam failure.

    b) What is grouting and explain different methods of grouting briefly.