

B.Tech. Civil (Water Resources Engineering)
BTCLEVI / BTMEVI / BTELVI / BTECVI / BTCSVI

Term-End Examination

December, 2016

00392

ET-531(A) : EARTH AND ITS ENVIRONMENT

Time : 3 hours

Maximum Marks : 70

Note : Answer any *five* questions. All questions carry equal marks. Give neat, well-labelled sketches wherever necessary.

1. (a) Explain the 'Hydrologic Cycle' with the help of a neat sketch. What role does it play in geological processes ? 7
- (b) Describe the important types of slow and rapid mass movement in respect of weathering. 7
2. (a) Explain the causes of earthquakes. Differentiate between P, S and L waves. 7
- (b) Discuss the major forces acting upon the air. 7

3. (a) Describe the hydrological classification of rocks. 7
- (b) Define form or habit of minerals. Describe form depending upon the degree of crystallisation. 7
4. (a) What do you mean by 'Metamorphic Rocks' ? Discuss the processes of metamorphism. 7
- (b) Define cleavage. Explain its significance. 7
5. (a) Describe the three principles of stratigraphy. 7
- (b) What is meant by biogeochemical cycles ? Explain the carbon cycle with the help of a neat sketch. 7
6. (a) Define population with respect to ecology. Explain the various properties which are the characteristics of each population. 7
- (b) Explain the life zones in oceans with the help of a neat diagram. 7
7. (a) Explain how volcanic eruptions can damage an ecosystem. 7
- (b) What are the features of wastelands ? Explain the various activities that can be initiated at wastelands. 7

8. Differentiate between the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Weather and Climate
 - (b) Extrusive and Intrusive Igneous Rocks
 - (c) Anticline and Syncline
 - (d) Joint and Fracture
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