

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

Term-End Examination

00635

December, 2014

ET-531(A) : EARTH AND ITS ENVIRONMENT

Time : 3 hours

Maximum Marks : 70

Note : Answer any **five** questions. All questions carry equal marks. Well-labelled diagram will be given due weightage.

1. (a) What are the different hypotheses of origin of the Earth ? Compare any two of these writing their strengths and weaknesses. 7
- (b) Explain hydrologic cycle and its importance. 7

2. (a) What is weathering ? Enlist various mechanical agents of weathering and mechanism of action of any one of them. 7
- (b) Explain the different stages in the development of a typical delta. 7

3. (a) What are the different types of glaciers ?
Explain the formation of any one type. 7
- (b) Write short notes on any **two** of the following : $2 \times 3 \frac{1}{2} = 7$
- (i) Stream erosion
- (ii) Recession of waterfalls
- (iii) Natural Levees
4. (a) Explain Richter's scale of magnitude of earthquake. 7
- (b) What is meant by organic movements ?
What are their effects ? Discuss with the help of a neat sketch. 7
5. (a) Briefly explain the following stating their effect in atmosphere : $2 \times 3 \frac{1}{2} = 7$
- (i) Pressure gradient force
- (ii) Coriolis force
- (b) Explain the following along with their utility : $2 \times 3 \frac{1}{2} = 7$
- (i) Weather map
- (ii) Weather forecasting
6. (a) Differentiate between igneous and metamorphic rocks. 7
- (b) Name various factors affecting behaviour of minerals. Explain the effect of any one in detail. 7

7. (a) What are the various physiographic divisions of India ? Compare their physical, stratigraphical and structural features briefly. 7
- (b) What is Gondwana sequence ? What are the uses of clay deposits occurring in the Gondwana sequence ? 7
8. (a) What do you understand by a rift valley ? Briefly explain formation of such a valley. 7
- (b) What are the different types of environmental pollution ? Briefly explain their effects on human population. 7
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