

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00506

June, 2016

BICE-003 : ENGINEERING GEOLOGY

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **seven** questions. All questions carry equal marks.*

1. Describe the internal structure of the Earth as revealed by the seismological evidence. 10

2. How are folds classified ? Explain with a neat diagram, the important types of folds on the basis of the inclination of axial plane. 10

3. What are the different causes of faulting of rocks ? Describe with neat sketches, the different parts of a fault. 10

4. Write short notes on the following : 10
 - (a) Rift Valley
 - (b) Pediplains
 - (c) Glacial Deposition
 - (d) Cone and Crater

5. What are the important physical properties of minerals used for identification ? Write down any four with examples. 10
6. Explain the difference between the following : 10
- (a) Hardness and Tenacity
 - (b) Density and Specific Gravity
 - (c) Colour and Lustre
7. Give an overview of Mesozoic group of rocks with reference to the Indian stratigraphy. 10
8. Discuss four properties of rocks which are tested in field for conforming the exact nature of rocks as suitable for an engineering project site. 10
9. Explain the following : 10
- (a) Assessment of seismic risk
 - (b) Intensity of earthquakes
10. What are the geological conditions that influence the design, stability and cost of a traffic tunnel in hilly region ? 10
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