

**B.Tech. Civil (Water Resources
Engineering)**

**Term-End Examination
December, 2011**

ET-531(A) : EARTH & ITS ENVIRONMENT

Time : 3 hours

Maximum Marks : 70

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

1. (a) Describe, with the help of a sketch / (es), the different zones that envelop the Earth from its core to stratosphere. 10
(b) Outline what do you understand by ecological instability ? 4
2. (a) "It is the appropriate combination of factors that has given birth to, and sustained the human and other forms of life on Earth". Discuss. 7
(b) What is meant by a *biomass* ? Discuss its importance in human life. 7
3. (a) Through sketches explain : 3+3
(i) joint and a fracture
(ii) foliation and lineation
(b) Discuss the products of mechanical and chemical weathering. 8

4. (a) What is a glacier ? Discuss its main features. 9
(b) Explain how Earth reacts to the radiation of energy coming from Sun ? 5
5. (a) Giving sketches, discuss the formation and occurrence of *igneous, extrusive, and sedimentary rocks*. 9
(b) Explain tertiary and quaternary rocks. 5
6. Giving explanatory figures, explain : 2+7+5
(a) faults;
(b) classification of faults;
(c) fault zone; shear zone, and fault plane.
7. (a) Discuss in detail what is meant by geological time - scale. 6
(b) Explain an ecosystem, giving examples. 8
8. Write short notes on *any four* of the following :
(a) Environmental pollution 4x3.5=14
(b) Cloud formation
(c) Bio-degradable and non - degradable pollutants.
(d) Rock texture
(e) Monsoon