

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

**Term-End Examination**

**June, 2010**

01466

**ET-531(A) : EARTH & ITS ENVIRONMENT**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Answer any five questions. All questions carry equal marks. Write answers in your own words.*

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1. (a) Justify the statement : "*there exist unique conditions of temperature and atmosphere on this earth*". 7  
(b) Briefly discuss the various zones surrounding our planet – from gaseous envelope to its core. 7
2. (a) What are earthquake waves? How do these help gather information about the interior of our earth? 10  
(b) Distinguish between : 4  
(i) a joint and a fracture  
(ii) a foliation and lineation
3. (a) Differentiate between mechanical and chemical weathering. 7  
(b) Give the description of products of mechanical and chemical weathering. 7

4. (a) Outline the surface features of glaciers. 5  
 (b) Sketch out, neatly, a 3-D representation of  
 glaciated U-shaped valley, and hanging  
 tributary valleys. Write their important  
 features. 9
5. (a) Explain tertiary and quaternary rocks. 7  
 (b) Briefly discuss : Igneous, Extrusive and  
 Sedimentary rocks. Give sketches. 7
6. What do you understand by *faults* ? Give 14  
 classification of faults. Explain *fault zone*, shear  
 zone and fault plane. Give all the necessary  
 sketches.
7. (a) What do you mean by population ecology; 8  
 properties of population; regulation of  
 population; and function of population.
- (b) Explain environmental pollution. 6  
 Distinguish between biodegradable and  
 nonbiodegradable pollutants.
8. (a) Giving sketches, discuss in brief the 9  
 following :
- (i) The *tundra* biome  
 (ii) The *desert* biome  
 (iii) The *grassland* biome
- (b) Explain what is meant by ecological 5  
 instability.
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