

Total No. of Questions : 10 ] [ Total No. of Printed Pages : 3

Roll No. ....

## **BE-202(GS)**

**B. E. (First/Second Semester)**

**EXAMINATION, Dec., 2011**

**(Grading System)**

**(Common for all Branches)**

**ENERGY, ENVIRONMENT, ECOLOGY AND SOCIETY**

**[BE-202(GS)]**

*Time : Three Hours*

*Maximum Marks : 70*

*Minimum Pass Marks : 22 (D Grade)*

**Note :** Attempt *one* question from each Unit. All questions carry equal marks. In all *five* questions have to be attempted.

### **Unit-I**

1. (a) 'Development of a country is linked with the availability of energy resources and their consumption.' Justify the statement.  
(b) Write a brief note on geothermal energy.

*Or*

2. (a) Describe the various components of wind energy conversion system.  
(b) What for are nuclear reactors used ? Describe its various parts.

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**Unit-II**

3. (a) Explain various segments of environment. How are they related with biosphere ?
- (b) What is food chain ? Describe various types of food chain.

*Or*

4. (a) Draw and explain Nitrogen cycle in nature.
- (b) Write a note on biodiversity.

**Unit-III**

5. (a) Describe various segments of atmosphere with the help of suitable diagram.
- (b) What is sound pollution ? Write the sources and adverse effects of sound pollution.

*Or*

6. (a) Write notes on the following :
  - (i) Green house effect
  - (ii) Depletion of ozone layer
- (b) Give a brief account of measurement of sound pollution.

**Unit-IV**

7. (a) Describe organic and inorganic water pollutants and their adverse effects.
- (b) Give a neat sketch of conventional domestic waste water treatment plant.

*Or*

8. (a) Write the characteristics and harmful effects of waste water from paper industry and pharmacy industry. Discuss the method of their treatment.

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- (b) Explain soil profile. Describe in brief how the nutrient availability is related to pH of the soil.

**Unit – V**

9. (a) Define and classify solid wastes. Give a brief account of various functions of solid waste management.
- (b) Write brief notes on the following :
- (i) Environmental Ethics
  - (ii) Environmental Protection Acts

*Or*

10. (a) Write a detailed note on recycling of solid waste.
- (b) What is an environmental impact assessment ? Why is it required ? Describe the various steps involved in environmental impact assessment methodology.