

Roll No .....

## BE - 202

**B.E. I & II Semester** Examination, December 2014

### Energy Environment Ecology & Society

*Time : Three Hours*

*Maximum Marks : 70*

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
ii) All parts of each questions are to be attempted at one place.  
iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.  
iv) Except numericals, Derivation, Design and Drawing etc.

#### Unit - I

1. a) Discuss the advantages and disadvantages of wind energy.  
b) Discuss the use of solar energy for water heating.  
c) Write a short note on biomass energy.  
d) What do you mean by primary and secondary energy sources? Mention the difference between them with suitable example.

Or

How Geothermal energy is used for generation of electrical power? Write its advantages and disadvantages.

#### Unit - II

2. a) Explain the term biodiversity with suitable examples.  
b) Describe the water cycle.  
c) Define the segments of environment.  
d) What are biogeochemical cycles? Describe the Nitrogen cycle with a neat diagram.

Or

What is an environment? Discuss the various segments of environment in brief.

#### Unit - III

3. a) What are the adverse effects of air pollutants?  
b) What are acid rains? State the effects of acid rains on health.  
c) Give the importance of ozone layer.  
d) Discuss the impact of noise pollution on biotic and abiotic components.

Or

What are Green house gases? How do they contribute in global warming?

#### Unit - IV

4. a) Write short note on aerobic treatment of water.  
b) What are the problems on land degradation.  
c) Write short note on harmful effects of industrial waste water.  
d) Mention the source of soil pollution and their control measures.

Or

Differentiate between organic and inorganic water pollutants.

#### Unit - V

5. a) What are codes of ethics?  
b) Write short note on environmental protection act.  
c) What are the objectives of ethics and its study?  
d) What are the various methods that are being adopted for collection and disposal of solid waste?

Or

State and discuss the general moral of ACM code of ethics and professional conduct.