

Roll No

BE - 202

B.E. I & II Semester Examination, June 2013

Energy Environment Ecology & Society

Time : Three Hours

Maximum Marks : 70

<http://www.rgpvonline.com/>

- Note:** 1. Attempt one question from each unit araling internal choice available therein. All questions carry equal marks.
2. All the fragments of particular question shall be attempted at one place only otherwise they will be treated separate question.
3. Inside distribution of marks for any fragments (if any) may be distributed by valuer.
4. Balanced chemical equations and figure must be drawn appropriately.

Unit - I

1. Discuss present status as well as future prospects alongwith merits and demerits of followings : in India, 14
(a) Solar energy (b) Wind power (c) Geothermal energy (d) Nuclear power

OR

2. What is energy? Write various renewable and non-renewable sources of energy. Discuss role of fossil fuels in energy scenario of India alongwith their environmental threats. 14

Unit - II

3. "Oxygen play vital role in troposphere while ozone do it in stratosphere" elucidate. Write down in-situ and ex-situ methods of conservation of biodiversity. 14

OR

4. Write short notes on followings: 14
(a) Carbon cycle (b) Tropic level (c) Endemic & exotic species (d) Hydrosphere

Unit - III

5. Write short notes upon followings: 14
(a) Decibel scale (b) Photochemical smog
(c) Depletion of ozone layer (d) Acid rain

OR

6. Describe the sources, relative contributions and sink of major green-house gases. Elucidate "Carbon dioxide function as a global thermostat: The earth would have been as lifeless as moon without carbon dioxide and also as hot as the hot-venus [surface temp-450°C] with too much carbon dioxide". 14

Unit - IV

7. Define the term BOD & COD. Which of these two would be greater for a polluted sewage? Explain compare the advantage of aerobic and anaerobic process. 14

OR

8. What is soil and its importance to biosphere? How soil formation & soil-erosion takes place? Discuss 'eutrophication' and 'Biological magnification'. 14

Unit - V

9. Write short notes upon followings : 14
(a) Incineration (b) Composting (c) Paralysis (d) Pulverisation

OR

10. "EIA is an intrinsic link between economic growth and environment" justify the statement. Describe various ethical situations belonging to engineering professionals. 14
