

15P118

Name

Reg. No

FIRST SEMESTER M.Sc. DEGREE EXTERNAL EXAMINATION, FEBRUARY 2016

(2015 Admission)

CC15P ES1 C02 – Energy and Environment

(Environmental Science)

Time: 3 Hours

Max. Weightage: 36

I. Answer all the questions. Each question carries 1 weightage.

1. Explain ecological importance of solar radiation.
2. Comment on the tidal energy.
3. Add a note on over exploitation of fossil fuels.
4. Comment on radiometric dating.
5. Mention the uses of coal.
6. Define Thermodynamics.
7. What is meant by shale gas?
8. What are solar ponds?
9. What are secondary energy sources?
10. Explain Uranium Enrichment.
11. Mention the mutagenic effects of radiation.
12. Comment on solar collectors.
13. What is meant by delayed biological effects of radiations?
14. Define fossils.

II. Answer any seven questions. Each question carries 2 weightage.

15. Comment on merits and demerits of wind energy.
16. Explain the formation process of fossil fuels in the geological time scale.
17. Write down about fuel wood usage in India.
18. Comment on the recent hydrogen bomb experiment and point out its possible environmental impact.
19. Explain the land degradation by energy production.
20. Write notes on the distribution of solar radiation across various atmospheric levels.
21. Compare and contrast between energy utilization in urban and rural areas.
22. Explain the energy flow in different trophic levels of ecosystem.
23. Write a brief note on pathway analysis.
24. Explain the reasons for energy crisis in India, and write a short note on possible alternatives.

III. Write an essay on any two of the following. Each question carries 4 weightage.

25. Write an essay on energy conservation measures for sustainable development.
26. Explain renewable energy resources.
27. Comment on the energy crisis in India and bring out the possible mitigatory measures.
28. Write an essay on nuclear energy generation and environmental safety.
