FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2017

(Regular/Supplementary/Improvement)

(CUCSS-PG)

CC15P ES1 C02 – ENERGY AND ENVIRONMENT

(Environmental Science)

(2015 Admission Onwards)

Time: Three Hours   Maximum: 36 Weightage

PART - A

Answer *all* questions. Each question carries 1 weightage

1. Explain Solar constant.

2. Define first law of Thermodynamics.

3. Explain the different types of energy.

4. What is MHD.

5. Explain wind energy.

6. What are the advantages of geothermal energy.

7. Explain food chain.

8. Define primary productivity.

9. Explain renewable and non renewable energy.

10. Explain the steps in fossil fuels formation.

11. Limitations of conventional energy.

12. What is biomass?

13. Explain nuclear fusion.

14. Explain any two hazards related to nuclear reactors.

(14 x 1 = 14 weightage)

PART –B

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

15. Define energy crisis and explain the solution for energy crisis

16. Explain the energy transformation issues associated in India

17. Explain the importance of multipurpose power projects with examples.

18. Briefly explain the different types of nuclear reactors.

19. Explain the environmental impact of hydro electric power projects

20. Role of fossil fuels in modern economy.

21. Explain sustainable energy management problems and solutions

22. Briefly describe the different solar energy capturing systems.

23. Explain secondary energy resources

24. Differentiate nuclear fission and fusion with examples.

(7 x 2 = 14 weightage)

PART -C

Answer any *two* questions. Each question carries 4 weightage.

25. Explain briefly the different type of renewable energy resources in India.

26. Explain the advantages and disadvantages of tidal energy, wave energy and biomass energy.

27. Explain the path way analysis for nuclear fuel processing.

28. Briefly explain the formation and energy transfer in an ecosystem

(2 x 4 = 8 weightage)

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