Reg. No……. Name…… **15U549**

B. A./B. Sc./B. COM DEGREE END SEMESTER EXAMINATION OCTOBER 2017

SEMESTER –5: PHYSICS (OPEN COURSE)

COURSE: 15U5OCPHY1: ENERGY AND ENVIRONMENTAL STUDIES

(For Regular 2015 admission)

Time: Three Hours Max. Marks: 75

PART A (Very short answer questions)

*(Answer **all** questions) Each question carries 1 Mark*

1. What is Biogas?
2. State four characteristics of wind energy?
3. Define Solar constant.
4. What is a solar pond?
5. What is Sewage?
6. What do you mean by air Pollution?
7. Give the basic idea of environment impact assessment.
8. What is Recycling?
9. What is photochemical smog?
10. What is reclamation? (1 x 10 = 10)

PART B (Short answer)

*(Answer **any Eight** questions) Each question carries 2 Marks*

11. Distinguish between renewable and non renewable energy sources with examples.
12. Explain the principle behind tapping the wave energy.
13. What are direct and in-direct radiation?
14. What are the benefits of waste management?
15. Explain greenhouse effect.
16. What are the important characteristics of waste water?
17. State any two environmental protection acts.
18. Briefly describe about fusion energy.
19. What are primary and secondary pollutants? Give examples.
20. What are the causes for the underground pollution? (2 x 8 = 16)

PART C (Problem/Derivations)

*(Answer **any Five** question) Each question carries 5 Marks*

21. Briefly describe the floating dome type biogas plant.
22. Explain about tidal power generation using the double basin arrangement.
23. Discuss briefly about cause and effects of global warming.
24. Describe any two promotional methods used for waste minimization.
25. Explain different classifications of water pollutants.
26. Explain the working of a solar cell.
27. Describe briefly about the biomass energy production (5 x 5 = 25)

PART D (Long answer questions)

*(Answer **any Two** question) Each question carries 12 Marks*

28. Briefly explain the production of geothermal energy with its advantages and disadvantages.
29. Discuss the various methods adopted to prevent water pollution
30. Using neat diagram, discuss the working principle of direct and indirect solar dryers.
31. Explain about the hazardous solid wastes and its characteristics. Describe briefly about the remedy measures used for its management.

(12 x 2 = 24)

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