

B. Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024**SEMESTER 5 : PHYSICS****COURSE : 19U5CRPHY08 : ENERGY AND ENVIRONMENTAL PHYSICS AND HUMAN RIGHTS
VISION***(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)*

Time : Three Hours

Max. Marks: 75

PART A**Answer any 10 (2 marks each)**

1. Discuss the urban problems related to energy.
2. Discuss the topic "Sun is the source of all energy on earth".
3. Relate the need for blackening the absorber plates in solar collectors
4. What is the concept of energy audit?
5. Explain bio-geographical classification of India
6. Compare solar water heater and electric water heater.
7. What kind of development did Mahatma Gandhi envisage?
8. What do you understand by Thermal Pollution.
9. Explain the importance of Water Act.
10. Write a note on Mineral resources.
11. Summarise oil refining?
12. Explain the significance of nuclear energy as a renewable resource.

(2 x 10 = 20)**PART B****Answer any 7 (5 marks each)**

13. Inspect the need and modalities for sun tracking
14. What is the role of environmental protection act?
15. Examine consciousness towards environmental issues by rural people and urban people.
16. Explain the 3Rs principle in waste management.
17. Highlight the implications hydroelectric power generation?
18. List the limitations of tidal power and wind power
19. Give a brief account of various energy resources.
20. What the term remind us "Environmental ethics". Elaborate.
21. Compare and contrast Tidal energy and Wave energy?
22. Examine the realistic changes one can make to have a significant impact on our energy consumption and family's energy cost?

(5 x 7 = 35)**PART C****Answer any 2 (10 marks each)**

23. With the help of neat diagram explain the working of two types of biogas plant.
24. Explain the types, characteristic features, structure and function of the forest ecosystem.
25. Explain the construction and working of a salt gradient solar pond
26. Comment on biodiversity. Describe the important values of biodiversity.

(10 x 2 = 20)