

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

Time : Three Hours

Max. Marks: 75

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

1. Explain Environmental problems associated with Mining operations.
2. Whom will you contact when you see an act of poaching?
3. Examine why is biomass energy more important in India
4. Determine any two ways in which an individual can support conservation of forest.
5. Cite examples of a fuels that cause environmental pollution
6. Define solar constant?
7. Presently what is the measure of human development?
8. Evaluate the need for Gender equity for sustainable development.
9. Comment on soil erosion and desertification of land resources.
10. Explain when and why the wildlife protection act was passed?
11. Comment on solar cookers?
12. Explain how timber extraction, mining and dams affect the forest resources.

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

13. How a solar green house is constructed
14. Outline the air (prevention and control of pollution) act.
15. Explain the significance of hydroelectric power as a renewable resource.
16. Summarise the superiority of optical concentrators
17. Analyse why hydrogen is projected as a potential green energy source
18. Write the functions of the central pollution control boards in controlling air pollution?
19. What is the environment (protection) act?
20. Explain watershed management.
21. Analyse the reason for floods, droughts and other problems and how to conserve our water resources.
22. Explain social, ethical, aesthetic and option values of biodiversity

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

23. Explain various land and mineral resources, its uses and over-exploitation.
24. Discuss various aspects of (a) optical concentrator (b) solar cooker and (c) Photo voltaic systems.

25. Assess the impact of climate change on earth.
26. Discuss various aspects of (a) geothermal energy (b) OTEC energy and (c) Fusion energy (d) fuel cell energy

(10 x 2 = 20)