

QP CODE: 22100039

Reg No :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, JANUARY 2022

Fifth Semester

CORE COURSE - PH5CRT08 - ENVIRONMENTAL PHYSICS AND HUMAN RIGHTS

Common for B.Sc Physics Model I, B.Sc Physics Model II Applied Electronics, B.Sc Physics Model II Computer Applications & B.Sc Physics Model III Electronic Equipment Maintenance

2017 Admission Onwards A1B13866

Time: 3 Hours Max. Marks: 60

Part A

Answer any **ten** questions.

Each question carries **1** mark.

- Give one example each for an imaging sensor and non-imaging sensor in a remote sensing satellite.
- 2. Distinguish between primary and secondary pollutants.
- 3. What is meant by waste management?
- 4. What is meant by environmental ethics?
- 5. What are the uses of natural gas as an energy source.
- 6. How geothermal heat energy is produced inside the Earth?
- 7. Why nuclear fusion is considered as a renewable energy source?
- 8. Solar radiation is emitted in which form?
- 9. What are the two types of solar ponds?
- 10. What is a flat plate collector?
- 11. What is the mission of UN human rights council?
- 12. According to the Indian Constitution, what is meant by directive principles of state policy and human rights?

 $(10 \times 1 = 10)$

Part B

Answer any six questions.

Each question carries 5 marks.



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- 13. Discuss an open-well recharge system that can be easily implemented for groundwater conservation at your home.
- 14. Write a short essay on disaster management.
- 15. Distinguish between municipal solid waste and hazardous solid waste.
- 16. Write a short essay on moving drum type biogas plant.
- 17. Write a short essay on the various methods used to store intermittently generated renewable energy.
- 18. Write a short essay on different types of optical concentrators.
- 19. Explain the working of different types of solar drying systems.
- 20. Write a short essay on universality of human rights.
- 21. Write a short essay on the positive and negative aspects of science and technology in human rights.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Discuss different methods for controlling air pollution.
- 23. Write an essay on environmental laws and constitutional provisions to control pollutions in India.
- 24. Explain how the electricity production from tidal energy differ from traditional hydroelectricity.
- 25. Explain the principle, working, and uses of a photovoltaic system.

 $(2 \times 10 = 20)$

