

QP CODE: 21100039



Reg No

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Name

# B.Sc DEGREE (CBCS ) EXAMINATION, FEBRUARY 2021

### **Fifth Semester**

## Core Course - PH5CRT08 - ENVIRONMENTAL PHYSICS AND HUMAN RIGHTS

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

BE6B3A6B

Time: 3 Hours

Max. Marks: 60

#### Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Give any one example for the ground water pollution in Kerala.
- 2. Name any three strategies used in disaster management to reduce the impact of a natural disaster.
- 3. Give any three problems associated with improper management of municipal solid wastes.
- 4. Explain composting in municipal solid waste management.
- 5. What are the merits and demerits of non-renewable energy?
- 6. Give any two advantages of renewable energy.
- 7. Give any four methods commonly used to store intermittently generated renewable energy.
- 8. Define solar constant.
- 9. What is the advantage of a solar pond over a flat plate collector?
- 10. Name any four types of optical concentrators.
- 11. What is meant by universality of human rights?
- 12. What is the important duty of the National Human Rights Commission of India?

 $(10 \times 1 = 10)$ 

#### Part B

Answer any six questions.

Each question carries 5 marks.





- 13. Write a short essay on any three sources of air pollution.
- 14. What is the role of E-waste in environmental pollution?
- 15. Discuss the (i) wild life protection act (ii) forest conservation act.
- 16. Write a short essay on wind as a source of energy.
- 17. Write a short essay on ocean thermal energy conversion.
- 18. Distinguish between free-standing and attached type solar green houses.
- 19. Explain the principle of a solar cell.
- 20. Write a short essay on the international covenant on economic, social and cultural rights.
- 21. What is the role of UN secretariat in human rights protection. Also write a short note on the activities of the economic and social council.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Explain how remote sensing can be used to investigate earth's surface features.
- 23. What is meant by waste management? Discuss the various methods for effective waste minimization and resource conservation. What are the benefits of waste minimization?
- 24. Explain the production and storage of hydrogen as a source of energy.
- 25. Write an essay on different types of solar water heaters.

 $(2 \times 10 = 20)$ 

