

QP CODE: 20100039	Reg No	:	••••••
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BSc DEGREE (CBCS) EXAMINATION, FEBRUARY 2020

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

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Time: 3 Hours Maximum Marks :60

Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Discuss any two application of aerial photography in environmental monitoring.
- 2. What are the natural disasters that cause environmental pollution?
- 3. What is the importance of waste management?
- 4. Name the important steps associated with environmental impact assessment.
- 5. What is biomass energy?
- 6. How hydroelectricity is produced?
- 7. Name any three intermittently generated renewable energy sources.
- 8. What is the source of energy production in the Sun?
- 9. What is a solar pond?
- 10. What is the use of a solar cooker?
- 11. Article 21-A provides which right to children?
- 12. Name any two scientific advancements that adversely affect the basic human rights.

 $(10 \times 1 = 10)$



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Part B

Answer any six questions.

Each question carries 5 marks.

- 13. Write a short essay on the significance of rainwater harvesting and its uses in Kerala.
- 14. Discuss the sources of greenhouse gases and its impact on global warming.
- 15. Discuss the (i) air (prevention and control of pollution) act, and (ii) water (prevention and control of pollution) act.
- 16. Write a short essay on non-renewable energy sources.
- 17. Write a short essay on nuclear fusion as a source of energy.
- 18. Write a short essay on different types of solar water heaters.
- 19. Compare and contrast mirror strip reflector and Fresnel lens collector.
- 20. Write a short essay on the international covenant on civil and political rights.
- 21. Write short notes on (i) the committee on economic, social and cultural rights, (ii) the human rights committee.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Discuss different methods for controlling water pollution.
- 23. Discuss the various waste treatment and disposal methods to with minimal impact on environment.
- 24. Write an essay on geothermal energy conversion for practical uses. What are its merits and demerits.
- 25. Write an essay on photovoltaic sun-tracking system.

 $(2 \times 10 = 20)$

