QP CODE: 19102438

19102438

Reg No : .....

Name : .....

BSc DEGREE (CBCS) EXAMINATION, OCTOBER 2019

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

422F8FE5

Maximum Marks: 60 Time: 3 Hours

Part A

*Answer any **ten** questions.*

Each question carries 1 mark.

1. Explain how toxic chemicals cause water pollution.
2. Give any remedial measure to reduce the environmental pollution due to consumerism.
3. Explain how good practices can reduce waste.
4. What is the essence of the air (prevention and control of pollution) act?
5. What is meant by nuclear fission energy?
6. What is the role of the gear system in a wind turbine generator?
7. How hydrogen can be stored?
8. What is the disadvantage of convective type solar pond?
9. Distinguish between passive and active solar water heaters.
10. What is the use of an optical concentrator?
11. Define human rights.
12. What percentage of the total number of seats to be filled by direct election in every panchayat is reserved for women?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Briefly discuss how spectral reflectance is used in remote sensing for the investigating Earth's surface features.

14. Write a short essay on acid rain.

15. Write a short essay on environmental ethics.

16. What is meant by biomass energy? How biomass can be converted into useful energy?

17. Write a short essay on the various methods used to store intermittently generated renewable energy.

18. Write a short essay on Sun as a source of energy.

19. Write a short essay on photovoltaic sun tracking system.

20. Write a short essay on Universal declaration of human rights.

21. Write a short essay critically appraising the UN human rights regime.

(6×5=30)

Part C

Answer any two questions.

Each question carries 10 marks.

22. Discuss the importance of water harvesting and methods commonly adopted in Kerala for the same.

23. Discuss the various waste treatment and disposal methods to with minimal impact on environment.

24. Compare and contrast geothermal energy and ocean thermal energy as renewable energy sources.

25. Compare and contrast (i) solar dryer, and (ii) solar cooker.

(2×10=20)