



21101588

QP CODE: 21101588

Reg No :

Name :

B.Sc DEGREE (CBCS) SPECIAL SUPPLEMENTARY EXAMINATION, JULY 2021

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

2018 Admission Only

58BB08A7

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What are the advantages of an arch dam over a gravity dam?
2. Give any two examples for control at source approach to reduce air pollution.
3. Explain landfilling in solid waste management.
4. What is the essence of the forest conservation act?
5. What are non-renewable energy sources?
6. Give an example for the conversion of biomass energy to thermal energy.
7. Explain how energy can be extracted from hydrogen.
8. Solar radiation is emitted in which form.
9. What are the three major layers in a salt gradient type solar pond?
10. What are the essential components of a flat plate collector?
11. What does the second generation of human rights deals with?
12. Give any two scientific advancements that strengthened the basic human rights.

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. Write a short essay on remote sensing for environmental monitoring and assessment.
14. Discuss the chemical and biological treatments used to control water pollution.
15. Discuss any three methods for waste minimization.
16. With the help of a neat sketch discuss any one method to produce electricity from ocean waves. What are the advantages and disadvantages of wave energy?
17. Write a short essay on geothermal energy conversion.
18. Explain how a solar desalination system works.
19. Draw the equivalent circuit of a solar cell and discuss its V-I characteristics.
20. What are the roles of (i) UN human rights council, and (ii) the security council, in the protection of human rights?
21. Write a short essay on the directive principles of state policy envisaged in the Constitution of India.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Write an essay on the role of consumerism in the increase in waste production. Also discuss the role of E-waste as an emerging environmental threat.
23. Write an essay on the management of solid wastes, including municipal solid wastes and hazardous solid waste.
24. Give any four examples for intermittently generated renewable energy sources. What are the methods used to store intermittently generated renewable energy?
25. Write an essay on optical concentrators that are used for the efficient of solar energy for heat and electricity production.

(2×10=20)

