



QP CODE: 24803635



24803635

Reg No :

Name :

INTEGRATED MSC DEGREE EXAMINATION, JUNE 2024

Fifth Semester

INTEGRATED MSC BASIC SCIENCE-PHYSICS

CORE - IPH5CR01 - ENVIRONMENTAL PHYSICS & HUMAN RIGHTS

2021 Admission Onwards

ADA7B2A7

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Give any two manmade reasons that cause flooding.
2. Distinguish between degradable and non-degradable pollutants, with one example for each.
3. Give any four methods to control air pollution.
4. What are the biological processes used in municipal solid waste management?
5. What is the essence of the water (prevention and control of pollution) act?
6. Give any two advantages of renewable energy.
7. With the help of an example, explain how energy is released during a nuclear fusion reaction.
8. Define solar constant.
9. What are the two major types of photovoltaic sun tracking system?
10. Define human rights.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Discuss the principle of remote sensing.
12. Discuss how (i) domestic waste, (ii) sewage, and (iii) industrial waste cause water pollution.
13. Write a short essay on waste minimization and resource conservation.





14. With the help of a neat sketch, explain the production of electricity from wind energy.
15. Write a short essay on the various methods used to store intermittently generated renewable energy.
16. Write a short essay on the construction and working of passive and active solar water heaters.
17. With the help of a diagram, explain the working of a parabolic trough reflector.
18. What are the roles of (i) UN human rights council, and (ii) the security council, in the protection of human rights?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Discuss how natural disasters cause environmental pollution. Also discuss the role of disaster management in reducing its impact.
20. Write an essay on the management of solid wastes, including municipal solid wastes and hazardous solid waste.
21. Why nuclear fission is considered as a non-renewable energy? With a neat sketch explain how nuclear fission is used for the production of electricity.
22. Explain the working of (i) solar desalination system, and (ii) solar cooker.

(2×5=10 weightage)

