TB245241I

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024

2022 ADMISSIONS REGULAR

SEMESTER V - CORE COURSE (PHYSICS)

PH5B05B18 - Environmental Physics and Human Rights

Time : 3 Hours **Maximum Marks : 60**

Part A

I. Answer any Ten questions. Each question carries 1 marks **(10x1=10)**

1. Explain the 10 % energy rule of an ecosystem.
2. Explain briefly a water shed management system.
3. List the causes of floods and droughts.
4. Distinguish between endangered and endemic species.
5. Distinguish between degradable and nondegradable pollutants.
6. List the important contents of the Environment Protection Act.
7. Write a note on vermi-composting.
8. Express the relation for the power density of wave energy.
9. Define the term solar constant.
10. What is a parabolic reflector?
11. Draw the spectral distribution of solar energy.
12. State the importance of Article 21A.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. Explain the principles of sustainable development.
14. What do you mean by sustainable water management? Explain briefly.
15. Discuss the environmental effects of extracting mineral resources.
16. Discuss the threats to biodiversity.
17. Explain the different aspects of sound pollution.
18. Discuss the environmental impact assessment.
19. What is a fuel cell? Explain it's working.
20. Explain solar desalination and solar dryer.
21. Give an account of PV sun-tracking systems.

Part C

III. Answer any Two questions. Each question carries 10 marks **(2x10=20)**

22. Explain the use and over-exploitation of forest resources.
23. Explain the causes and control measures of waterpollution.
24. Explain in detail different types of optical concentrators.
25. Mention the basic human rights for prisoners . Describe the important enactments and rules regarding the rights of prisoners.