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S - 1655

Reg. No.		 	 	 	•••	 	
Nama :							

Fifth Semester B.Sc. Degree Examination, December 2023 First Degree Programme Under CBCSS

Physics

Open Course

PY 1551.4 — ENVIRONMENTAL PHYSICS

(2018 Admission Onwards)

Time: 3 Hours

Max. Marks: 80

PART - A

Answer all the questions. Answer should not exceed two sentences. Each question carries 1 mark.

- Write note on nuclear energy.
- 2. What is solar energy?
- 3. What is the thermodynamics of atmosphere?
- 4. Mention the factors governing the air pollution.
- 5. Define the term Particulate mutter.
- Define renewable sources of energy.
- 7. What is green house effect?
- 8. Write four facts about troposphere.

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- 9. What do you mean by sea breeze?
- 10. What does an air quality standard mean?

 $(10 \times 1 = 10 \text{ Marks})$

PART - B

Answer any eight questions. Answer should not exceed one small paragraph. Each question carries 2 marks.

- 11. Define hydro power.
- 12. Explain the dispersal mechanism of air pollutants.
- 13. Write note on bioenergy.
- 14. What are fuel cells?
- Briefly explain about wind energy.
- 16. Write note on the composition of air.
- 17. What is heat island effect?
- 18. What are the effects of green house gases on earth?
- Mention the factors governing the air pollution.
- 20. Mention in detail the water quality standards.
- 21. Explain any one waste disposal method.
- 22. What is gaseous and particulate matter?

 $(8 \times 2 = 16 \text{ Marks})$

PART - C

Answer any six questions. Each question carries 4 marks.

- 23. Explain in detail about forestry.
- 24. Differentiate between wet and dry deposition.

- Explain about the environmental degradation. 25
- Comment on the changing composition of local and global environment. 26
- Explain in detail the Gaussian plume model. 27.
- Explain the thermal and radioactive pollution 28
- Briefly explain the hydrostatic equilibrium. 29
- Explain about the elements of weather and climate in India.
- Illustrate the stratification and stability of atmosphere.

 $(6 \times 4 = 24 \text{ Marks})$

PART - D

Answer any two questions. Each question carries 15 marks.

- Demonstrate about deforestation, and degradation of soil.
- What is the nuclear radiation? Point out the health hazards and safety measures 33. of nuclear radiation.
- 34. With neat diagram briefly explain about the Remote sensing technique, its type and stages in remote sensing.
- What is a renewable source? Mention any five renewable sources of energy. Explain any one renewable source of energy with neat diagram. 35.

 $(2 \times 15 = 30 \text{ Marks})$