

K24U 0022

Name :

Sixth Semester B.Sc. Degree (C.B.C.S.S. - OBE - Regular/Supplementary/ Improvement) Examination, April 2024 (2019 to 2021 Admissions)

DISCIPLINE SPECIFIC ELECTIVE IN CHEMISTRY/POLYMER CHEMISTRY 6B17CHE/PCH-A: Environmental Chemistry

Time: 3 Hours

Max. Marks: 40

Instruction: Answer the questions in English only.

SECTION - A

Answer all questions. Each question carries 1 mark;

- Give any two types of water resources on earth in the Hydrosphere.
- Give two examples of greenhouse gases.
- 3. What is the expansion of COD?
- 4. What is the acceptable limit of total hardness in drinking water as per BIS $(4 \times 1 = 4)$ specification?

SECTION - B

Answer seven questions out of 10. Each carries 2 marks :

- Write a note on segments of the environment.
- How SO₂ formed in atmosphere ? Give two of its effects on human.
- 7. What is greenhouse effect? Give one of its consequences.
- 8. What is thermal pollution? Give one of its consequences.
- 9. What you mean by hardness of water? How it is formed?
- What is the ion exchange process in soil? Give one example.

P.T.O.

K24U 0022

- 11. Define municipal solid waste and give one example.
- 12. Define soil. How they formed?
- 13. What is the hazard of a nuclear reactor?
- 14. What are the biological effects of radiation?

 $(7 \times 2 = 14)$

SECTION - C

Answer four questions out of 6. Each carries 3 marks :

- 15. Write one source and adverse effect of Pb, Hg and Cd heavy metal poisoning.
- Write a brief note on Bhopal gas tragedy.
- 17. What is acid rain, how it formed and write one adverse effect.
- 18. Briefly discuss BOD and its experimental determination. 19. Discuss about source, effect and control of E waste.
- 20. Write a brief note on Fukushima nuclear disaster.

 $(4 \times 3 = 12)$

SECTION - D

Answer two questions out of 4. Each carries 5 marks :

- 21. Briefly discuss the following air pollution control devices with its principle-Cyclone separators, scrubbers and catalytic converters.
- 22. Discuss water pollution by pesticides, industrial effluents, agricultural discharge. Write a note on solid waste management.
- 24. What is noise pollution? Discuss about its source, effects and control. (2×5=10)