

**THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2020**

Environment and Water Management

EWM 3B 03—ENVIRONMENTAL CHEMISTRY—I

Time : Two Hours

Maximum : 60 Marks

Section A

Answer atleast seven questions.

Each question carries 2 marks.

All questions can be attended.

Overall Ceiling 14.

1. What are Aerosols ?
2. What is TLC ?
3. What is Capillary water ?
4. Define Beer Lamberts law.
5. Distinguish between persistent and non persistent pollutants.
6. What are primary nutrients ?
7. Define radioactive pollution.
8. Which are the major zones of the atmosphere ?
9. What are secondary pollutants ?
10. What are the effects of carbon monoxide on human beings ?

(7 × 2 = 14 marks)

Section B

Answer atleast five questions.

Each question carries 6 marks.

All questions can be attended.

Overall Ceiling 30.

11. Explain the various sources of soil pollutants.
12. What are the sources and sinks of carbon dioxide ?
13. Explain hydrological cycle.
14. Give an account of air quality standards.

Turn over

15. Briefly describe the ion exchange chromatography.
16. What are the different types of chromatography ?
17. Give an account of soil water.

(5 × 6 = 30 marks)

Section C

*Answer any two questions.
Each question carries 8 marks.*

18. What is global warming ? Explain the causes and effects of global warming.
19. Explain the different chemical reactions in the atmosphere.
20. Give an account of essential elements in soil.
21. Give an account of working principle and components of flame photometer.

(2 × 8 = 16 marks)