



K21P 0748

Reg. No. :

Name :

**II Semester M.Sc. Degree (CBSS – Reg./Suppl. (Including Mercy Chance)/
Imp.) Examination, April 2021
(2014 Admission Onwards)
CHEMISTRY**

CHE2E.01 : Environmental Chemistry and Disaster Management

Time : 3 Hours

Max. Marks : 60

SECTION – A

Answer **all** questions in **one** word or **one** sentence. **Each** question carries **one** mark.

1. What is an epidemic ?
2. What are greenhouse gases ?
3. Define a xenobiotic.
4. What is los angeles smog ?
5. Write any two uses of biofilms.
6. What is non-point source of pollution ?
7. Define black carbon.
8. What is GIPs ?

(8×1=8)

SECTION – B

Answer **any eight** questions. Answer may be **two** or **three** sentences. **Each** question carries **two** marks.

9. What is an aquifer ?
10. Define oxygen demanding waste.

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11. What are secondary air pollutant ?
12. What are water-borne diseases ?
13. Define biomagnification.
14. What is high volume air samples ?
15. Define nuclear fission.
16. Composition of storm water.
17. Define activated sludge.
18. What are air pollution indicators ?
19. What is photochemical smog ?
20. Define risk analysis.

(8×2=16)

SECTION – C

Short paragraph question. Answer **any four** questions. **Each** question carries **3** marks.

21. Describe the process of soil formation.
22. Illustrate the vertical stratification of atmosphere.
23. What is oxygen sag curve ?
24. Comment on risk management act and policy in India.
25. Classify the different pesticides based on their chemical properties.
26. What are the climatic factors that triggered Bhopal gas tragedy ?
27. What are tertiary waste water treatment methods ?
28. Describe any two detectors of gas chromatography.

(4×3=12)



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SECTION – D

Essay type questions. Answer **four** questions. **Each** question carries **6** marks.

29. A) Describe the process of preparedness, planning and development of risk reduction plan with reference to Tsunami.

OR

- B) Describe the causes and effect of eutrophication.

30. A) Explain the sources of pollution in soil and their control measures.

OR

- B) Explain the methods for control of air pollution in industries.

31. A) Describe the principle, instrumentation and environmental applications of AAS.

OR

- B) What are the sources and effects of radioactive pollution ?

32. A) Explain the climate changed induced disasters and mitigatory measures.

OR

- B) Describe the applications of remote sensing and GIS in disaster prediction and management.

(4×6=24)