K20P 0309

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (CBSS-Reg./Suppl./Imp.) Examination, April 2020
(2014 Admission Onwards)
CHEMISTRY
CHE2 E.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 thermal pollution ?
2. What are primary pollutants ?
3. Define a pollutant.
4. Mention the sources of radioactive pollution.
5. When did Environmental Protection Act came into force ?
6. What is acid rain ?
7. What is a chromatogram ?
8. Differentiate smoke and smog. **(8×1=8)**

SECTION – B

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

9. Write the principle of AAS.
10. What is Green House Effect ?
11. Differentiate natural and man-made disasters.
12. Mention the layers of atmosphere.
13. Differentiate disaster and hazard.
14. What are the effects of global warming ?
15. Mention the sources and impacts of radioactive pollution.
16. What are environmental impacts of a disaster ?
17. Write the principle of gas chromatography.
18. Write a note on photochemical smog.
19. Mention the impacts of climate change.
20. What is remote sensing ? Write the major steps in remote sensing. **(8×2=16)**

P.T.O.

SECTION – C

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

21. Mention the sources of SO_2 in the atmosphere and its impacts on plants.
22. What is ozone depletion ?
23. How dissolved oxygen in water is determined ?
24. What are pandemics ?
25. Describe the organizational structure for disaster management in India.
26. Write the principle and applications of X-ray fluorescence.
27. Describe any two air pollution accidents in India.
28. Mention the steps in disaster management cycle. **(4×3=12)**

SECTION – D

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

29. A) Discuss the process of vulnerability analysis.

    OR

    B) Describe the waste water treatment methods.

30. A) Mention the sources of soil pollution. Describe the pollution control methods.

    OR

    B) Describe the type and effects of urban disasters.

31. A) Mention the steps for formulating a disaster risk reduction plan.

    OR

    B) Describe the instrumentation of AAS. Mention its application in chemical analysis.

32. A) What is Green House Effect ? Mention the types and sources of green house gases in the atmosphere.

    OR

    B) Mention the water quality parameters. Describe the procedure for the determination of COD in water. **(4×6=24)**