

19. (a) Explain the general constituents of food.

Or

- (b) Write a brief note on any five effects of adulterants.

20. (a) Mention the additives used in cosmetics and explain its role.

Or

- (b) Discuss the regulatory test to be performed on a cosmetic product.

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

21. Describe the causes of air pollution and effects of air pollution on human health.
22. Discuss the physical and chemical water quality parameter.
23. Enumerate the geochemical impact of municipal solid waste and steel plant effluents.
24. Elaborate the types and test for adulterants.
25. Explain the standard methods employed for analysis of cosmetic colours.
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S.No. 6251

P 22 CHNME 1

(For candidates admitted from 2022–2023 onwards)

P.G. DEGREE EXAMINATION, NOVEMBER 2023

Chemistry — Non Major Elective

CHEMISTRY OF POLLUTION, FOOD AND COSMETICS

Time : Three hours

Maximum : 75 marks

SECTION A — (20 marks)

Answer ALL questions.

- I. (A) Choose the correct answer : ($5 \times 1 = 5$)
1. Which of the following gases are called Green houses gases?
- (a) Methane (b) Nitrogen
- (c) Carbondioxide (d) Both (a) and (c)
2. Identify the most polluted river among the following
- (a) Ganga (b) Chenab
- (c) Cauvery (d) Yamuna

3. Soil erosion can be prevented by _____
 - (a) Over grazing
 - (b) Removal of vegetation
 - (c) Afforestation
 - (d) Increasing bird population
4. Choose the compound used for preservation of food grains
 - (a) Vinegar
 - (b) Sodium chloride
 - (c) Potassium permanganate
 - (d) Sodium benzoate
5. Castor oil is used in lipsticks to _____
 - (a) Preventing shrinkage
 - (b) Building viscosity
 - (c) Dispersing colour
 - (d) Preventing bleeding

(B) Fill in the blanks : (5 × 1 = 5)
6. The earth atmosphere is made up of approximately 73% of _____.
7. Fluorosis is the health effects caused due to excess of _____ in drinking water.
8. _____ includes commercial and domestic wastes generated in municipal or notified areas in either solid or semi-solid form.

9. _____ contains 5-8% of acetic acid.
10. _____ are care substances used to enhance the appearance of the body.
- II. Answer the following questions : (5 × 2 = 10)
11. Differentiate primary pollutants from secondary pollutants.
12. Write any five sources of freshwater.
13. List the causes of soil erosion.
14. Outline the role of antioxidant.
15. Give the ingredients of face powder.

SECTION B — (5 × 5 = 25)

Answer ALL questions choosing either (a) or (b).

16. (a) Explain the anthropogenic source of air pollution.
Or
(b) Outline any five methods to prevent air pollution.
17. (a) Summarize the causes of ground water pollution.
Or
(b) List any five major water pollutants and their sources.
18. (a) Give a brief note on effects of soil pollution.
Or
(b) Delineate the causes and symptoms of lead poisoning.