

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Winter 2022 - 23 Examination

Semester:1
Subject Code: 303115101
Subject Name: Chemistry

Date: 25/01/2023
Time: 2:00 pm to 4:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Fill in the blanks, one word answer, MCQ-not more than (15) five in case of MCQ) (All are compulsory) (Each of one mark)

1. What is an undesirable change in physical, chemical, or biological characteristics of air, land, water, or soil due to the introduction of contaminants called?
 - a. Succession
 - b. Pollution
 - c. Conservation
 - d. Extinction
2. Soil colloidal particle shows the phenomena
 - a. Plasticity
 - b. Adhesion and cohesion
 - c. Flocculation
 - d. All of the above
3. Permanent hardness is caused due to
 - a. Magnesium carbonate
 - b. Magnesium sulphate
 - c. Magnesium bicarbonate
 - d. All of the above
4. Separating..... From stratosphere is transition zone called the stratopause?
5. The pollutants that decomposable and manageable in nature are termed as -
6. What is the impact of air pollution on plants?
 - a. Infection in the lungs
 - b. Reduce growth and yield of crops
 - c. Irritation in eyes
 - d. Deafening of ears
7. In water treatment plant, zeolite process is used to remove the _____ of water.
8. What is PM_{2.5} & PM₁₀

9. Dental cavity in children may be caused due to deficiency of which parameter in water?
10. The yellowness of the Taj Mahal is an effect of
11. Give full form of MPN
12. From which phenomenon is the term 'Greenhouse effect' derived?
 - a. That occurs in a boathouse
 - b. That occurs in a blue house
 - c. That occurs in a greenhouse
 - d. That occurs in a house
13. Ozone hole was caused by chlorofluorocarbons. (True/False)
14. The ozone layer is present in _____
15. CNG stands for

Q.2 Answer the following questions. (Attempt any three) (15)

- A) Write down Effects of Soil pollution.
- B) What do you understand by Global warming? Explain in Brief.
- C) Explain Sustainable Development
- D) Discuss primary and secondary air pollution

Q.3 A) What do you understand by oxidation & reduction reaction with example. (07)

B) Describe any two-soil structure in detail. (08)

OR

B) Discuss the effects & sources of Carbon monoxide, Particulate matter, Hydrocarbons (08)

Q.4 A) Find out the pH of a mixture formed by mixing the following two solutions. (07)

Solution A: Volume 300ml, pH=7

Solution B: Volume 700ml, pH=5

OR

A) Explain term Acidity of water sample. Describe the laboratory procedure for the measurement of it. (07)

B) Write down different types of Water parameters. (08)