

St. Mary's School, Dwarka
Holiday Homework
Class: XI
Subject: Chemistry
Week 4
Worksheet 4

Objective:

- Ø Revision of concepts
- Ø Application of the concepts to real life situations.
- Ø Skills to carry out research work and develop scientific aptitude

Instructions:

- *Neatly write all the answers in your science notebook.
- *Attempt the questions keeping in mind the weightage of each question.
- *Assignment 'Summer Holiday Homework' will be created on TEAMS. PDF of handwritten work should be uploaded on it.

- Q1. Green house effect leads to global warming. Which substances are responsible for green house effect? 1
- Q2. Acid rain is known to contain some acids. Name these acids and where from they come in rain? 1
- Q3. Ozone is a toxic gas and is a strong oxidising agent even then its presence in the stratosphere is very important. Explain what would happen if ozone from this region is completely removed? 2
- Q4. (a) Dissolved oxygen in water is very important for aquatic life. What processes are responsible for the reduction of dissolved oxygen in water?
(b) What could be the harmful effects of improper management of industrial and domestic solid waste in a city? 2
- Q5. During an educational trip, a student of botany saw a beautiful lake in a village. She collected many plants from that area. She noticed that villagers were washing clothes around the lake and at some places waste material from houses was destroying its beauty.
After few years, she visited the same lake again. She was surprised to find that the lake was covered with algae, stinking smell was coming out and its water had become unusable. Can you explain the reason for this condition of the lake? 2
- Q6. Green plants use carbon dioxide for photosynthesis and return oxygen to the atmosphere, even then carbon dioxide is considered to be responsible for green house effect. Explain why? 3

- Q7. For dry cleaning, in the place of tetrachloroethane, liquefied carbon dioxide with suitable detergent is an alternative solvent. What type of harm to the environment will be prevented by stopping use of tetrachloroethane? Will use of liquefied carbon dioxide with detergent be completely safe from the point of view of pollution? Explain. 3
- Q8. A farmer was using pesticides on his farm. He used the produce of his farm as food for rearing fishes. He was told that fishes were not fit for human consumption because large amount of pesticides had accumulated in the tissues of fishes. Explain how did this happen? 3
- Q9. Explain how does green house effect cause global warming. 3
- Q10. (a) From where does ozone come in the photochemical smog?
(b) How is ozone produced in stratosphere?
(c) Ozone is a gas heavier than air. Why does ozone layer not settle down near the earth?
(d) A person was using water supplied by Municipality. Due to shortage of water he started using underground water. He felt laxative effect. What could be the cause?
(e) Why does water covered with excessive algal growth become polluted? 5