

# JOY INTERNATIONAL COLLEGE KADUNA

## HOMEWORK

CLASS: SS2

SUBJECT: CHEMISTRY

S/N	REVISION TOPIC	CONTENT	OBJECTIVES
1	POLLUTION	Study: <ul style="list-style-type: none"><li>▪ Definition of pollution.</li><li>▪ Types of pollution, effects and control.</li></ul>	At the end, you should be able to: <ul style="list-style-type: none"><li>▪ Define pollution.</li><li>▪ State the types of pollution.</li><li>▪ Outline the effects and control measures of pollution.</li></ul>
2	WATER AND SOLUTIONS	<ul style="list-style-type: none"><li>▪ Sources and types of water.</li><li>▪ Hardness of water, types and methods of removal of hardness of water.</li></ul>	At the end of your Study, you should be able to: <ul style="list-style-type: none"><li>▪ State the sources and types of water.</li><li>▪ Define hardness of water.</li><li>▪ State the types of hardness of water and methods of removal of hardness of water.</li></ul>

### REVISION QUESTIONS FOR TOPIC 1

- Pollution of rivers by organic waste is harmful to aquatic organisms because of\_\_\_\_\_
  - Scarcity of food in the food
  - reduction in the amount of dissolved oxygen
  - Presence of heavy metal ions
  - increase in the level of sediments
- Which of the following gases makes up the largest percentage of the atmospheric air?
  - Carbon (iv) oxide
  - Hydrogen
  - Nitrogen
  - Oxygen
- The mixture of gases used in a photographer's flash tube is
  - Argon and Krypton

- B. Krypton and Xenon
  - C. Helium and Argon
  - D. Argon and Xenon
4. Which of the following substances is not a pollutant?
- A. Carbon (iv) oxide
  - B. Chlorofluorocarbon
  - C. Sulphur (iv) oxide
  - D. Hydrocarbon
5. which of the following is an impurity in air?
- A. CO<sub>2</sub>
  - B. O<sub>2</sub>
  - C. H<sub>2</sub>O
  - D.CO
6. A consequence of global warming is\_\_\_\_\_
- A. Water pollution
  - B. Flooding
  - C. Increased humidity
  - D. Air pollution
7. Which of the following materials is classified as non-biodegradable pollutant
- A.Paper
  - B. Plastics
  - C. Wood
  - D animal hide
8. Factors which can contribute to environmental pollution include the following except
- A. Chemical warfare
  - B. Overpopulation
  - C. Industrialization
  - D. Agricultural activities
9. Environmental pollution is worsened by the release from automobile exhausts of\_\_\_\_\_
- A. Steam
  - B. Smoke
  - C. Heavy metals
  - D. Water vapour
10. All the following are types of pollution except\_\_\_\_\_
- A. Air pollution
  - B. Land/Soil pollution
  - C. Water pollution
  - D. Domestic pollution

### ESSAY

- 1a. What is pollution?
- b. State 3 methods for controlling water pollution.
- 2a. State two effects of air pollution.
- b. Outline two soil pollutants.

## REVISION QUESTIONS FOR TOPIC 2

11. The method that can be used to convert hard water to soft water is
- Passage over heated charcoal
  - Aeration
  - Chlorination
  - The use of an ion exchange resin
12. Steam changes the colour of cobalt (ii) chloride from
- White to green
  - Blue to pink
  - Blue to white
  - White to red
13. The chemical used for coagulation in water purification is
- Sodium tetraoxo-sulphate (VI)
  - Copper tetraoxo-sulphate (VI)
  - Calcium tetraoxo-sulphate (VI)
  - Aluminium tetraoxo-sulphate (VI)
14. Pure water has a boiling point of \_\_\_\_\_
- 200°C
  - 100°C
  - 100°C
  - 0°C
15. Which of the following is a disadvantage of hard water?
- Hard water tastes better than soft water
  - It causes wastage of soap
  - Hard water can be supplied in lead pipes
  - It is hard
16. Permanent hardness of water can be removed by all the following except
- Distillation
  - Addition of washing soda
  - Boiling
  - Permutit method
17. Which of the following is not a natural source of water
- Rain water
  - Spring
  - Pipe-borne water
  - River
18. The two types of water are \_\_\_\_\_ & \_\_\_\_\_
- Permanent and temporary
  - Natural and artificial
  - Natural and treated
  - Permanent and natural
19. The method for the removal of hardness of water that is not economical is \_\_\_\_\_
- Addition of caustic soda

- B. Permutit method  
C. Addition of washing soda  
D. Distillation
20. Water turns white anhydrous copper II tetraoxosulphate (VI) to \_\_\_\_\_  
A. Red  
B. Blue  
C. Pink  
D. Green

**ESSAY**

- 1a. Define hard water.  
b. State three advantages of hardness of water.
- 2a. Differentiate between temporary and permanent hardness of water.  
b. Outline all the methods used for the purification of water for town supply.

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**Note:**

- Students should feel very free to interact with any of above teachers for assistance through phone calls, WhatsApp or email.
- Students should solve questions in their test and assignment exercise book.