3rd Term Worksheet [2018 – 19]

Subject – Chemistry

Class – VIII

Name : **Sec. :**

Chapter – 8
[Water]

Check Point:

[A] Answer the following: [127]

1. What is the primary source of water on earth?

Ans. _____

_____

2. List the different sources of water on earth.

Ans. _____

_____

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_____

3. What is the difference between surface water and groundwater.

Ans. _____

_____

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4. Explain any three uses of water in our day-to-day life.

Ans. _____

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5. Describe the anomalous behaviour of water.

Ans. _____

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[B] Write T for True and F for false statement: [133]

1. Sugar solution is an example of a true solution. _____
2. Colloidal solution does not transmit light. _____
3. Suspensions scatter the beam of light. _____
4. Particle size of solute is greater in suspensions than in colloids. _____

5. Anhydrous salts contain water in them that imparts colour to the salt. _____

6. Silica get packets used in bottles helps to absorb moisture from bottles. _____

[C] Answer the following questions: [134]

1. What is hard water? how is it different from soft water?

Ans. _____

2. Suggest methods to remove the hardness of water.

3. Distinguish between temporary and permanent hardness of water.

4. Write any one disadvantage of using hard water.

Keywords: **[135]**

Surface water: _____

Ground water: _____

Solute: _____

Solvent: _____

Solution: _____

Non-aqueous solutions: _____

_____

Aqueous solutions: _____

Crystals: _____

Crystallization: _____

_____

Hydrated salts: _____

_____

_____

Anhydrous salts: _____

_____

Hygroscopic substances: _____

_____

Hard water: _____

Soft water: _____

Temporary hardness: _____

_____

Permanent Hardness: _____

_____

_____

Exercise: **[136-137]**

[A] Multiple Choice Questions: [136]

(i) Which of the following is not the source of surface water?

(a) rivers (b) lake

(c) well (d) oceans

(ii) Which of the following sources of water seeps into the soil and collects above the impermeable rock layer?

(a) pond water (b) rain water

(c) groundwater (d) sea water

(iii) Which of the following is the correct order of metals in the reactivity series of metals?

(a) K>Na>Ca>Mg (b) K>Ca>Mg>Na

(c) Ca>Na>Mg>K (d) K>Na>Mg>Ca

(iv) Which of the following do not release hydrogen when reacts with water?

(a) calcium (b) magnesium

(c) solution (d) none of these

(v) In a salt solution, salt is _____.

(a) solute (b) solvent

(c) solution (d) none of these

(vi) Water is a compound, made up by combination of hydrogen and oxygen, in the ratio _____ by volume.

(a) 2 : 1 (b) 3 : 1

(c) 2 : 3 (d) none of these

(vii) Temporary hardness is due to the presence of dissolved bicarbonates of _____.

(a) calcium and magnesium (b) magnesium and potassium

(c) calcium and sodium (d) potassium and magnesium

[B] Write T for true and F for false statements.: [136]

1. We do not need water for domestic purposes. _____
2. About 50 per cent of earth's surface is covered with water. _____
3. Pure water is neutral as it does not change colour of the litmus paper. _____
4. Hydrated salts are used for absorbing moisture in the bottle. _____
5. Permanent hardness can be removed by simple boiling of water. _____

[C] Fill in the blanks: [137]

1. _____ showed that we can produce water by introducing an electric spark thought a mixture of two volumes of hydrogen and one volume of oxygen.
2. The solution in which no more solute can be dissolved at a given temperature is called _____.
3. Depending upon the size of the particles, solutions are classified as _____, colloidal solution, and _____.
4. At a given temperature, different substances dissolve to_____ extents in the same _____ of a given solvent.
5. When hydrated salts are heated, they lose their _____.

[D] Give reasons for the following: [137]

1. Water is a universal solvent.

2. Silica get packs are used in bottles.

[E Answer the following questions: [137]

1. What are the different uses of water?

Ans-

2. Describe any three chemical properties of water.

Ans-

3. Distinguish between suspensions and colloids.

Ans-

4. What do you mean by supersaturated solution?

Ans-

5. What is water of crystallization? How can we make crystals of copper sulphate?

Ans-

6. Describe the effect of heat on hydrated salts with the help of a suitable example.

Ans-

7. What is the difference between temporary hardness and permanent hardness? How can we treat them?

Ans- _____

8. Write any two disadvantages of using hard water.

Ans- _____

[F] Complete the given equations: [137]

1. $\underset{\text{Hot magnesium}}{Mg} + \underset{\text{Steam}}{H_2O} \longrightarrow$ _____

2. $\underset{\text{Blue crystals}}{CuSO_4.5H_2O} \underset{\text{Cool}}{\overset{\text{Heat}}{\rightleftharpoons}}$ _____

3. $MgSO_4 + Na_2CO_3 \rightarrow$ _____

4. $CaSO_4 + Na_2CO_3 \rightarrow$ _____

Chapter – 9
[Carbon and its Compounds]

Check Point:

[A] Answer the following questions: [139]

1. What are the various forms of carbon that are present around us?

Ans. _____

2. Name two naturally occurring forms of carbon.

Ans. _____

3. What are organic compounds? How do these differ from inorganic compounds?

Ans. _____

[B] Answer the following questions: [144-145]

1. What are the various forms of carbon that are present around us?

Ans. _____

2. Name two naturally occurring forms of carbon.

Ans. _____

3. What is allotropy?

Ans. _____

4. Explain why diamond is hard in light?

Ans. _____

5. What is carbon cycle? Draw a neat, well-labelled digram to show it.

Ans. _____

6. Why is graphite used as a solid lubricant?

Ans. _____

7. What makes graphite suitable for use as an electrode?

Ans. _____

8. Sate two important uses of each diamond and graphite.

Ans. _____

9. Why the name fullerene has been given to the allotrope containing 60 atoms joined in its molecule?

Ans. _____

10. State some possible uses of fullerenes in future.

Ans. _____

[C] Answer the following questions: [147]

1. How is the structure of amorphous carbon different from those of crystalline forms of carbon?

Ans. _____

2. Give the names of different amorphous forms of carbon.

Ans.

3. State the uses of

a. Charcoal:

b. Animal charcoal:

c. Coke:

4. An organic substance is completely burnt in the absence of air. Which one of the following substances is likely to be formed? (a) Graphite
(b) Amorphous carbon

Ans.

5. What is gas carbon?

[D] Answer the following questions: [153]

1. Discuss the poisonous nature of carbon monoxide.

Ans. _____

_____

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2. Write one reducing property of carbon monoxide.

Ans. _____

_____

_____

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_____

3. Name the scheme launched by Government of India for promotion of LPG in rural areas.

Ans. _____

_____

Keywords: **[153]**

Allotropy: _____

_____

Asphyxia: _____

_____

Hydrocarbon: _____

Exercise: **[154-155]**

[A] Multiple Choice Questions: [154]

(i) The valency of carbon is

(a) 1 (b) 2

(c) 3 (d) 4

(ii) The hardest allotrope of carbon is

(a) diamond (b) graphite

(c) coke (d) gas carbon

(iii) The graphite on heating at 700°C in presence of oxygen converts into

(a) carbon dioxide (b) carbon monoxide

(c) carbonyl chloride (d) none of these

(iv) Wood charcoal is used

(a) in gas mask (b) as a pesticides

(c) in making jewellery (d) in cutting diamonds

(v) The compounds which are rich in carbon on burning produce

(a) lampblack (b) petrol

(c) oxygen (d) none of these

(vi) When carbon monoxide reacts with haemoglobin, it decreases the _____ carrying capacity of the blood.

(a) carbon dioxide (b) water

(c) oxygen (d) nitrogen

[B] Fill in the blanks: [154]

1. The allotrope of carbon used for cutting glass is _____.
2. The soft crystalline form of carbon is _____.
3. Lampblack, charcoal and coal are _____ forms of carbon.
4. Charcoal is a good _____ agent.
5. Carbon dioxide turns _____ milky.
6. _____ is the condition caused due to lack of oxygen and excess of carbon dioxide in the blood.

[C] Match the column A with column B: [154]

	Column A		Column B
1.	Diamond, Graphite	a.	carbon monoxide poisoning
2.	Asphyxia	b.	amorphous carbon
3.	Charcoal, soot	c.	by extreme heating of graphite
4.	Fullerene	d.	crystalline carbon

[D] Answer in one or two words: [155]

1. An element present in all living things.

_____

2. Hardest substance used in jewellery.

_____

3. A gas that turns limewater milky.

_____

4. A clean fuel.

_____

5. Poisonous gas present in vehicular exhaust.

_____

[E] Answer the following questions: [155]

1. What is allotropy? Write important allotropes of carbon.

Ans. _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

2. What are the important uses of charcoal?

Ans. _____

_____

_____

_____

_____

3. Why do we use coke not coal for making iron?

Ans.

4. Why is diamond rarer in nature than graphite?

Ans.

5. Demonstrate the process of preparation of carbon dioxide in laboratory.

Ans.

6. Describe the conditions for burning of fuels that lead to formation of carbon monoxide.

Ans.

7. Write any four uses of carbon monoxide.

Ans.

8. Why carbon monoxide is known as poisonous gas?

Ans.

9. Explain the following :

a. Carbon monoxide acts as a reducing agent for extraction of metals.

b. Combustion of traditional fuels have harmful effects on health and environment.

c. Government initiative for promotion of LPG in rural areas.