



An ISO 9001:2015 Certified Organization

**GLOBAL COMPETITION SOCIETY**

**Duration : 60 Min.**

**Total Ques. : 50**

**Paper Type : S 1**

**10  
CLASS**

## SAMPLE Q.P : GLOBAL SCIENCE OLYMPIAD (GSO)

1. The Actual Question Paper Contains 50 Questions.
2. Each question carry an equal marks of 2 against 50 question
3. The Duration of the Test Paper is 60 Minutes

1. **A small amount of calcium oxide (quick lime) is taken in a beaker. Water is slowly added to this. Which of the following observations is /are correct about this activity ?**

- (i) The beaker becomes hot because it is an endothermic reaction
  - (ii) A clear solution is obtained at the top after the reaction gets over.
  - (iii) This reaction is a combination reaction in which quick lime (CaO) is converted in to slaked lime, Ca(OH)<sub>2</sub>.
- (A) (i), (ii) and (iii)      (B) (ii) and (iii) only  
(C) (iii) only              (D) (i) and (iii) only  
(E) None of these

2. **A student wrote three statement about rancidity :**

- (i) When fats and oils are reduced, they become rancid.
  - (ii) Chips manufacturers usually flush chips bags with oxygen to prevent rancidity.
  - (iii) Rancidity is prevented by adding substances called antioxidants to food. Choose the correct statement(s).
- (A) (i) only  
(B) (ii) and (iii) only  
(C) (iii) only  
(D) All of these  
(E) None of these

3. **Read the given statement and mark the correct option.**

**Statement 1 : When a mixture of hydrogen and chlorine is placed in sunlight , hydrogen chloride is formed.**

**Statement 2 : It is an example of displacement**

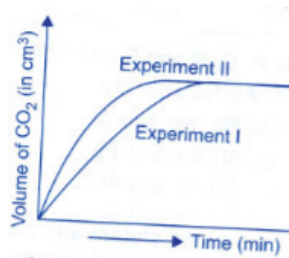
**reaction.**

- (A) Both statement 1 and 2 are true and statement 2 is correct explanation of statement 1.
- (B) Both statement 1 and 2 are true but statement 2 in the not correct explanation of statement 1.
- (C) Statement 1 is true but statement 2 is false.
- (D) Both statement 1 and 2 are false.
- (E) None of these

4. **Marble chips or calcium carbonate react with hydrochloric acid as :**



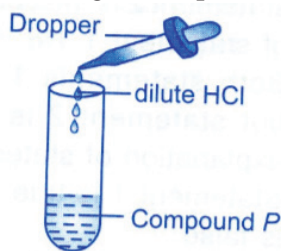
**The reaction is carried out twice and following graphs were obtained :**



**Which of the following statement is incorrect ?**

- (A) Reaction is faster in experiment II.
- (B) Marble chips taken in experiment II are smaller in size then the marble chips taken in experiment I.
- (C) Same amount of marble chips and hydrochloric acid is used for both the experiments.
- (D) Both B & C
- (E) None of these

5. Choose the incorrect statement among the following.
- (A) Tamarind, tomato and sour milk are the natural sources of tartaric acid, citric acid and lactic acid respectively.
- (B) The atmosphere of Venus is made up of thick white and yellowish clouds of sulphuric acid.
- (C) Bleaching power is used for disinfecting drinking water.
- (D) During electrolysis of brine,  $\text{Cl}_2$  gas is given off at the anode and  $\text{H}_2$  gas at the cathode.
- (E) None of these
6. Observe the given experimental set-up carefully.



Which of the following could be the possible observation and inference drawn ?

- (A) The solution becomes blue-green due to formation of copper oxide, P is acidic.
- (B) The solution becomes blue-green due to formation of copper chloride, P is basic.
- (C) The solution becomes white due to formation of calcium hydroxide, P is basic.
- (D) The solution becomes white due to formation of calcium oxide, P is acidic.
- (E) None of these
7. Few statements regarding the properties of bases are given below. Mark the correct statement ?
- (i) Sodium hydroxide and potassium hydroxide are soluble in water.
- (ii) Calcium hydroxide and magnesium hydroxide are partially soluble in water.
- (iii) All metallic hydroxides react with acids to form their respective metallic salts.
- (iv) Metallic oxides are acidic oxides hence they react with acids to form salts.
- (A) (i), (ii) and (iv) only      (B) (i), (iii) and (iv) only
- (C) (i), (ii) and (iii) only      (D) (ii) and (iii) only
- (E) None of these
8. Baking powder is a mixture of X and a mild edible acid such as Y. When it is heated, Z is produced which makes bread and cake soft and spongy. X, Y and Z are respectively
- (A) Sodium hydrogen carbonate, tartaric acid,  $\text{CO}_2$
- (B) Sodium carbonate, acetic acid,  $\text{H}_2$

- (C) Sodium hydroxide, acetic acid,  $\text{H}_2$
- (D) Sodium chloride, oxalic acid,  $\text{H}_2$
- (E) None of these

9. Fill in the blanks by selecting the option with the correct words. The process of removing impurities from impure metal to obtain pure metal is known as \_\_\_\_\_ of metal. The most widely used method for refining is \_\_\_\_\_. In this method, the impure metal is taken as \_\_\_\_\_ and the pure is taken as \_\_\_\_\_.
- (A) Refining, electrolytic refining, anode, cathode
- (B) Calcination, electrolysis, cathode, anode
- (C) Refining, smelting, cathode, anode
- (D) Smelting, calcination, anode, cathode
- (E) None of these
10. Which of the following statements are incorrect ?
- (i) Reactivity of Al decreases if it is dipped in nitric acid.
- (ii) Carbon can reduce the oxides of Na and Mg.
- (iii) NaCl is a good conductor of electricity in solid state.
- (iv) Metals like K, Ca and Mg are always found in free state in nature.
- (A) (i), (ii) and (iii) only
- (B) (ii), (iii) and (iv) only
- (C) (i) and (iii) only
- (D) (ii) and (iii) only
- (E) None of these
11. Read the given statement and mark the correct option.
- Statement 1 : Articles made of aluminium do not corrode even though it is an active metal.**
- Statement 2 : Aluminium reacts with air to form a layer of oxide due to which it does not react further.**
- (A) Both statement 1 and 2 are true and statement 2 is correct explanation of statement 1.
- (B) Both statement 1 and 2 are true but statement 2 is not correct explanation of statement 1.
- (C) Statement 1 is true but statement 2 is false.
- (D) Both statement 1 and 2 are false.
- (E) None of these