

Chemical Reactions and Equations – Class X Paper Set 1

1. What type of reaction is $C(s)+O_2(g)\rightarrow CO_2(g)$
 - (a) Decomposition
 - (b) Displacement
 - (c) Combination
 - (d) Double displacement
2. Which of the following is a balanced equation?
 - (a) $H_2+O_2\rightarrow H_2O$
 - (b) $2H_2+O_2\rightarrow 2H_2O$
 - (c) $H_2+O_2\rightarrow H_2O_2$
 - (d) $2H_2+2O_2\rightarrow 2H_2O$
3. What product is formed when magnesium burns in air?
 - (a) Magnesium hydroxide
 - (b) Magnesium oxide
 - (c) Magnesium chloride
 - (d) Magnesium sulphate
4. Which reaction type absorbs energy?
 - (a) Exothermic
 - (b) Endothermic
 - (c) Combination
 - (d) Displacement
5. In the reaction $Zn(s)+CuSO_4(aq)\rightarrow ZnSO_4(aq)+Cu(s)$, which element is displaced?
 - (a) Zinc
 - (b) Copper
 - (c) Sulphur
 - (d) Oxygen
6. What is the color change when iron is dipped into copper sulfate solution?
 - (a) Blue to green
 - (b) Green to blue
 - (c) Blue to brown
 - (d) No color change
7. Which gas is evolved when dilute hydrochloric acid reacts with zinc?
 - (a) Oxygen
 - (b) Carbon dioxide
 - (c) Nitrogen
 - (d) Hydrogen

8. What happens in an oxidation reaction?

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|----------------------|-----------------------|
| (a) Gain of oxygen | (b) Loss of oxygen |
| (c) Gain of hydrogen | (d) Loss of electrons |

9. Which of these reactions represents corrosion?

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| (a) Rusting of iron | (b) Decomposition of water |
| (c) Respiration | (d) Formation of salt from acid and base |

10. What substance prevents oxidation of food items?

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| (a) Salt | (b) Water |
| (c) Antioxidant | (d) Acid |

Answers for Paper Set 1:

1. (c), 2. (b), 3. (b), 4. (b), 5. (b), 6. (c), 7. (d), 8. (a), 9. (a), 10. (c)