

Summary

Test Name:	CBSE/10/Chemistry/Chemical reactions and equations/ Types of reactions
Description:	Based on previous years' Board papers
CreatedBy:	Uplift Academy
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Total time:	No Time Limit
No Of Questions:	10
Negative marking:	0
Guidelines:	Attempt this test to check your concepts

Questions

1. A compound X which is a green coloured solid gets oxidised to a reddish brown solid in the presence of air. X on heating gives brown coloured solid Y and two pungent smelling gases A and B.

Identify X, Y, A, B and the type of reaction

- CuSO_4 , CuO , SO_2 , SO_3 , decomposition
- FeSO_4 , Fe , SO_2 , SO_3 , decomposition
- FeSO_4 , Fe_2O_3 , SO_2 , SO_3 decomposition
- FeSO_4 , Fe_2O_3 , SO_3 , SO_2 decomposition

2. Which of the following is an exothermic process:

i) Reaction of water with quick lime

ii) Dilution of an acid

iii) Evaporation of water

iv) Sublimation of camphor(crystals)

- i) and ii)
- ii) and iii)
- iii) and iv)
- i) and iv)

3. When an apple is cut and kept for a long time, it turns brown because

- Fe present in it changes to Fe^{3+}
- Fe present in it changes to Fe^{2+}
- FeO is formed
- Fe^{3+} gets reduced to Fe^{2+}

4. Rusting of iron and respiration are :

- Both are exothermic processes
- Both are endothermic processes
- Rusting is exothermic, respiration is endothermic
- Rusting is endothermic, respiration is exothermic

5. Which of the following is true about N_2 gas:

i) it supports combustion

ii) it is lighter than air

iii) it is insoluble in water

iv) it is collected by downward displacement of water

- i),ii) and iv)
- i), ii) and iii)
- ii),iii) and iv)
- i),ii),iii) and iv)

6. During Diwali, the red colored flame produced on bursting fire crackers is due to:

- Ba^+ salt

b. Sr^{2+} salt

c. Na^+ salt

d. K^+ salt

7. Removal of H is :

a. Oxidation

b. Reduction

c. Dehydration

d. Hydrogenation

8. Water breaks down in the presence of electricity into H_2 and O_2 this process is called :

a. electrolysis

b. displacement

c. combination

d. photochemical reaction

9. Reduction is a process in which:

a. Loss of electrons takes place

b. Gain of electrons takes place

c. O_2 is added

d. H_2 is removed

10. Redox reaction involves:

a. Oxidation

b. Reduction

c. Both a) and b)

d. Neither a) nor b)

Answer Key:

1. A compound X which is a green coloured solid gets oxidised to a reddish brown solid in the presence of air. X on heating gives brown coloured solid Y and two pungent smelling gases A and B.

Identify X, Y, A, B and the type of reaction

Correct Answer(s):

c.

FeSO₄, Fe₂O₃, SO₂, SO₃ decomposition

Explanation:

FeSO₄ which is green in colour, undergoes oxidation in the presence of atmospheric gases to give Fe₂O₃, SO₂, SO₃(decomposition)

2. Which of the following is an exothermic process:

- i) Reaction of water with quick lime
- ii) Dilution of an acid
- iii) Evaporation of water
- iv) Sublimation of camphor(crystals)

Correct Answer(s):

a.

i) and ii)

Explanation:

iii) and iv) are endothermic reactions

3. When an apple is cut and kept for a long time, it turns brown because

Correct Answer(s):

a.

Fe present in it changes to Fe³⁺

Explanation:

Fe undergoes oxidation to form Fe³⁺

4. Rusting of iron and respiration are :

Correct Answer(s):

a.

Both are exothermic processes

Explanation:

Heat is evolved in both the reactions

5. Which of the following is true about N_2 gas:

- i) it supports combustion
- ii) it is lighter than air
- iii) it is insoluble in water
- iv) it is collected by downward displacement of water

Correct Answer(s):

d.
i),ii,iii) and iv)

Explanation:

Characteristics of N_2

6. During Diwali, the red colored flame produced on bursting fire crackers is due to:

Correct Answer(s):

b.
 Sr^{2+} salt

Explanation:

Sr burns with red flame(flame test)

7. Removal of H is :

Correct Answer(s):

a.
Oxidation

Explanation:

Addition of Oxygen and removal of hydrogen is oxidation

8. Water breaks down in the presence of electricity into H_2 and O_2 this process is called :

Correct Answer(s):

a.

electrolysis

Explanation:

Electro= electricity

lysis = breaking

9. Reduction is a process in which:

Correct Answer(s):

b.

Gain of electrons takes place

Explanation:

All other options involve oxidation

10. Redox reaction involves:

Correct Answer(s):

c.

Both a) and b)

Explanation:

as the name implies redox:

red=reduction

ox=oxidation
