



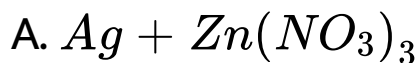
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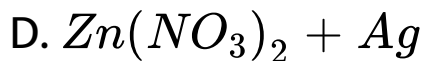
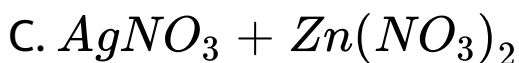
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SAMPLE PAPER 5

Section A

1. Zinc and silver nitrate reacts to form:





Answer: D



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2. The table below gives the pH values of some substances in two columns

Substance	pH value
(I) Brine	(a) 10
(II) Gastric Juices	(b) 7
(III) Milk of Magnesia	(c) 13
(IV) Aqueous sodium Hydroxide	(d) 1

The correct matching of substances and their pH value is

A. I-c,II-b,III-a,IV-d

B. I-b,II-a:II-c,IV-d

C. I-d,II-b,III-a,IV-c

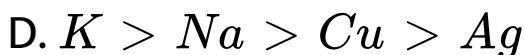
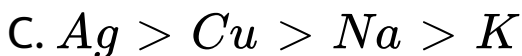
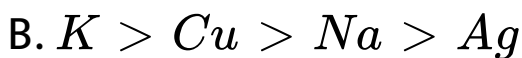
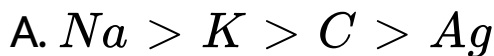
D. I-b,II-d,III-a,IV-c

Answer: D



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3. Arrange the following metals in the decreasing order to reactivity Na, K, Cu and Ag.

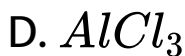
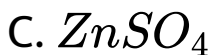
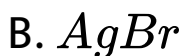


Answer: D



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4. Which of the following is decomposed by sunlight?



Answer: B



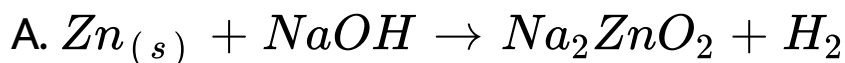
5. The strength of a basic solution can be increased by

- A. by adding H^+ ions
- B. by decreasing OH^- ions
- C. by adding OH ions
- D. by reducing H^+ ions

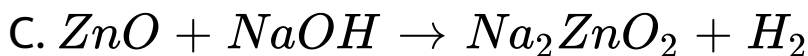
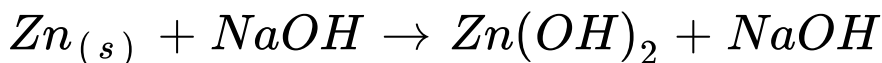
Answer: C



6. A small amount of sodium hydroxide solution is added to a small pieces of granulated zinc metal in a test tube. Which of the following represent correct equation?



B.



Answer: A



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7. Which of the following is represent in a chemical change?

A. Remain constant in temperature

B. Change in colour

C. Evolution of a gas

D. Both b and c

Answer: D



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8. What is aqua regia?

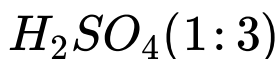
A. It is mixture of con. HNO_3 and H_2SO_4

(1:3)

B. It is a mixture of HCl and HNO_3 (3: 1)

C. It is a mixture of HCl and H_2SO_4 (3: 1)

D. It is a mixture of HNO_3 and



Answer: B



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9. Acid rain water flowing into a river affects aquatic life by:

A. contaminating the water

B. lowering the pH of water

C. increase the pH of water

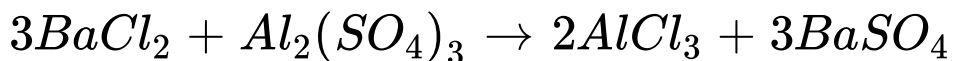
D. deposit harmful metals into water bodies

Answer: B



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10. What type of a chemical reaction is represented by the following equation:



A. Displacement Reaction

B. Decomposition Reaction

C. Precipitation Reaction

D. Combustion Reaction

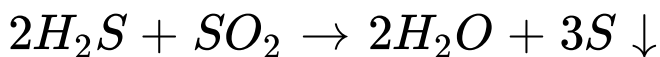
Answer: C



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Section B

1. Name the oxidising and reducing agent in the following reaction:



A. H_2S : Oxidising agent SO_2 : reducing agent

B. H_2S : Oxidising agent SO_2 : neither reduced nor oxidised

C. H_2S : Oxidising agent, SO_2 : oxidising agent

D. It is a non redox reaction.

Answer: C



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2. Equal volumes of hydrochloric acid and potassium hydroxide solutions of same concentration are mixed and the pH of the resulting solution is analysed with pH strip.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Red							Green						Blue

What is the colour obtained in the reacting mentioned in above passage?

A. Yellow

B. Red

C. Yellowish green

D. Blue

Answer: C

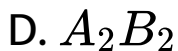
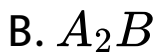


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3. During the formation of a compound between two atoms A and B. Atom A loses two electrons while atom B gains one electrons.



Choose the option with correct formula of the compound formed



Answer: C



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4. Which of the metals react with dilute Nitric acid and evolve hydrogen gas?

(I)P (II) Mg(III)Mn(IV)Zn

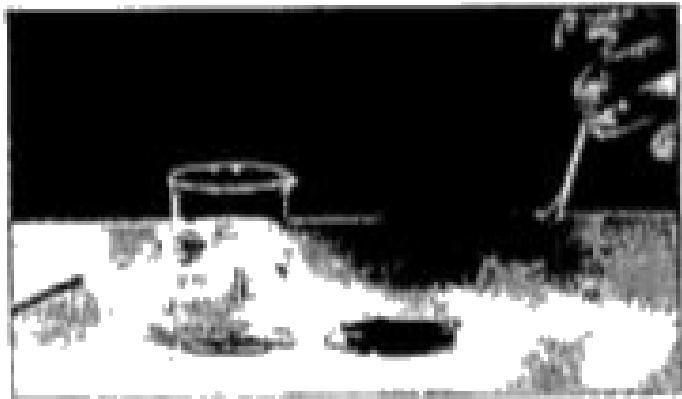
- A. Both I and II
- B. Both II and III
- C. Both I and IV
- D. Both II and IV

Answer: B



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5. A small amount of a substance X is taken in a beaker and dilute hydrochloric acid is added to it slowly while stirring. The colour of the solution turns blue green.



Select the correct statements:

I. The substance X is copper oxide

II. The substance X is iron oxide

III. The blue green colour of the solution is due to the formation of copper chloride.

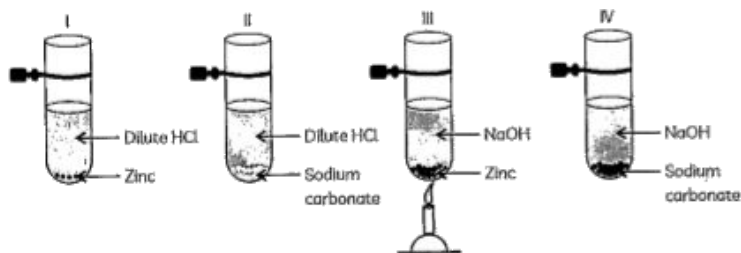
IV. The blue green colour of the solution is due to the formation of copper sulphate.

- A. Both I and II
- B. Both II and III
- C. Both I and IV
- D. Both II and IV

Answer: A



6. Deeksha performed an experiment using zinc granules and sodium carbonate with sodium hydroxide and hydrochloric acid under different conditions as shown here.



What will be the observation recorded by Deksha?

A. H_2 gas is evolved in (R)

B. All the setup becomes heated, as it is exothermic reaction

C. Basic salt is formed in condition (Q)

D. No gas is evolved in condition.

Answer: D



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7. Assertion(A): The acids must always be added slowly to water with constant stirring.

Reason (R):Dissolving an acid or a base in water in highly exothermic reaction.

A. Both A and R are true, and R is the correct explanation of A.

B. Both A and R are true, but R is not the correct explanation of A.

C. A is true but R is false.

D. A is false but R is true.

Answer: A



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8. Assertion A: When hydrogen and nitrogen combines, ammonia is formed.

Reason(R): It is an exothermic reaction.

A. Both A and R are true, and R is the correct explanation of A.

B. Both A and R are true, but R is not the correct explanation of A.

C. A is true but R is false.

D. A is false but R is true.

Answer: B



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9. Select the incorrect statements

(I) Almost all metals combine with oxygen to form metal oxides.

II. All metal oxides are soluble in water.

III. All metal oxides are basic in nature.

IV. Some metal oxides dissolve in water to form alkalis.

A. Only I

B. Only II

C. Both II and III

D. Both II and IV

Answer: C

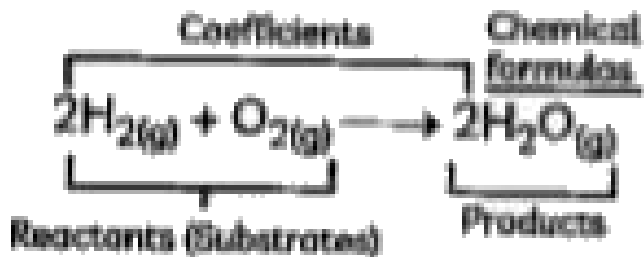


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Section C

1. Case 1: A chemical equation is the representation of chemical change in terms of symbols and formulae of reactants and products. The substances which react are written on the left hand side of the arrow and are termed as reactants while the substances produced as result of reaction are called products and are written on the right hand side of the arrow. The arrowhead shows the direction of the reaction. A chemical equation in the which the number of atoms of each element on reactant side is equal to that on

the product side is said to be balanced.



Which of the following statement is incorrect regarding the significance of the chemical equations?

- A. A chemical equation provides both qualitative and quantitative details of a chemical change.

B. A chemical equation tells about the names of various reactants and products.

C. A chemical equation provides information regarding the relative number of molecules (or atoms) of reactants and products, involved in the reaction.

D. A chemical equation provides the information about the density of

product formed.

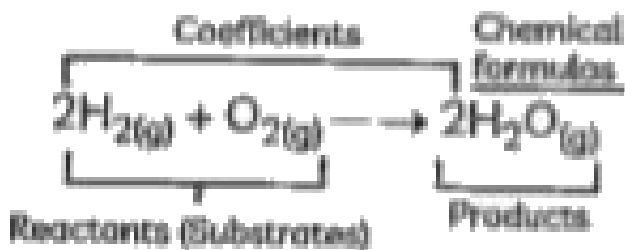
Answer: D



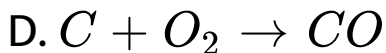
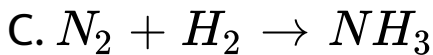
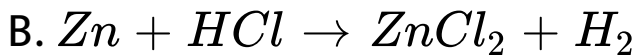
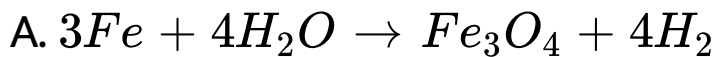
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2. Case 1: A chemical equation is the representation of chemical change in terms of symbols and formulae of reactants and products. The substances which react are written on the left hand side of the arrow and are termed as reactants while the substances

produced as result of reaction are called products and are written on the right hand side of the arrow. The arrowhead shows the direction of the reaction. A chemical equation in the which the number of atoms of each element on reactant side is equal to that on the product side is said to be balanced.



Among the following the correct balanced equation is



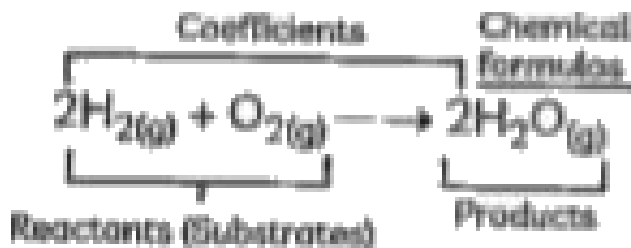
Answer: A



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3. Case 1: A chemical equation is the representation of chemical change in terms of symbols and formulae of reactants and

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In which of the following equation the mass is not same on both the sides?

- A. Word equation
- B. Skeletal equation
- C. Balanced equation
- D. Both a and b

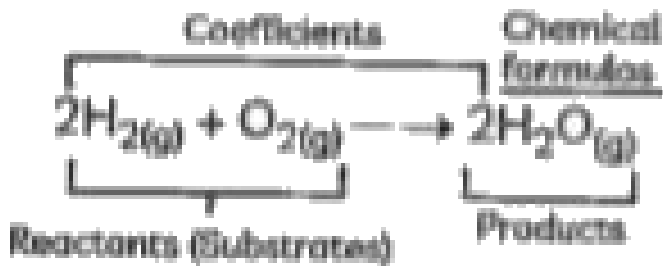
Answer: D



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4. Case 1: A chemical equation is the representation of chemical change in terms of symbols and formulae of reactants and products. The substances which react are written on the left hand side of the arrow and are termed as reactants while the substances produced as result of reaction are called products and are written on the right hand side of the arrow. The arrowhead shows the direction of the reaction. A chemical equation in the which the number of atoms of each element on reactant side is equal to that on

the product side is said to be balanced.



How is input of energy represented in chemical equation ?

- A. delta (Δ)
- B. mu (μ)
- C. hv
- D. Both a and c

Answer: D



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