



FUSCO'S SCHOOL (ICSE)

Indiranagar, Bangalore

ANNUAL EXAMINATION 2016-17

Subject: Chemistry

Class : VIII

Marks : 80

I. Fill in the blanks :

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- During solidification can freezing the inter particle attraction _____
- The temperature _____ is called absolute zero.
- All the temperature on the Kelvin scale are in _____
- _____ is a group of atoms of elements having charge on it.
- Industrially hydrogen can be prepared by _____ process.
- The phenomenon of adsorbing large volume of hydrogen is called _____
- Hydrogen burns with _____ flame _____ sound
- Formula for potassium chlorate _____
- Total quantity of mass and energy together _____ through out in a chemical reaction.
- The three states of matter are _____

II. Define the following :

8

- Valency
- Law of conservation of mass
- Hydrogenation
- Boyle's law

III. Give reasons for the following:

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- On heating a liquid at its boiling point heat energy is converted to potential energy.
- On heating a sublimable solid the inter particle attraction is overcome.
- Nitric acid in the dilute form is not used for the preparation of hydrogen from metals.
- Gases unlike solids and liquids exert pressure in all directions.

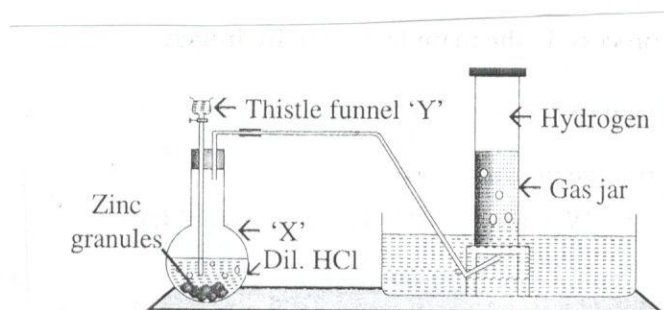
IV. Write the molecular formula for the following: (using valences)

6

- Lead monoxide
- Iron (II) sulphide
- Ammonium hydroxide
- Potassium zincate
- Calcium bisulphate

V. The diagram represents the preparation and collection of hydrogen by a standard laboratory method

6



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1. State what difference will be seen if pure zinc is added in the distillation flask 'x' instead of granulated zinc
 2. Name a solution which absorbs the impurity – H₂S
 3. State why hydrogen is collected after all the air in the apparatus is allowed to escape
 4. Name a gas other than hydrogen collected by the same method.
 5. Write down the equation for that reaction

Section – II 40Marks

Question –II

- I. Give balanced equations for the following conversion: 6
 - a. Sodium zincate from zinc
 - b. Sodium zincate from zinc
 - c. Sodium aluminate from aluminium.

- II. State the conditions and give balance equation for the conversion of: 4
 - a. Coke to water gas
 - b. Water gas to hydrogen

Question – III

- I. Write balanced equation for the following words equations. 4
 - a. Iron + hydrochloric acid \longrightarrow Iron (II) chloride + water
 - b. Calcium + water \longrightarrow calcium hydroxide + Hydrogen
 - c. Water $\xrightarrow[\text{Current}]{\text{electric}}$ hydrogen + oxygen.
 - d. Nitrogen dioxide + Water + oxygen \longrightarrow Nitric acid

II. Answer the following :

1. Derive perfect gas equation 4
2. How do solids , liquids and gases differ with reference to inter – particle space and inter – particle attraction and collision. 4
3. Stat the similarities between hydrogen and halogen. 2

1. Question – IV

- I. Write the observation for the following : 8
 - a. When zinc filling are added to a concentrated solution of sodium hydroxide.
 - b. When lead is added to dil. sulphuric acid
 - c. When hydrogen is passed through organic compound (vegetable) in the presence of a catalystr.
 - d. When hydrogen react with sulphur

II. Sate the use of hydrogen 2

- a. As a fuel
- b. In extraction of metals

III. Calculate the following

- a. Calculate the temperature at which a gas 'A' at 20⁰ cc. 2
- b. A gas 'X' at a pressure of 75mm of hg and temp 38⁰ c has a value 2.57 litres. Find the value of 'X' at S.T.P 2
- c. At a given temp the pressure of a gas reduces to 75% of its initial value