GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ SESSION 2020-21

CLASS-9A, B, C, D, E, F

SUBJECT: CHEMISTRY PRACTICAL

INSTRUCTIONS: Students are advised to write the following Chemistry Practicals in Chemistry Practical File.(D. N. publications or Nova Publications). These experiments are to be written neatly. The same pattern of writing is to be followed as given. Write each experiment on a fresh page.

EXPERIMENT NO 9.

Object :-

To identify the gas evolved when NaOH solution is added to a small amount of $NH_4C\ell$ taken in a clean dry test tube and the mixture is heated. Then moist red litmus paper is held into the gas. Also, a glass rod dipped in conc. $HC\ell$ is held into the gas.

Observations:-

- (i) A colourless gas is evolved with pungent smell.
- (ii) The litmus paper turns blue.
- (iii)Dense white fumes of $NH_4C\ell$ are evolved.

Inference:-

- (i) Ammonia (NH₃) gas is present.
- (ii) Ammonia gas is basic in nature.
- (iii) Ammonia gas is confirmed.

EXPERIMENT NO 10

Object :-

To identify the gas evolved when conc. $HC\ell$ is added to MnO_2 and the mixture is heated in a clean dry test tube . Then moist blue litmus paper is held into the gas. Also, a starch iodide paper is held into the gas.

Observations:-

- (i) A greenish yellow gas is evolved with pungent odour.
- (ii) The litmus paper turns red and then gets bleached.
- (iii) The starch iodide paper turns blue black.

<u>Inference</u>:-

- (i) Chlorine gas is present.
- (ii) Chlorine gas is acidic in nature and also a bleaching agent.
- (iii)Chlorine gas is confirmed.

EXPERIMENT NO 11

Object:-

To identify the presence of water vapour in a given compound. Few crystals of copper sulphate are heated in a clean dry hard glass test tube. Then blue or red litmus paper is held into the gas. Also, blue cobalt chloride paper is held into the gas.

Observations:-

- (i) A colourless, odourless gas is evolved which condenses on the cooler part of the test tube and white residue is left behind.
- (ii) No effect on the litmus paper.
- (iii)Cobalt chloride paper turns from blue to pink.

Inference:-

- (i) Colourless gas is water vapour. Colourless liquid is water. Residue is of anhydrous copper sulphate.
- (ii) Water vapours are present.
- (iii) Water vapours are confirmed.

EXPERIMENT NO 12

Object :-

To identify the gas evolved when few drops of dilute $HC\ell$ is added to Zn pieces taken in a clean test tube and the mixture is slightly warmed. Then a glowing splinter is held into the gas.

Observations :-

- (i) A colourless, odourless gas is evolved
- (ii) Gas mixed with air burns with a pop sound when the glowing splinter is brought near it.

<u>Inference</u>:-

- (i) Hydrogen gas is present.
- (ii) Hydrogen gas is confirmed.

EXPERIMENT NO 13

Object :-

To identify the gas evolved when a small amount of the mixture of $KC\ell O_3$ and MnO_2 is heated in a clean dry hard glass test tube. Then a glowing splinter is held into the gas.

Observation:-

- (i) A colourless, odourless gas is evolved.
- (ii) The glowing splinter rekindles.

Inference:-

- (i) Oxygen gas is present
- (ii) Oxygen gas is confirmed.

"END"