ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution

Class: X

Worksheet Number: 1

Sub: Physical Science **SOLUTION** **F.M.: 15**

Topic: Inorganic Chemistry **Date: 30th April 2020**

Answer the following questions: **[1×15=15]**

1. Which one is used to prepare ammonia?

(a) NH_4Cl (b) $(NH_4)_2SO_4$ (c) NH_4NO_3 (d) $Ca(OH)_2$

Answer: (c) NH_4NO_3

2. An aqueous solution of ammonia behaves as:

(a) acid (b) basic (c) neutral (d) changes as per condition

Answer: (b) basic

3. Pure ammonia is collected:

(a) over water (b) over alcohol (c) over ether (d) over mercury

Answer: (d) over mercury

4. NH_3 is a/an

(a) oxidant (b) reductant (c) both (d) none of these

Answer: (b) reductant

5. Ammonia turns in presence of Nessler's reagent:

(a) black (b) green (c) brown (d) yellow

Answer: (c) brown

6. Liquor ammonia contains _____ ammonia.

(a) 25% (b) 30% (c) 35% (d) 45%

Answer: (c) 35%

7. What is the industrial manufacturing of ammonia known as?

(a) Oswald process (b) Solvey process (c) Bayer process (d) Haber process

Answer: (d) Haber process

8. The reaction of Haber process is a:

(a) replacement reaction (b) synthesis reaction (c) decomposition reaction (d) combination reaction

Answer: (d) combination reaction

9. The catalyst used in Haber process is:

(a) MnO_2 (b) platinum dust (c) iron powder (d) copper powder

Answer: (c) iron powder

10. Which one is produced in the first step in the manufacturing of urea?

(a) ammonium carbamate (b) ammonium carbonate (c) ammonium sulphate (d) ammonium sulphite

Answer: (a) ammonium carbamate

11. Incomplete combustion of H.S produce:

(a) SO_2 (b) H_2SO_4 (c) S (d) both (a) & (c)

Answer: (c) S

12. Which one is used to manufacture the sedative barbiturate?

(a) ammonia (b) HNO_3 (c) H_2S (d) urea

Answer: (d) urea

13. H_2S is a poisonous gas because it:

(a) affects the CNS

(b) decrease the efficiency of lungs

(c) causes cerebral haemorrhage

(d) deactivates the essential cellular proteins

Answer: (d) deactivates the essential cellular proteins

14. Which reaction is exothermic?

(a) $N_2 + 3H_2 \rightarrow 2NH_3$

(b) $N_2 + O_2 \rightarrow 2NO$

(c) $4NH_3 + 5O_2 \rightarrow 4NO + 6H_2O$

(d) $2SO_2 + O_2 \rightarrow 2SO_3$

Answer: (b) $N_2 + O_2 \rightarrow 2NO$

15. When H_2S is passed through lead nitrate, the colour of the precipitate obtained is:

(a) white (b) brown (c) green (d) black

Answer: (d) black