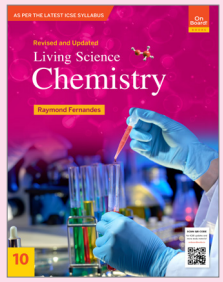
ICSE Living Science CHEMISTRY

Class 10



Multiple-Choice Questions

CHAPTER 9: STUDY OF COMPOUNDS – AMMONIA

1. Sal ammoniac is .....
   (a) ammonium chloride.
   (b) ammonium hydroxide.
   (c) ammonium sulphate.
   (d) ammonium nitrate.
   Ans: a

2. Common name of ammonia is .....
   (a) acidic air.
   (b) alkaline air.
   (c) neutral air.
   (d) ionized air.
   Ans: b

3. Dry ammonium chloride reacts with ....., when heated gently, to form ammonia.
   (a) calcium chloride
   (b) calcium nitrate
   (c) calcium hydroxide
   (d) calcium oxide
   Ans: c

4. Reactants should be in a ..... state so as to provide maximum surface area for reaction.
   (a) solution
   (b) gaseous
   (c) solid
   (d) grounded
   Ans: d

5. Ammonia is dried by passing the gas through a tower of .....
   (a) sodalime.
   (b) quicklime.
   (c) lime water.
   (d) slaked lime.
   Ans: b

6. Ammonia cannot be collected over ..... because it is highly soluble in it.
   (a) air
   (b) acid
   (c) water
   (d) base
   Ans: c

7. Metals like magnesium, calcium and aluminium, when burnt in nitrogen gas, form their respective metal .....
   (a) nitrides.
   (b) nitrites.
   (c) nitrates.
   (d) salts.
   Ans: a

8. ..... process is used for the large-scale manufacturing of ammonia.
   (a) Baeyer's
   (b) Ostwald
   (c) Hoope's
   (d) Haber-Bosch
   Ans: d

9. The catalyst used in Haber-Bosch process is
   (a) finely divided iron in the presence of molybdenum.
   (b) finely divided molybdenum in the presence of iron.
   (c) solid iron in the presence of molybdenum.
   (d) crystalline iron in the presence of molybdenum.
   Ans: a

10. Haber-Bosch process in the manufacture of ammonia is ..... in nature.
   (a) endothermic
   (b) ionic
   (c) exothermic
   (d) basic
   Ans: c

11. Dry ammonia gas turns moist red litmus paper ....., methyl orange into ..... and colourless phenolphthalein solution into .....
   (a) yellow, pink, blue.
   (b) blue, yellow, pink.
   (c) pink, blue, yellow.
   (d) blue, pink, yellow.
   Ans: b

12. With sulphuric acid, ammonia forms .....
   (a) ammonium phosphate.
   (b) ammonium chloride.
   (c) ammonium nitrate.
   (d) ammonium sulphate.
   Ans: d

13. Ammonia reacts with oxygen in the presence of ..... catalyst to form nitric oxide and water.
   (a) platinum
   (b) molybdenum
   (c) nickel
   (d) iron
   Ans: a

14. Ammonia reacts with excess chlorine to form ..... and hydrogen chloride gas.
   (a) nitrogen chloride
   (b) nitrogen dichloride
   (c) nitrogen trichloride
   (d) nitrogen pentachloride
   Ans: c

15. ..... of metallic oxides by ammonia shows that ammonia contains nitrogen and hydrogen.
   (a) Reduction
   (b) Oxidation
   (c) Neutralization
   (d) Ionization
   Ans: a

16. Ammonium hydroxide reacts with soluble salts of metals to form their insoluble metallic ..... with different colours and solubility.
   (a) chlorides
   (b) oxides
   (c) carbonates
   (d) hydroxides
   Ans: d

17. Ammonia is used in the manufacture of ..... by Ostwald's process.

(a) sulphuric acid
(b) acetic acid
(c) nitric acid
(d) hydrochloric acid

Ans: c

18. Advantage(s) of using ammonia as a refrigerant is/are

(a) it does not destroy atmospheric ozone.
(b) it has good thermodynamic properties.
(c) ammonia refrigeration systems use less electricity.
(d) all of these.

Ans: d

19. It is used as a cleansing agent for removing grease stains from clothes as ammonia solution ..... fats and grease.

(a) emulsifies
(b) solidifies
(c) precipitates
(d) liquefies

Ans: a

20. Which of the following is not a use of ammonia?

(a) It is used in the manufacture of fertilizers.
(b) It is used in the manufacture of washing soda and baking soda.
(c) It is used in copper pipes.
(d) It is used as a laboratory reagent.

Ans: c