

CHEMISTRY

BOOKS - ARIHANT CHEMISTRY (HINGLISH)

PURIFICATION AND ESTIMATION OF ORGANIC COMPOUNDS

Practice Exercise

1. Absolute alcohol is prepared by

- A. fractional distillation
- B. Kolbe's method
- C. azeotropic distillation
- D. vacuume distillation

Answer: C



- 2. Aniline is usually purified by
 - A. steam distillation

- B. simple distillation
- C. vacuum distillation
- D. extraction with a solvent

Answer: A



Watch Video Solution

3. Name the technique where extraction of compound takes place based on difference in solubility

- A. Differential extraction
- B. Chromatography
- C. Sublimation
- D. Crystallision

Answer: A



Watch Video Solution

4. The technique used for the separation of acetone and methanol, is

- A. steam distillation
- B. vacuum distillation
- C. fractional distillation
- D. simple distillation

Answer: C



Watch Video Solution

5. The best and latest technique for isolation, purification and separation of organic compound is

- A. crystallisation
- B. distillation
- C. Sublimation
- D. chromatography

Answer: D



Watch Video Solution

6. The compound that does not give a blue color in Lassaigne's test is

A. aniline

B. glycine

C. hydrazine

D. urea

Answer: C



Watch Video Solution

7. If on adding $FeCl_3$ solution to acidifies Lassaigne's solution a blood red coloration is produced, it indicates the presence of

- A. N and S in the compound
- B. S in the compound
- C. N and P in the compound
- D. Br in the compound

Answer: A



Watch Video Solution

8. An organic compound on heating with CuO produces CO_2 but no water. The organic compound may be

A. carbon trtrachloride

B. choloform

C. methane

D. ethyliodide

Answer: A



Watch Video Solution

9. Which of the following complex formation indicates the presence of sulphur in the organic compound when sodium

nitroprusside is added to sodium extract of the compound?

A.
$$Fe_4igl[Fe(CN)_6igr]_3$$

B.
$$Na_2igl[Fe(NO)(CN)_5igr]$$

C.
$$Fe_4(CNS)_3$$

D.
$$Na_{4}ig[Fe(CN)_{5}NOSig]$$

Answer: D



10. In sulphur estimation, 0.157 g of an organic compound gives 0.4813 g of barium sulphate.

The percentage of sulphur in the compound, is

- A.42.10
- B.52.10
- C.21.05
- D. 40.01

Answer: A



View Text Solution

11. In Kjeldahl's method ammina from 5 g of F1food neutralises $30 {
m cm}^2$ of 0.1 N acid. The percentage of nitrogen in the food is

- A. 0.84
- B. 0.4
- C. 16.8
- D. 1.68

Answer: A



12. If 0.765g of an acid gives 0.535g of CO_2 and 0.138g of H_2O , then the ratio of the percentage of C to H is

- A. 19:2
- B. 18:11
- C. 20:17
- D. 1:7

Answer: A



13. 0.59 g of an organic compound produces

112 mL nitrogen at NTP. The percentage of

nitrogen in the compound through Duma's

method is

- A. 23.7
- B. 27.5
- C. 33.07
- D. 16.8

Answer: A



14. 0.12 gm of an organic compound containing phosphorus gave 0.22 gm of $Mg_2P_2O_7$ by the usual analysis. Calculate the percentage of phosphorus in the compound.

A. 31

B. 0.2

C. 66

D. 62

Answer: D



Watch Video Solution

15. A compound of carbon, hydrogen, and nitrogen contains the three elements in the respective ratio of 9:1:3.5 Calculculate the empirical formula. If the molecular weight of the compound is 108, what its molecular formula?

A. C_2H_4N

B. C_3H_4N

C. C_3H_6N

D. C_2H_6N

Answer: B



Watch Video Solution

16. A substance is found to contain 7 % nitrogen. The minimum molecular weight of it, is

- A. 700
- B. 100
- C. 200
- D. 70

Answer: C



Watch Video Solution

17. When $FeCl_3$ is added to the sodium extract of an organic compound containing

both N and S, the red coloured precipitate is

formed due to the formation of

A.
$$\left[Fe(CN)_6\right]^{3}$$

B.
$$[Fe(CNS)]^{2+}$$

C.
$$\left[Fe(CNS)_2
ight]^+$$

D.
$$\left[Fe(CN)_6\right]^{4-}$$

Answer: B



View Text Solution