



CHEMISTRY

BOOKS - NEET PREVIOUS YEAR (YEARWISE + CHAPTERWISE)

CHEMICAL ANALYSIS

Exercise

1. The most suitable method of separation of a mixture of ortho and para nitrophenol in the

ratio 1:1 is :

- A. sublimation
- B. chromatography
- C. crystallisation
- D. steam distillation

Answer: D



Watch Video Solution

2. In Duma's method for estimation of nitrogen. 0.25g of an organic compound gave 40mL of nitrogen collected at 300K temperature of 725mm pressure. If the aqueous tension at 300K is 25mm , the percentage of nitrogen in the compound is

A. 17.36

B. 18.2

C. 16.76

D. 15.76

Answer: C



Watch Video Solution

3. Which of the statements is not true ?

A. On passing H_2S through acidified

$K_2Cr_2O_7$ solution , a milky colour is

observed

B. $Na_2Cr_2O_7$ is preferred over $K_2Cr_2O_7$

in volumetric analysis

C. $K_2Cr_2O_7$ solution in acidic medium is
orange

D. $K_2Cr_2O_7$ solution becomes yellow on
increasing the pH beyond 7

Answer: B



Watch Video Solution

4. The LaSSaigen's extract is boiled with conc. HNO_3 while testing for halogens. By doing so
it :

- A. helps in the precipitation of AgCl
- B. increases the solubility product of AgCl
- C. increases the concentration of NO_3^- ions
- D. decomposes Na_2S and NaCN , if formed

Answer: D



Watch Video Solution

5. In Dumas' method of estimation of nitrogen $0.35g$ of an organic compound gave $55mL$ of nitrogen collected at $300K$ temperature and $715mm$ pressure. The percentage composition of nitrogen in the compound would be : (Aqueous tension at $300K = 15mm$)

A. 16.45

B. 17.45

C. 14.45

D. 15.45

Answer: A



Watch Video Solution

6. An organic compound contains carbon, hydrogen and oxygen. Its elemental analysis gave C , 38.71 % and H , 9.67 % . The empirical formula of the compound would be :



D. CH_4O

Answer: A



Watch Video Solution

7. The best method for the separation of naphthalene and benzoic acid from their mixture is

A. chromatography

B. crystallisation

C. distillation

D. sublimation

Answer: D



Watch Video Solution

8. Camphor is often used in molecular mass determination because

A. it is readily available

B. it has a very high cryoscopic constant

C. it is volatile

D. it is solvent for organic substances

Answer: C



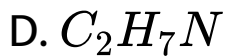
Watch Video Solution

9. An organic compound contains

$C = 40\%$, $H = 13.33\%$, and $N = 46.67\%$.

Its empirical formula will be

A. $C_2H_7N_2$



Answer: C



Watch Video Solution

10. In steam distillation of toluene , the pressure of toluene in vapour is

A. equal to the pressure of barometer

B. less than the pressure of barometer

C. equal to vapour pressure of toluene in
simple distillation

D. more than vapour pressure of toluene in
simple distillation

Answer: B



Watch Video Solution

11. Which of the following techniques is most suitable for purification of cyclohexanone from a mixture containing benzoic acid , isoamyl alcohol , cyclohexane and cyclohexanone ?

A. Crystallisation

B. IR spectroscopy

C. Sublimation

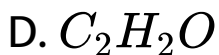
D. Evaporation

Answer: B



Watch Video Solution

12. A compound contains $C = 40\%$, $O = 53.5\%$, and $H = 6.5\%$ the empirical formula of the compound is:



Answer: A





Watch Video Solution

13. Lassaigne's test for the detection of N fails in :



Answer: B



Watch Video Solution

14. A is a lighter phenol and B is an aromatic carboxylic acid . Separation of a mixture of A and B can be carried out easily by using a solution of

A. sodium hydroxide

B. sodium sulphate

C. calcium chloride

D. sodium bicarbonate

Answer: D



[View Text Solution](#)

15. In sodium extract test of organic compounds, the nitrogen of an organic compound is converted into :

- A. sodamide
- B. sodium cyanide
- C. sodium nitrite
- D. sodium nitrate

Answer: B



Watch Video Solution

16. Kjeldahl's method is used in the estimation of

A. nitrogen

B. halogens

C. sulphur

D. oxygen

Answer: A



17. Lassaigne's test is used for the detection of:

A. nitrogen

B. sulphur

C. chlorine

D. All of the above

Answer: D

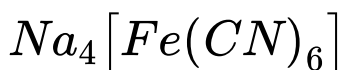


Watch Video Solution

18. Prussian blue is formed when

A. ferrous sulphate reacts with $FeCl_3$

B. ferric sulphate reacts with



C. ferrous ammonium sulphate reacts with



D. ammonium sulphate reacts with $FeCl_3$

Answer: B



Watch Video Solution

