

11. Michael Faraday discovered benzene in the gas which was produced by destructive distillation of vegetable oil that is done in

- A. The presence of Oxygen B. The presence of Hydrogen
C. The absence of Oxygen D. The presence of excessive Oxygen

Answer: Option C

12. By which method the molecular mass of benzene was determined as 78.108?

- A. Specific gravity method B. Vapour density method
C. X-ray diffraction method D. Distillation methos

Answer: Option B

13. How many moles of H₂ are added up when benzene is heated with hydrogen in the presence of platinum?

- A. Two B. Three
C. Four D. Six

Answer: Option B

14. Chlorination of toluene in the presence of sublight produces

- A. Benzyl chloride B. o - chlorotoluene
C. p - chlorotoluene D. benzoic acid

Answer: Option A

15. The heat of hydrogenation of cyclohexene is

- A. ?239 kJ mol⁻¹ B. ?208 kJ mol⁻¹
C. ?119.5 kJ/mol D. ?119.5 kcal/mol

Answer: Option C

16. The resonance energy of benzene is

- A. 150.5 kJ/mol B. 250.5 kJ/mol
C. 150.5 Cal/mol D. 250.5 Cal/mol

Answer: Option A

17. What catalyst is employed when benzene is prepared from acetylene at 70°C?

- A. Cr₂O₃ + Al₂O₃ + SiO₂ B. Raney nickel
C. Organo-nickel D. Ni 250 - 300°C

Answer: Option C

18. Mixture of catalysts Cr₂O₃ + Al₂O₃ + SiO₂ at 500°C are used when benzene is prepared from

- A. acetylene B. N-hexane
C. Benzene sulphonic acid D. Sodium benzoate

Answer: Option B

19. Which one of the following methods will not give benzene?

- A. Heating sod. Salt of Benzoic acid with soda lime B. Distilling phenol with Zn dust
C. Chlorobenzene with NaOH at 360°C & 150atm. D. Hydrolysis of benzene sulphonic acid with super heated steam.

Answer: Option C

20. Which is fused cyclic aromatic compound

- A. diphenyl amine B. diphenyl methane
C. naphthalene D. biphenyl

Answer: Option C