



CHEMISTRY

BOOKS - UNITED BOOK HOUSE

SET-18

Exercise

1. State Henry's law regarding solubility of a gas in liquid. On which factors Henry's constant (K_H) depends?

 [Watch Video Solution](#)

2. What is an ideal solution? Give example

 [Watch Video Solution](#)

3. Between KCN and K_2SO_4 which one is more effective and why for coagulation of $Fe(OH)_3$ sol?

 [Watch Video Solution](#)

4. Define with proper example physical absorption.

 [Watch Video Solution](#)

5. Why Starch-Iodide paper gets blue when come in contact with starch?

 [Watch Video Solution](#)

6. Explain why NCI_3 gets hydrolysed but not NF_3 .

 [Watch Video Solution](#)

7. $[CoF_6]^{3-}$ is paramagnetic but $[Co(NH_3)_6]^{3+}$ is diamagnetic explain.

 [Watch Video Solution](#)

8. What are the monomers of Nylon 6 6 ? State one use of it.

 [Watch Video Solution](#)

9. What is the co-ordination number of each particle in three dimensional cubic close pack?

 [Watch Video Solution](#)

10. Lead forms face centred cubic lattice having density 11.35 gm cm^{-3} .

What is the radius of Pb atom *atwtof* $Pb = 207 \text{ gm mole}^{-1}$

 [Watch Video Solution](#)

11. What is Schottky defect?

 [Watch Video Solution](#)

12. Silver forms face centred cubic lattice having edge length 4.086 \AA . Find the density of Silver. (Given At wt of Ag=108).

 [Watch Video Solution](#)

13. Why Raoult's law for relative lowering of vapour pressure is not applicable for concentrated solution?

 [Watch Video Solution](#)

14. The elevation of boiling point is 0.70 K when 12.5 gm of a non electrolyte gets dissolved in 175 gm of water. Calculate mole mass of the substance

$$K_b = 52 \text{ K Kg mol}^{-1}$$

 [Watch Video Solution](#)



Watch Video Solution

15. State Kohlrausch laws. Calculate the molar conductance of CH_3COOH at infinite dilution if molar conductance at infinite dilution for HCl , $NaCl$ & CH_3COONa are 426, 126 and $91 \text{ ohm}^{-1}\text{cm}^2\text{mol}^{-1}$ respectively.



Watch Video Solution

16. What is the unit of electrochemical equivalence?



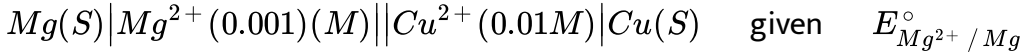
Watch Video Solution

17. Express standard Hydrogen electrode.



Watch Video Solution

18. Calculate the E.M.F. for the cell given below



$$=-2.36V. \quad E_{Cu^{2+} / Mg}^{\circ} = +0.34V$$



[Watch Video Solution](#)

19. State the reaction that occurs in every stage of iron extraction in blast furnace.



[Watch Video Solution](#)

20. State one basic flux state its formula.



[Watch Video Solution](#)

21. What will happen when KI is added to acidified $KMnO_4$ solution.



[Watch Video Solution](#)

22. Which trivalent ion shows colour between Pm Lu and why?

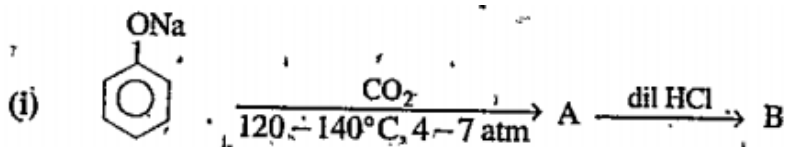
 [Watch Video Solution](#)

23. State the product when Bromoethane is treated with ethanolic KOH.

State mechanism for that reaction.

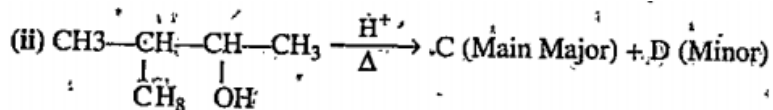
 [Watch Video Solution](#)

24. Identify A-B.



 [Watch Video Solution](#)

25. Identity C-D.



 Watch Video Solution

26.

https://d10lp6p6xz60nq.cloudfront.net/physics_images/PAT_CHE_OXI_B05_C11

 Watch Video Solution

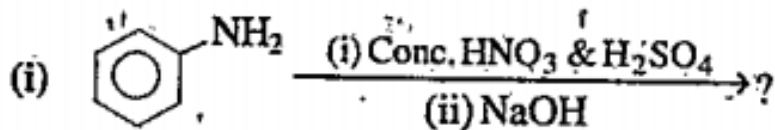
27. Why Grignard reagent gets dissolved in ether?

 Watch Video Solution

28. How would you distinguish 1° , 2° , & 3° alcohol using Lucas reagent?

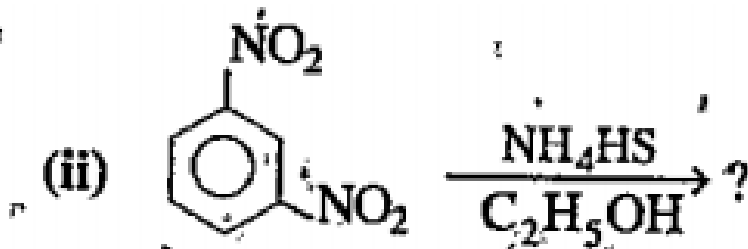
 Watch Video Solution

29. State the product forms in the following reaction?



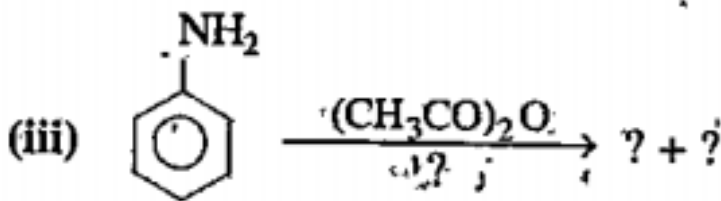
[▶ Watch Video Solution](#)

30. State the product forms in the following reaction?



[▶ Watch Video Solution](#)

31. State the product forms in the following reaction?



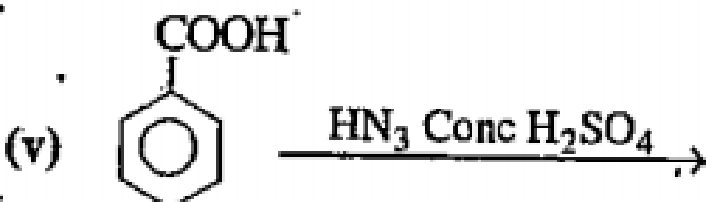
[▶ Watch Video Solution](#)

32. State the product forms in the following reaction?



[▶ Watch Video Solution](#)

33. State the product forms in the following reaction?



[▶ Watch Video Solution](#)

34. An organic compound containing C, H, N & O (A) on treatment with NaOH & Br_2 from (B) B on treatment with $NaNO_2$ and Hydrochloric acid forms C a primary alcohol which on iodoform test gives yellowish crystalline precipitate identify A, B & C. Give reasons and chemical reaction.

 [Watch Video Solution](#)

35. Write the reactions between D(+) Glucose and (a) Tollen's reagent (b) $NaBH_4$.

 [Watch Video Solution](#)

36. Give an example of a protein that taken part in transportation.

 [Watch Video Solution](#)

37. Establish the rate equation for 1st order reaction.

 [Watch Video Solution](#)

38. Specific reaction rates for a reaction at 300K and 310K are $3 \times 10^{-6} \text{S}^{-1}$ and $2.8 \times 10^{-5} \text{S}^{-1}$. Calculate the activation energy for that reaction.

 [Watch Video Solution](#)

39. State Arrhenecous equation relating rate of a reaction with temperature dependence. How would you get activation energy from the plotting of this equation.

 [Watch Video Solution](#)

40. For a zero order reaction the initial concentration of the reactant is 1.386 mol L^{-1} . If the half life period of the same be 20S then what. Shall

be the concentration of the reaction after 30S.

 [Watch Video Solution](#)

41. What will happen when Cl_2 is passed through hot concentrate caustic soda solution.

 [Watch Video Solution](#)

42. Explain why SO_2 shows both oxidising and reducing nature.

 [Watch Video Solution](#)

43. Why Xe forms most of the compound among the other inert gas?

 [Watch Video Solution](#)

44. Give example of each: Etard reaction.

 [Watch Video Solution](#)

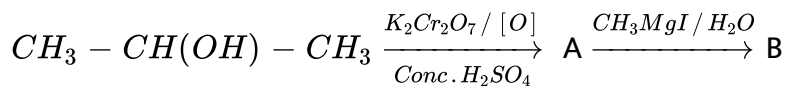
45. Give example of each: Rosenmund reaction

 [Watch Video Solution](#)

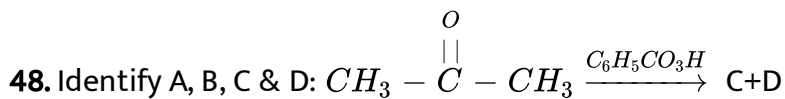
46. Give example of each: Schimidt reaction.

 [Watch Video Solution](#)

47. Identify A, B, C & D:

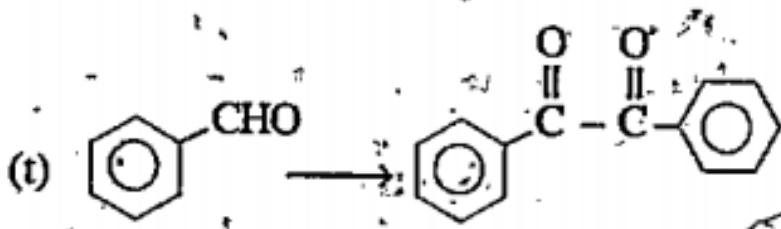
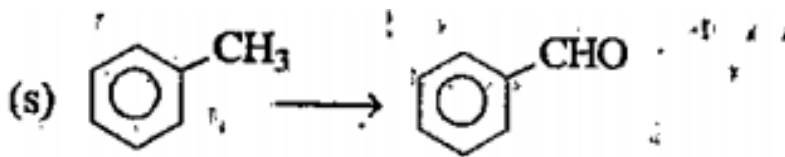
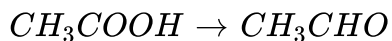


 [Watch Video Solution](#)



 [Watch Video Solution](#)

49. How would you carry out the following conversion.



 Watch Video Solution

50. Quantity of charge in Coulomb required to convert 1 mole $Cr_2O_7^{2-}$ & Cr^{3+} .

A. 96500 Coulomb

B. 289500 coulomb

C. 579000 coulomb

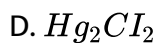
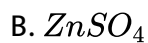
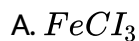
D. 193000 cou-lomb

Answer:



[Watch Video Solution](#)

51. Which one among the following gives black precipitate when reacts with ammonia.

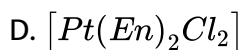
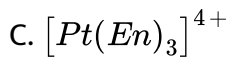


Answer:



[Watch Video Solution](#)

52. Which one shows both optical and geometrical isomerism:



Answer:

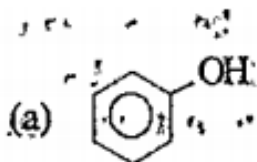


Watch Video Solution

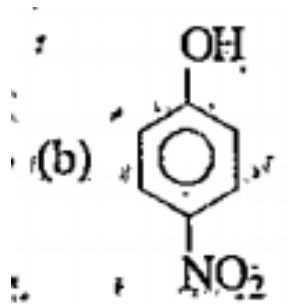
53. Which one will form effertvescence when added to 5 % $NaHCO_3$

soln.

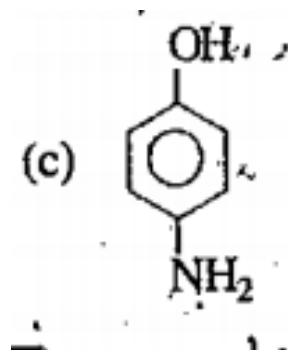
A.



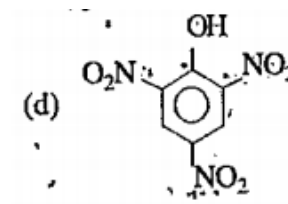
B.



C.



D.



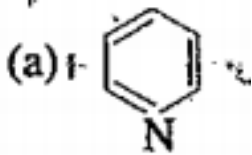
Answer:



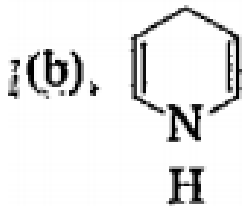
Watch Video Solution

54. Which one is most basic

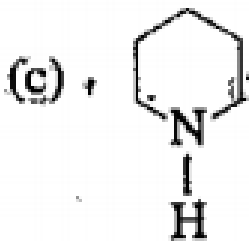
A.



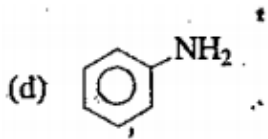
B.



C.



D.



Answer:

 [Watch Video Solution](#)

55. Which one is a natural fibre.

- A. Strach
- B. cellulose
- C. Rubber
- D. Nylon

Answer:

 [Watch Video Solution](#)

56. An anti histamin among the compounds.

A. Ranitidine

B. Luminal

C. Paracetamol

D. Serotonine

Answer:

 [Watch Video Solution](#)

57. Sodium form bcc lattice with edge length 4.29 \AA therefore atomic radius of Na atom is .

A. 5.72 \AA

B. 0.93 \AA

C. 1.86 \AA

D. 3.22 \AA

Answer:



[Watch Video Solution](#)

58. Which is not a lyophilic sol

- A. protein
- B. gelatine
- C. starch
- D. Gold sol

Answer:



[Watch Video Solution](#)

59. Least reactive towards SN1 reaction ?

- A. Benzyl Chloride

B. Chloro benzene

C. ethyl chloride

D. Isopropyl Chloride

Answer:



[Watch Video Solution](#)

60. Acetone when kept with conc HCl:

A. Mesitylene

B. Mesityl oxide

C. diacetone alcohol

D. Phorone

Answer:



[Watch Video Solution](#)

61. The base which is absent in DNA

- A. Adenine
- B. Guanine
- C. Cytosine
- D. Urasil

Answer:



[Watch Video Solution](#)

62. Which one has highest sweetening action.

- A. Aspertame
- B. Alitame
- C. Sucralose
- D. Saccharine

Answer:

 [Watch Video Solution](#)

63. State two advantages of using detergents as compare to soap.

 [Watch Video Solution](#)

64. Calculate Manetic moment in BM of V^{2+} ion.

 [Watch Video Solution](#)

65. Why Sc^{3+} form colourless compound?

 [Watch Video Solution](#)

66. Which one has higher energy of activation value between physisorption and chemisorption?



[Watch Video Solution](#)