



CHEMISTRY

BOOKS - SHARAM PUBLICATION

SOLVED PAPER 4

Exercise

1. The bleaching action of Cl_2 is due to and that due to SO_2 is due to

 [Watch Video Solution](#)

2. Write the iUPAC name of $(NH_4)_3[Cr(SCN)_6]$

 [Watch Video Solution](#)

3. What is mean by pyrometallurgy ?

 [Watch Video Solution](#)

4. What is demulsification?How is it achieved?

 [Watch Video Solution](#)

5. Define space lattice.

 [Watch Video Solution](#)

6. Fill up the blank in the following reaction .



 [Watch Video Solution](#)

7. Name two broad spectrum antibiotics.

 [Watch Video Solution](#)

8. Carbyl amine reaction is given by

- A. 2° amine
- B. 1° amine
- C. 3° amine
- D. Both 1° and 2° amine

Answer:

 [Watch Video Solution](#)

9. Which of the following solutions has highest depression in freezing point at one atmospheric pressure?

A. $0.1MNaCl$

B. $0.1MBaCl_2$

C. $0.1MUrea$

D. $0.1MFeCl_3$

Answer:

 [Watch Video Solution](#)

10. Which of the following statements is incorrect about the collision theory of chemical reactions?

- A. In considers reacting molecules or atoms to be hard sphere and ignores their structural features
- B. Number of effective collisions determines the rate of reaction
- C. Collision of atoms or molecules possessing sufficient threshold energy results into product formation

D. Molecules should collide with sufficient threshold energy and proper orientation for the collision to be effective

Answer:

 [Watch Video Solution](#)

11. Which of the following is not applicable to the phenomenon of adsorption?

A. $\Delta H > 0$

B. $\Delta G < 0$

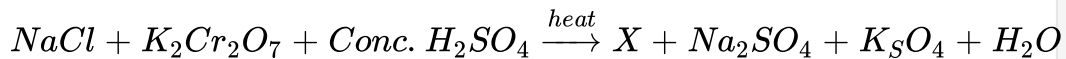
C. $\Delta S < 0$

D. $\Delta H < 0$

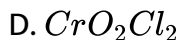
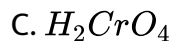
Answer:

 [Watch Video Solution](#)

12. In the reaction



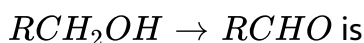
, 'X' is a reddish brown gas which gives a yellow solution on passing through water and a yellow precipitate on treating the solution with lead acetate solution. So 'X' could be



Answer:

 [Watch Video Solution](#)

13. The most suitable reagent for the conversion of



A. PCC

B. $KMnO_4$

C. $K_2Cr_2O_7$

D. CrO_3

Answer:



[Watch Video Solution](#)

14. Which of the following polymer contains nitrogen?

A. Polyvinyl chloride

B. Bakelite

C. Nylon

D. Terylene

Answer:

 [Watch Video Solution](#)

15. What are Alloys? Name the constituents of Brass and Bronze alloys.

 [Watch Video Solution](#)

16. How is sulphur dioxide prepared in the laboratory?

 [Watch Video Solution](#)

17. What is Wurtz-Fitting reaction? Give equation.

 [Watch Video Solution](#)

18. In the reaction $4NH_3 + 5O_2 \rightarrow 4NO + 6H_2O$. The rate of formation of NO is $3.6 \times 10^{-3} \text{ mol lit}^{-1} \text{ s}^{-1}$. Find the rate of disappearance of oxygen gas.

 [Watch Video Solution](#)

19. What are Clathrates ? Name two noble gases which form clathrate.

 [Watch Video Solution](#)

20. What happens when chlorobenzene is treated with CH_3COCl in presence of *anh.* $AlCl_3$?

 [Watch Video Solution](#)

21. Suggest suitable reagents in the following transformations .



 [Watch Video Solution](#)

22. The coagulation of 100 ml of a colloidal solution of gold is completely prevented by addition of 0.25g of starch to it before adding 10 ml of 10% $NaCl$ solution. Calculate the gold number of starch.

 [Watch Video Solution](#)

23. Write a note on S_N1 reaction.

 [Watch Video Solution](#)

24. Write a note on Hofmann ammonolysis of alkylhalides.

 [Watch Video Solution](#)

25. Write notes on Gabriel phthalimide synthesis.

 [Watch Video Solution](#)

26. What do you mean by activity and selectivity of the catalyst?

 [Watch Video Solution](#)

27. The freezing point depression of 0.1 molal solution of acetic acid in benzene is $0.256 \text{ K kg mol}^{-1}$. K_f for benzene is $5.12 \text{ K kg Mol}^{-1}$. What conclusion can you draw about the molecular state of acetic acid in benzene.

 [Watch Video Solution](#)

28. Discuss the construction and working of a dry cell.

 [Watch Video Solution](#)

29. How will you convert nitrobenzene to benzoic acid?

 [Watch Video Solution](#)

30. Write a note on interhalogen compounds.

 [Watch Video Solution](#)

31. What is reaction of HCl with

MnO_2 ?

 [Watch Video Solution](#)

32. What is reaction of HCl with

Ozone?

 [Watch Video Solution](#)

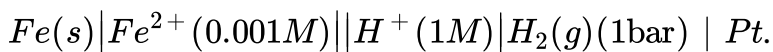
33. Write a note on haloform reaction.

 Watch Video Solution

34. State and explain Kohlrausch's law of independent migration of ions.

 Watch Video Solution

35. Write the Nernst equation and emf of the following cell at 298K.



 Watch Video Solution

36. How can you prepare benzaldehyde from toluene? What is the name of the reaction?

 Watch Video Solution

 Watch Video Solution

37. Give a chemical test to distinguish between Formaldehyde and Acetone.

 Watch Video Solution

38. How is SO_2 prepared in laboratory? How does it react with acidified $KMnO_4$ solution.

 Watch Video Solution

39. How does SO_2 react with lime water?

 Watch Video Solution

40. How is sulphur dioxide prepared in the laboratory ? How does it react with hot Mg ribbon

 [Watch Video Solution](#)

41. What are addition and condensation polymerisation? Give one example of each.

 [Watch Video Solution](#)

42. What is biodegradable polymer ? Give an example.

 [Watch Video Solution](#)

43. How is Dacron synthesised?

 [Watch Video Solution](#)

 Watch Video Solution

44. What do you mean by elevation boiling point ?How will you calculate the molecular mass of a solute from elevation of boiling point?

 Watch Video Solution

45. 18g of glucose ($C_6H_{12}O_6$) is dissolved in 1kg of water.At what temperature will solution boil at 1 atmosphere? K_b for water is $0.52Kkgmol^{-1}$.

 Watch Video Solution