



CHEMISTRY

BOOKS - UNITED BOOK HOUSE

MODEL QUESTION PAPER 4

Exercise

1. Which one is not possible

A. $N = 1, l = 0, m = 0$

B. $n = 3, l = 2, m = 0$

C. $n = 4, l = 4, m = -3$

D. $n = 3, l = 2, m = 0$.

Answer:



Watch Video Solution

2. Which one is least ionic



C. KCl

D. $AgCl$

Answer:



Watch Video Solution

3. Which one has highest bond energy?

A. F_2

B. Cl_2

C. Br_2

D. l_2

Answer:



Watch Video Solution

4. Viscosity of a liquid does not depend on:

A. Intermolecular force of attraction

B. Temperature

C. Pressure

D. Density

Answer:



Watch Video Solution

5. If the enthalpy change at $27^{\circ}C$ temperature for the change $waterrarrstembe30 \text{ kJmol}^{-1}$ then entropy change

A. $10 \text{ Jmol}^{-1} \text{ K}^{-1}$

B. $1.0 \text{ Jmol}^{-1} \text{ K}^{-1}$

C. $100 \text{ Jmol}^{-1} \text{ K}^{-1}$

D. $0.1 \text{ Jmol}^{-1} \text{ K}^{-1}$

Answer:



Watch Video Solution

6. Which of the following equation is not correct?

A. $W_{re} = -nR \ln V \frac{t}{V} i$

B. $\ln k = \frac{\Delta H^\circ - T \Delta S}{RT}$

C. $K = e^{-\Delta / RT}$

D. $\Delta G / sys / \Delta S_{Top} = -T$

Answer:



Watch Video Solution

7. pH of 10^{-4} (M) NaOH Solution—

A. 10

B. 4

C. 6

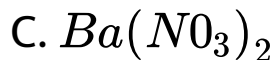
D. 4.5

Answer:



Watch Video Solution

8. Barytes is

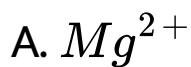


Answer:



Watch Video Solution

9. Which one has least hydration enthalpy



Answer:



Watch Video Solution

10. Hybridisation of Carbon in Carbanion—

A. SP^3

B. Sp^2

C. SP

D. SP^3d .

Answer:



Watch Video Solution

11. Which one does not give SN' reaction

A. Methyl Chloride

B. Tertiary butyl Chloride

C. Allyl Chloride

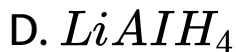
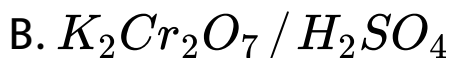
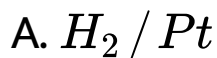
D. Benzyl Chloride

Answer:



Watch Video Solution

12. Which of the following reagents converts carbonyl compounds into hydrocarbon



Answer:



Watch Video Solution

13. Fly- ash found is

A. Thermal power station

B. Industrial zone

C. Atomic power station

D. Deep Ocean

Answer:



Watch Video Solution

14. In acidic medium, the equivalent weight of

$K_2Cr_2O_7$ (Mol. Wt. =M) is



Watch Video Solution

15. What is the number of helium atoms in 1 mole He?



Watch Video Solution

16. Give an example of diagonal relationship in periodic table



Watch Video Solution

17. Which block element in the periodic table contains natural radioactive element?



Watch Video Solution

18. What do you mean by state property?



[Watch Video Solution](#)

19. Baeyer's reagent is -



[Watch Video Solution](#)

20. Is the equivalent weight of element a variable quantity explain.



[Watch Video Solution](#)

21. 1.46 gm of a metal oxide contains 0.24 gm oxygen. If the specific heat of the metal be $0.087 \text{ Cal} \cdot \text{g}^{-1} \cdot \text{C}^{-1}$ then calculate its atomic weight



[Watch Video Solution](#)

22. State aufbau principle. Write the electronic configuration of the element having atomic no 17.



[Watch Video Solution](#)

23. State the Hund's rule of maximum multiplicity. Wh Fe^{3+} ion is more stable than Fe^{2+} ion?



Watch Video Solution

24. Write with balanced equation what happens when CO_2 is pasped through sodium metaborate solution.



Watch Video Solution

25. What happens when Boron and Concentrated H_2SO_4 is heated.



[Watch Video Solution](#)

26. Why $-NO_2$ group is meta Orienting.



[Watch Video Solution](#)

27. What is Chloriosis? What is responsible for it?



[Watch Video Solution](#)

28. Calculate the de Broglie wavelength of a stone piece of mass 25 gm moving with the velocity 150m / sec .



[Watch Video Solution](#)

29. Calculate the frequency and kinetic energy of a photon having wavelength 450 nm.



[Watch Video Solution](#)

30. What is screening effect? Arrange the orbital as per their increasing screening efficiency s, p, d, f,



Watch Video Solution

31. Why CaF_2 is insoluble in water? What type of bonding is observed in $LiIH_4$?



Watch Video Solution

32. Which one has higher electrovalent nature among $NaCl$ & $AlCl_3$? Indicate the hybridisation of 'P' in PCl_5



Watch Video Solution

33. What is partial pressure? If the total pressure of a mixture of 4gmH_2 & 16gmO_2 at 27°C be 5atm . find the ratio of partial pressure . of H_2 & O_2



Watch Video Solution

34. What do you understand by laminar flow?

Define surface tension.



Watch Video Solution

35. A gas is compressed by 10 lit in an external pressure 10 atm irreversibly. Calculate the work in Joule unit.



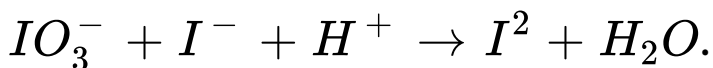
Watch Video Solution

36. Show that Wcrversibly > Wirreversible.



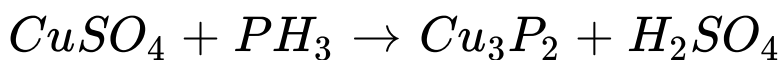
Watch Video Solution

37. Balance the following chemical equation by
ion electron method.



Watch Video Solution

38. Balance the following- reaction by
ordination number method:-



[Watch Video Solution](#)

39. Establish the fealtionship between Volume
strength and perccentage strength of H_2SO_2
soln.



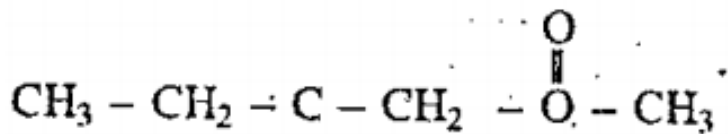
[Watch Video Solution](#)

40. What happens when Cl_2 gas is passed through cold lime solution. What is table salt?



[Watch Video Solution](#)

41. Write the IUPAC name



[Watch Video Solution](#)

42. Write the IUPAC name



Watch Video Solution

43. Answer the question below:-

$Ax_2 + by_2 = Cxy + Heat$:Establish the

relation between a, b, & c.



[Watch Video Solution](#)

44. Answer the question below:-If the K_c at $25^\circ C$ be 50 then find K_p



[Watch Video Solution](#)

45. Answer the question below:-In which direction the eqm will shift if temperature is increased.



[Watch Video Solution](#)

46. What do you mean by ionic product of water? Is water acidic in higher temperature? State with example Common ion effect.



[Watch Video Solution](#)

47. Describe the preparation of graphaiate imacheson process. Why CO is highly- toxic? Write one use of silica gel.



[Watch Video Solution](#)

48. How would you carry out the following

Conversion :-Ethene \rightarrow formaldehyde



[Watch Video Solution](#)

49. How would you carry out the following

Conversion :-Acetylene \rightarrow Mesitylene



[Watch Video Solution](#)

50. How would you differ chemically: Ethene & Ethyne.



[Watch Video Solution](#)

51. How would you differentiate Chemically :-
Ethyne & Propyne



[Watch Video Solution](#)