



CHEMISTRY

BOOKS - UNITED BOOK HOUSE

MODEL QUESTION PAPER 19

Exercise

1. Which one among the following disobeys

Bohr theory

B.
$$He^{\,\oplus}$$

C.
$$Li_{2+}$$

D.
$$H^{\,\oplus}$$



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2. Type of bond expected between two atoms having electro-negetivities 1. 0 & 3.8

A.	Mejalio	

B. Covalent

C. Co-ordinateCovalency

D. electroyalent.

Answer:



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3. Structure of NH_3 —

A. Tetrahedral

- B. Pyramidal
- C. Linear
- D. Trianguler



- **4.** Value of R in Cal/k. Mole-
 - A. 8.31
 - $\texttt{B.}\,8.31\times10^7$

C. 0.082

D. 1.987. 5

Answer:



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5. Relation between $\Delta H\&\Delta U$

A.
$$\Delta H = \Delta U + \Delta nRT$$

B.
$$\Delta H = \Delta U - P \Delta V$$

C.
$$\Delta H = \Delta U - P \Delta V$$
S

D.
$$\Delta U = \Delta H + P \Delta V$$



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6. Changeof enthalpy in exothermic reaction

A. Positive

B. Negative

C. Zero

D. infinity.



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7. Velocity Constant for a reaction at 290.K is given by $3.2 \times 10^{-3} S^{-1}$. What w ill be its value at 300 K—

A.
$$6.4 imes 10^{-3}$$

B.
$$3.2 \times 10^{-4}$$

$$\mathsf{C.}\,9.6\times10^{-3}$$

D.
$$1.28 \times 10^{-2}$$



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8. Which one of the follownig cation has highest polerising Power

A.
$$Cs^{\,\oplus}$$

B.
$$Li^{\oplus}$$

C.
$$K^{\,\oplus}$$

D.
$$Na^{\,\oplus}$$



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9. Water glass is

A.
$$Na_2SO_4$$

$$\operatorname{B.}{Na_2S_2O_3}$$

C.
$$Na_2SiO_3$$

D.
$$CaSiO_3$$

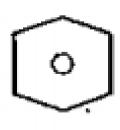
Answer:

10. Which one of the following shows acidic nature—

A.
$$CH_3-C\equiv C_H$$

$$B. CH_3 - C \equiv C - CH_3$$

C.



D. $CH_2 = CH-CI$.



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11. Largest C -. C bond preetn in—

A. propane

B. ethene

C. Acetylene

D. Benzene.

Answer:

12. The reaction between $AgNO_3$ and C_2H_2 is

- A. oxidation
- **B.** Reduction
- C. Acidbase
- D. Substitution.

Answer:



13. Which one is found in Bayers reagent—

- A. $KMnO_4$
- B. Pd
- C. $LiAlH_4$
- D. $NaBH_4$

Answer:



14. The	lung	diseae	caused	by	silica	is—
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- A. Minamata
- B. Etai Etai
- C. Silicosis
- D. Black foot



15. Calculate the mass of 2.24 liter $C0_2$ at N.T.P



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16. No of Ca^{2+} ion present in 1 gm-iorn Ca^{2+} is?



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17. Give an example of actionid.



18. What is state function?



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19. What type of function entropy is?



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20. Give an example of Metamerism



21. State laws of reciprocal proportion.



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22. Why law of reciprocal proportion is called equivalent ratio rule?



23. Explain with proper-example pauli exclusion principle.



24. State two postulates of Bohr atom model



25. Slate with equation effect of temperature on Boric Acid.



26. Why BF_6^{3-} does not exist, explain.



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27. Which one is weak acid and why? $ICH_2COOH, BrCH_2COOH, ClCH_2COOH$

•



28. Which is most basic and why? CH_3NH_2 , $(CH_3)_2$ NH, $(CH_3)_3N$



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29. What is particulate mater? Give two example'



30. Write two defects.of Bohr atom model. Concept of which quantum number comes form Sommerfield theory?



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31. Derive the equation for radius of n th shell form Bohr theory.



32. What is d-block element? Give two example



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33. Why the S-block element does not respond to flame test? State two properties of element which are not peiodic.



34. State reason:- Bond angle of PF_3 is greater than NH_3



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35. State reason:- CO_2 is linear but not SO_2



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36. Write two differences between $\sigma \& \pi$ bond.

What is antibonding moleculer orbital?

37. State Daltons partial pressure laws and derive partial pressure and total pressure realtion.



38. Calculate the partial pressure of SO_2 in a mixture with 60% CO_2 and total pressure being 4 atm.

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39. What,do you mean by enthalpy of a system? Write two characteristic of it.



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40. Calculate, $\Delta U,W$ and Q when an ideal gas is compressed at 5 atm pressure from 25 litre to 5 litre at a constant temp of $27^{\circ}\,C$.



41. Balance the equation by oxydation no.

method :-

$$AL + NaOH + H_2O \rightarrow NaAlO_2 + H_2$$



42. Balance by ion electron method :

$$Zn + NaNO_3
ightarrow Na_2ZnO_2 + NH_3 + H_2O$$



43. Balance the equation by oxydation no.

method :-

$$Na_2S_2O_3+I_2
ightarrow Na_2S_4O_6+2NaI$$



44. Write with balanced equation what happens when:- H_2O_2 is passed through acidified $KMnO_4$ soln



45. Write with balanced equation what happens when:- H_2O_2 is passed through acidified $K_2Cr_2O_7$ soln



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46. Which one is more soluble in water and why $MgCO_3 \& CaCO_3$. What is hydrolith?



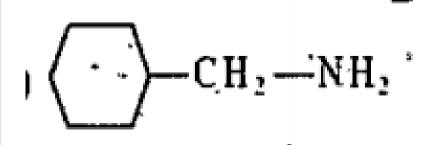
47. .Write the IUPAC name of the following compound:-

$$CH_3 - CH_2 - CH = C - CHO$$

 Br



48. .Write the IUPAC name of the following compound:-





49. .Write the IUPAC name of the following compound:- $CH_2=C=CH_2$



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50. $aA+bB=\mathbb{C}+dD$ If the equilibrium Constant for the reaction be K. get the equilibrium constant for the reaction $XaA+xbB+x\mathbb{C}+xdD$.



51. Write La Chatterlicr principle. Applying this Discuss the effect of heat on the equilibrium of an exothermic reaction.



52. How would you prepare:- Boric Acid from Borax.



53. How would you prepare:- Borax from Colemanite



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54. State one use of Boric acid



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55. What happens when:-CO is passed through ammbniacal Silver nitrate solution



56. what happens when -CO is passed through Cuprous Chloride solution.



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57. State one use of CO



58. Write short note on:- Ozonolysis reaction.



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59. Write short note on:-Wurtz reaction



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60. How would you convest:-Acetylene \rightarrow 2 -Chloro propene



61. How would you convest:-Ethylene ightarrow Glyoxal



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62. What is Lindler's Catalyst.

