LAST LOOK

✍ Question (no.1) ✍

✍ Choose the correct answer :

1- Hydrochloric acid reacts with each of the following except ……

a) Ethylene b) Ethanol c) Ehthyne d) Phenol

2- 2-Methyl pentane contains …… methylene ($-CH_2-$) groups.

a) 2 b) 3 c) 4 d) 5

3- In the reactions : $2SO_{3(g)} \rightleftharpoons 2SO_{2(g)} + O_{2(g)}$

When using a smaller closed container , the equilibrium constant (Kc)..

a) decreasesb) increases c) doesn't change d) doubles

4- Alkanes react with chlorine in indirect sunlight in a an …… reaction .

a) Elimination b) addition

c) substitution d) Direct combination

5- A solution of sodium hydroxide of 0.01 molar concentration , its pH…….

a) 12 b) 14 c) 2 d) 7

6- No. of moles of NH_3 gas in 72 litres at S.T.P = ……

a) 3.6 moles b) 2.3 moles c) 3.2 moles d) 6.3 moles

7- The number of isomers for C_5H_{12} is ……

a) 2 b) 3 c) 4 d) 5

8- The mass of gold precipitated by passing 96500 coulombs in a solution of gold (III) chloride is ……

a) 3 moles b) 1 mole c) $\frac{1}{3}$ moles d) 2 moles

9- Reduction in the dry cell occurs to ……

a) the graphite rod b) zinc chloride

c) zinc d) Manganese dioxide

10- The products of the hydrolysis of sodium carbonate are carbonic acid and …..

a) sodium & hydrogen ions b) sodium hydroxide

c) sodium & hydroxide ions d) sodium & carbonate ions

11- …… stated the reletion between the speed of chemical reactions and the concentration of the reactants.

a) Ostwald b) Le chatelier

c) Guldberg & waege d) Kekule

12- The colour of methyl orange indicator in an acidic medium is ……

a) orange **b) red** **c) yellow** **d) colourless**

13- The pH value of the solution containing the least amount of [OH^-] ions is ……

a) 1 **b) 7** **c) 10** **d) 14**

14) Sodium hydroxide (caustic soda) reacts with all except ……

a) Methyl acetate **b) phenol**

c) Benzoic acid **d) ethanol**

15- Bakelite is a polymer formed from ……

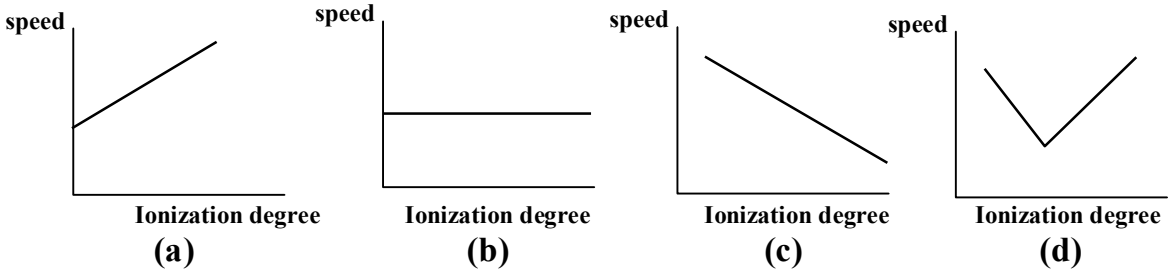
a) Terphthalic acid & ethylene glycol **b) Formaldehyde & phenol**

c) Phenol & acetaldelyde **d) Acetic acid & ethanol**

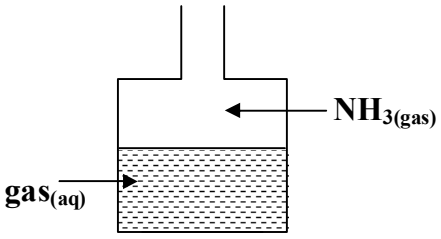
16- Dichlorodiphenyl trichloro ethane is ……

a) T.N.T **b) D.D.T** **c) P.V.C** **d) P.C.B**

17- The graph showing the relaition between ionization degree and the speed of reaction is ……



18- The diagram shows a container containing NH_3 gas dissolved in water. Equilibrium can be reached by ……



a) Adding more water

b) Adding more ammonia

c) cooling

d) closing the container

19- The number of atoms of NH_3 present in 8.5 grams is ……

a) Arogadro's number **b) 2x Avogadro**

c) $\frac{1}{2}$ x Avogadro **d) 4 x Avogadro**

20- No. of sodium ions present in one mole of sodium sulphate is …… ions.

a) 6.02×10^{23} **b) 1.204×10^{23}**

c) 12.04×10^{23} **d) 3.01×10^{23}**

21- In electrolytic cells, the anode is ……

a) negative electrode and oxidation takes place it .

b) positive electrode and oxidation takes place at it .

c) positive electrode and reduction takes place at it

d) negative electrode and reduction takes place at it .

22- If $K_c < 1$, then ……

a) the backward reaction is predominant

b) the reaction is complete and spontaneous

c) concentration of products < concentration of reactants

d) a , c are correct

23- Primary cells are …… cells .

a) Galvanic , spontaneous , irreversible

b) Galvanic , spontaneous , reversible

c) Electrolytic, irreversible

d) Electrolytic , easy to be charged

24- The solution of Hydrogen chloride gas ……

a) contains ions & lights a lamp connected to two electrodes in its solution

b) doesn't contains ions & doesn't light a lamp connected to two electrodes in its solution

c) the bond between the atoms of the gas in the solution is ionic

d) a , c are correct

25- In the reaction : $Cu + 2 Ag^{+} \longrightarrow Cu^{+2} + 2Ag$

The oxidizing agent is :

a) Cu **b)** Ag^{+} **c)** Cu^{2+} **d) Ag**

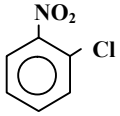
26- Pure acetic acid solution dissolved in water ……

a) Contains ions and lights a lamp connected to two electrodes in its solution

b) Doesnt contain ions and doesn't light a lamp connected to two electrodes in its solution

c) contains ions and their number decreases by dilution

d) a, c are correct

27- 

is formed from

a) Nitration of chloro benzene **b) Alkylation of nitro benzene**

c) Nitration of alkyl benzene **d) Chlorination of nitro benzene**

28- When a quantity of electricity passes through electrolytic cells connected in series the masses formed are proportional to ……

a) atomic mass **b) equivalent mass**

c) valency **d) atomic number**

29- Marookh oil is produced from the reaction of salicylic acid with ……

a) Acetic acid **b) Mehtanol** **c) Ethanol** **d) All the previous**

30- Catalytic hydration of acetylene then reducing the product gives ……

a) Ethanal **b) ethanol**

c) Ethanoic acid **d) All the previous**

31- Markownikoff's rule is applied when HBr is added to ……

a) Propene **b) vinyl bromide**

c) 1- butene **c) All the previous**

32- Baeyr's reaction is a an …… reaction

a) Addition **b) reaction to detecl double bonds**

c) Oixdation **d) Al the previous**

33- Catalytic hydration of 2- methyl – 1- butene gives ……

a) primary alcohol **b) secondary alcohol**

c) tertiary alcohol **d) Dihydric alcohol**

34- The red colour of litmus paper is due to hydrolysis of ……

a) Ammonium acetate **b) Ammonium chloride**

c) Sodium carbonate **d) Ammonium carbonate**

35- The compound formed by condensation polymerization is ……

a) taflon **b) P.V.C** **c) Bakelite** **d) P.P**

36- From the slow reactions……

a) Silver nitrate with sodium chloride

b) Alcohols with carboxylic acids

d) Magnesium with hydrochloric acid

c) sodium hydroxide with Hydrochloric acid

37- The hydrolysis of of ethyl hydrogen sulphate at 110 ^{0}C gives ……

a) ethanal **b) ethanol** **c) ethene** **d) ether**

38- When Faraday passes through an electrolyte …….. is precipitated, evolved or dissociated

a) Molecular mass

b) Equivalent mass

c) Mole

39- When 22.4 L of O_2 react with 70 L of H_2 completely at S.T.P to form water vapour , then the remaining hydrogen is ……

a) 47.6 L **b) 23.8 L** **c) 50.4 L** **d) 25.4 L**

40- Unsaturated hydrocarbons with the general formula C_nH_{2n} are ……

a) Acetylenes **b) Parafins** **c) Cyclic alkanes** **d) Olefins**

41- The conc. of NaOH solution on dissolving 40 g in 1 L of water is ……

a) $\frac{1}{4}$ molar **b) $\frac{1}{2}$ molar** **c) 1 molar** **d) 2 molar**

[Na =23 , O = 16 , H= 1]

42- The chemical equilibrium is affected by the following except ……

a) Pressuse **b) Catalyst** **c) Temperature** **d) Concentration**

43- At S.T.P the amount of O_2 formed from the break down of 36 g of H_2O is ……

a) 22.4 L **b) 44.8 L** **c) 11.2 L** **d) 5.2 L**

44- Ionic equilibrium rises in weak electrolytes between ……

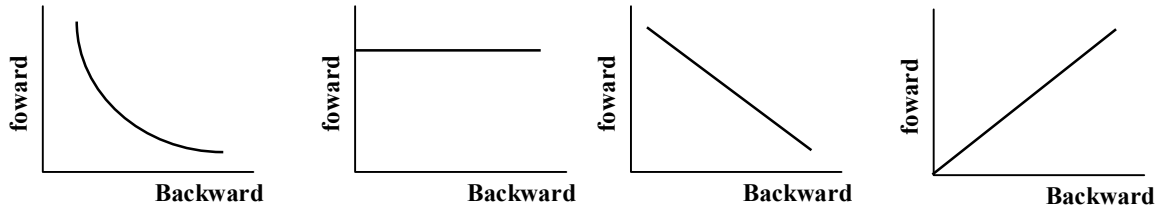
a) Reactants and products molecules

b) Reactants moleaules and produet ions

c) Reactants ions and product molecules

d) Products ions and reactants ions

45- On adding a catalyst : $N_2 + 3H_2 \rightleftharpoons 2NH_3$, …… shows the relation between the rates of forward and backward reactions .



(a) **(b)** **(c)** **(d)**

46- 300 moles of acetic acid contains …… carbon atoms.

a) 600 Avogadro **b) 450 Avogadro**

c) 300 Avogadro **d) 150 Avogadro**

47- The resultant of dividing the volume of gas at (S.T.P) and the number of moles equates ……

a) 22.4 **b) 273** **c) 6.02 × 1023** **d) 2.24**

48- The no. of atoms in one mole of phosphorous vapour is ……

a) 4 atoms **b) 2 x Avogadro** **c) 4 x Avogadro** **d) Avogadro**

49- Which of the following is a carboxylic acid ?

a) HOOC CH_3 **b) CH_3CH_2COOH**

c) $C_2H_5OCOCH_3$ **d) a,b are correct**

50- If you have two samples of two different gases which have the same volume temperature and pressure , then they are similar in ……

a) Chemical activity **b) Density** **c) Mass** **d) No. of molecules**

51- 20.2 ml of NaOH of 0.1 M is required to neutralize 25 ml of Dibasic acid of ……

a) 0.04 M **b) 0.08 M** **c) 0.12 M** **d) 0.16 M**

52- The isomer of phenyl acetate is ……

a) Methyl acetate **b) phenyl benzoate**

c) Methyl benzoate **d) ethyl benzoate**

53- K_{sp} of $Ba_3(PO_4)_2$ equales ……

a) $[Ba^{+2}]\ [Po_4^{-3}]$ **b) $[Ba^{+2}]^3\ [Po_4^{-3}]^2$**

c) $[3Ba^{+2}]^3\ [2Po_4^{-3}]^2$ **d) $[3Ba^{+2}]\ [2Po_4^{-3}]$**

54- The main difference between the strong and weak acid is …… each of them

a) ionization degree of **b) the conc of the solution of**

c) reaction of No with **d) the effect of litmus paper on**

55- At 25 ^{0}C : $H_2O_{(l)} + 57KJ \rightleftharpoons H^+_{(aq)} + OH^-_{(aq)}$ on increasing the temperatures :

a) the water becomes basic **b) the water becomes acidic**

c) $[H^+]\ [OH^-]$ decreaes **d) $[OH^-]\ [H^+]$ increases**

56- When drops of HCl are added to water :

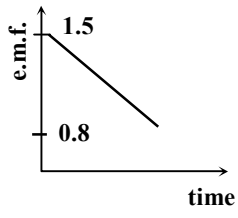
a) $[OH^-] = [H_3O^+]$

b) $[H_3O^+]$ increases & $[OH^-]$ increases

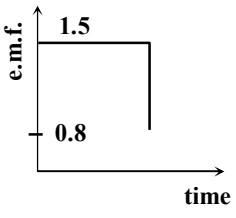
c) $[H_3O^+]$,increases $[OH^-]$ decreases

d) $[H_3O^+]$ increases , $[OH^-]$ doesn't change

57- …… Represents galvanic cells .



(a)



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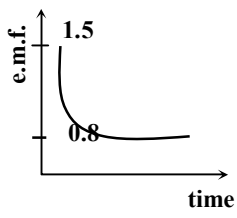
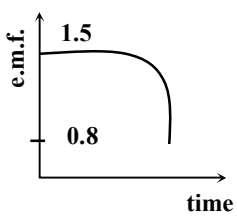


(c)



(d)

58- …… contains an amine and an ester group .

a) $H_2N - CH_2\ COOCH_3$

b) $H_2N\text{-}\ CH_2\ CONH_2$

c) $H_2N - CH_2 - \overset{\overset{O}{\|}}{C} - OH$

d) $H_2N - CH_2 - \overset{\overset{O}{\|}}{C} - H$

59- Esterification reactions are similer to Neutralization in ……

a) speed of reaction **b) formation of ionic salts**

c) formation of water **d) formation of esters**

60- The functional groups in

$$H - \overset{\overset{O}{\|}}{C} - CH_2 - O - CH_2 - \overset{\overset{O}{\|}}{C} - O - CH_2 - CH_3$$

are ……

a) Aldehyde & ketoue **b) carboxyl , aldehyde & ether**

c) ester, ether & ketone **d) Aldehyde , ether & ester**

61- The name of C_2H_5-$OCOCH_3$ according to IUPAC is ……

a) methyl propanoate **b) ethyl acetate**

c) ethyl ethananoate **d) methyl butanoate**

LAST LOOK

✍ MODEL ANSWER OF No. 1✍

1- d) Phenol
2- a) 2
3- a) decreases
4- c) substitution
5- a) 12
6- c) 3.2 moles
7- b) 3
8- c) $\frac{1}{3}$ moles
9- d) Manganese dioxide
10- c) (sodium & hydroxide) ions
11- c) Guldberg & waege
12- b) red
13- a) 1
14- d) ethanol
15- b) Formaldehyde & phenol
16- b) D.D.T
17- a) graph
18- d) closing the container
19- b) 2x Avogadro
20- c) 12.04×10^{23}
21- b) + ve and oxidation takes place at it
22- d) a , c are correct
23- a) Galvanic , spontaneous , irreversible
24- b) doesn't contain ions & doesn't light a lamp connected to two electrodes in its solution
25- b) Ag^{+}
26- a) Contains ions and lights a lamp connected to two electrodes in its solution
27- a) Nitration of chloro benzene
28- b) equivalent mass
29- b) Mehtanol
30- c) Ethanoic acid
31- c) All the previous
32- d) Al the previous
33- c) tertiary alcohol
34- b) Ammonium chloride
35- c) Bakelite
36- b) Alcohols with carboxylic acids
37- b) ethanol
38- b) Equivalent mass
39- d) 25.4 L
40- d) Olefins
41- c) 1
42- b) Catalyst
43- a) 22.4 L
44- b)Reactants moleaules and produet, ions
45- d) graph
46- a) 600 Avogadro
47- a) 22.4
48- c) 4 x Avogadro
49- d) a,b are correct
50- d) No. of molecules
51- a) 0.04
52- c) Methyl benzoate
53- b) $[Ba^{+2}]^3 [Po_4^{-3}]^2$
54- a) ionization degree of
55- d) $[OH^-]$ $[H^+]$ increases
56- d) $[H_3O^+]$ increases , $[OH^-]$ doesn't change
57- d) graph
58- a) $H_2N - CH_2 COOCH_3$
59- c) formation of water
60- d) Aldehyde , ether & ester
61- c) ethyl ethananoate