LAST LOOK

✍ Question No. 2 ✍

✍ *Write the scientific expression for each of the following:*

1- Compounds that their colours change according to the PH of the medium.
2- The change in the concentration of the reactants per time unit.
3- Reaction of organic acids with alcohols in the presence of dehydrating substance.
4- Reaction of benzene with alkyl halide in the presence of anhydrous aluminum chloride.
5- The electrode at which oxidation process takes place in the electrochemical cells.
6- A solution its concentration is known.
7- The formula that shows the type and number of atoms present in an organic compounds.
8- Unsaturated aliphatic hydrocarbons having a double bond in their structure.
9- A dynamic system that takes place when the rate of forward reaction equals the rate of backward reaction and the concentration of reactants and products are not changed.
10- Quantity of electricity required to precipitate or dissolove equivalent mass in grams of any element during electrolysis.
11- Saturated cyclic hydrocabons their genral formula is C_nH_{2n}
12- Organic compunds having ($-CH_2OH$) group in their structures.
13- Equal volumes of gases under the same condition of temperature and pressure contain equal numbers of molecules.
14- it involves the determination of concentration of constituents of the compound.
15- Quantity of electricity required to precipitate 1.118 milligram of silver.
16- Unstaurated aliphatic hydrocarbons having triple bond in their structures.
17- Alcohols in which the Carbinol group is attached to two carbon atoms and one hydrogen atom.
18- The minimum amount (Quantity) of energy that must be gained by a molecule to react at collision.
19- At constant temperature the degree of ionization (α) increases by dilution.
20- the standard electrode which has electric potential equals zero.
21- Easy liquefied halogenated alkanes used in manufacture of cooling systems.
22- Alchols in which the carbinol group is not attached to any hydrogen atoms.
23- A chemical analysis is used to identify the consituents of the substance.
24- A small size cell commonly used in hearing and watches.
25- the multiplying of ecectric current intensity in amperes and time in seconds.
26- The number of Carboxylic groups in an Organic acids.

27- The volume of gases involved in a reaction and the gases produced exist in fixed ratios.

28- the rule used on the addition of an unsymmetric reagent (Hx) to an Unsymmetric alkene.

29- The maximum water vapour pressure of water at a certainTemperature.

30- protein mdecules produced in living cells that act as Catalysts for many biological and industrial process.

31- The presence of more than one organic compound having the same molecular formula but different structural formulas.

32- the resultant of multiplying the concentration of hydrogen ion times that of hydroxyl ion form water ionization .

33- An ester produced from the rection of salicylic acid with methyl alcohol.

34- A type of papers upon ignition leaves no ash.

35- Systems in which electrical energy is converted to chemical energy through non spontaneous (Oxidation – reduction) reaction.

36- The process of adding hydrogen to plants oils to convert it to an artificial fat.

37- Natural polymers arise from the condensation of alpha amino acids with each other.

38- the negative logarithm of hydrogen ion concentration.

39- Addition of water to alkenes or alkynes in the presence of catalyst.

40- A process in which a certain volume of a solution of known concentration is added to another solution of unknown concentration till the complete rection between the two solution.

41- The masses of the different materials formed or consume by the same amount of electricity are proportional to their equivalent masses.

42- Conversion Of long chain hydrocarbon to a shorter one by the effect of heat, pressure and a catalyst.

43- Polyhdroxy aldehydes or polyhydroxy ketones.

44- They are galvanic cells characterized by reversible chemical reactions and store the electrical energy as chemical energy.

45- Molecules which have kinetic energy that equls or exceeds the activation energy.

46- Important organic compounds obtained by treatment of alkyl benzene sulphonic acid with caustic soda.

47- A substance that cause change in the rate of the chemical reaction without itself, being changed or without affecting the equilibrium position.

48- At a constant temperature the rate of a chemical reaction is directly proportional to the product of multiplication of the reactant concentration, each is raised to the power of the number of maleculus or ions in the balanced chemical equation.

49- hydrolysis of ester by ammonia (NH_3) to give acid amide and alcohol.
50- A type of alcohol is used as antifreeze materials in car radiators in cold countries.
51- The equilibrium which occurs between molecules of a weak electrolyte and the ions produced from it.
52- The electrode at which the reduction process takes place.
53- The descending arrangement of standard oxidation potentials of the elements with reference to the standard hydrogen electrode.
54- the rection of alkenes with potassium permanganate solution in alkaline medium to give dihydric alcohols.
55- A group of compunds having the same general molecular formula and graduated in their physical properties.
56- An expression to express the degree of acidity or alkalinity of equeous solution using positive successive number.
57- the point at which complete reaction takes place.
58- Apparently a stationary system but in reality it is dynamic system.
59- the rections which are used for determination of substance that form sparingle soluble products.
60- the number of dissolved moles mass of a in a litre of the solution.
61- it is the atomic mass or molecular mass of a substance expressed in grams.
62- A method of chemical analysis depends on the volatilization of element or compound required to be determined.
63- the rections which proceed in one direction due to the excaping of one of the products from the system.
64- the reactions which proceed in both forword and backword directions.
65- the reactions which end in a very short time as soon as the reactants are mixed.
66- the change in any of the condition of chemical equilibrium cause a shift of the equilibrium in the direction which will oppose this change.
67- the product of multiplication of the concentration of ions (mole/ litre) raised to the power of the number of ion which exist in quilibrium with its saturated solution.
68- the salt derived from a weak acid and weak alkali.
69- The process of dissolution of salt in water to produce acid and alkali from which the salt is derived.
70- The Ionization which happenes in strong electrolytes.
71- The ions which do not exist freely in the equoues solution of acids.
72- the hydrated proton.
73- the reaction in which the electorns are transferred between reactant substance.
74- The sum of oxidation and reduction potentials for the two half cells.

75- the moving material bodies in the molten or solution which are rich in electrons.
76- The process of the formation of thin layer of a certain high value metal on the surface of a cheap metal.
77- A theory which considered that organic compound are formd in the cells of living organism only.
78- A method which in sued to separate alkanes from each other in petroleum ore.
79- An Organic atomic group with a general formula C_nH_{2n+1}
80- the gas which is celled swamps gas.
81- A mixture of caustic soda and quick lime
82- A mixture of carbon mono oxide gas and hydrogen gas which is used as a reducing agent.
83- the process of combination of unsaturated small malecules to each other to form a very large molecule.
84- A process in which two different monomers combine together and are accompanied by losing a simple molecule such as water.
85- The radical produced by removing one hydrogen atom from benzene molecule.
86- The Ugliest compound in the history of chemistry.
87- The substance found in cigarette smoke and causes cancer.
88- An atom or Atomic group which is responsible for the physical and chemical properties of the organic compunds.
89- The alcohols which are very difficult to be oxidized.
90- An explosive substance and it is used an the treatment of burns.
91- the reaction of organic acid with sodium carbonate or bicarbonate.
92- The saturated monocarboxylic aliphatic acid.
93- The method used to prepare acetic acid by oxidation of diluted alcoholic solution in the presence of vinegar bacteria.
94- The sodium salt of high fatty carboxylic acids.
95- The esters produced from the reaction between fatty acids and glycerol.
96- the heating of ester with aqueous alkalis to produce the alcohol and the salt of the acid.
97- A physical Quantity is measured by gram/ litre at (stp)
98- The volume Occupied by the molecular mass in gram at (stp).
99- The electrolytic material in mercury cell.
100- Organic acid in added to fruits to retain their colour and taste.

LAST LOOK

✍ Model Answers ✍

of Question No. 2

1 Indicators.
2 Rate of chemical reaction.
3 Estrification.
4 Friedal craft's reaction (alkylation)
5 Anode
6 Standard solution.
7 molecular formula.
8 Alkenes
9 Chemical equilibrium in reversible reactions.
10 faraday.
11 Cycloalkanes.
12 Primary alcohols.
13 Avogadro's law.
14 Quantitiative anlaysis
15 one coulomb
16 Alkynes.
17 Secondary alcohols.
18 Activation energy
19 Ostwald's law
20 standard hydrogen electrode (S.H.E)
21 Freons.
22 Tertiary alcohols.
23 Qualitative analysis.
24 Mercury cell.
25 Quantity of electricrty
26 Basicity of acids.
27 The law of Gay Lussac
28 Markownikoff's rule.
29 Saturated water vapour pressure.
30 Enzymes.
31 Isomerism.
32 Ionic product of water.
33 Marookh oil (Methyl salycilate)
34 Ashless filter paper.
35 electrolytic cells.
36 hydrogenation of oils.
37 proteins.
38 PH
39 Catalytic hydration.
40 Titration
41 Faraday's second law
42 Thermal catalytic Cracking
43 Carbohydrates.
44 Secondary cells.
45 Activated molecules.
46 Detergents
47 Catalyst.
48 law of mass action
49 Ammonolysis
50 Ethylene glycol.
51 Ionic equilibrium.
52 Cathode.
53 Electrochemical series.
54 Bayer's reaction
55 Homogenous series.
56 PH.
57 End point
58 Equlibrium system
59 precipitation reactions.
60 Molar concentration (molarity)
61 The mole.
62 Volatilization method.
63 Complete (irreversible) reaction
64 Reversible reactions.
65 instantaneous reaction
66 Le chatelier's principle.
67 solubility product.
68 Neutral salt(Ammonium carbonate)
69 hydrolysis of slat solution (hydration)
70 complete ionization.
71 protons.
72 hydronium ion
73 oxidation reduction reaction (redox)
74 e.m.f for cell
75 Anions
76 Electroplating.
77 the vital force theory
78 fractional distillation.
79 alkyl group
80 methane gas
81 soda lime
82 water gas
83 addition polymerization
84 condensation polymerization
85 phenyl radical
86 D.D.T
87 Benzopyrine
88 functional group
89 tertiary alcohol.
90 picric acid
91 acidity test
92 fatty acids
93 Biological method
94 soap
95 oil and fats.
96 saponification
97 the density of gas.
98 22.4 litre.
99 KOH solution
100 Cirtic acid.