MDCAT Chemistry Online Test

Sr	Questions	Answers Choice
1	What is not correct about ΔHF	A. It is always negative B. Ìts value gives an idea about the relative stability of reactants and the products. C. Its value can be greater or less than zero D. Value depends upon nature of bonds
2	What is correct about heat of combustion	A. It is applicable to gaseous substances only B. It is always negative C. It is always positive D. It is positive in some cases while negative in other
3	The enthalpy of formation of a compound is	A. Positive B. Either positive or negative C. Negative D. None
4	The values of ΔH for the process I(g)+e-1---------> I-1(g) is:	A. >0 B. <0 C. 0 D. None
5	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J
6	If a reaction involves only solids and liquids, which of the following is true?	A. ΔH = ΔE B. ΔH =ΔE C. ΔH>ΔE D. AH =AE +nRT
7	NaOH+HCl- NaCl+ H2O. Enthalpy change in the above reaction is called	A. Enthalpy of reaction B. Enthalpy of Neutralisation C. Enthalpy of formation D. Enthalpy of combustion
8	Hess's law is analogous to	A. Law of heat summation B. law of increasing entropy C. Law of heat exchange D. Ist law of thermodynamics
9	The net heat change in a chemical reaction is the same whether it is brought about in two or more different ways in one or several steps.it is known as	A. Henry's law B. Hess's law C. joule's law D. Law of conservation of energy
10	Which of the following has positive value of enthalpy	A. Neutralisation B. Atomization C. combustion D. All of the above
11	For an endothermic reaction, enthalpy of reactants	A. Is smaller than that of the products B. Is greater than that of the products C. Must be greater or smaller than that of the products D. Is equal to that of the products
12	Enthalpy of neutralization of strong acids and strong bases have same values because	A. Neutralization leads to the formation of salt and water B. Acids always give rise to H+ and bases always furnish OH- C. Strong acids and bases are ionic substances D. The net change involves the combination of H and OH ions to form water
13	If the energy of the activated complex lies close to energy of reactants, it means that reaction is	A. Slow B. Exothermic C. Endothermic

		D. Exothermic and fast
14	By increasing the concentration of reactants, the rate of reaction	A. Decreases B. Increases C. Remains constant D. Not predicted
15	The increase in reaction rate as a result of increase in temperature from 10K to 90K is	A. 512 B. 256 C. 400 D. 112
16	For a chemical reaction to occur	A. The vessel shall be open B. Reacting molecules should have less energy than Ea at time of collision C. Reacting molecules must be properly oriented and energy more than or equal to Ea D. The reacting molecules must not collide with each other
17	Which of the following reactions are usually slow?	A. Neutralization of acids and bases B. Displacement Reactions C. Organic substitution reaction D. Free radical reactions
18	Rate of which reaction increases with temperature?	A. Exothermic and endothermic reactions B. Endothermic reactions C. Exothermic reactions D. None of these
19	In which of the following techniques rate of reaction is directly related with number ofions	A. Spectrometry B. Dilatometric method C. Conductometric method D. Refractometric method
20	For a chemical reaction which can never be a fractional no	A. order B. molecularity C. half-life D. rate constant
21	If the rate of the reaction is equal to the rate constant, the order of the reaction is	A. 3 B. 1 C. 0 D. 2
22	If the reaction "P+Q→R+S' is deseribed as being of zero order with respect to P, it means that	A. P is catalyst in this reaction B. P molecules do not possess sufficient energy to react C. The concentration of P does not change during the reaction D. The rate of reaction is independent of the concentration of P
23	For reaction of methane and chlorine light is not available then	A. Reaction will take place rapidly B. No Reaction take place C. Reaction occurs at double the rate D. May all cases occur
24	Which of the following statement about the order of reaction is true?	A. The order of reaction can only be determined by experiment B. a second order reaction is also bimolecular C. The order of reaction is always non-zero D. The order of reaction increases with increasing temperature
25	The reaction takes place among the molecules when they have:	A. Activation energy B. Properly oriented C. Concentrated D. Activation energy and proper orientation
26	Half-lives required to convert 100% reactant to produet for a first order reaction are	A. 10 B. 1000 C. 100 D. Infinity
27	Doubling the pressure in a liquid phase reaction	A. Will double the rex B. Will increase the rex C. Will decrease the rex D. Will not alter the concentration of reactant
		A. average rate

28	When the concentration of reactants is taken as unity the rate of reaction is equal to	A. average rate B. concentratian of reactant C. instantaneous rate D. specific rate constant
29	Higher the surface area available for reaction	A. slower the reaction B. faster the reaction C. constant the reaction D. lower the Ea
30	Amount of product formed increases with time, this statement is true for reactions-------with kinetics	A. 1s order B. 3rd order C. zero order D. Any order
31	All the Hydrolytic reactions are	A. First order B. Second order C. Third order D. pseudo-first order
32	The radioactive disintegration of 238U92 is	A. First order B. Second order C. Third order D. Zero order
33	The collision which results in chemical reaction	A. Effective collision B. Ineffective collision C. Useless collision D. All of the above
34	Substance which is formed as well as consumed during a chemical reaction and have temporary existence.	A. Reactant B. product C. Catalyst D. Intermediate
35	The study of which one of the followings guides to the mechanism of the reaction	A. Order of reaction B. Rate of reaction C. Half-life period of reaction D. Rate determining step
36	For a chemical reaction in which one of the reactant also act as solvent, the order will be	A. First order B. Third order C. Second order D. pseudo-first order
37	A reaction A- B is independent of concentration of reactant A. The order of reaction will be	A. First order B. Second order C. Third order D. Zero order
38	When does average rate become equal to instantaneous rate of reaction	A. At the start of reaction B. time interval is zero C. at the end of reactior D. time interval approaches zero
39	The slope of the graph is steepest at the beginning of reaction showing	A. Rapid decrease in concentration of reactants B. Rapid increase in concentration of reactants C. Fast rate of reaction D. All of the above
40	Which property of liquid is measured by polarimeter	A. Conductance B. Optical activity C. Refractiye Indéx D. Change in volume
41	Unit of the rate constant depends upon the	A. Molecularity of reaction B. Order of reaction C. Concentration terms D. Number of reactants
42	The number of atoms or molecules whose concentrations determines the rate of a chemical reaction is called the	A. Molecularity of the reaction B. specific activity of the reaction C. Order of the reaction D. rate constant of the reaction
43	In the reaction A+B→ Products, if B is taken in excess, then it is an example of	A. Second order reaction B. zero order reaction C. Pseudo first order reaction D. first order reaction
44	The rate of reaction between A and B increases by a factor of 100, when the concentration of A is increased 10 folds, the order of reaction with respect to A is	A. 10 B. 1 C. 4 D. 2
45	The conversion of molecules of A to B follows a second order kineties. Doubling the	A. 2 B. 4

45	concentration of A will inerease the rate of formation of B by a factor of	C. 1/2 D. 1/4
46	If reactants are conductor of electricity, then method is used to measure the change in concentration of reaction	A. Optical rotation B. Refractrometric C. Dilatometric D. Electrical conductivity
47	In dilatometric method is directly proportional to extent of reaction	A. Change in concentration B. Change in pressure C. Chang in volume D. Change in temperature
48	Spectrometry method is applicable if a reactant or a product absorbs radiation	A. Ultraviolet B. Visible C. Infrared D. Any of these
49	The order of reaction provides valuable information about of reaction	A. Condition B. Concentration C. Mechanism D. Parameters
50	The reaction which is zero order	A. Decomposition ofN2O5 B. Formation of Glucose in plant C. Formation of FeI2 D. Chorination of methane in sunlight
51	The number of reacting molecules whose concentration change during reaction is called	A. Activated molecule B. Rate of reaction C. Order of reaction D. half-life
52	The rate of reaction for a reaction is 30 mol dm-3sec-1 if the product of concentration of 10.reactant is unity the specific rate constant is	A. 25 B. 2.5 C. 30 D. 15
53	When the concentration of product is increased the instantaneous rate of reaction with reference to reactants will be	A. Positive B. Negative C. the same D. falling curve
54	The concentration of product is increasing from 30 mole/dm3 to 40mol/dm3 in 0.5 sec then rate of reaction will be------moledm-3sec-1	A. 0 B. 20 C. 15 D. 25
55	Consider gas is measure in bars then the units of rate of reaction is	A. Mole dm-3 sec B. Bars sec C. Mole dm-3 sec-1 D. Bars sec-1
56	The reaction kinetics concerned with the	A. Rate of reaction B. Direction of reaction C. Factor effecting rate of reaction D. both a &b
57	Reaction kinetics is important to discover the---under which reaction will proceed most economically:	A. rate constant B. Conditions C. volume D. equilibrium point
58	Rusting of iron is the example of	A. Fast B. Slow C. moderate D. depends upon conditions
59	Ionization of KClO3. is suppressed by	A. Increasing temperatuse B. adding KCl C. adding NaNO3 D. Decreasing temperature
60	The value of Kc for H2O at 25C° is	A. 1x10 (-14)mole dm-3 B. 14 mol dm-3 C. 1.86×10(-16) mol dm-3 D. 1.0x10 (-7)moldm-3