

PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	Which of the following organic molecule is not aromatic.	A. Benzene B. Naphthalene C. Anthracene D. Cyclo-octatetraene
2	Which of the following class of compounds follow the criteria of aromaticity.	A. The compounds must have high degree of unsaturation B. they must have the property to undergo addition reactions C. They must have the property to undergo substitution reactions D. They must have the ability to sustain an induced current in NMR
3	Which of the following statements is not correct with respect to the important characteristics of aromatic compounds.	A. They are usually cyclic compounds B. They are resistant to usual addition reactions C. They usually undergo substitution reactions D. They are less stable
4	Which of the following statements is not correct. with respect to resonance.	A. The position of atomic nuclei must be same B. The limiting structures must have same number of paired and unpaired electrons. C. The energy of the various limiting structures must contribute equally D. All above
5	The decrease in electron density at one position accompanied by a corresponding increase at other position is called.	A. Inductive effect B. Asymmetric effect C. Electromeric effect D. Resonance effect
6	Which of the following statement is not correct with respect to electrometric effect.	A. It is permanent effect B. It is brought into play instantaneously at the demand of attacking reagent C. It proceeds a polar addition reaction D. The original electronic condition is restored after the removal of attacking reagent.
7	To complete transfer of a shared pair of electrons to one of the atoms joined by a double or triple bond at the requirement of an attacking reagent is known as.	A. Inductive effect B. Resonance effect C. Electromeric effect D. Stark effect
8	Which of the following case of acid or base strength is not explained by inductive effect.	A. Formic acid > acetic acid B. Dimethyl amine > trimethyl amine C. Dimethyl amine > methyl amine D. Chloroacetic acid > acetic acid
9	Correct order of increasing _____ I effect of groups is	A. ----- NO ₂ > -----CN > -----COOH > -----F B. -----F > -----COOH > -----CN > -----NO ₂ C. -----F > -----CN > -----NO ₂ > -----COOH D. -----CN > -----COOH > -----NO ₂ > -----F
10	Inductive effect can be used to explain	A. Dipole moment of chemical bonds B. Strength of acids C. Strength of bases D. All above
11	Which of the following statement is not correct with respect to inductive effect.	A. Bond length decrease with increase in inductive effect. B. Inductive effect generates polar character in bonds C. Variation in strength of aliphatic acids can be explained D. Bond length increase with increase in inductive effect.

		U. It alone can explain the basicity of triphenylamine
12	An induction of dipole or polarity in non polar bond, and consequent electron shifting along a chain of atoms is known as.	<p>A. Inductive effect</p> <p>B. Resonance effect</p> <p>C. Hyper conjugation</p> <p>D. None of the above</p>
13	Retarded reaction are those	<p>A. $\frac{1}{p}$ is independent of pressure</p> <p>B. $\frac{1}{p}$ is directly proportional to pressure</p> <p>C. $\frac{1}{p}$ is inversely proportional to pressure</p> <p>D. $\frac{1}{p}$ is directly proportional to the square of the pressure</p>
14	The kinetics of the decomposition of ammonia on the tungsten surface follows	<p>A. Zero order</p> <p>B. First order</p> <p>C. Second order</p> <p>D. Third order</p>
15	Which of the following state is not correct regarding Langmuir adsorption theory.	<p>A. Adsorbent has specific equivalent sites</p> <p>B. One site can adsorb only one molecule</p> <p>C. Adsorbed molecules cannot interact with each other</p> <p>D. Adsorption is a static process</p>
16	The Langmuir theory of unimolecular adsorption is generally valid at.	<p>A. Low pressures and low temperature</p> <p>B. Low pressures and high temperature</p> <p>C. High pressures and low temperature</p> <p>D. High pressure and high temperature</p>
17	According to the Langmuir isotherm, when the pressure of the gas is very large, the adsorption.	<p>A. Is directly proportional to pressure</p> <p>B. Is inversely proportional to pressure</p> <p>C. Is directly proportional to the square of the pressure.</p> <p>D. Is independent of pressure</p>
18	The Langmuir adsorption isotherm shows that the amount of adsorbed gas per gram of the solid is equal to.	<p>A. $\frac{a}{1+bp}$</p> <p>B. $\frac{ap+1}{1-bp}$</p> <p>C. $1+\frac{a}{1-bp}$</p> <p>D. $a(1+bp)$</p>
19	In terms of the amount of the substance adsorbed per gram of the adsorbent (x/m), and pressure p of the gas, the Freundlich adsorption isotherm is represented as.	<p>A. $\frac{x}{m} = k p^{\frac{1}{n}}$</p> <p>B. $\frac{x}{m} = k p^{\frac{1}{n}}$</p> <p>C. $p = k (\frac{x}{m})^{\frac{1}{n}}$</p> <p>D. $\frac{x}{m} = (\frac{k}{p})^{\frac{1}{n}}$</p>
		A. Adsorption on solids is reversible in nature

20	Which of the following characteristics of adsorption is wrong.	nature B. Adsorption, in general increase with increase in temperature. C. Adsorption is generally selective in nature. D. Both enthalpy and entropy of adsorption are negative
21	The enrichment of chemical substance at the surface of a solid is called	A. Adsorption B. Absorption C. Sorption D. Isotherm
22	A colloidal system in which both the dispersion phase and dispersed phase are liquid is.	A. Smoke B. Emulsion C. Whipped cream D. Mist
23	Which of the following methods does not give the weight average molecular weight.	A. Sedimentation equilibrium B. Sedimentation velocity C. Light scattering D. Osmotic method
24	Which of the following statements is not correct regarding the structure of DNA.	A. It has a double helix structure. B. There are hydrogen bonds in its structure C. Unlike RNA there is no fixed ratio of bases in DNA D. The code for protein synthesis is given by the sequence of bases in DNA
25	Which of the following is a natural polymer	A. Nylon B. Leucite C. Cellulose D. Polystyrene
26	Which of the following methods gives the number average molecular weight of a polymer.	A. Light scattering method B. Osmotic method C. Sedimentation equilibrium method D. Viscosity method
27	In emulsions , the dispersed phase and the dispersion medium are.	A. Both solids B. Both liquids C. Both gases D. Phase is liquid and medium is solid.
28	Which of the following statement is not correct regarding the stern theory of charge on colloidal particles.	A. The colloidal particle has a charge distribution at its surface. B. In the immediate vicinity of the colloidal particles there is an excess of counter ions C. The greater the concentration and charge of ions in the diffused electrical double layer. the larger is the thickness of the layer D. At large distance from the colloidal particles, the concentration of co-ions and counter ions are almost equal
29	The colloidal solution of arsenic sulphide prefers to absorb	A. NO ₃ B. K ⁺ C. S ₂ ⁻ D. H ⁺
30	The tyndall effect is not observed in	A. Suspensions B. Emulsions C. Colloidal solutions D. True solutions