

## NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	During the folding of filter paper the apex form angle of about	A. 80° B. 60° C. 180° D. 90°
2	Variable valency is generally exhibited by	A. Normal elements B. Transition elements C. Metallic elements D. None of these.
3	Hess's law deals with	A. Changes in heat or reaction B. Rate of reaction C. Equilibrium constant D. Influence of pressure on volume of a gas.
4	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
5	The structure of XeF <sub>6</sub>	A. Distorted octahedral B. Pyramidal C. Tetrahedral D. None of the above
6	Octane number can be changed by	A. Isomerisation B. alkylation C. Cyclisation D. All of these
7	All the naturally occurring processes proceed spontaneously in a direction which lead to	A. Decrease of entropy B. Increase of enthalpy C. Increase of free energy D. Decrease of free energy
8	The last orbit of argon would have electrons	A. 8 B. 18 C. 2 D. 6
9	Hypo is used to photography for	A. Developing picture B. Picture printed C. The colour of picture D. The fixation of picture
10	Most common reactions of benzene and its derivatives are	A. Electrophilic addition reactions B. Electrophilic substitution reactions C. Nucleophilic addition reactions D. Nucleophilic substitution reactions
11	Propyne on hydrolysis in presence of H <sub>2</sub> SO <sub>4</sub> and HgSO <sub>4</sub> gives	A. Acetaldehyde B. Acetone C. Formaldehyde D. None
12	The kinetic theory of gases predicts that total kinetic energy of a gaseous assemble depends on	A. Pressure of the gas B. Temperature of the gas C. Volume of the gas D. Pressure, temperature, and volume of the gas.
13	Setting of cement is an	A. Exothermic reaction B. Endothermic reaction C. Neither exothermic nor endothermic D. None
14	Wholer prepared urea from	A. Ammonia B. NH <sub>4</sub> CNO C. NH <sub>3</sub> D. Uric acid
	Which of the following alcohols cannot be prepared by treatment of aldehyde or ketone	A. 1-Propanol

15	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with $\text{NaBH}_4$ or $\text{LiAlH}_4$ ?	B. 2-Propanol C. 2-Methyl-2-propanol D. Ethanol
16	The rate at which a substance reacts depends on its	A. Atomic weight B. Equivalent weight C. Molecular weight D. Active mass
17	Maximum number of active hydrogens	A. Acetic acid B. Glycerol C. Methane D. Methanol
18	Which of the substances Na, Hg, S, Pt and graphite can be used as electrodes in electrolytic cells having aqueous solution?	A. Na, Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only
19	The addition of HBr is easiest with	A. $\text{CH}_2 = \text{CHCl}$ B. $\text{ClCH} = \text{CHCl}$ C. $\text{CH}_3 - \text{CH} = \text{CH}_2$ D. $(\text{CH}_3)_2\text{C} = \text{CH}_2$
20	Which of the following statements is correct with respect to the property of elements with increase in atomic number in the carbon family (group 14)?	A. Their metallic character decreases B. The stability of +2 oxidation state increases C. Their ionization energy increases D. Their atomic size decreases