

NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	Among alkali metal salts, the lithium salts are the poorest conductors of electricity in aqueous solution because of	<p>A. Easy diffusion of Li^+ ions</p> <p>B. Lower ability of Li^+ ions to polarize water molecules</p> <p>C. Lowest charge to radius ratio</p> <p>D. Higher degree of hydration of Li^+ ions</p>
2	When electricity is passed through molten $\text{Al}_2\text{O}_3 + \text{Na}_3\text{AlF}_6$ and 13.5 gms of Al are deposited, the number of faraday must be	<p>A. 0.5</p> <p>B. 1.0</p> <p>C. 1.5</p> <p>D. 2.0</p>
3	Chile salt petre is	<p>A. NaNO_3</p> <p>B. Na_2SO_4</p> <p>C. KNO_3</p> <p>D. $\text{Na}_2\text{S}_2\text{O}_3$</p>
4	The unit rate of a reaction can be increased in general by all the factors except by	<p>A. Using a catalyst</p> <p>B. Increasing temperature</p> <p>C. Increasing the activation energy</p> <p>D. Increasing the conc. of reactants</p>
5	For preparing an alkane, a concentrated aqueous solution of sodium or potassium salt of saturated carboxylic acid is subjected to	<p>A. Hydrolysis</p> <p>B. Oxidation</p> <p>C. Hydrogenation</p> <p>D. Electrolysis</p>
6	The alkali metal which is liquid at 15°C is	<p>A. K</p> <p>B. Cs</p> <p>C. Na</p> <p>D. None</p>
7	The substance used as a smoke screen in warfare is	<p>A. SiCl_4</p> <p>B. PH_3</p> <p>C. PCl_5</p> <p>D. Acetylene</p>
8	The total number of protons in 10 g of calcium carbonate is ($N_0 = 6.023 \times 10^{23}$)	<p>A. 1.5057×10^{24}</p> <p>B. 2.0478×10^{24}</p> <p>C. 3.0115×10^{24}</p> <p>D. 4.0956×10^{24}</p>
9	When sulphur is boiled with Na_2SO_3 solution, the compound formed is	<p>A. sodium sulphides</p> <p>B. Sodiums sulphates</p> <p>C. Sodium persulphate</p> <p>D. Sodium thiosulphate</p>
10	The halide which is not hydrolysed is	<p>A. SiCl_4</p> <p>B. SiF_4</p> <p>C. CCl_4</p> <p>D. PbCl_4</p>
11	Which of the following value of ΔH_f represent that product is least stable?	<p>A. $-94.0 \text{ kcal mol}^{-1}$</p> <p>B. $-231.6 \text{ kcal mol}^{-1}$</p> <p>C. $+21.4 \text{ kcal mol}^{-1}$</p> <p>D. $+64.8 \text{ kcal mol}^{-1}$</p>
12	The IUPAC name of the compound having the formula $(\text{CH}_3)_3\text{C} - \text{CH} = \text{CH}_2$ is	<p>A. 1, 1-Dimethyl-3-butene</p> <p>B. 1, 1, 1-Trimethyl-3-propene</p> <p>C. 3, 3-Dimethyl-1-butene</p> <p>D. 3, 3, 3-Trimethyl-1-propene</p>
13	Each of following is true of white and red phosphours except that they	<p>A. Are both soluble in CS_2</p> <p>B. Can be oxidized by heating in air</p> <p>C. Consist of the same kind of atoms</p> <p>D. Can be converted into one another</p>
14	Given below are some statements concerning formic acid, which of them is true?	<p>A. It is a weaker acid than acetic</p> <p>B. it is a reducing agent</p> <p>C. When its calcium salt is heated, it forms a ketone</p> <p>D. It is an oxidizing agent</p>

15	Ammonia gas used directly as a fertilizer is injected into the soil at a depth of about	A. Two inches B. Three inches C. Five inches D. Six inches
16	Aldehydes are produced in atmosphere by	A. Oxidation of secondary alcohols B. Reduction of alkenes C. Reaction of oxygen atoms with hydrocarbons D. Reaction of oxygen atoms with ozone.
17	Which of the following statements is most appropriate about effective nuclear charge? It depends upon	A. The shielding constant B. The atomic number C. The charge on the nucleus D. Both the nuclear charge and the shielding
18	Which one is primary alcohol?	A. Butan-2-ol B. Propan-2-ol C. Butan-1-ol D. 2, 3-Dimethylhexane-4-ol
19	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	A. One gm. atomic weight B. One gm. equivalent weight C. Electrochemical equivalent D. None of the above
20	The principal constituent of pyrex glass	A. Zn B. B C. Pb D. Cl