

NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	The alkali metal which is liquid at 15°C is	A. K B. Cs C. Na D. None
2	What happens when CCl_4 is treated with AgNO_3 solution?	A. NO_2 will be evolved B. A white ppt. of AgCl will form C. CCl_4 will dissolve in AgNO_3 solution D. Nothing will happen
3	Which of the following belongs to the halogen family?	A. Francium B. Polonium C. Radium D. Astatine
4	The total number of protons in 10 g of calcium carbonate is ($N_0 = 6.023 \times 10^{23}$)	A. 1.5057×10^{24} B. 2.0478×10^{24} C. 3.0115×10^{24} D. 4.0956×10^{24}
5	The ratio of the ionization energy of H and Be^{3+} is	A. 1 : 1 B. 1 : 3 C. 1 : 9 D. 1 : 16
6	Which is true for an element R present in group 13 of the periodic table?	A. It is a gas at room temperature B. It has oxidation state of +4 C. It forms R_2O_3 D. It forms RX_2
7	The ratio of close packed atoms to tetrahedral holes in cubic close packing is	A. 1 : 1 B. 1 : 2 C. 1 : 3 D. 2 : 1
8	One mole of gas refers to	A. The number of molecules in one litre of gas B. The number of molecules in one gram of gas C. The number of molecules contained in 12 grams of ^{12}C isotope D. The number of molecules in 22.4 litres of a gas at S.T.P.
9	Maximum number of active hydrogens	A. Acetic acid B. Glycerol C. Methane D. Methanol
10	Which of the following pairs are chemically dissimilar?	A. Na and K B. Ba and Sr C. Zr and Hf D. Ca and Zn
11	How many kinds of space lattices are possible in a crystal?	A. 23 B. 7 C. 230 D. 14
12	Which of the following alkali metal hydroxides is the strongest base?	A. LiOH B. NaOH C. KOH D. CsOH
13	The disaccharide present in milk is	A. Sucrose B. Maltose C. Lactose D. Cellobiose
14	BiCl_3 on hydrolysis forms a white precipitate of	A. Bismuthic acid B. Bismuth oxychloride C. Bismuth pentachloride

		D. Bismuth hydroxide.
15	When excess of SnCl_2 is added to a solution of HgCl_2 , a white precipitate turning to grey is obtained. The grey colour is due to the formation of	A. Hg_2Cl_2 B. SnCl_4 C. Sn D. Hg
16	The structure of XeF_6	A. Distorted octahedral B. Pyramidal C. Tetrahedral D. None of the above
17	Magnesium keeps on burning in	A. N_2 B. CO_2 C. N_2O D. N_2 as well as CO_2
18	Which of the following elements is most electronegative?	A. Oxygen B. Chlorine C. Nitrogen D. Fluorine
19	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
20	The rate of reaction between A and B increases by a factor of 100, and when the concentration with respect to A is increased 10 folds, the order of reaction w.r.t. A is	A. 10 B. 1 C. 4 D. 2