

## NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	The number of unpaired electrons in the p-subshell of oxygen atom	A. 1 B. 2 C. 3 D. 4
2	Which of the following imparts violet colouration to non-luminous flame of Bunsen burner?	A. $\text{NaCl}$ B. $\text{BaCl}_2$ C. $\text{CaCl}_2$ D. KCl
3	Which of the following is directly related to Qualitative analysis?	A. Identification B. Separation C. Measurement D. Calculation
4	Aldehydes are produce 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.
5	An endothermic reaction is one in which the reacting substances	A. Have more energy than the products B. Have less energy than the products C. Have the same energy as the products D. Are at a higher temperature than the products.
6	When sulphur is boiled with $\text{Na}_2\text{SO}_3$ solution, the compound formed is	A. sodium sulphides B. Sodiums sulphates C. Sodium persulphate D. Sodium thiosulphate
7	For the carbylamine reaction we need hot alc. KOH and	A. Any amin and chloroform B. Chloroform and Ag powder C. A primary amine and chloroform D. A mono alkyl amine and trichloromethane
8	In the manufacture of iron from haematite, limestone is added to act as.	A. Flux B. A reducing agent C. Slag D. An oxidizing agent
9	Dehydration of glycerol give	A. Propane B. Propene C. Acrolein D. Benzene
10	Which of the following reaction is used for detecting presence of carbonyl group?	A. Reaction with hydroxylamine B. Reaction with hydrazine C. Reaction with phenyl hydrazine D. All
11	A zero order reaction is one whose rate is independent of	A. Temperature of the reaction B. The concentration of the reactants C. The concentration of the products D. The material of the vessel in which the reaction is carried out
12	The total pressure exerted by a number of non-reacting gases is equal to the sum of partial pressure of the gases under the same conditions is known as	A. Boyle's law B. Charle's law C. Avogadro's law D. Dalton's law
13	Which of the following has least mass?	A. 2 gram atom of nitrogen B. $3 \times 10^{23}$ atoms of C C. 1 mole of S D. 7.0 g of Ag.
14	Which one is primary alcohol?	A. Buten-2-ol B. Propan-2-ol

	..... is primary alcohol	<p>C. Butan-1-ol</p> <p>D. 2, 3-Dimethylhexane-4-ol</p>
15	Rusting of iron is catalysed by	<p>A. Fe</p> <p>B. <math>O_2</math></p> <p>C. Zn</p> <p>D. <math>H^+</math></p>
16	The number of atoms contained in 11.2 L of $SO_2$ at S.T.P are	<p>A. <math>\frac{3}{2} \times 6.02 \times 10^{23}</math></p> <p>B. <math>2 \times 6.02 \times 10^{23}</math></p> <p>C. <math>6.02 \times 10^{23}</math></p> <p>D. <math>4 \times 6.02 \times 10^{23}</math></p>
17	The order of reactivity of halogens in aliphatic substitution reactions is	<p>A. <math>Br_2</math> &gt; <math>Cl_2</math> &gt; <math>F_2</math></p> <p>B. <math>Cl_2</math> &gt; <math>Br_2</math> &gt; <math>F_2</math></p> <p>C. <math>Cl_2</math> &gt; <math>Br_2</math></p> <p>D. <math>F_2</math> &gt; <math>Br_2</math> &gt; <math>Cl_2</math></p>
18	How many kinds of space lattices are possible in a crystal?	<p>A. 23</p> <p>B. 7</p> <p>C. 230</p> <p>D. 14</p>
19	The main structure features of proteins is	<p>A. An ester linkage</p> <p>B. An ether linkage</p> <p>C. The peptide linkage</p> <p>D. All</p>
20	The ratio of close packed atoms to tetrahedral holes in cubic close packing is	<p>A. 1 : 1</p> <p>B. 1 : 2</p> <p>C. 1 : 3</p> <p>D. 2 : 1</p>