

## NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	Which of the following species participate in sulphonation of benzene ring?	<p>A. <math>\text{H}_2\text{SO}_4</math></p> <p>B. <math>\text{HSO}_3^-</math></p> <p>C. <math>\text{SO}_3</math></p> <p>D. <math>\text{SO}_2</math></p>
2	Which of the following belongs to the halogen family?	<p>A. Francium</p> <p>B. Polonium</p> <p>C. Radium</p> <p>D. Astatine</p>
3	The bond angle H-O-H in ice is closest to	<p>A. <math>120^\circ</math></p> <p>B. <math>60^\circ</math></p> <p>C. <math>90^\circ</math></p> <p>D. <math>109^\circ</math></p>
4	Red P can be obtained from white P by	<p>A. Heating it with a catalyst in an inert atmosphere</p> <p>B. Distilling it in an inert atmosphere</p> <p>C. Dissolving it in <math>\text{CS}_2</math> and crystallizing</p> <p>D. Melting it and pouring the liquid into water</p>
5	The chemical composition of white lead is	<p>A. <math>\text{Na}_2\text{CO}_3</math></p> <p>B. <math>\text{Pb}_3\text{O}_4</math></p> <p>C. <math>\text{Pb}(\text{OH})_2 \cdot 2\text{PbCO}_3</math></p> <p>D. <math>\text{PbO}</math></p>
6	Which of the following nitrogen fertilizer contain more nitrogen	<p>A. <math>\text{NaNO}_3</math></p> <p>B. <math>\text{KNO}_3</math></p> <p>C. <math>\text{NH}_4\text{NO}_3</math></p> <p>D. Urea</p>
7	The density of nitrogen gas prepared from air is slightly greater than that of nitrogen prepared by a chemical reaction from a compound of nitrogen due to the presence of the following in aerial nitrogen.	<p>A. Argon</p> <p>B. <math>\text{CO}_2</math></p> <p>C. Some nitrogen molecules analogous to <math>\text{O}_2</math></p> <p>D. Greater amount of nitrogen molecules derived from <math>^{15}\text{N}</math> isotope.</p>
8	Hypo is used to photography for	<p>A. Developing picture</p> <p>B. Picture printed</p> <p>C. The colour of picture</p> <p>D. The fixation of picture</p>
9	Toluene can be oxidized to benzoic acid by	<p>A. <math>\text{KMnO}_4</math> (alk)</p> <p>B. <math>\text{K}_2\text{Cr}_2\text{O}_7</math> (acidic)</p> <p>C. Both</p> <p>D. None</p>
10	Which of the following elements is most electronegative?	<p>A. Oxygen</p> <p>B. Chlorine</p> <p>C. Nitrogen</p> <p>D. Fluorine</p>
11	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>
12	On heating acetaldehyde with ammoniacal silver nitrate solution, we get	<p>A. <math>\text{CH}_3\text{OH}</math></p> <p>B. Silver acetate</p> <p>C. <math>\text{HCHO}</math></p>

D. Silver mirror

13	The pure crystalline substance on being heated gradually first forms turbid liquid at constant temperature and still at higher temperature turbidity completely disappears. The behaviour is a characteristic of substance forming	A. Allotropic crystal B. Liquid crystals C. Isomeric crystals D. Isomorphous crystals
14	Ethyl alcohol is industrially prepared from ethylene by	A. Permanganate oxidation B. Catalytic reduction C. Absorbing in $\text{H}_2\text{SO}_4$ followed by hydrolysis D. Fermentation
15	Natural fertilizer provides phosphorus to plants in the form of $\text{P}_2\text{O}_5$	A. 1.2 kg B. 2.2 kg C. 3.2 kg D. 4 kg
16	The number of atoms in 0.004 g of magnesium is close to	A. 24 B. $2 \times 10^{20}$ C. $10^{20}$ D. $6.02 \times 10^{23}$
17	The isomers due to the unequal distribution of carbon atoms on either side of the functional group belonging to the same homologous series are called	A. Functional isomers B. Position isomers C. Chain isomers D. Metamers
18	An electrolyte	A. Forms complex ions in solution B. Gives ions only when electricity is passed C. Possesses ions even in solid state D. Gives ions only when dissolved in water
19	Phosphide ion has the electronic structure similar to that of	A. Nitride ion B. Fluoride ion C. Sodium ion D. Chloride ion
20	Fluorine does not show positive oxidation states due to the absence of	A. d-orbitals B. s-orbitals C. p-orbitals D. None