

## NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	Which of these is the most widely used nitrogen fertilizer in Pakistan	A. Urea B. Ammonium nitrate C. Ammonium Sulphate D. Ammonium chloride
2	Which of the following process is used to separate insoluble particles from liquids?	A. Separation B. Filtration C. Crystallization D. Condensation
3	The molal elevation constant is the ratio of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solute D. Mole fraction of solvent
4	$\Delta H_{neutralisation}$ is always	A. positive B. Negative C. Zero D. Positive or negative
5	The mass of the neutron is of the order of	A. $10^{-23}$ kg B. $10^{-24}$ kg C. $10^{-26}$ kg D. $10^{-27}$ kg
6	The total number of protons in 10 g of calcium carbonate is ( $N_0 = 6.023 \times 10^{23}$ )	A. $1.5057 \times 10^{24}$ B. $2.0478 \times 10^{24}$ C. $3.0115 \times 10^{24}$ D. $4.0956 \times 10^{24}$
7	Phosphide ion has the electronic structure similar to that of	A. Nitride ion B. Fluoride ion C. Sodium ion D. Chloride ion
8	Which one of the following has the lowest boiling point?	A. B B. Al C. Ga D. Ti
9	According to MO theory, the species $O_2^+$	A. Bond order of 2.5 B. Three unpaired electrons C. Diamagnetic character D. Stability lower than $O_2$
10	Bond angle is minimum for	A. $H_2O$ B. $H_2S$ C. $H_2Se$ D. $H_2Te$
11	When electrons revolve in stationary orbits,	A. There is no change in energy level B. They become stationary C. They are gaining kinetic energy D. There is increase in energy
12	Ozone is not	A. An allotrope B. A powerful oxidizing agent C. Paramagnetic D. a bent molecule
13	Ethyl alcohol is industrially prepared from ethylene by	A. Permanganate oxidation B. Catalytic reduction C. Absorbing in $H_2SO_4$ followed by hydrolysis D. Fermentation
14	Given below are some statements concerning formic acid, which of them is true?	A. It is a weaker acid than acetic B. it is a reducing agent C. When its calcium salt is heated, it forms a ketone D. It is an oxidizing agent
15	Gooch Crucible used to filter the solution of	A. $H_2SO_4$ B. HCl

15	Some oxides add to water the solution of	C. $\text{KMnO}_4$ D. Both B & C
16	In cold countries ethylene glycol is added to water in radiators of cars during winter. It results in	A. Lowering in b.pt. B. Reducing viscosity C. Reducing specific heat D. Lowering in freezing pt.
17	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
18	The chemical composition of white lead is	A. $\text{Na}_2\text{CO}_3$ B. $\text{Pb}_3\text{O}_4$ C. $\text{Pb}(\text{OH})_2 \cdot 2\text{PbCO}_3$ D. $\text{PbO}$
19	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.
20	In which of the following elements +1 oxidation state is more stable than +3	A. B B. Al C. Ga D. Ti