

NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	Pollutant of automobile exhausts that affects nervous system/produces mental diseases is	A. Mercury B. Lead C. Nitrogen oxide D. Sulphur oxide
2	Which of the following species participate in sulphonation of benzene ring?	A. H_2SO_4 B. HSO_3^- C. SO_3^- D. SO_2
3	1 mole of CH_4 contains	A. 6.02×10^{23} atoms of H B. 4 g-atom of hydrogen C. 1.81×10^{23} molecules of CH_4 D. 3.0 g of carbon
4	As a fixing agent in photography, sodium thiosulphate is used for	A. Dissolving out unreacted silver bromide B. Converting silver halides to metallic silver C. Reducing solubility of AgBr D. Preventing overdeveloping and fogging.
5	Hydrogen chloride molecule contains	A. Covalent bond B. Double bond C. Co-ordinate bond D. Electrovalent bond
6	If N_A is Avogadro's number, then number of valence electrons in 4.2 g of nitride ions N^{3-} is	A. $2.4 N_A$ B. $4.2 N_A$ C. $1.6 N_A$ D. $3.2 N_A$
7	Which of the following is acidic?	A. SO_3 B. N_2O C. BeO D. HgO
8	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
9	The percentage of nitrogen in urea is	A. 46 B. 60 C. 70 D. 80
10	Which of the following does not reflect the periodicity of elements?	A. Bonding behaviour B. Electronegativity C. Ionisation potential D. Neutron/proton ratio
11	BiCl_3 on hydrolysis forms a white precipitate of	A. Bismuthic acid B. Bismuth oxychloride C. Bismuth pentachloride D. Bismuth hydroxide.
12	Acetic anhydride is obtained from acetyl chloride by the reaction of	A. P_2O_5 B. H_2SO_4 C. CH_3COONa D. CH_3COCH_3
13	Propyne on hydrolysis in presence of H_2SO_4 and HgSO_4 gives	A. Acetaldehyde B. Acetone C. Formaldehyde D. None
14	When a carbon atom forms single bonds with other carbon atoms, these hybrid orbitals overlap with the orbitals of hydrogen to form four bonds which are	A. Three sigma and one P_i B. Two sigma and two P_i C. One sigma and three P_i

P

D. Sigma

15 $\Delta H_{\text{neutralisation}}$ is always

- A. positive
- B. Negative
- C. Zero
- D. Positive or negative

16 The unit rate of a reaction can be increased in general by all the factors except by

- A. Using a catalyst
- B. Increasing temperature
- C. Increasing the activation energy
- D. Increasing the conc. of reactants

17 In which of the following elements +1 oxidation state is more stable than +3

- A. B
- B. Al
- C. Ga
- D. Ti

18 Which of the following is directly related to Qualitative analysis?

- A. Identification
- B. Separation
- C. Measurement
- D. Calculation

19 Salol is prepared from

- A. Salicylic acid and phenol
- B. Salicylic acid and methyl alcohol.
- C. Both
- D. None

20 The acid used in lead storage cells is

- A. Phosphoric acid
- B. Nitric acid
- C. Sulphuric acid
- D. Hydrochloric acid