

NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	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
2	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
3	Which of the following as a molecular diseases?	A. Allergy B. Cancer C. German measles D. Sickle cell anemia
4	Galena is an ore of	A. Gallium B. Lead C. Tin D. Germanium
5	Which one of the halogen acid is a liquid?	A. HF B. HCl C. HBr D. HI
6	Rusting of iron is catalysed by	A. Fe B. O_2 C. Zn D. H^+
7	Which of the following does not reflect the periodicity of elements?	A. Bonding behaviour B. Electronegativity C. Ionisation potential D. Neutron/proton ratio
8	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
9	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
10	Which of the following belongs to the halogen family?	A. Francium B. Polonium C. Radium D. Astatine
11	The valence orbital configuration of an element with atomic number 23 is	A. $3d^5$ B. $3d^3, 4s^2$ C. $3d^3, 4s^1, 4p^1$ D. $3d^2, 4s^2, 4p^1$
12	The relative rates of diffusion of a gas (molecular weight = 128) as compared to oxygen is	A. 2 times B. 1/4 C. 1/8 D. 1/2
13	Phenol is heated with CCl_4 and alkaline KOH when salicylic acid is produced. The reaction is known as	A. Friedel-Craft reaction B. Reimer-Tiemann's reaction C. Rosenmund's reaction D. Sommelet reaction
14	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
15	Which of the following oxides is peroxide?	A. Na_2O_2 B. MnO_2 C. BaO

D. SO_2

16 Sea weeds are important source of

- A. Iron
- B. Chlorine
- C. Iodine
- D. Bromine

17 Setting of Plaster of Paris involves

- A. Oxidation with atmospheric
- B. Combination with atmospheric CO_2
- C. Dehydration
- D. Hydration to yield another hydrate

18 Acetylene gives

- A. White ppt. with ammonical AgNO_3 and red ppt. with ammonical $\text{Cu}(\text{NO}_3)_2$
- B. White ppt. with ammonical AgNO_3 and red ppt. with ammonical Cu_2Cl_2
- C. White ppt. with both
- D. Red ppt. with both

19 Aluminothermy used for on the spot welding of large iron structure is based upon the fact that

- A. As compared to iron, aluminium has greater affinity for oxygen
- B. As compared to aluminium, iron has greater affinity for oxygen
- C. Refraction between aluminium and oxygen is endothermic
- D. Reaction between iron and oxygen is endothermic.

20 Octane number can be changed by

- A. Isomerisation
- B. alkylation
- C. Cyclisation
- D. All of these