

Chemistry General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Bragg's law is given by equation	A. $n\lambda = 2d \sin\theta$ B. $\lambda = 2d \sin\theta$ C. $2n\lambda = d \sin\theta$ D. $n\lambda = 1/2 d \sin\theta$
2	Acetic anhydride is obtained from acetyl chloride by the reaction of	A. $\text{CH}_3\text{COCl} + \text{CH}_3\text{COCl} \rightarrow \text{CH}_3\text{COOCOCH}_3 + \text{HCl}$ B. $\text{CH}_3\text{COCl} + \text{CH}_3\text{COCl} \rightarrow \text{CH}_3\text{COOCOCH}_3 + \text{HCl}$ C. $\text{CH}_3\text{COCl} + \text{CH}_3\text{COCl} \rightarrow \text{CH}_3\text{COOCOCH}_3 + \text{HCl}$ D. $\text{CH}_3\text{COCl} + \text{CH}_3\text{COCl} \rightarrow \text{CH}_3\text{COOCOCH}_3 + \text{HCl}$
3	Water (H_2O) is liquid while hydrogen sulphide (H_2S) is a gas because	A. Water has higher molecular weight B. Hydrogen sulphide is a weak acid C. Sulphur has high electronegativity than oxygen D. Water molecules associate through hydrogen bonding.
4	Octane number is zero for	A. n-Heptane B. Isooctane C. n-Hexane D. Isoheptane
5	Which of the following represents elements in order of increasing atomic size?	A. I,Br,Cl B. Na,Mg,C C. C,N,O D. Li,Na,K
6	Which of the following geometry is associated with the compound in which the central atom assumes sp^3d hybridization?	A. Planar B. Pyramidal C. Angular D. Trigonal bipyramidal
7	The pore size of the filter paper depends upon	A. Nature of the medium B. Temperature of the medium C. Size of the particles D. Mass of the particles
8	In which molecule carbon atom is sp^2 hybridized	A. $\text{CH}_2=\text{CH}_2$ B. C_2H_4 C. C_2H_2 D. None of the above
9	The weight of 11.2 liters of CO_2 at S.T.P. would be	A. 88 g B. 44 g C. 32 g D. 22 g
10	SO_2 and NO_2 pollution by increasing	A. Alkalinity B. Acidity C. Neutrality D. Buffer action
11	Which of the following pairs are chemically dissimilar?	A. Na and K B. Ba and Sr C. Zr and Hf D. Ca and Zn
12	Toluene can be oxidized to benzoic acid by	A. KMnO_4 (alk) B. $\text{Cr}_2\text{O}_7^{2-}$

</sub>(acidic)

C. Both

D. None

A. >Calcium carbonate

B. >Calcium hydroxide

C. >Calcium oxide

D. >Calcium bicarbonate

13 Calcium cyanamide on treatment with steam under pressure gives NH_3 and

A. Super saturated

B. Unsaturated

C. Remains saturated

D. None

14 Saturated solution of NaCl on heating becomes

A. It is a noble metal
B. Oxygen forms a protective reaction easily with water
C. Iron undergoes reaction easily with water
D. Fe form mono and divalent ions.

16 Which of the following is a colligative property?

A. Melting point
B. Osmotic pressure
C. Freezing point
D. Sublimation temperature

17 Which is not a colligative property?

A. Osmotic pressure
B. Lowering of vapour pressure
C. Depression of freezing point
D. Elevation of boiling point

18 Which one is the property of an ideal solvent

A. Should be expensive
B. It should react chemically with the solute
C. Impurities should crystallize along with the solute
D. Should be safe to use

19 Which of the following has linear shape?

A. SP
B. SP^{2+}
C. SP^{3+}
D. None of the above

20 In cold countries ethylene glycol is added to water in radiators of cars during winter It result in

A. Lowering in b.pt.
B. Reducing viscosity
C. Reducing specific heat
D. Lowering in freezing pt.