

Class 11 Chemistry
Annual Local 2019 MCQs

1. Enthalpy of combustion can be determined by:
 A. Bomb calorimeter B. Copper calorimeter
 C. Coffee-cup calorimeter D. Glass calorimeter
2. Born - Haber cycle is applied to determine:
 A. Lattice energy B. Bond energy
 C. Hydration energy D. Potential energy
3. What is added with S in order to balance the following equation? $S \rightarrow H_2S$
 A. $2H^+, 1e^-$ B. $2H^+, 3e^-$
 C. $2H^+, 4e^-$ D. $2H^+, 2e^-$
4. Which of the following has highest number of molecules in it?
 A. 10g of NO B. 10g of NO₂
 C. 10g of N₂O₄ D. 10g of N₂O
5. How many moles of O₂ are needed for the complete combustion of one mole of Butane (C₄H₁₀)?
 A. 8 B. 6.5
 C. 13 D. 4.5
6. Which of the following orbital is of greater energy?
 A. 4d B. 6s
 C. 4f D. 5p
7. When fast neutrons are bombarded on nitrogen atoms, what radiations are emitted?
 A. β -rays B. γ - rays
 C. X -rays D. α - rays
8. The C - H bond length will be greater when the hybridization of carbon is:
 A. sp^2 B. sp^3
 C. dsp^3 D. sp
9. One atmosphere pressure is equal to:
 A. 101.325 Pa B. 101.325 Bars
 C. 101325 N/m² D. 101325 Kpa
10. In which of the following pairs, both gases will diffuse at the same rate?
 A. H₂ & He B. N₂ & CO
 C. CO & CO₂ D. O₂ & SO₂
11. Which of the following requires least energy for vaporization?
 A. Cl₂ B. Br₂
 C. I₂ D. F₂

12. Sodium chloride exists in cubic and octahedral forms. This phenomena is called:
A. Polymorphism
B. Allotropy
C. Anisotropy
D. Isomerism
13. A reaction will proceed in forward direction in order to attain equilibrium when (Q = reaction quotient, K = equilibrium constant).
A. $Q < K_c$
B. $Q = K_c$
C. $Q = \frac{1}{2} K_c$
D. $Q > K_c$
14. pH of 0.001 M $NaOH$ solution is:
A. 10^{-3}
B. 11
C. 10^{-11}
D. 3
15. Which of the following compounds will produce acidic solution on hydrolysis?
A. KNO_3
B. $NaCl$
C. NH_4NO_3
D. $NaCN$
16. The units of rate constant and rate of reaction will be same when order of reaction is:
A. 2
B. 3
C. Zero
D. 1
17. Which of the following is **NOT** a pair of partially miscible liquids?
A. Aniline - water
B. Nicotine - water
C. Benzene - water
D. Phenol - water