

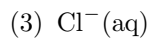
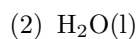
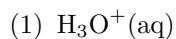
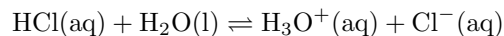
MHT CET 2026 Mathematics Memory Based Question Paper PDF

Chemistry

1. Which of the following statement is correct for vapor pressure?
 - (1) Vapor pressure decreases with increase in temperature
 - (2) Vapor pressure is independent of temperature
 - (3) Vapor pressure increases with increase in temperature
 - (4) Vapor pressure becomes zero at high temperature
2. Find the number of atoms present in 11.2 L of nitrogen gas at STP.
 - (1) 3.01×10^{23}
 - (2) 6.02×10^{23}
 - (3) 12.04×10^{23}
 - (4) 1.204×10^{23}
3. Which of the following is true for entropy?
 - (1) Entropy decreases with increase in randomness
 - (2) Entropy is the measure of randomness of a system
 - (3) Entropy remains constant in every process
 - (4) Entropy is always zero for gases
4. Calculate the solubility in mol dm^{-3} of sparingly soluble salt BaBr if its solubility product is 4.9×10^{-13} at the same temperature.
 - (1) 7×10^{-7}
 - (2) 7.5×10^{-7}
 - (3) 8×10^{-7}
 - (4) 4.9×10^{-7}
5. Calculate the pH of 0.01 M strong dibasic acid.
 - (1) 5.5
 - (2) 2.5
 - (3) 2.0
 - (4) 1.7
6. The solubility product of PbCl_2 at 298 K is 3.2×10^{-5} . What is its solubility in mol dm^{-3} ?
 - (1) 8×10^{-6}
 - (2) 2×10^{-2}
 - (3) 5.6×10^{-3}

(4) 5×10^{-2}

7. Identify Base₂ for the following equation according to Brønsted-Lowry theory:



8. What is the pH of 2×10^{-3} M solution of a monoacidic weak base if it ionises to the extent of 5%?

(1) 14

(2) 10

(3) 4

(4) 2

9. A certain mass of a gas occupies a volume of 2.5 dm^3 at NTP. Calculate the change in volume of gas at the same temperature if pressure of gas is changed to 1.25 atm.

(1) 3.0 dm^3

(2) 0.5 dm^3

(3) 4.5 dm^3

(4) 1.5 dm^3

10. Identify conjugate acid and conjugate base for HCO_3^- ion respectively:

