

MHT CET 2026 Mathematics Memory Based Question paper PDF

Chemistry

1. For a first-order reaction, the time required to reduce the concentration of the reactant to half its initial value is:
(a) $0.3010/k$
(b) $1/k$
(c) $0.693/k$
(d) $2.303/k$
2. The EAN of cobalt in the complex $[\text{Co}(\text{NH}_3)_6]^{3+}$ is:
(a) 27
(b) 30
(c) 33
(d) 36
3. A cube of edge 4 cm has mass 256 g. The density of the material in SI unit is:
(a) 4 kg/m^3
(b) 1600 kg/m^3
(c) 4000 kg/m^3
(d) 1000 kg/m^3
4. The Van't Hoff factor for a solution of K_2SO_4 in water is:
(a) 1
(b) 2
(c) 3
(d) 4
5. In the electrolysis of molten NaCl , the product obtained at the cathode is:
(a) Cl gas
(b) Na metal
(c) NaOH
(d) H gas
6. Which of the following is an example of physisorption?
(a) Adsorption of NH_3 on charcoal
(b) Adsorption of H on Ni
(c) Adsorption of noble gases on solid surface

- (d) Adsorption of O on heated metal
7. Which of the following reagents are used in Friedel–Crafts alkylation?
- (a) AlCl_3
 - (b) FeCl_3
 - (c) RCOCl
 - (d) H_2SO_4

