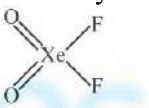
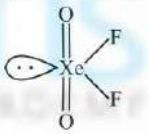
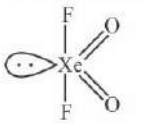
28) Half life of a chemical reaction at a particular concentration is 50 minutes. When the concentration of the reactant is doubled, the half life remains same, then the order of reaction is
a) Zero b) First
c) Second d) Third

29) Structure of XeO_2F_2 is incorrectly represented by

(1) 

(2) 

(3) 

(4) both (1) and (2)

30) The value of observed molecular weight of silver nitrate is 133.5 gram/mole in an aqueous solution the degree of dissociation of silver nitrate in this solution may be
a) 32% b) 27%
c) 79% d) 49%

31) Aniline reacts with bromine water to give white precipitate. Calculate amount of white precipitate formed when 93 g aniline reacts with 640 g Br_2 with 50% yield
a) 81 g b) 165 g
c) 300 g d) 172 g

32) The cell constant of a conductivity cell is defined as (σ = cell constant l = length between the electrode A = area, R = resistance, G = Conductance, K = conductivity, ρ = specific resistance)
a) $\sigma = \frac{\rho}{R}$ b) $\sigma = G \times K$
c) $\sigma = (G\rho)^{-1}$ d) All of these

The equilibrium constant for the reaction $Sr_{(s)} + Mg^{+2}_{(aq)} \rightleftharpoons Sr^{+2}_{(aq)} + Mg_{(s)}$ is 2×10^2 at 25°C. The E° for a cell made up of Sr/Sr^{+2} and Mg^{+2}/Mg half cell is;
(1) 0.0591 V (2) 0.0679 V
33) (3) 0.0366 V (4) 3.667 V

34) If relative decrease in vapour pressure is 0.5 for a solution containing 1 mole NaCl in 2 mole of H_2O then % ionization of NaCl is
a) 100% b) 60%
c) 40% d) 80%

35) Which of the following compound does not contain N – N bond?
a) N_2O_5 b) N_2O_4
c) N_3H d) N_2O_3

36) For an electrolyte A_2B_3 which is correct relation between molar conductivity (Λ_m) and equivalent conductivity (Λ_{eq})?
a) $\Lambda_{eq} = 6\Lambda_m$ b) $2\Lambda_m = 3\Lambda_{eq}$
c) $\Lambda_m = 6\Lambda_{eq}$ d) $3\Lambda_m = 2\Lambda_{eq}$

37) Which of the following salt has more value of Van't Hoff factor i as that of NaCl?
a) Na_2SO_4 b) $Al(NO_3)_3$
c) $K_4[Fe(CN)_6]$ d) All of these

38) An aqueous sodium acetate solution is electrolyzed using 2A current for 9650 sec. Calculate volume of gas evolved at anode at S.T.P.
a) 4.48 L b) 2.24 L
c) 6.72 L d) None of these

39) When ethyl alcohol (C_2H_5OH) reacts with thionyl chloride, in the presence of pyridine, the gas obtained is
a) HCl b) SO_2
c) HCl, SO_2 d) None of these

40) The number of P–O–P (bridges bond) and lone pair in the structure of P4O10 are
a) 20, 4 b) 6, 20
c) 24, 6 d) 4, 24

41) When the activation energies of forward and backward reaction are equal, then
a) $\Delta H = 0$ b) $\Delta H = \infty$
c) No catalyst present d) $\Delta S = 0$

Answer Key for 23-04-2025 NEET MODEL QUESTION PAPER – CHEMISTRY

Q	16	17	18	19	20	21
A	C	A	A	A	B	B
Q	22	23	24	25	26	27
A	C	D	D	D	D	D

– தொடரும்