

- (1) Calculate pH of 0.01 M H_2SO_4 solution? (2)
- (2) Convert 10^{-2} M H_2SO_4 into normality. (2)
- (3) 4.9 gms of H_2SO_4 is present in 2 lt of its solution having density 1.4 gm/ml. Calculate molarity and molality of the solution. (5)
- (4) How many grams of KOH are required to prepare 2 lt of its solution having pH 12? (5)
- (5) 9.8 gms of H_2SO_4 is present in 2 lt of solution. Calculate normality, molarity and pH of solution. (5)
- (6) If 0.5 amp current flows for 1 hr through $CuSO_4$ solution, then calculate the amount of copper deposited at cathode. (2)
- (7) Calculate the normality and pH of 10 lts of Caustic potash (KOH) solution which contains 0.056 gms of solute. (5)
- (8) Find the pH of a solution containing 8 gm of NaOH in 2 lt of its solution. (3)
- (9) 10 gm of a dibasic acid with molecular weight 90 g/mol is present in 2 lt of its solution. Find molarity and normality of the solution. (5)
- (10) A divalent metal has equivalent weight 12. Find its atomic weight. (2)
- (11) 2.45 gms of H_2SO_4 is present in 250 ml of its solution. Calculate pH of the solution. (3)

- (12) How many grams of silver will be deposited at the cathode by the passage of 10 amp of current through silver nitrate solution for half an hour. (5)
(AgNO_3)
- (13) How many grams of calcium chloride (CaCl_2) are required to prepare 2 lt. of its semimolar solution. (5)
- (14) 11.2 grams of caustic potash (KOH) are present in 5 lt of its solution. Find pH of the solution. (5)
- (15) 5 lt of an aqueous solution contains 19 gms of magnesium chloride (MgCl_2). Find molarity and normality of the solution. (5)
- (16) How many grams of NaOH are required to prepare 4 lt of its solution having pH 10. (5)
- (17) Calculate the normality of H_2SO_4 solution containing 14.7 grams of solute in 3 lts of solution. (2)
- (18) 40 gms of caustic soda (NaOH) is dissolved in water to prepare 5 lts of its solution having density 1.02 gm/cc. Calculate normality, molarity and molality of the solution. (5)
- (19) 21.2 gms of sodium carbonate is dissolved in water to prepare 2 lts of its solution, having density 1.01 gm/cc. Calculate the molarity, normality and molality of the solution. (5)
- (20) Calculate the pH of 0.01 M KOH solution. (2)