

Maliba Pharmacy College
B. Pharm 3rd Semester, Mid semester exam I
Pharmaceutical Analysis-I (030020304)

Time: 60 min
Total marks: 20

Date: 1/10/2012

Q.1 Define following. (Any Five)

05

1. Lewis acid
2. Calibration
3. Molality
4. Indeterminate error
5. Buffer solution
6. Quality assurance
7. Iodometry

Q.2 Comment on following statements. (Any three)

06

1. Equivalent weight of potassium permanganate is different in acidic and alkaline medium.
2. Aqueous solutions of ammonium chloride are alkaline in nature.
3. Aluminum chloride is a lowry-bronsted acid.
4. Glycerol is added in the titration of boric acid with sodium hydroxide solution.

Q.3 Calculate following.

09

1. Accurately weighed 0.5 g pure sample of sodium carbonate is dissolved in water and titrated with a solution of hydrochloric acid. A volume of 25 ml is required to reach the methyl orange endpoint. Calculate the normality of hydrochloric acid solution.
2. Calculate the pH of solution prepared by mixing 50 mL of 0.1 M ammonia solution and 50 mL of 0.05 M hydrochloric acid solution. Dissociation constant of ammonia is 1.8×10^{-5} .
3. What volume of 0.1 M KMnO_4 is required to completely react in acid solution with 10.0 mL of 3.2 % w/v hydrogen peroxide solution having a density of 1.01 g/mL?