

Pramukh Swami Science & H.D. Patel Arts College, Kadi

Bachelor of Vocation Pharmaceutical Chemistry Semester- II

Internal Examination, March-2019,

(PC-214) Analytical Chemistry

Time: 2 hours 28/03/2019 Total Marks: 60

Que-1. Answer any 12 questions. Each question carries 1 mark [12]

1. What is Error?
2. What is titration?
3. What is precision?
4. Define accuracy.
5. What is normality?
6. Define range.
7. What is standard deviation?
8. Write the type of titration.
9. Phenolphthalein is used in acid base titration. (True/False)
10. _____ is used to detect Ca^{+2} in complexometric titration. (EDTA/DMG)
11. What is redox titration?
12. _____ ml of 0.1 N HCl is required to neutralize 10 ml of 0.2 N NaOH solution.

Que.2. Answer any five questions. Each question carries 4marks [20]

1. Write the name of any four book with their author which are in your library.
2. What is the molarity of 4.9% H_3PO_4 solution by mass (density of $\text{H}_3\text{PO}_4 = 1.22$ g/ml)?

3. The volume of 0.1 M $\text{Ca}(\text{OH})_2$ needed for the neutralization of 40 ml of 0.05 N

oxalic acid will be?

4. Explain Redox titration with example.

5. If for a particular experiment, the accepted true value is 14.09 and the measured value of sample is 14.40, then calculate % relative error?

6. How the error can be minimized? Explain.

7. Explain complexometric titration.

8. Explain classical method of analysis.

Que.3. Answer any four questions. Each question carries 7 marks [28]

1. Explain the Error in detail.
2. Explain acid base titration.
3. Explain the instrumental method of analysis.
4. What is concentration? Define (i) Mole fraction (ii) %W/W
5. Explain the Mean of following data- 10.2, 10.3, 10.4, 10.7 and 10.6
6. Define primary and secondary standard.