

**Pramukh Swami Science & H.D. Patel Arts College, Kadi**  
**Bachelor of Vocation Pharmaceutical Chemistry Semester- III**

**Internal Examination, November-2018,**  
**(PC-312) Advanced Analytical chemistry - I**

**Time: 2 hours**

**16/11/2017**

**Total Marks: 60**

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

1. Define Chromatography.
2. Name of stationary phase used in Paper Chromatography.
3. Full form of HPLC.
4. Principle of TLC  
(a) Partition (b) Adsorption (c) pH (d) Separation.
5. The conductivity of weak electrolyte increases more on dilution than that of strong electrolyte. (True/False)
6. What is potential?
7. Write the Equation of Rf.
8. Kjeldahl Method is used for the \_\_\_\_\_  
(a) Moisture determination (b) halide determination  
(c) Nitrogen determination (d) Carbon determination
9. Calomel electrode is working as anode. (True/False)
10. What is pH?
11. What is extraction?
12. Potential value of Standard Hydrogen electrode,  
(a) 0 V (b) 20 V (c) 1 V (d) 5 V
13. What is specific conductivity?

**Que.2. Answer any five questions. Each question carries 4marks**

**[20]**

1. Give the definition of following  
(a) Mobile phase (b) Stationary Phase  
(c) Eluate (d) Retention time
2. Give the classification of Chromatography.
3. Explain Paper Chromatography.

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

4. Short note on TLC.
5. Explain hydrogen electrode in brief.
6. Explain the Soxhlet Extraction.
7. Explain the type of extraction.
1. Discuss EMF series in detail.
2. Write down the applications of TLC.
3. Explain Acid base titration performed by potentiometric method.
4. Explain the Kohlrausch law.
5. Explain the effect of pH on extractability of drugs
6. Short note on Column Chromatography.