

# **2010 scheme**

**QP CODE: 402006**

**Reg. No: .....**

## **Final Year B.Pharm Degree Supplementary Examinations December 2021**

### **Pharmaceutical Analysis – II**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw Diagrams wherever necessary.*

**Essays**

**(3x10=30)**

1. Discuss principle, instrumentation and pharmaceutical applications of spectrofluorimetry
2. Give an account of instrumentation and applications of HPLC.
3. Describe the principle involved in end point detection by potentiometric titration. Add a note on the principle and methodology of water determination by potentiometric titration

**Short notes**

**(14x5=70)**

4. Describe the origin and applications of mass spectrum
5. State Beer-Lamberts law. Mention its significance in pharmaceutical analysis
6. Describe instrumentation of paper electrophoresis.
7. Describe principles of adsorption column chromatography. Add a note on factors affecting column efficiency.
8. Explain methods of solid sample handling in IR spectroscopy
9. Describe the principle and applications of atomic emission spectroscopy
10. What is ICH. Describe briefly, the guidelines published by ICH
11. Describe principle of ion exchange chromatography. Mention its applications.
12. Describe the basic principle of thermal analysis. What is a thermogram
13. Explain construction of electrodes used in conductometric titrations. Explain graphical methods for end point detection in conductometry
14. Explain technique of thin layer chromatography with a diagram
15. Explain polarogram. Mention its significance in chemical analysis
16. With examples, explain factors affecting bathochromic and hypsochromic shift in UV spectroscopy
17. Explain the principle of obtaining monochromatic radiation from diffractions grating

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