

# 2012 scheme

QP CODE: 412006

Reg. No: .....

## **Final Year B.Pharm Degree Supplementary Examinations November 2024 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. Write the principle, development techniques and applications of paper chromatography. (3+4+3)
2. Define Lambert-Beer Law. Derive an equation for the same. Explain deviations from this equation.
3. Explain radio immune assay in detail.

**Short notes**

**(14x5=70)**

4. Write the principle involved in column chromatography. List out the adsorbents used in column chromatography. (4+1)
5. Write in detail about preparation of TLC plates. Write the applications of TLC.
6. List the advantages and disadvantages of gas chromatography over high performance liquid chromatography.
7. What is an electrochemical cell. How can that measure the potential.
8. Differentiate between differential scanning calorimetry and differential thermal analysis.
9. Name any three reference electrodes. Explain the working of saturated calomel electrode. (1+4)
10. What are the different types of currents seen in polarogram. Explain.
11. List out the detectors used in UV-spectroscopy. Explain photomultiplier tube in detail (1+4)
12. Define and classify quenching. (2+3)
13. Write the principle and applications of NMR spectroscopy. (2.5+2.5)
14. Explain the working and applications of quadrupole mass analyser.
15. Explain Bragg's law in detail. Write the applications of x-ray diffraction studies.
16. List ten GLP principles as per WHO guidelines.
17. Write short notes on regulatory control and regulatory drug analysis.

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