2012 scheme

Final Year B. Pharm Degree Supplementary Examinations June 2022
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. Explain the principle of separation of components in GLC and HPTLC. Describe ideal properties of stationary phases used in GLC and HPTLC techniques giving appropriate examples.

2. Describe the construction and working principle of a polarograph. Write the scope of Ilkovic equation in polarography.

3. Explain the structural factors affecting intensity of fluorescence. What is fluorescence quenching. Mention types of quenching giving example

Short notes   **(14x5=70)**

4. Explain the factors governing ion exchange process for cations and anions.

5. Explain the applications, merits and limitations of Glass electrode.

6. Explain the working principle and applications of DSC.

7. Derive an expression for Beer-Lambert's Law. When do you see deviations from Beer's law.

8. List types of ion peaks observed in a mass spectrum. Write significance of each of these peak.

9. Chemical shift in NMR spectroscopy. State the causes for origin of chemical shift.

10. Explain the equation for Bragg's law and explain the terms involved in it.

11. With examples, explain the usefulness of infra-red spectrum in pharmaceutical analysis.

12. Briefly describe the salient features of ISO 9000.

13. Define validation. Explain its types.

14. How is a flame photometer used in analysis of specific cations. Write any two applications of flame photometry.

15. How are end points determined in potentiometric titrations.

16. Explain the working principle of a Turbidimeter. Add a note on turbidimetric microbial assays.

17. Explain the types of development techniques in column chromatography
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