

**Final Year B.Pharm Degree Examinations May 2019**

**Pharmaceutical Analysis – II  
(2012 scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw diagrams and equations wherever necessary.

**Essays**

**(3x10=30)**

1. Compare and contrast thin layer chromatography and high performance thin layer chromatography.
2. Discuss on theory and instrumentation of UV – visible spectroscopy.
3. Interferences in atomic absorption spectroscopy and methods of overcoming the same.

**Short notes**

**(14x5=70)**

4. Classify chromatographic techniques.
5. What are the advantages and disadvantages of plate theory of chromatography
6. What are the various plate preparation techniques used in TLC
7. What are the factors affecting R<sub>f</sub> value
8. What is the principle of ion exchange chromatography and what are the factors affecting the same
9. What are the different methods of detecting the end point in potentiometric titration
10. Explain various conductometric titration curves.
11. Ilkovic equation.
12. Differentiate elastic and inelastic scattering with at least one example and application for each.
13. Light sources used in fluorimeter.
14. C<sup>13</sup> NMR is a better technique than P<sup>31</sup> NMR for elucidating the structure of a newly discovered macromolecule. Justify your answer.
15. Explain the working of hollow cathode lamp.
16. TQM and ISO quality management systems are more suited for process industries than Pharmaceutical industries. Discuss.
17. Classify quality audits. Explain internal audits in detail.

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