

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – DEC-2014

Time: Three Hours

Max. Marks: 70 Marks

PHARMACEUTICAL ANALYSIS

Q.P. CODE: 2862

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS

2 x 10 = 20 Marks

1. Describe the construction and working of double beam UV/Visible Spectrophotometer and write the advantages over single beam spectrophotometer.
2. Explain the principle of potentiometric titrations. Write the construction, working, merits and demerits of glass electrode.
3. Compare the principle, development techniques and applications of paper chromatography and paper electrophoresis.

SHORT ESSAYS

6 x 5 = 30 Marks

4. Write the limitations and applications of Beer-Lambert's law for multiple component analysis.
5. What is fluorescence? What are the factors affecting the fluorescence intensity?
6. Explain the conductometric titration curve for weak acid vs strong base and add note on factors affecting conductance.
7. Give an account on handling of solid samples in IR spectroscopy.
8. Discuss the pharmaceutical applications of HPLC
9. Outline the construction and working of thermal conductivity detector in GC.
10. Explain the various methods of preparation of TLC plates.
11. Write a note on total quality management.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Define wave number and frequency.
13. Explain the terms eluent and eluate.
14. WCOT and SCOT columns
15. Batho chromic and hypso chromic shifts in UV-visible spectroscopy
16. Enlist synthetic ion exchange resins.
17. Various sources of IR radiation
18. Differences between atomic spectra and molecular spectra.
19. Applications of HPTLC in Pharmaceutical analysis
20. Finger print range and its significance
21. Applications of flame photometry
