Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination - Aug 2013

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. a) Derive Beer's and Lamberts law
 - b) What are the applications, advantages and limitations of Beer's law
- 2. Write principle of electrophoresis and draw neat labeled diagram and explain the methodology used in paper electrophoresis
- What are Conductometric Titrations and discuss their applications

SHORT ESSAYS 6 x 5 = 30 Marks

- 4. What are the factors affecting the fluorescence
- 5. Write a note on spectro photometric titration
- 6. Explain different types of ion exchangers
- 7. Write working of bolometer
- 8. What is validation? What are the requirements of analytical instrument validation
- 9. Explain deformation vibration in IR spectroscopy
- 10. What are effect of solvent and conjugation in UV spectroscopy
- 11. Karl fischer titration

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 12. What are indicator electrodes
- 13. Define molar conductivity and specific conductance
- 14. Define quality control and quality assurance
- 15. Adsorbents used in TLC
- 16. Define ion exchange capacity
- 17. Importance of fingerprint region in IR spectroscopy
- 18. Preparation of TLC plate
- 19. What are the factors affecting in column efficiency
- 20. Define filters and monochromators
- 21. What are the ideal characters of mobile phase in gas chromatography
