Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – Feb / Mar 2012

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. Explain the construction and working of any monochromators and detectors used in UV – Visible spectroscopy

- 2. Write the construction, working, advantages and disadvantages of calomel electrode
- With a neat diagram, explain the different parts and working of Gas Liquid Chromatogarphy

SHORT ESSAYS 6 x 5 = 30 Marks

- 4. Explain the different sampling techniques in IR spectroscopy
- 5. What are the molecular factors affecting intensity of fluorescence
- 6. Explain anion and cation exchange resins
- 7. Explain about wet packing and dry packing of the column chromatography
- 8. Give details about flame temperatures and Nebulisation in flame photometry
- 9. Explain the theory & applications of HPTLC
- 10. Write a note on conductiometric titrations
- 11. Describe the preparation of plates and adsorbents used in TLC

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

- 12. Write the working principle of Atomic Absorption Spectroscopy
- 13. Write the principle of separation in Gel electrophoresis
- 14. Define blue shift and red shift
- 15. What is absorption maxima and mention its significance
- 16. Name various regions of Electromagnetic spectrum
- 17. Name the list of radiation sources used in IR spectrometry
- 18. Differentiate between TLC and paper chromotography
- 19. Define gradient elution and isocratic elution
- 20. What is guard column? Mention its significance
- 21. Expand and explain HETP
