

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – MAY 2016

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 (Answer any Two)

2 x 10 = 20 Marks

1. Explain the construction and working of (a) Standard hydrogen electrode (b) Glass electrode.
2. Discuss the phenomenon of fluorescence. Explain the working of fluorimetry with suitable diagram.
- 3 Explain a) The principle of ion exchange chromatography.
b) Different types of anionic and cationic resins.
c) Applications of ion exchange chromatography. (4+4+2 = 10 marks)

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Explain the various derivatisation techniques used in gas chromatography.
5. Describe the various visualization techniques used in paper and thin layer chromatography.
6. Explain the theory and applications of conductometry.
7. Explain the various detectors used in IR spectroscopy?
8. Explain the factors affecting column efficiency.
9. Explain spectrophotometric titrations.
10. Explain the different techniques involved in the development of paper chromatography.
11. Compare between HPTLC and TLC.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Name various region of electromagnetic spectrum.
13. Application of Gel electrophoresis.
14. Importance of finger print region in IR spectroscopy.
15. How do you select a proper filter in colorimeter?
16. Define and classify monochromators.
17. Define quality control and quality assurance.
18. Pharmaceutical applications of flame photometry.
19. What is meant by gradient and isocratic elution?
20. Define Beer's and Lambert's Law.
21. Applications of atomic emission spectroscopy.
