

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – 04-Dec-2020

Time: Three Hours

Max. Marks: 70 Marks

PHARMACEUTICAL ANALYSIS (RS & RS2)

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. Classify the chromatographic methods. Discuss the theory and instrumentation of HPLC.
2. What are ion exchange resins? Explain the mechanism of ion exchange process and application of ion exchange chromatography.
3. With the help of neat labeled, schematic diagram, explain the advantages of double beam UV-visible spectrophotometer over single beam.

SHORT ESSAYS (answer any six)

6 x 5 = 30 Marks

4. Discuss in brief the conductometric titrations and give their applications.
5. Explain the various vibration transitions in I R spectroscopy.
6. Give a note on interferences in flame photometry.
7. Distinguish between fluorescence and phosphorescence. Give the various factor affecting fluorescence.
8. Explain the different source of quality variation.
9. Explain the construction and working principle of any two detectors used in gas chromatography.
10. Write the significance of derivatization techniques in Gas chromatography.
11. Write a note on fundamental vibrations in IR.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Define and classify gratings.
13. Define electrical potential and electrochemical cell.
14. Define quality control and Quality Assurance.
15. Applications of Potentiometer.
16. Principle of separation in gel electrophoresis.
17. Define gradient elution and isocratic elution.
18. List of radiation sources in I R spectrometry.
19. What is absorption maxima and mention its significance.
20. Explain the ideal characters of mobile phase in HPLC.
21. Define transmittance and absorbance in spectrometry.
