

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination - JUNE-2019

Max. Marks: 70 Marks

Time: Three Hours

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. Write principle, stationary phase, mobile phase, development techniques and Applications of column chromatography.
2. Discuss principle of polarography and method of analysis by using Dropping Mercury Electrode (DME).
3. With the help of a neat labeled schematic diagram of Gas chromatographic assembly, explain the principle of separation.

SHORT ESSAYS (answer any six)

6 x 5 = 30 Marks

4. Explain in detail the detectors used in IR spectroscopy.
5. Explain the methodology used in multicomponent system in UV-Visible spectroscopic technique.
6. Enumerate the different reference electrodes & Indicators electrodes in potentiometric titrations.
7. Write a note on factors affecting the separation efficiency of Ion exchange resin.
8. Define Validation? Explain types of "process Validation"?
9. What is quenching? Explain various types of quenching with suitable examples?
10. Write a detailed note on spectrophotometric titrations with suitable examples.
11. How do you relate fluorescence intensity to concentration? Describe any four factors that influence fluorescence intensity.

SHORT ANSWERS

10 x 2 = 20 Marks

12. What is an ion-exchange resin? Give an example of natural resin a) Cation b) Anion.
13. What is TLC & Write the principles of separation in TLC.
14. What are the requirements for a compound to be analyzed by Gas- Liquid Chromatography.
15. Give example of carrier gas used in G.L.C.
16. What is potentiometry? How is potential (emf) is measured.
17. What are auto titrimeters? What is the principle of operation?
18. Reasons for Deviation of Beer's law.
19. Write various ranges of electromagnetic spectrum.
20. Define filters and monochromators.
21. Name the factors that influences fluorescence intensity.
