(Revised Scheme 2)

Q.P. CODE : 9201

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY (Answer any TWO) **2 X 20 = 40 Marks**

1. Outline the principle involved in ORD. Explain in detail about its instrumentation and applications
2. Explain beer Lamberts law. Describe the working of a UV visible spectrophotometer. Enumerate the applications of UV spectroscopy in pharmacy
3. a) Describe the principle and working of quadrupole mass spectrometer and its application
   b) Discuss the principles and procedure involved in ion – exchange chromatography

SHORT ESSAY (Answer any FIVE) **5 X 10 = 50 Marks**

4. Discuss in detail about instrumentation of HPLC
5. Define mass fragmentation pattern and PMR spectral features for Butylacetate
6. Explain in detail about X –rays generation. Give brief account on X – ray powder diffraction
7. What is electrophoresis. Explain with example the method of paper electrophoresis
8. What is Chemical shift. Write the factors affecting chemical shift
9. Discuss the working of FTIR? How is it different from dispersive IR spectrometer

SHORT NOTES **2 X 5 = 10 Marks**

10. Anova
11. Thesis writing

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