Rajiv Gandhi University of Health Sciences
First Year M.Pharm Degree Examination – Nov 2011

[Time: 3 Hours]

[Max. Marks: 100]

MODERN PHARMACEUTICAL ANALYSIS

(RS 2 & RS 3)

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. Explain the theory and principle in HPLC. Write a note on the detectors used in HPLC. What are the applications of HPLC in pharmacy

2. Explain the fragmentations rules in mass spectroscopy Predict the fragmentation pattern for 2,2 dimethyl pentane

3. Explain the working of a double beam UV – visible spectrophotometer with a neat labeled diagram

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

4. Write in detail about instrumentation of NMR spectrometer

5. What is decoupling in NMR spectroscopy? Explain its types

6. Write briefly the factors that affect the migration of ions in electrophoresis

7. Write a note on development techniques and detection methods used in paper chromatography

8. What is miller indices? Give an account of X – ray powder diffraction and diffractrometer

9. Write a note on spin - spin splitting and coupling constant

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

10. Chi – square test

11. Citation of references

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