

Rajiv Gandhi University of Health Sciences, Karnataka
First Semester M. Pharm Degree Examination - 15-Nov-2022

Time: Three Hours

Max. Marks: 75 Marks

Modern Pharmaceutical Analytical Techniques

Q.P. CODE: 5101

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

Answer All The Questions

10 x 7.5 = 75 Marks

1. Define quenchers with example. Describe the theory and factors affecting the measurement of fluorescence.
2. Write the principle, instrumentation and working procedure of Gel electrophoresis.
3. Add a note on a) Spin-spin coupling with examples b) Factors influencing chemical shift
4. Write the principle involved in the IR spectroscopy. Describe the modes of molecular vibrations of in IR spectroscopy.
5. State and explain Beer-Lambert Law. Write briefly about the deviations of absorption laws. Add a note on applications of UV visible spectroscopy.
6. Discuss Mc Lafferty rearrangement and its significance in structural diagnosis. Add a note on nitrogen rule.
7. Define molecular ion. Explain with diagram, the principle involved in electron impact ionization mass spectroscopy. Write its merit and demerits.
8. What are the common efficiency parameters? Explain any two gas chromatography detectors.
9. Discuss the Bragg's law, add a note on types of crystals and applications of x-ray diffraction.
10. Explain the principle and applications of atomic absorption spectroscopy.

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