

Rajiv Gandhi University of Health Sciences, Karnataka

First Semester M. Pharm Degree Examination - 10-Nov-2021

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. Explain the working principle of FT-IR with neat labeled diagram of interferometer.
2. Define chemical shift. Outline with a neat sketch about NMR instrumentation.
3. Write fragmentation process in Mass spectroscopy.
4. Write construction and working of any two mass analyzer.
5. State Beer and Lambert's Law. Explain the construction and working of prism monochromator and photomultiplier tube detector.
6. Explain the theory of Thin layers Chromatography. Discuss about visualization techniques and agents used in TLC.
7. Discuss the derivatization techniques in GC and HPLC.
8. Define Spin-Spin coupling with example. Explain nuclear magnetic double resonance.
9. Define and classify Electrophoresis. Describe Isoelectric Focusing.
10. Define X-Ray diffraction. State and Derive an equation for Bragg's Law.

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