

Rajiv Gandhi University of Health Sciences, Karnataka

First Semester M. Pharm Degree Examination - 18-Jul-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. Explain in brief the interference filters, barrier layer cell, grating and PMT.
2. What do you mean chemical shift in NMR? Explain the various factors influencing chemical shifts.
3. Explain any Two types of ionization techniques and analyzers in mass spectrometry.
4. Explain the working principle of FT- IR with neat labelled diagram of Interferometer.
5. Explain theory of fluorescence and factors affecting fluorescence.
6. Describe the plate and rate theories in gas chromatography.
7. Explain efficiency parameters of HPLC. List out the applications of HPLC.
8. Define and derive the equation for Bragg's Law and enlist the applications of X-ray defraction.
9. Define Electro-Osmotic Flow. Explain the instrumentation and applications of Capillary Electrophoresis.
10. Explain the theory of Gas chromatography. Describe the various carrier gases employed in gas chromatography.

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