



Draw neat labeled diagrams wherever necessary. Answer **FOUR** questions

ANSWER ANY FOUR

4 X 25 = 100 Marks

1.
 - a) Describe HPLC instrumentation with help of a block diagram.
 - b) Enumerate quantitative methods used in GC.
2.
 - a) How do you do interpretation of IR-Spectra of organic compounds. Explain
 - b) Different sampling techniques used in IR – spectroscopy.
3. Write notes on
 - a) Circular dichroism
 - b) Moving Boundary Electrophoresis
 - c) HPTLC
4.
 - a) Explain the principles and theoretical basis of PMR spectroscopy.
 - b) What are
 - i) Chemical shift concept
 - ii) De – coupling and shift reagentsHow they are useful in deciding the chemical structure.
5.
 - a) What is fragmentation. Explain different fragmentation rules and patterns in Mass spectroscopy.
 - b) Write about Fast atom bombardment Ionization technique.
6.
 - a) Write Woodward's rules for calculating absorption maximum of carbonyl Compounds. Multicomponent analysis by UV – Spectrophotometry.

* * * * *

www.FirstRanker.com