

3 Answer the following : **2×7=14**

- (a) Write a detailed note on Raman spectroscopy.
- (b) Justify the statement "Spectroscopy is an important tool in bioanalytics."

OR

- (a) Write a detailed note on Circular dichromism (CD) spectroscopy analysis
- (b) Write a general account on mass spectrometry and its applications.

4 Answer the following : **2×7=14**

- (a) Write a detailed note on gas chromatography and associated mass spectrometric techniques.
- (b) Discuss liquid chromatography in detail.

5 Write short notes on : (any two) **2×7=14**

- (a) Differentiate Native and Denatured gel electrophoresis
- (b) IEF
- (c) Blotting techniques
- (d) Agarose gel electrophoresis.
