



**3** Answer the following : **2×7=14**

- (a) Write the principle and application of UV-Visible spectroscopy.
- (b) Briefly describe tissue fixation and staining.

**OR**

**3** Answer the following : **2×7=14**

- (a) Write a note on affinity chromatography.
- (b) Write the basic principle and classification of chromatographic techniques.

**4** Answer the following : **2×7=14**

- (a) Describe the ion exchange chromatography and its applications.
- (b) What is mass-spectrometry? Explain the different types of mass analyzer use in LC-MS.

**5** Write the short note on any two of the following : **2×7=14**

- (a) Western blotting technique
- (b) Isoelectric focusing
- (c) SDS-PAGE
- (d) Types of centrifuges and their uses.

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