

- i) Chiral chromatography
- ii) Electrophoresis
- iii) Supercritical fluid chromatography

(15 marks)

- b)
 - i) Describe the process of visualization and identification of solutes in planer chromatography. Explain how a complex mixture is separated
 - ii) Discuss two methods used in quantifying solutes in planner chromatography.

(10 marks)

- Q.3
- a)
 - i) Explain the parameters used to describe the solute behaviour in column chromatography
 - ii) Discuss the factors responsible for band-broadening in column chromatography

(8 marks)

- b) Using diagrams where appropriate, explain the working of the following instrumental parts.
 - i) Two common GC detectors
 - ii) Reciprocating pump in HPLC

(9 marks)

- c) Describe separation methods employed in flow analysis (5 marks)