

IV B.Tech. II Semester Regular Examinations, April/May -2006

CHROMATOGRAPHIC SEPARATIONS

(Bio-Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Discuss in detail about classification of chromatographic Techniques. [16]
2. Write short notes on:
 - (a) Distribution coefficients
 - (b) Column Efficiency [8×2=16]
3. Explain different stationary phases. [16]
4. Explain HPLC in detail. [16]
5. Discuss in detail about gas chromatography. [16]
6. What are the different columns used in GC. [16]
7. Discuss in detail about Chiral Chromatography. [16]
8. Write short notes on:
 - (a) TLC
 - (b) Ion Exchange chromatography. [8×2=16]

IV B.Tech. II Semester Regular Examinations, April/May -2006

CHROMATOGRAPHIC SEPARATIONS

(Bio-Technology)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Discuss in detail about Retention chromatography. [16]
2. Write short notes on:
 - (a) Band broadening processes
 - (b) Sorption Isotherm [8×2=16]
3. What are the different applications of ion exchange chromatography. [16]
4. Explain the design of HPLC machine. [16]
5. Discuss in detail about the Instrumentation of GC. [16]
6. Discuss in detail about quantitative analysis of GC. [16]
7. What are the different types of chromatography? [16]
8. Write short notes:
 - (a) Stationary phases
 - (b) Distribution coefficient [8×2=16]

IV B.Tech. II Semester Regular Examinations, April/May -2006
CHROMATOGRAPHIC SEPARATIONS
(Bio-Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Discuss in detail about Sorption Mechanism. [16]
2. Write short notes on:
 - (a) Retention parameters
 - (b) Chromatogram [8×2=16]
3. Discuss the Application of size exclusion chromatography. [16]
4. Discuss in detail about the types of columns used in HPLC. [16]
5. What is the principle and Instrumentation of GC. [16]
6. Discuss in detail about the applications of GC. [16]
7. What are the scopes and limitations of applications of chromatography. [16]
8. Write short notes on:
 - (a) Sorption mechanism
 - (b) Column Efficiency [8×2=16]

IV B.Tech. II Semester Regular Examinations, April/May -2006

CHROMATOGRAPHIC SEPARATIONS

(Bio-Technology)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Discuss qualitative and quantitative aspects of chromatography. [16]
2. What are factors that effect retention parameters. [16]
3. Discuss principle and Applications of TLC. [16]
4. What are the applications of HPLC. [16]
5. What the qualitative and quantitative aspects of GC. [16]
6. Discuss the Role of GC in Biotechnology. [16]
7. Discuss in detail about capillary Electrophoresis. [16]
8. Write short Notes on:
 - (a) Size exclusion chromatography
 - (b) Resolution of peaks. [8×2=16]
