

SEMESTER	III	QP CODE	23ANCH32
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**P.R. GOVERNMENT COLLEGE (AUTONOMOUS), KAKINADA
SEM END EXAMINATIONS NOV -2024**

II B.SC ANALYTICAL CHEMISTRY: SEPARATION METHODS

TIME: 2 HRS

DATE & SESSION	18.11.24 & AN	REG NO									MAX MARKS	50
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SECTION-I

Answer any THREE of the following questions. And attempt one question from Each section part Each question carries TEN marks
3X10=30Marks

PART-A

1. Explain about different types of Solvent extraction techniques. **BT1, CO1, PO2**
2. Explain about the Principle and classification of Chromatographic methods **BT1, CO2, PO2**
3. Demonstrate the principle, experimental set up and applications of Paper chromatography. **BT2, CO3, PO2**

PART-B

4. Demonstrate the principle, experimental set up and applications of TLC. **BT2, CO3, PO2**
5. Write about Columns and detectors used in HPLC **BT1, CO3, PO1**
6. Analyse the principle and applications of Adsorption chromatography. **BT2, CO4, PO4**

SECTION-II

Answer any FOUR of the following questions. Each question carries FIVE marks

4 X 5=20Marks

7. Explain factors affecting solvent extraction. **BT1, CO1, PO1**
8. Explain briefly about efficiency of a chromatographic column. **BT1, CO2, PO4**
9. Define R_f value and write its significance. **BT1, CO3, PO1**
10. Write about Stationary phases and Mobile phases used in HPLC. **BT1, CO3, PO1**
11. Compare and Contrast the NPC and RPC? **BT2, CO4, PO3**
12. Explain briefly about Resolution and capacity factor. **BT1, CO2, PO1**
13. Write about Columns and Column packing in Column chromatography. **BT1, CO3, PO2.**