

--	--	--	--	--	--	--	--	--	--



GIET UNIVERSITY, GUNUPUR – 765022

Ph.D. (Second Semester) Examinations, April – 2024

PPECH2016 - Basics of Chromatography

(Chemistry)

Time: 3 hrs

Maximum: 70 Marks

The figures in the right-hand margin indicate marks.

Answer ANY FIVE Questions

(14 x 5 = 70 Marks)

	Marks
1.a. Explain about the reverse phase paper chromatographic technique.	10
b. Write the application of paper chromatography.	4
2.a. Explain the various development methods in paper chromatography	10
b. What is Zone Spreading? Write its importance.	4
3.a. Discuss the principle, Instrumentation and Applications of HPTLC.	10
b. Write the different visualization methods in TLC.	4
4.a. Write short note on adsorption chromatography.	7
b. . What are the factors affecting the column efficiency in adsorption chromatography?	7
5.a. What is capillary electrophoresis? Give the details of the instrument and its applications.	10
b. Explain briefly gas evaluation chromatography	4
6.a. Write short notes on molecular sieve chromatography	4
b. What is gas chromatography? Illustrate a gas chromatographic instrument and describe components.	10
7.a. Write the advantages of gas chromatography.	6
b. Discuss the principle and applications of counter current chromatography	8
8.a. Explain about the application of GC-MS for trace constitutes.	10
b. Write short note on partition chromatography.	4

---End of Paper---