

Roll No.

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School of Pharmaceutical Education and Research
M. Pharm. I Semester End Term Examination 2023-24

Subject: **Phytochemistry**
Paper Code: **MPG103T**

Date: **13-03-24**

Maximum Marks: **75**
Time: **3 hours**

Write your roll number at the top immediately on receipt of this paper.

Note: This paper consists of Sections A and B. Attempt both the sections.

Section A: It is compulsory to answer all the questions in this section.

Section B: Answer any 4 out of 6 questions in this section.

Abbreviations Used:

CO - Course Outcome, PO - Program Outcome, BTL - Bloom's Taxonomy Level: BT level 1 - Remember; BT level 2 - Understand; BT level 3 - Apply; BT level 4 - Analyze; BT level 5 - Evaluate; BT level 6 - Create

SECTION A

Answer the following in brief (Attempt all questions)

5 x 3 = 15 Marks

Q. No. 1	Question	BTL	CO	PO
a)	Differentiate between primary and secondary metabolites.	2	1	2
b)	What is meant by lead selection in drug discovery process?	1	2	4
c)	Explain the principle of SCF extraction.	2	3	3
d)	With the help of block diagram depict a typical GC-MS system.	2	4	1,2
e)	Write biological source, molecular formula and chemical structure of luteolin.	1	5	3

SECTION B

Long type Questions (Attempt any 4 out of 6)

4 x 15 = 60 Marks

Q. No.	Question	BTL	CO	PO
Q. No. 2	Write a detailed account of source, composition, biosynthesis and uses of Vinca Alkaloids.	1	1	2,4
Q. No. 3	Discuss major approaches used in the drug discovery from plants. Support your answer using suitable examples.	2	2	3
Q. No. 4	Explain the theory and principle of Flash chromatography. Add a note on its significance in natural product research.	2	3	5
Q. No. 5	Describe the concept and instrumentation of LC-MS. Enumerate its role in the analysis of natural products isolation	2	4	1,3
Q. No. 6	Give the details of biological source, structural formula, spectral characteristics and therapeutic uses of carvone.	2	5	3,4
Q. No. 7	Write a detailed account of isolation, purification, identification and pharmaceutical significance of glycyrrhizin.	3	1	
