

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[M.PHARM 0922]**

**SEPTEMBER 2022  
(APRIL 2022 EXAM SESSION)**

**Sub. Code: 2993**

**M.PHARMACY DEGREE EXAMINATION  
SEMESTER - I (PCI New regulations 2016)  
PHARMACOGNOSY - MPG  
PAPER III – PHYTOCHEMISTRY**

*Q.P. Code : 262993*

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 75 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Describe the recent methods of extraction techniques with special emphasis on microwave assisted extraction technique.
2. Write a note on biosynthesis, isolation and characterization of
  - a. Taxol
  - b. Sennosides

**II. Write notes on:**

**(7 x 5 = 35)**

1. Selection and optimization of lead compound from Andrographis.
2. Instrumentation and applications of HPTLC.
3. Spectral analysis of Glycyrrhizin.
4. Flash column chromatography and its applications.
5. Isolation and characterization of Piperine.
6. Applications of LCMS in the characterization of herbal extracts.
7. Protocol design for the selection of lead molecule.

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