

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 5 EXAMINATION – SUMMER-2025

Subject Code: BP503TP

Date: 14-05-2025

Subject Name: Pharmacognosy and Phytochemistry II

Time: 02.30 PM TO 05.30 PM

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) Describe about Shikimic acid pathway. | 06 |
| | (b) Write in detailed about sources, isolation and identification of Curcumin. | 05 |
| | (c) Write a note on super critical fluid (SCF) extraction. | 05 |
| Q.2 | (a) Brief note on production, estimation and utilization of the Sennoside | 06 |
| | (b) Write down isolation, identification and analysis of Menthol | 05 |
| | (c) Write general introduction of benzoin and myrrh. | 05 |
| Q.3 | (a) Write a note on acetate mevalonate acid pathway. | 06 |
| | (b) Write about production, estimation and utilization of the podophyllotoxin | 05 |
| | (c) Differentiate Black Catechu and Pale Catechu. | 05 |
| Q.4 | (a) Give method for isolation and estimation of caffeine. | 06 |
| | (b) Define Resins. Write a short note on Ginger. | 05 |
| | (c) Draw a well labeled morphology and microscopical diagram (T.S) of fennel | 05 |
| Q.5 | (a) Enlist different modern methods of extraction. Explain any one method in detail. | 06 |
| | (b) What are different sources of Aloe? Explain their method of preparation. | 05 |
| | (c) Write B.S., family. Chemical constituents, uses and marketed formulation of Gentian. | 05 |
| Q. 6 | (a) Write the utilization of radioactive isotopes in the investigation of biogenetic studies. | 06 |
| | (b) Write application of modern chromatographic techniques in isolation and identification of phytoconstituents. | 05 |
| | (c) Give the source, isolation and identification method of glycyrrhetic acid. | 05 |
| Q.7 | (a) Give significance of HPTLC and GC in isolation, purification and identification of crude drugs. | 06 |
| | (b) Define Alkaloids. Write down its classification with example. | 05 |
| | (c) Write industrial production method and estimation method of forskolin. | 05 |
