

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm - SEMESTER– V. EXAMINATION – WINTER -2019

Subject Code: BP503TP**Date: 20/11/2019****Subject Name: Pharmacognosy and Phytochemistry II****Time: 02:30PM TO 05:30PM****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) Explain Shikimic acid pathway with chemistry. | 06 |
| | (b) Write in detail about acetate mevalonate pathway. | 05 |
| | (c) Discuss in detail about pathway for biosynthesis of lipids in plants. | 05 |
| Q.2 | (a) Define Alkaloids. Write down its classification with example. | 06 |
| | (b) Write down source, chemical constituents and uses of Rauwolfia and Opium. | 05 |
| | (c) Write down source, chemical constituents and uses of Colophony and Ginger. | 05 |
| Q.3 | (a) Define Tannins and Glycosides. Write down chemical constituents and uses of Asafoetida and Taxus. | 06 |
| | (b) Differentiate between Fennel and Coriander. | 05 |
| | (c) Give method for isolation and estimation of Caffeine. | 05 |
| Q.4 | (a) Write the biological source, isolation and estimation method of Podophyllotoxin. | 06 |
| | (b) Write method for isolation of atropine and Curcumin. | 05 |
| | (c) Describe a suitable method for production and estimation of Diosgenin. | 05 |
| Q.5 | (a) Write down pharmacognosy of drug used as a dental analgesic. | 06 |
| | (b) Write down isolation, identification and analysis of Menthol. | 05 |
| | (c) Give the source, isolation and identification method of Glycyrrhetic acid. | 05 |
| Q. 6 | (a) Write a note on production and estimation of Sennosides. | 06 |
| | (b) Differentiate between Pale catechu and Black catechu. | 05 |
| | (c) Write down different methods of tracer techniques in the investigation of Biogenetic studies. | 05 |
| Q.7 | (a) Define extraction. Enlist different modern methods of extraction. Explain in detail Microwave assisted extraction. | 06 |
| | (b) Give significance of HPTLC and GC in isolation, purification and identification of crude drugs. | 05 |
| | (c) Write a note on super critical fluid (SCF) extraction. | 05 |
