

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.

- 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**
