

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm- SEMESTER-V EXAMINATION – WINTER -2021**

**Subject Code: BP503TP**

**Date:17/12/2021**

**Subject Name: Pharmacognosy and Phytochemistry II**

**Time: 10:30am to 01:30pm**

**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) Define and classify Alkaloids. Explain the chemical classification of alkaloids with suitable examples. **06**
- (b) Define Tannins and Glycosides. Write down chemical constituents and uses of Aloe and Catechu. **05**
- (c) Differentiate between Fennel and Coriander microscopically. **05**
- Q.2** (a) Write the biological source, isolation and estimation method of Podophyllotoxin. **06**
- (b) Write down pharmacognosy of drug used as a dental analgesic. **05**
- (c) Give the source, isolation and identification method of Glycyrrhetic acid. **05**
- Q.3** (a) Write a note on production and estimation of Sennosides. **06**
- (b) Write down different methods of tracer techniques in the investigation of Biogenetic studies. **05**
- (c) Write method for isolation of atropine and Curcumin. **05**
- Q.4** (a) Explain Shikimic acid pathway with chemistry. **06**
- (b) Write down source, chemical constituents and uses of Rauwolfia and Opium. **05**
- (c) Define extraction. Enlist different modern methods of extraction. Explain in detail Microwave assisted extraction. **05**
- Q.5** (a) Give significance of HPTLC and GC in isolation, purification and identification of crude drugs. **06**
- (b) Write a note on super critical fluid (SCF) extraction. **05**
- (c) Write down isolation, identification and analysis of Rutin. **05**
- Q.6** (a) Give method for isolation and estimation of Caffeine. **06**
- (b) Write down isolation, identification and analysis of Menthol. **05**
- (c) Differentiate between Pale catechu and Black catechu. **05**
- Q.7** (a) Write in detail about acetate mevalonate pathway. **06**
- (b) Write down source, chemical constituents and uses of Colophony and Ginger. **05**
- (c) Describe a suitable method for production and estimation of Diosgenin. **05**

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