

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 6 EXAMINATION – WINTER -2019**

**Subject Code: 2260006****Date: 07-12-2019****Subject Name: Pharmacognosy-IV****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.

- Q.1** (a) Define alkaloids and write the types of alkaloid with suitable examples. **06**  
(b) Write detailed procedure of method of isolation of alkaloids present in plant material. **05**  
(c) Describe morphology and draw well labelled diagrams of morphology and microscopy of tylophora. **05**
- Q.2** (a) Write a note on tropane alkaloids, draw structures and give list of drugs known as solanaceous alkaloid. **06**  
(b) Differentiate between two varieties of ephedra. **05**  
(c) Write a note on diterpene alkaloid containing drug used in cancer. **05**
- Q.3** (a) Write a detailed note on steroidal alkaloids. **06**  
(b) Write a detailed note on types of alkaloids present in rauwolfia and draw structures. **05**  
(c) Write the difference between fibres from vegetable source and animal source. **05**
- Q.4** (a) Describe the method of preparation of penicillinase. **06**  
(b) Describe chemical test for identification of: **05**  
Atropine  
Ergot alkaloids  
(c) Which are the important medicinal agents obtained from marine source? Give at least two examples in each class. **05**
- Q.5** (a) Describe the method of preparation of papain and mention its uses. **06**  
(b) Classify enzymes with suitable examples on the basis of their mode of action on substances. **05**  
(c) Write the source and uses of talc and bentonite. **05**
- Q. 6** (a) Write the source and use of: **06**  
Diastase  
Ficin  
Urokinase  
(b) Write the life cycle of ergot. Draw diagram showing each phase. **05**  
(c) Write the source and chemical constituents of anticancer agents from marine source. **05**
- Q.7** (a) Describe in details, each step of method of preparation and processing of tea. **06**  
(b) Write a note on imidazole alkaloid containing drug. **05**  
(c) Write a note on substance obtained from marine source used in *in-vivo* pharmacological testing of anti-inflammatory drugs on animals. **05**

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