

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER-5 • EXAMINATION – SUMMER -2018**Subject Code: 250006****Date: 25/05/2018****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) Discuss the shikimic acid pathway with structure in detail. **06**
(b) Write a brief note on tracer technique. **05**
(c) Illustrate acetate mevalonate pathway. **05**
- Q.2** (a) Define alkaloid. Give the classification of alkaloid with suitable example. **06**
(b) Discuss the methods used for extraction of alkaloids. **05**
(c) Describe properties and general chemical tests for identification of alkaloids. **05**
- Q.3** (a) Explain stereo isomerism with natural product examples. **06**
(b) Describe chemistry and biogenetic pathway of nicotine. **05**
(c) Draw the well labeled morphological and microscopical diagram of Datura leaf. **05**
- Q.4** (a) Discuss the life cycle of ergot. **06**
(b) Write a note on pyridine – piperidine and discuss one drug containing pyridine – piperidine alkaloid. **05**
(c) Give the biological source, chemical constituents and use of Pilocarpus and Colchicum. **05**
- Q.5** (a) Give the complete pharmacognosy of drug having anti – hypertensive activity. **06**
(b) Give the pharmacognosy of anti – cancer drug. **05**
(c) Write a short note on Ma – Hung. **05**
- Q. 6** (a) Discuss the cultivation and collection of opium alkaloid. **06**
(b) Write a short note on drug containing diterpene alkaloids. **05**
(c) Write a note on drug containing Imidazole alkaloid. **05**
- Q. 7** (a) Give a brief note on Hemlock and Dubosia. **06**
(b) Give the pharmacognosy of Hellbore. **05**
(c) Discuss the adulterants and allied drugs of Nux vomica. **05**
