

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – V • EXAMINATION – WINTER • 2016

Subject Code: 250006

Date: 03-12-2016

Subject Name: Pharmacognosy - IV

Time: 10:30 am - 01:30 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) Describe the general procedure of isolation of alkaloids. **06**
(b) Describe biosynthesis and uses of Atropine. **05**
(c) Prepare a brief note on drug used in glaucoma. **05**
- Q.2** (a) Give biological sources, chemical constituents and uses of any two drugs containing liquid alkaloid. **06**
(b) Write on properties and uses of opium alkaloids. **05**
(c) Draw well labeled diagram showing morphological and microscopical characters of Quinazoline alkaloid containing drug. **05**
- Q.3** (a) Differentiate the following pairs of drugs: **06**
i. Indian Henbane & Egyptian Henbane
ii. *Ephedra sinica* & *Ephedra equisetina*
iii. *Rauwolfia serpentina* & *Rauwolfia canescens*
(b) Write a note on radiotracer techniques. **05**
(c) Discuss in brief on substituents of Ipecacuanha. **05**
- Q.4** (a) Draw chemical structure and give specific chemical tests for followings (ANY THREE) **06**
i. Quinine ii. Atropine iii. Reserpine iv. Strychnine
(b) Give the biosynthetic pathway for tryptophan. **05**
(c) Write chemical constituents with structure and uses of Ashgandh. **05**
- Q.5** (a) Comment on following statements: **06**
i. Fresh Cola seeds are preferred over dried seeds.
ii. In murexide test caffeine gives red color.
iii. The inner bark of cinchona turns red to yellow.
(b) Write a pharmacognostic note on drug used in amoebic dysentery. **05**
(c) Give chemical constituents and uses of Duboisia and colchicum. **05**
- Q. 6** (a) Discuss the saprophytic cultivation of ergot with merits and demerits of the method. **06**
(b) Write a note on importance of biosynthetic pathways study of plants. **05**
(c) Write short note on **05**
i. Toxicity of belladonna & Aconite ii. Veratrum alkaloids
- Q.7** (a) Describe cultivation, collection and uses of cinchona bark. **06**
(b) Discuss in brief on stereoisomerism of alkaloids giving suitable examples. **05**
(c) Enlist different types of tea. How they are prepared? **05**
