

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.

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|-------------|---|-----------|
| 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:
i. Indian Henbane & Egyptian Henbane
ii. <i>Ephedra sinica</i> & <i>Ephedra equisetina</i>
iii. <i>Rauwolfia serpentina</i> & <i>Rauwolfia canescens</i> | 06 |
| | (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)
i. Quinine ii. Atropine iii. Reserpine iv. Strychnine | 06 |
| | (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:
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. | 06 |
| | (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
i. Toxicity of belladonna & Aconite ii. Veratrum alkaloids | 05 |
| 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 |
