

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – V • EXAMINATION – WINTER • 2014

Subject Code: 250006**Date: 08-12-2014****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) Give the biogenesis of any one phenathrene alkaloid synthesized from tyrosine. **06**
 (b) Describe biosynthetic pathway for phenylalanine. **05**
 (c) Define alkaloids and describe their properties. **05**
- Q.2** (a) Describe in detail the saprophytic production of an ergot with its merits and demerits. **06**
 (b) Give morphological and microscopical characters of Hemlock fruit. **05**
 (c) Describe the processing of different categories of tea. **05**
- Q.3** (a) Give the morphological difference between four species of Cinchona and differentiate the stem bark and root bark. **06**
 (b) Give chemical constituents, pharmacological actions and uses of an antihypertensive drug. **05**
 (c) Write chemical constituents and uses of tropane alkaloid containing drug with steroidal lactone. **05**
- Q.4** (a) Differentiate the followings: **06**
 i. Chhota chand & Bada Chand
 ii. *Strychnos nuxvomica* & *Strychnos potatorum*
 (b) Describe the pharmacognosy of cancer Tree. **05**
 (c) Write a note on "Substituent of Ipecacuanha" **05**
- Q.5** (a) Comment on followings: **06**
 i. Aconine is more toxic than aconitine.
 ii. Jaborandi leaves should be used within 2 years.
 iii. Colchicine is basic in nature.
 (b) Describe in detail pharmacognosy of quinazoline containing drug with well labeled diagrams. **05**
 (c) Write in detail on drug used in amoebic dysentery. **05**
- Q. 6** (a) Compare the morphological characters of various varieties of Datura leaf. **06**
 (b) Write Biological source, family, chemical composition and toxicity of sag-angur patti. **05**
 (c) Explain the concept of stereochemistry with suitable examples of natural products. **05**
- Q. 7** (a) Write a brief note on tracer technique. **06**
 (b) Differentiate the Egyptian Henbane and Indian Henbane with respect to morphological and microscopical characters. **05**
 (c) Write a note on Indian Tobacco. **05**
