

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Bachelor of Pharmacy Sem-V-Examination-Nov/Dec-2011**

**Subject code: 250006**

**Date: 01/12/2011**

**Subject Name: Pharmacognosy-IV**

**Time: 2.30 pm -5.30 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 Alkaloid. Give the classification of Alkaloids with suitable examples. **06**  
(b) Write a detail note on Nux-vomica. **05**  
(c) Discuss general methods used for extraction of alkaloids. **05**
- Q.2** (a) Discuss in details one drug containing tropane alkaloid. **06**  
(b) Describe chemistry, isolation, and biogenetic pathway of atropine. **05**  
(c) Describe any one drug containing Quinazoline alkaloid. **05**
- Q.3** (a) Write down the official source, chemical constituents, test for identification of Ergot. **06**  
(b) Describe chemistry and pharmacological activity of reserpine. **05**  
(c) Give the difference between D. metal and D. innoxia **05**
- Q.4** (a) Discuss the Shikimic acid pathway in detail. **06**  
(b) Give the importance of the study of biogenetic pathway for secondary metabolites. **05**  
(c) Give the botanical source and chemical constituents of antihypertensive alkaloid. **05**
- Q.5** (a) Describe cultivation, collection, active constituents and uses of Cinchona. **06**  
(b) What are the Purins derivatives? Explain with example. **05**  
(c) Write a note on Alkaloidal amine containing drug. **05**
- Q. 6** (a) Give the botanical sources, chemical constituents and pharmacological activity of Lobelia, Ipecac and Aconite. **06**  
(b) Give the chemistry, biogenesis and pharmacological activity of Morphine. **05**  
(c) Explain stereo- isomerism with natural product examples. **05**
- Q.7** (a) Describe Official botanical Source, morphology and microscopy of Rauwolfia. **06**  
(b) Write short note on Steroidal alkaloid. **05**  
(c) Describe botanical sources, morphology, microscopy and active constituents of any one alkaloid containing drug uses in amoebic dysentery. **05**

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