

Seat No.: _____

Enrolment No. _____

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.

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|-------------|--|-----------|
| Q.1 | (a) Give the biogenesis of any one phenanthrene 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:
i. Chhoti chand & Bada Chand
ii. <i>Strychnos nuxvomica</i> & <i>Strychnos potatorum</i> | 06 |
| | (b) Describe the pharmacognosy of cancer Tree. | 05 |
| | (c) Write a note on "Substituent of Ipecacuanha" | 05 |
| Q.5 | (a) Comment on followings:
i. Aconine is more toxic than aconitine.
ii. Jaborandi leaves should be used within 2 years.
iii. Colchicine is basic in nature. | 06 |
| | (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 |
