Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm-Semester-V May-2012 Examination Subject code: 250006

Subject Name: Pharmacognosy-IV

Time: 02:30pm to 5:30pm Date: 22-05-2012 Total Marks: 80

Instructions:	

1	A 44 4		
1.	Attempt	any tive	questions.

- Attempt any five questions.
 Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- 4. Draw figures and diagrams wherever necessary.

Q.1	(a) (b) (c)	Define alkaloids. Discuss general properteries of alkaloids. Write general methods of isolation of alkaloids Clarify a role of alkaloids in plant.	06 05 05
Q.2	(a) (b) (c)	Give detail classification of alkaloids giving suitable examples. Give specific chemical test and commercial importance of tropane alkaloids. Discuss adulterants and substituents of Belladonna herb.	06 05 05
Q.3	(a)	How can you differentiate <i>Datura innoxia</i> from <i>Datura metel</i> by its morphology and microscopical characters?	06
	(b) (c)	Write a note on Vinca alkaloids and their semi-synthetic derivatives. Write a note on purine alkaloids	05 05
Q.4	(a)	Elaborate importance of stereoisomerism in natural product by giving suitable examples.	06
	(b) (c)	Comment: Ashwagandha is called as rasayana drug in Ayurveda. Describe histology of Nuxvomica seed.	05 05
Q.5	(a)	Give source, chemical constituents and therapeutic importance of Quinoline alkaloid containing drugs.	06
	(b) (c)	Explain source and life-cycle of Ergot. Give specific chemical test and commercial importance of ergot alkaloids.	05 05
Q. 6	(a)	Give brief introduction to basic metabolic pathways. Give outline of shikkimic acid pathway and products derived from it.	06
	(b)	Mention Botanical source, pharmacological uses and toxicity of Ma-huang	05
	(c)	Give source, cultivation and collection method for opium alkaloids.	05
Q. 7	(a)	Describe source, pharmacological uses and chemical test of morphine. Mention morphine free species of opium. Give biogenesis of papaverine and morphine	06
	(b)	Illustrate acetate mevalonate pathway	05
	(c)	Give different varieties of Tobacco in India. Explain method of cultivation of it.	05
