Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm - SEMESTER–V • EXAMINATION – SUMMER 2017

Subject code: 250006 **Date: 16/06/2017**

Subject Name: Pharmacognosy-IV

Time: 10:30 AM to 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)	Illustrate the biogenetic pathway of the biogenesis of unsaturated fatty acids in plants and animals.	**06**
	(b)	Write the biogenesis of any alkaloid synthesized from ornithine.	**05**
	(c)	Write a brief note on tracer techniques used for biogenetic studies in plants.	**05**
Q.2	(a)	Write a detailed note on drugs containing steroidal alkaloid.	**06**
	(b)	Enlist the physical and chemical properties of alkaloids.	**05**
	(c)	Differentiate between any two varieties of ephedra species.	**05**
Q.3	(a)	Write a note on stepwise preparation of black tea.	**06**
	(b)	Write a note on morphine free species.	**05**
	(c)	Write a note on Indian ginseng.	**05**
Q.4	(a)	Give the biological source, chemical constituents, chemical tests and uses of a seed containing indole alkaloids.	**06**
	(b)	Write a note on adulterants of the drug mentioned in Q.4 (a).	**05**
	(c)	Give examples of therapeutically active natural products which show cis-, trans- and cis-trans isomerism.	**05**
Q.5	(a)	Differentiate between rauwolfia and its most common adulterant.	**06**
	(b)	Write a note on cultivation and collection of aconite.	**05**
	(c)	Draw schematic T.S. and powder microscopy of vasaka.	**05**
Q. 6	(a)	Write chemical test for identification of: i. Ergotamine ii. Caffeine iii. Quinine	**06**
	(b)	Classify tropane alkaloids. Write a pharmacognostic note on any one tropane alkaloid containing drug.	**05**
	(c)	Write atleast six species of cinchona. Draw a detailed T.S. of the bark.	**05**
Q. 7	(a)	Differentiate between two varieties of ipecacuanha.	**06**
	(b)	Explain meso forms giving suitable examples of natural products	**05**
	(c)	Write a note on production of ergot alkaloids by saprophytic culture.	**05**

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