Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2015

Subject Code: 910105 **Date: 31-12-2015**

Subject Name: Chemistry of Medicinal Natural Products

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 importance of HPTLC and HPLC in herbal drug analysis.	**06**
	(b)	Discuss super critical fluid extraction method.	**05**
	(c)	Discuss – counter current chromatography.	**05**
Q.2	**(a)**	Define photosynthesis and write on light cycle of photosynthesis.	**06**
	(b)	Explain the C-3 cycle of photosynthesis.	**05**
	(c)	Give biosynthetic pathway for terpenoids.	**05**
Q.3	**(a)**	Classify antibiotics. Write on structure elucidation of penicillin.	**06**
	(b)	Classify glycosides. Write isolation methods for glycosidal drugs.	**05**
	(c)	Discuss – Biosynthesis of Streptomycin.	**05**
Q.4	**(a)**	Give isolation and structure elucidation of vincristine.	**06**
	(b)	Write a brief note on autacoids.	**05**
	(c)	Describe classification and biological significance of carbohydrates.	**05**
Q.5	**(a)**	Write a note on – Microwave assisted extraction and its application.	**06**
	(b)	Write a note on Structure of Immunoglobins and their sources.	**05**
	(c)	Write a note on Carotenoids.	**05**
Q. 6	**(a)**	Write sources and method of isolation of podophyllotoxin.	**06**
	(b)	Define Resins. Classify and give general properties.	**05**
	(c)	Write sources and isolation method of Taxol.	**05**
Q.7	**(a)**	What are Terpenoids? Give properties and classification of them	**06**
	(b)	Give brief outline of Shikkimic acid pathway.	**05**
	(c)	Explain stereochemistry of lipids giving suitable examples.	**05**

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