

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – I • EXAMINATION – SUMMER 2013

Subject Code: 910105**Date: 15-05-2013****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)	Describe Shikimic acid pathway. Classify and enlist the secondary metabolites produced through it.	06
	(b)	Write about - Taxol, its source and chemistry.	05
	(c)	Write about - Biosynthesis and therapeutic uses of Carotenoids.	05
Q.2	(a)	Define antibiotics. Write source, production method and isolation of Grisofulvin.	06
	(b)	Mention biosynthesis of Streptomycin.	05
	(c)	Write therapeutic importance and chemistry of Penicillin.	05
Q.3	(a)	Give source, isolation method and estimation of Sennosides.	06
	(b)	Write source, isolation, structure determination and stereochemistry of Podophyllotoxin.	05
	(c)	Write a note on - Camptothecin.	05
Q.4	(a)	Write about conventional extraction processes.	06
	(b)	Explain - Microwave assisted extraction and its application.	05
	(c)	Explain in detail - Extraction methods where gas is used.	05
Q.5	(a)	Write in detail about Glycoproteins and lipoproteins.	06
	(b)	Write about - Immunoglobulins and plants increasing immunoglobulins in human body.	05
	(c)	Write biosynthesis, chemical test and therapeutic uses of Atropine.	05
Q. 6	(a)	Write source, isolation and chemistry of Glycyrrhizic acid.	06
	(b)	Write a note on - Autocoids.	05
	(c)	Write about biological activities and chemistry of Vincristine.	05
Q.7	(a)	Explain biosynthesis of Lipids.	06
	(b)	Write biosynthesis of Flavanoids.	05
	(c)	Explain droplet counter current chromatography.	05
