

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.PHARM- SEM-I-EXAMINATION – JULY 2012

Subject code: 910201

Date: 07/07/2012

Subject Name: Chemistry of Natural Products

Time: 02:30 pm – 05:30 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)	Define and classify carbohydrates. Prove the structure of sucrose.	08
	(b)	Describe chemistry of cellulose.	08
Q.2	(a)	What are amino acids? Enlist method of synthesis of amino acids and discuss in detail any three methods.	08
	(b)	Discuss structure and chemistry of oxytocin.	08
Q.3	(a)	What are alkaloids? Classify them with example. Discuss steps involved in determination of molecular structure of alkaloids.	08
	(b)	Discuss chemistry of ergotamine.	08
Q.4	(a)	What are steroids? Discuss nomenclature and stereochemistry of steroids.	08
	(b)	Give the general methods of synthesis and reaction of pyrazole.	08
Q.5	(a)	Enlist five member heterocyclic ring systems and discuss biological importance of it. Write synthesis and reactions of pyrimidine.	08
	(b)	Discuss chemistry of 2,6,8 trihydroxy purine.	08
Q. 6	(a)	What are anthocyanins. Discuss in detail isoflavones.	08
	(b)	Write a note on cortisone.	08
Q.7	(a)	What are purines and nucleic acids. Discuss structure of nucleosides	06
	(b)	Biosynthesis of vit. D3	05
	(c)	Structure of angiotensin.	05
