

Seat No.: _____

Enrolment No. _____

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

Subject Code: 910201

Date: 22-05-2013

Subject Name: Chemistry of 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) Discuss in detail the structure of glucose.	06
	(b) Write note on epimerization.	05
	(c) Define and classify carbohydrates with structural examples.	05
Q.2	(a) Give any one method each for amino and carboxyl end degradation of amino acids.	06
	(b) What are essential and non essential amino acids. Give the structures of essential amino acids.	05
	(c) Discuss the chemistry of insulin.	05
Q.3	(a) Discuss in detail the general methods for degradation of alkaloids.	06
	(b) Discuss the chemistry of morphine.	05
	(c) Give a brief account of vinca alkaloids.	05
Q.4	(a) Discuss the chemistry of cholesterol.	06
	(b) Write note on Vitamin D3.	05
	(c) Write note on Aldosterone.	05
Q.5	(a) What are anthocyanins? Discuss general methods for the synthesis of Anthocyanins.	06
	(b) Write note on flavones isoflavones.	05
	(c) Write a note on pectins.	05
Q. 6	(a) Discuss the structure of DNA.	06
	(b) What are purines? Give the general method of synthesis of purine.	05
	(c) Write note on nucleic acids.	05
Q.7	(a) Give the general methods of synthesis and reactions of Imidazole.	06
	(b) Give the synthesis of pyridine and indole	05
	(c) Give preparation and properties of pyrimidines.	05
