

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm-SEMESTER-VI- (OLD SYLLABUS) EXAMINATION – SUMMER-2015

Subject Code: 260006

Date: 14/05/2015

Subject Name: Pharmacognosy – V (Plant Bio Technology)

Time: 10:30 a.m. to 1:30 p.m.

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) Write a note on Guduchi.	06
	(b) Write a note on Karen.	05
	(c) Describe the microscopy of a traditional drug having anomalous vascular bundles.	05
Q.2	(a) Write a note on an unorganized traditional drug.	06
	(b) Write a note on a drug used as a brain and nervine tonic.	05
	(c) Enlist anthelmintic drugs. Describe the drug used in ring-worm infection.	05
Q.3	(a) Write a note on a root drug having steroidal saponins.	06
	(b) Write a note on a drug containing naphthoquinones.	05
	(c) Write a note on a drug having Vitamin C.	05
Q.4	(a) What are the applications, advantages and disadvantages of plant tissue culture?	06
	(b) Classify and describe types of cultures.	05
	(c) Define: (i) Totipotency (ii) De-differentiation & Re-differentiation (iii) Competency (iv) Callus (v) Pluripotency	05
Q.5	(a) Enlist various techniques of tissue culture. Write a note on protoplast fusion and its applications.	06
	(b) Describe the technique of producing secondary metabolites using Recombinant DNA Technology.	05
	(c) Write a note on micropropagation.	05
Q. 6	(a) Describe the stereochemistry of Geraniol and Menthone.	06
	(b) Describe the biogenesis of Carvone in detail.	05
	(c) Describe the chemistry of Vitamin A.	05
Q.7	(a) Define the terms 'Nutraceuticals' and 'Functional foods'. Classify various nutraceuticals. Describe dietary fibres.	06
	(b) Describe various anti-oxidants used as nutraceuticals.	05
	(c) Write a note on a bicyclic monoterpenoid.	05
