Seat No.:	Enrolment No.
Sear NO.	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – VI • EXAMINATION – SUMMER • 2014

S T	ubje ime: struc	ct Code: 260006 Date: 02-06-2014 ct Name: Pharmacognosy – V (Plant Bio Technology) Total Marks: 80 etions:	
	2.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Define plant tissue culture. Discuss general composition of media used in plant tissue culture.	06
	(b)	Write schematic diagram showing isolation, culture and regeneration of young plant from leaf protoplast.	05
	(c)	Write application of plant tissue culture with suitable example.	05
((a)	Define and classify terpenoids. Discuss its properties and occurrence with suitable example.	06
	(b) (c)	Discuss mevalonate pathway for biosynthesis of iso pentenyl diphosphate. Write schematically conversion of iso pentenyl diphosphate to terpenoids.	05 05
Q.3	(a)	Define neutraceutical, antioxidant and probiotic with suitable example.	06
	(b) (c)	Write brief note on dietary fibre with suitable example. Describe herbs used as food or medicine with suitable example and its regulation regarding herb as food.	05 05
Q.4	(a)	Write biological source, geographical source, chemical constituents with chemical structure and uses of Dhamaso.	06
	(b)	Write biological source, geographical source, chemical constituents with chemical structure and uses of Chakramadu.	05
(0	(c)	Write biological source, geographical source, chemical constituents with chemical structure and uses of Shatavari.	05
((a)	Write schematically biogenesis of β -Amyrin with chemical structure.	06
	(b) (c)	Discuss schematically biogenesis of Menthol with chemical structure. Write schematically biogenesis of Vitamin A with chemical structure.	05 05
(b)	(a)	Describe briefly basic requirement for plant tissue culture laboratory.	06
	(b) (c)	Discuss briefly general procedure involved in plant tissue culture. Discuss various types of culture used in plant tissue technology with suitable example	05 05
Q.7	(a)	Describe microscopic characteristic of Bhringraj leaf and draw its well labeled diagram of transverse section along with its main active chemical constituents and uses.	06
	(b)	Describe microscopic characteristic of Chitrak root and draw its well labeled diagram of transverse section along with its main active chemical constituents and uses.	05
	(c)	Describe microscopic characteristic of Amla fruits and draw its well labeled diagram of transverse section along with its main active chemical constituents and uses.	05
