Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014

	•	Code: 140402 Date: 20-06-2014	
Ti	me: 1 tructio	t Name: Basic Taxonomy and Techniques 10:30 am - 01:00 pm Total Marks: 70 ons: Attempt all questions.	
	2.	Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Briefly explain the contributions of Aristotle, Theophrastus and Linnaeus in the field of taxonomy and classification of living organisms.	07
	(b)	Briefly explain the meaning of terms species, genus, family, class, phylum and kingdom.	07
Q.2	(a)	Comment on the morphological, anatomical and biochemical characterization of living organisms.	07
	(b)	Comment on the principle and significance of 16S rRNA analysis. OR	07
	(b)	Comment on the significance of GC% and sequence homology.	07
Q.3	(a) (b)	What is plant taxonomy? Describe the requirements of plant taxonomy. Describe the requirements and significance of animal taxonomy. OR	07 07
Q.3	(a) (b)	Comment on the early attempts of animal classification. Comment on the early attempts of microbial classification.	07 07
Q.4	(a)	Discuss the characteristic features of family Leguminosae. Give common examples and mention the economic importance.	07
	(b)	Comment on the present status of plant taxonomy. OR	07
Q.4	(a)	Discuss the characteristic features of family Poaceae. Give common examples and mention the economic importance.	07
	(b)	Comment on the present status of animal taxonomy.	07
Q.5	(a) (b)	Describe the scientific nomenclature of microorganisms. Give examples. Comment on the methods of microbial classification. OR	07 07
Q.5	(a) (b)	Briefly describe different categories of microorganisms. Describe characteristics features of any four phyla of animals. Write suitable examples of animals under each phylum.	07 07
