Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV(New) EXAMINATION - SUMMER 2016

Subject Code:2140402 Date:03/06/2016

Subject Name: BASIC TAXONOMY AND TECHNIQUES

Time:10:30 AM to 01:00 PM Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

			MARKS
Q.1		Short Questions	14
	1	What do you mean by word taxonomy?	
	2	Enlist names of plant families.	
	3	Define the word classification.	
	4	What is plant diversity?	
	5	What do you mean by animal nomenclature?	
	6	Substitute the word for classification.	
	7	Enlist various characters used for microbial classification.	
	8	Animal kingdom is divided into ten major	
	9	is the father of plant taxonomy.	
	10	is the father of animal taxonomy.	
	11	Scientific nomenclature of organisms was suggested by	
	12	What is biological species?	
	13	Define the term intuitative method.	
	14	Contribution of Aristotle in taxonomy.	
Q.2	(a)	Define the terms:	03
		Isolation, characterization, identification.	
	(b)	Write a note on serology.	04
	(c)	Give historical prospective of taxonomy.	07
		OR	
	(c)	Explain various types of diversities in plants.	07
Q.3	(a)	Write a brief account on microbial diversity.	03
	(b)	Enlist and explain various colonical characterizations for microorganism.	04
	(c)	Write about DNA hybridization experiment.	07
		OR	
Q.3	(a)	What are the scopes of animal classification?	03
	(b)	What do you understand by phage typing? Explain it in briefly.	04
	(c)	Discuss in detail about numerical taxonomy.	07
Q.4	(a)	Write the significance about %G+C ratio for taxonomy.	03
	(b)	Discuss about characterization of animals.	04
	(c)	Describe how rRNA analysis is important for taxonomy. OR	07
ΩA	(a)		02
Q.4	(a)	Explain scientific nomenclature of plants with suitable examples. Write a note on early attempts of plant classification.	03 04
	(b)	Write the key characteristics of family Poaceae and Leguminosae.	04 07
	(c)	write the key characteristics of failing Poaceae and Leguininosae.	U/
Q.5	(a)	What is the present status of animal taxonomy?	03
-	(h)	Give a note on early attempts of animal classification	04

(c)	Write the key characteristics of phylum protozoa and porifera with examples.	07	
	OR		
(a)	(a) Discuss the contribution of Bentham and Hooker in taxonomy.		
(b)	Briefly explain the concept of family, class, phylum and kingdom.	04	
(c)	Define the term animal diversity. Write in detail about various methods of animal classification.	07	
	(a) (b)	examples. OR (a) Discuss the contribution of Bentham and Hooker in taxonomy. (b) Briefly explain the concept of family, class, phylum and kingdom. (c) Define the term animal diversity. Write in detail about various methods of	
