## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-IV (NEW) - EXAMINATION - SUMMER 2017

Subject Code: 2140402	Date: 06/06/2017
	20000 00,00,202.

**Subject Name: Basic Taxonomy and Techniques** 

## **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	Theophrastus is regarded as the father of	
	2	Binomial Nomenclature system was given by	
	3	Whittacker proposed kingdom classification.	
	4	The taxonomical category of any rank is called	
	5	The conserved sequences of rRNA is important for taxonomical studies of living organisms.	
	6	The existence of multiple forms of plants is called	
	7	The scientific names of animals include the name of genus and	
		the name of	
	8	Phylogenetic system of classification is based on	
	9	The group of similar plants which breed freely among	
	10	themselves constitute a The first step in taxonomy is	
	10	The first step in taxonomy is	
	11	The modern classification is based on	
	<b>12</b>	The basic taxonomical unit is called	
	13	The book "Systema Naturae" was written by	
	14	Classification system based on all important morphological	
		characters is termed as	
Q.2	(a)	Highlight the contributions of Theophrastus in the field of	03
	<b>(b)</b>	taxonomy.  How will you name the organisms? Illustrate with suitable	04
	(0)	examples.	<b>0</b> 4
	(c)	Comment on the molecular characterization of living organisms	07
	. ,	for the purpose of classification.	
		OR	
	<b>(c)</b>	Comment on the recent developments in the field of plant	07
		taxonomy.	0.0
<b>Q.3</b>		Contributions of Aristotle in the field of taxonomy.	03
	<b>(b)</b>	Comment on the present status of animal taxonomy.	04
	<b>(c)</b>	How will you classify animal world using different methods of	07
		classification?  OR	
Q.3	(a)	Give the importance of microbial classification.	03
<b>~.</b>	(b)	Comment on the diversity of plants and its significance.	04
	(c)	Comment on categories of microorganisms and their importance.	07

<b>Q.4</b>	(a)	How will you classify microorganisms?	03
	<b>(b)</b>	Highlight the recent developments in the field of microbial taxonomy.	04
	(c)	Discuss different types of microbial diversities and their significance.	07
		OR	
Q.4	(a)	Highlight the early attempts of animal classification.	03
	<b>(b)</b>	Comment on anatomical characterization of animals.	04
	(c)	Give a comparative account of animal phyla Protozoa, Porifera and Platyhelminthes.	07
Q.5	(a)	Highlight the early attempts of plant classification.	03
	<b>(b)</b>	Comment on morphological characterization of plants.	04
	(c)	Pulses belong to Leguminosae family. Illustrate.	07
	(-)	OR	
Q.5	(a)	Highlight the early attempts of microbial classification.	03
	(b)	Comment on biochemical characterization of microorganisms.	04
	(c)	You have isolated a microbial consortium from the soil. How will you characterize, identify and classify the microbes present in that consortium?	07

\*\*\*\*\*