

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – IV • EXAMINATION – WINTER 2012

Subject code: 140402**Date: 28/12/2012****Subject Name: Basic Taxonomy & Techniques****Time: 02.30 pm - 05.00 pm****Total Marks: 70****Instructions:**

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

Q.1 (a) What is taxonomy? Comment on morphological characterization of organisms. **07**

(b) Define classification. Comment on biochemical characterization. **07**

Q.2 (a) Write a note on early attempts of plant classification. **07**

(b) Define animal diversity and discuss different types of animal diversities. **07**

OR

(b) Define plant diversity and discuss different types of plant diversities. **07**

Q.3 (a) What is animal taxonomy? Describe the requirements and significance of animal taxonomy **07**

(b) Explain the significance of (G+C) % and 16S rRNA analysis in the classification of organisms. **07**

OR

Q.3 (a) What is plant taxonomy? Describe the requirements and significance of plant taxonomy. **07**

(b) Define animal phylum and briefly describe different types of animal phyla with examples. **07**

Q.4 (a) Describe the characteristic features of *Leguminosae* family and give common examples. **07**

(b) Explain scientific nomenclature of animals with common examples. **07**

OR

Q.4 (a) Describe the characteristic features of *Poaceae* family and give common examples. **07**

(b) Explain scientific nomenclature of plants with common examples. **07**

Q.5 (a) What are viruses? Describe the important characteristics of viruses. **07**

(b) What are microorganisms? Describe various categories of microorganisms with suitable examples. **07**

OR

Q.5 (a) Comment on the recent developments in the field of plant taxonomy. **07**

(b) Describe the methods of classifying microorganisms. **07**
