

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEM-IV Examination-Nov/Dec-2011

Subject code: 140402

Date: 28/11/2011

Subject Name: Basic Taxonomy & Techniques

Time: 02.30 pm -5.00 pm

Total marks: 70

Instructions:

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

- Q.1** (a) Briefly define / explain the terms – taxonomy, classification, nomenclature, species, genus, family, order, class, phylum and kingdom. **07**
(b) What is plant diversity? Describe different types of plant diversities. **07**
- Q.2** (a) Write a note on morphological characterization of organisms. **07**
(b) Give the importance of (G+C) % and 16S rRNA analysis in taxonomy. **07**
- OR**
- (b) Write a note on biochemical characterization of organisms. **07**
- Q.3** (a) Write a note on early attempts of plant classification. **07**
(b) What is plant taxonomy? Describe the requirements and significance of plant taxonomy. **07**
- OR**
- Q.3** (a) Describe the characteristic features of *Poaceae* family and give common examples. **07**
(b) Describe the characteristic features of *Solanaceae* family and give common examples. **07**
- Q.4** (a) Describe important phyla of animals with examples. **07**
(b) Discuss the scope and importance of animal classification. **07**
- OR**
- Q.4** (a) Write a note on scientific nomenclature of animals with examples. **07**
(b) Briefly describe the recent developments in the field of animal taxonomy. **07**
- Q.5** (a) Write a note on the early attempts of microbial classification. **07**
(b) Describe various methods of microbial classification. **07**
- OR**
- Q.5** (a) Describe the various categories of microorganisms with suitable examples. **07**
(b) Describe the important characteristics of viruses. **07**
