

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER– IV EXAMINATION – SUMMER 2015**

**Subject Code:** 140402**Date:** 01/06/2015**Subject Name:** Basic Taxonomy & Techniques**Time:** 10.30am-01.00pm**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) What is plant taxonomy? Describe requirements of plant taxonomy. **07**  
(b) What are microorganisms? Enlist important types of microorganisms and describe any two of them. **07**
- Q.2** (a) Define animal taxonomy. Throw light on the recent developments in the field of animal taxonomy. **07**  
(b) Enlist important methods of animal classification and describe any three of them in detail. **07**
- OR**
- (b) Enlist important methods of microbial classification and describe any three of them in detail. **07**
- Q.3** (a) What are microbial diversities? Comment on various types of microbial diversities. Give significance of microbial diversities. **07**  
(b) Comment on the significance of GC% and 16S-rRNA analysis in the classification of living world. **07**
- OR**
- Q.3** (a) Give characteristic features, common examples and economic importance of family *Poaceae*. **07**  
(b) Give characteristic features, common examples and economic importance of family *Leguminosae*. **07**
- Q.4** (a) Enlist ten phyla of animals. Comment on the characteristic features of any three phyla of animals with common examples. **07**  
(b) "The living world is diverse and beautiful". Justify the statement. **07**
- OR**
- Q.4** (a) Comment on the early attempts of plant classification. **07**  
(b) Comment on the recent developments in the field of microbial taxonomy. **07**
- Q.5** (a) Comment on the early attempts of microbial classification. **07**  
(b) Why we classify the living organisms? Justify. **07**
- OR**
- Q.5** (a) Describe the scientific nomenclature system used for microorganisms with suitable examples. **07**  
(b) Comment on animal diversity and its significance. **07**

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