

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- IV<sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNE- 2012****Subject code: 140402****Date: 25/05/2012****Subject Name: Basic Taxonomy and Techniques****Time: 10:30 am – 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.

- Q.1** (a) Write a short note on present status of animal taxonomy. **07**  
(b) Describe in detail various methods of microbial classification. **07**
- Q.2** (a) Describe various methods/ systems of plant and animal classification. **07**  
(b) Discuss the historical background of taxonomy. **07**
- OR**
- (b) What are the contributions given by Carl Linnaeus in field of taxonomy? **07**
- Q.3** (a) Write a note on nomenclature of plants. **07**  
(b) What are the principal of biological classification? **07**
- OR**
- Q.3** (a) Define following term with brief explanation. **07**  
• Taxonomy hierarchy  
• Strains  
• Species  
(b) How viruses are morphologically categorized discuss in detail? **07**
- Q.4** (a) Enlist various traditional characters used for classification of prokaryotes. **07**  
Discuss phage typing in detail.  
(b) Explain following terminologies. **07**  
• Taxonomy  
• Characterization  
• Identification
- OR**
- Q.4** (a) What are the scope and importance of animal classification? **07**  
(b) Explain about evolutionary distance (herirarchy) between organisms **07**  
(phylogenetic tree).
- Q.5** (a) Discuss in detail the significances and method of comparing genomes in **07**  
field of taxonomy.  
(b) Explain characteristics features of family Liliaceae. **07**
- OR**
- Q.5** (a) Write a note on contribution of Aristotle in field of taxonomy. **07**  
(b) 16s rRNA analysis is significant technique for finding degree of **07**  
similarity among the species. Justify.

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