

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- IVth 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 (phylogenetic tree). **07**

- Q.5** (a) Discuss in detail the significances and method of comparing genomes in field of taxonomy. **07**
(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 similarity among the species. Justify. **07**
