

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E. Sem-III Regular / Remedial Examination December 2010

Subject code: 130401
Subject Name: Introductory Biology

Date: 13 /12 /2010

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) Comment on Biology as “The Science of Life”. Briefly explain the methods of science. **07**
(b) Describe the development of biology in ancient India. **07**
- Q.2** (a) Discuss various theories of origin of life. **07**
(b) Describe the unified and basic characteristics of organisms. **07**
OR
(b) Describe the use and misuse of biology. **07**
- Q.3** (a) Explain the concept and different modes of speciation. **07**
(b) Describe structure, location and functions of connective tissues. **07**
OR
- Q.3** (a) Define transpiration. Describe different types of transpirations. Mention the factors affecting transpiration. **07**
(b) Draw a labeled diagram and briefly describe the internal structure of Monocot root. **07**
- Q.4** (a) Write a note on biological nitrogen fixation. **07**
(b) Explain the Calvin cycle of photosynthesis. **07**
OR
- Q.4** (a) Describe different types of plant tissues. **07**
(b) Write a note on respiration in human. **07**
- Q.5** (a) Describe the human digestive system with the help of labelled diagram. **07**
(b) Comment on the basics of human endocrine system. **07**
OR
- Q.5** (a) Define nutrition and briefly describe different modes of nutrition in animals. **07**
(b) Write a note on the circulatory system in human. **07**
