

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER– III (NEW) EXAMINATION – SUMMER 2015**

**Subject Code: 2130401****Date: 29/05/2015****Subject Name: Introductory Biology****Time: 02.30pm-05.00pm****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) Discuss various theories of origin of life. **07**  
(b) Describe the use and misuse of biology. **07**
- Q.2** (a) Explain the Calvin cycle of photosynthesis. **07**  
(b) Describe different types of plant tissues. **07**
- OR**
- (b) Describe structure, location and functions of connective tissues. **07**
- Q.3** (a) Write a note on biological nitrogen fixation. **07**  
(b) Describe various modes of nutrition in animals. **07**
- OR**
- Q.3** (a) Write a note on the circulatory system in human. **07**  
(b) Write a note on respiration in human. **07**
- Q.4** (a) Describe the human digestive system with the help of labelled diagram. **07**  
(b) Describe the unified and basic characteristics of living organisms. **07**
- OR**
- Q.4** (a) Comment on the basics of human endocrine system. **07**  
(b) Write a short note on different parts of leaf with a neat diagram. **07**
- Q.5** (a) Draw neat diagram of human heart with all the labeling. **07**  
(b) “Flower is a modified shoot” justify the statement. **07**
- OR**
- Q.5** (a) Describe important applications of biology and biotechnology. **07**  
(b) With a diagram discuss human nervous system. **07**

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