

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– III EXAMINATION – SUMMER 2015

Subject Code: Introductory Biology**Date: 29/06/2015****Subject Name: 130401****Time: 02.30pm-05.00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable diagrams wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Differentiate the terms: [a] Biology and [b] Bio Technology **07**
(b) Draw a net diagram to explain the morphology of flowering plant. **07**
- Q.2** (a) Discuss Plant-water relations. Give all biological views. **07**
(b) What is amniocentesis? Comment on the misuse of the technique of amniocentesis. **07**
- OR**
- (b) Write a note on: “Theories explaining origin of life on earth” **07**
- Q.3** (a) Explain about the hypothesis of Oparin and Haldane with its importance. **07**
(b) Discuss types of various animal tissues. **07**
- OR**
- Q.3** (a) Explain how Darwin tried to resolve all the previous perplexities highlighting on the evidences of evolution? What he proposed? **07**
(b) Explain the terms: Anabolism, Catabolism, Reproduction **07**
- Q.4** (a) Explain the process of secondary growth in the stems of woody angiosperms with the help of schematic diagrams. What is its significance? **07**
(b) Discuss main function of human nervous system and human heart. **07**
- OR**
- Q.4** (a) How does the human respiration system work? **07**
(b) Explain convergent evolution with suitable example. What is a fossil? Discuss the implications of fossils in evolution. **07**
- Q.5** (a) How can biology be misused? How can it help society? **07**
(b) Discuss the locomotion in animals. **07**
- OR**
- Q.5** (a) Discuss the causes and effects of nutritional disorders. **07**
(b) Briefly explain types of leaves and parts thereof. **07**
