

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-V Examination-Nov/Dec.-2011

Subject code: 150405

Date: 03/12/2011

Subject Name: The Science of Life

Time: 2.30 pm -5.00 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) Explain mechanism of replication in prokaryotes. **10**
(b) Write a short note on RNA. **04**
- Q.2** (a) What are monoclonal antibodies? Describe method for its production. **07**
(b) Enlist secondary lymphoid organs and explain any one in detail. **07**
- OR**
- (b) Draw a chart showing hematopoietic system. **07**
- Q.3** (a) Write a short note on Transcription in Eukaryotes. **10**
(b) Write a short note on optical isomerism **04**
- OR**
- Q.3** (a) Write a short note on Transcription in Prokaryotes. **10**
(b) Explain the Properties of genetic code. **04**
- Q.4** (a) Explain processing of m-RNA. **07**
(b) Give structural classification of protein. **07**
- OR**
- Q.4** (a) Explain initiation process of translation in prokaryotes. **07**
(b) Write a short note on Structure of t-RNA. **07**
- Q.5** (a) Write a note on enzymology of eukaryotic replication. **06**
(b) Write a short note on Asthma and allergy **05**
(c) Differentiate between active and passive immunity **03**
- OR**
- Q.5** (a) Write a short note on innate component of immune system. **06**
(b) Write a short note on immunodeficiency. **05**
(c) Differentiate between innate and adaptive immunity. **03**
