

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-Vth Examination December 2010

Subject code: 150405

Subject Name: The Science of Life

Date: 21 /12 /2010

Time: 03.00 pm - 05.30 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) Give Classification of Monosaccharides. 07
(b) Write a short note on types of protein structure. 07

- Q.2 (a) Describe briefly primary lymphoid organs. 07
(b) Explain briefly different granulolytic cells of immune system. 07

OR

- (b) Explain briefly different lymphoid cells of immune system 07

- Q.3 (a) Write a short note on Replication in Prokaryotes. 10
(b) Write a short note on Watson and Crick model of DNA. 04

OR

- Q.3 (a) Write a short note on Replication in Eukaryotes. 10
(b) Explain the Properties of genetic code. 04

- Q.4 (a) Give classification of amino acids. 07
(b) Write a short note on post transcriptional modification of m-RNA. 07

OR

- Q.4 (a) Write a short note on Transcription in Prokaryotes. 07
(b) Explain mechanism of translation in eukaryotes. 07

- Q.5 (a) Write short note on factors affecting immunogenicity. 06
(b) Draw a diagram of any prokaryotic cell with appropriate labeling. 06
(c) Differentiate between immunogenicity and antigenicity 02

OR

- Q.5 (a) Write a short note on basic structure of antibody. 06
(b) Draw a diagram of any akaryotic cell with appropriate labeling. 06
(c) Differentiate between innate and adaptive immunity. 02
