

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. E. Sem. - V - Examination – June- 2011****Subject code: 150405****Subject Name: The Science of Life****Date: 30/06/2011****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) Give Classification of Monosaccharide. **07**  
(b) Write a short note on classification of lipids. **07**
- Q.2** (a) Enlist different types of immune cells. Explain any four in detail. **07**  
(b) Write a short note on spleen. **07**
- OR**
- (b) Write a short note on Lymph node. **07**
- Q.3** (a) Write a short note on Translation in Prokaryotes. **10**  
(b) Explain Polysaccharides. **04**
- OR**
- Q.3** (a) Write a short note on Transcription in Eukaryotes. **10**  
(b) Explain the Properties of genetic code. **04**
- Q.4** (a) Explain DNA and RNA in detail. **07**  
(b) Explain classification of proteins on the basis of its structure. **07**
- OR**
- Q.4** (a) Write a note on enzymology of eukaryotic replication. **07**  
(b) Write a short note on Structure of t-RNA. **07**
- Q.5** (a) Describe different classes of Immunoglobulins. **06**  
(b) Draw a diagram of typical animal cell. **05**  
(c) Differentiate between plant and animal cell. **03**
- OR**
- Q.5** (a) Write a short note on autoimmune disease with a suitable example. **06**  
(b) Draw a diagram of typical plant cell. **05**  
(c) Differentiate between prokaryotic and eukaryotic cell. **03**

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