

**SRI PADMAVATHI MAHILA VISVAVIDYALAYAM::TIRUPATI**  
**(Women's University)**

M.Phil./Ph.D. Entrance Test - September, 2012

DEPARTMENT OF BIOTECHNOLOGY

**Time: 3 hours**

**Max.marks:100**

Answer any Five questions  
All questions carry equal marks

**(5X20=100)**

1. Give a brief account of Genome organization in Prokaryotes and Eukaryotes.
2. Explain the principle and different methods of sterilization.
3. Write an essay on allosteric regulation of enzyme activities.
4. Explain the principle and mechanism of antigen and antibody interactions.
5. Enumerate the differences between Prokaryotic and Eukaryotic Translational Mechanisms.
6. Write an essay on biosynthesis of fatty acids and glycolipids.
7. Explain the basic principles, types and applications of electrophoresis.
8. Write about the different methods of introduction of rDNA into host cells.