

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

Ph.D. Entrance Test - September, 2012

DEPARTMENT OF APPLIED MICROBIOLOGY

Time: 3 Hrs

Max.Marks:100

Answer any **FIVE** questions
All questions carry equal marks

5x20=100

1. Give an account of oxidation and biosynthesis of fatty acids.
2. What are Transposable elements. Describe the mechanism of transposition.
3. Describe the growth cycle of bacteria and the factors influencing it.
4. Discuss the difference between genomic and cDNA libraries and describe the methods for generation of cDNA libraries.
5. Give an account of methods of cultivation of viruses.
6. Describe the mode of action of antibacterial agents and add a note on the mechanism of drug resistance.
7. Describe recent trends in using microorganisms for environmental cleanup of contaminated and heavy metal polluted sites.
8. Give the principle and application of DNA fingerprinting techniques.