## KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2014 admission II<sup>nd</sup> Semester Final Examination- June /July-2015

Marks: 50 Cat. No: Fdqu.1202 Title: General Microbiology (1+1) Time: 2 hours I. Define 10x1=101. Resolving power 2. Conjugation 3. Vaccine 4. Chemostat 5. Chemoautotroph 6. Differential staining 7. Spontaneous generation 8. Tyndallisation 9. Mutation. 10. Numerical aperture Write short notes on any FIVE questions II.  $(5 \times 2 = 10)$ 1. Contributions of Louis Pasteur 2. Germ theory of diseases 3. Transformation in bacteria Phase contrast microscope 5. Different parts of light microscope 6. Genetic engineering 7. Archaebacteria Ш. Write short essay on any FIVE questions  $(5 \times 4=20)$ 1. Methods for enumeration of microorganisms in a sample 2. Growth curve of bacteria 3. Preservation of microbial cultures 4. Microbial products of industrial importance 5. Techniques for pure culturing of bacteria 6. Electron microscopy Biosynthesis of proteins

## IV. Write essay on any ONE

 $(1 \times 10 = 10)$ 

1. How do prokaryotes differ from eukaryotes? Explain with the help of neatly labeled diagrams at typical prokaryotic and eukaryotic cell.

What are bacteriophages? Describe lytic and lysogenic cycles, with labeled diagrams