

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2011 Admission

II<sup>nd</sup> Semester Special Re- Examination- June -2015

Cat. No: Fdqu.1202

Marks: 80.00

Title: General Microbiology (1+1)

Time: 3 hours

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- I. Define the following (10x1=10)
1. Plaque
  2. Plasmid
  3. Heterokaryosis
  4. Archaea
  5. Chemoautotroph
  6. Numerical aperture
  7. Germ theory of diseases
  8. Antibody
  9. Mutation
  10. Genetic engineering
- II. Write short notes on any ten (10x3=30)
1. Vaccines
  2. Phase contrast microscopy
  3. Contributions of Leewenhoek
  4. Pasteurization
  5. Pour plate technique
  6. Photosynthetic bacteria
  7. Bacterial conjugation
  8. Role of T cells in defense mechanism
  9. Lytic phages
  10. Blue green algae
  11. Scanning electron microscope
  12. Synchronous culture
- II. Write short essays on any six of the following (6x5=30)
1. Differentiate between aerobic respiration and fermentation
  2. Biosynthesis of proteins
  3. Differentiate between heterotrophs and autotrophs
  4. Life cycle of lysogenic phage
  5. What are complete and selective media? Give examples
  6. What is meant by differential staining? Explain with suitable example
  7. Electron transport chain
  8. What is meant by spontaneous generation theory? Who finally disproved it?
- III. Write essay on any one (1x10=10)
1. Differentiate between prokaryotes and eukaryotes. Draw a neatly labeled diagram of typical prokaryotic cell.
  2. Explain briefly the applications of microorganisms in industry. Give suitable examples.