

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food Engg.) 2011 Admission

II<sup>nd</sup> Semester Final Examination, July/August 2012

Cat. No Fdqu.1202

Title: General Microbiology (1+1)

Marks: 80

Time: 3 hours

I. Fill up the blanks

(10 x 1= 10)

1. Fungal hyphal cross wall is called .....
2. In water potability test .....is used as indicator bacterium
3. Prokaryotic DNA does not contain ..... protein
4. Agaricus bisporus is a ..... Fungi
5. .... enzyme catalyses nitrogen fixation
6. Host is killed in the ..... Life cycle of virus
7. .... confers resistance to the bacterial endospores
8. Rhodospirillum is a ..... Bacteria
9. Motility of a bacteria is due to its .....
10. .... Is the term given to bacteria without cell wall,

II. Write short answers on any ten

(10x 3 =30)

1. Synchronous culture
2. Eukarote
3. Phase contrast microscope
4. Louis Pasteur
5. Differential staining
6. Phyllosphere
7. Active immunity
8. Auxotroph
9. Pili
10. Capsule of bacterium
11. Transduction
12. Conjugation

III. Write short essay on any six of the following

(6 x 5=30)

1. Mention different sterilization techniques and explain autoclaving in detail
2. Explain methods of isolation of microorganisms
3. What are the different preservation techniques for the microorganisms
4. With a neat diagram explain the life cycle of bacteriophage
5. Give the classification of algae
6. Mention the different industrial application of microorganisms
7. What is a chemostat, explain with a diagram
8. Write a note on anaerobic microorganisms

IV. Write an essay on any one

(1x 10=10)

1. What is immunology, explain how antibodies can be produced and its application
2. Describe different microbial enumeration techniques