

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Hort.)

Semester : I (New)

Course No. : H/MIBO 111

Credits : 2(1+1)

Day & Date : Thursday, 17.12.2015

Term : I

Academic Year : 2015-16

Title : Introductory Microbiology

Time : 10.00-12.00

Total Marks : 40

- Note :
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Differentiate between prokaryotic and eukaryotic cells. Describe general characteristics of algae.
- Q.2 Define bacterial growth and explain the bacterial growth curve.
- Q.3 Write short notes (Any two).
- 1) Symbiosis
 - 2) Nutrition of bacteria
 - 3) Bacteriophages
- Q.4 Define fungi and write the different characters of fungi.
- Q.5 Define the term 'Microbiology' and write its importance in horticultural and allied fields.
- Q.6 Draw a well labeled diagram of a typical bacterial cell and write the functions of mesosomes.
- Q.7 Give the important contribution of following scientist.
- 1) Louis Pasteur
 - 2) Anton-Van- Leeuwenhoek
 - 3) Robert Koch
 - 4) Thirumalchar
- Q.8 Classify the bacteria on the basis of temperature requirement of cells and arrangement of bacterial cells.
- Q.9 List out the different methods of reproduction in bacteria and explain in detail sexual methods of reproduction.
- Q.10 What are the general properties of viruses?

SECTION "B"

- Q.11 Define the following terms.
- 1) Endospores
 - 2) Antibiosis
 - 3) Pure culture
 - 4) Facultative parasites
- Q.12 Fill in the blanks.
- 1) _____ are also known as 'Ray fungi'
 - 2) The symbiotic association between fungi and algae is known as _____.
 - 3) Viruses are _____ parasites.
 - 4) The science which deals with the study of algae is called _____.