

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD
SEMESTER END EXAMINATION

B.Sc. (Hort.)

Semester : I (New)	Term : I	Academic Year : 2016-17
Course No. : II/MIBO 111	Title : Introductory Microbiology	
Credits : 2(1+1)	Time : 10.00-12.00	Total Marks : 40
Day & Date : Friday, 16.12.2016		

- 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 Describe in detail the structure of typical prokaryotic cell.
- Q.2 Write down about Robert Koch and his postulates.
- Q.3 What is differential staining? Explain the mechanism of Gram staining.
- Q.4 What is plasmid? Write down its general properties.
- Q.5 Define microbial growth and explain in short various phases of growth.
- Q.6 Enlist the difference between prokaryotic and eukaryotic cell.
- Q.7 Describe in detail the account of bacterial conjugation.
- Q.8 Define Virus. Give its general properties.
- Q.9 a) Mention different steps involved in lytic cycle of bacteriophages with well labeled diagram.
b) Explain in detail the decomposition of organic matter.
- Q.10 Write short notes (Any two).
- 1) Mycoplasma
 - 2) Fungi
 - 3) Actinomycetes

SECTION "B"

- Q.11 State True or False.
- 1) Antony Van Leeuwenhoek is the father of Microbiology.
 - 2) Mycology is the study of algae.
 - 3) The hereditary characteristics are coded on RNA.
 - 4) Neutrophiles require near about 7 pH for their growth.
- Q.12 Fill in the blanks.
- 1) Bacteria grow in the presence of oxygen is called _____ bacteria.
 - 2) Gram's staining method is a type of _____ staining.
 - 3) YEMA media is used for isolation of _____ bacteria.
 - 4) Lichen is a type of _____ association between algae and fungi.

