

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

Semester	: II (New)	Term	: Second	Academic Year	: 2022-23
Course No.	: II/MIBO 121	Title	: Introductory Microbiology		
Credits	: 2 (1+1)				
Day & Date	: Friday, 04.08.2023	Time	: 9:00 to 11:00 hrs.	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 diagram wherever necessary.

SECTION 'A'

- Q.1 Define microbiology. Explain its scope and importance in horticulture and allied fields.
- Q.2 Enlist various internal and external parts of bacterial cell. State the functions of cell wall and mesosomes.
- Q.3 Define reproduction. Enlist different methods of reproduction in bacteria and explain conjugation in brief.
- Q.4 Define fungi. Write the general characteristics of fungi.
- Q.5 Differentiate between prokaryotic and eukaryotic cell.
- Q.6 Define bacterial growth. Explain growth phases in bacteria with growth curve.
- Q.7 What do you mean by virus? Give the characteristics of virus along with example of diseases caused by them.
- Q.8 Give one major contribution of the following Scientists:
a) Robert Hooke b) Louis Pasteur c) Robert Koch d) Joseph Lister
- Q.9 Define sterilization. Enlist various methods of sterilization and explain radiation method in detail.
- Q.10 Write short notes on (Any Two):
a) Symbiosis b) Bacteriophage c) Binary fission

SECTION 'B'

- Q.11 Define the following terms:
1) Antibiosis 2) Pure culture 3) Isolation 4) Simple staining
- Q.12 Fill in the blanks:
1) Science which deals with the study of algae, is known as _____.
- 2) Actinomycetes are known as _____.
- 3) Alexander Fleming discovered the first antibiotic _____.
- 4) The zone/region of soil immediately surrounding the plant root surface, is called as _____.

