

(DMB01)

ASSIGNMENT - 1
M.Sc. DEGREE EXAMINATION, MARCH, 2023 .
First Year
Microbiology
INTRODUCTION MICROORGANISMS
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Germ theory of diseases
2. Robert Koch
3. Mycoplasmas
4. Staphylococcus
5. TMV
6. Viroids

(DMB01)

ASSIGNMENT - 2
M.Sc. DEGREE EXAMINATION, MARCH, 2023 .
First Year
Microbiology
INTRODUCTION MICROORGANISMS
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Protozoa Reproduction
2. Economic importance of Microalgae
3. (a) Describe the development of Vaccines.
(b) Describe the morphology and Ultra structure of Bacterial cell.
4. (a) Write an account on the latest classification of Bacteria based on Bergy's Manual.
(b) Describe the general characters of Cyanobacteria and Archaeobacteria.
5. (a) Describe the morphology and chemistry of Viruses.
(b) Describe the symptoms and methods of transmission of Viruses.
6. (a) Describe the structure and reproduction of Microalgae.
(b) Write an account on the classification of Fungi based on Ainsworth.

(DMB02)

ASSIGNMENT - 1
M.Sc. DEGREE EXAMINATION, MARCH, 2023.
First Year
Microbiology
MICROBIOLOGICAL METHODS
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Simple staining
2. Chemical methods of sterilization
3. MPN method
4. Baiting technique
5. Purification of Viruses
6. Applications of HPLC

(DMB02)

ASSIGNMENT - 2
M.Sc. DEGREE EXAMINATION, MARCH, 2023.
First Year
Microbiology
MICROBIOLOGICAL METHODS
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. SDS-PAGE
 2. Isoelectric focusing
 3. (a) Describe the instrumentation, principle and applications of Fluorescent Microscopy.
(b) Describe the composition and preparation of Bacteriological media.
 4. (a) Describe the methods of isolation of Bacteria.
(b) Describe the maintenance and preservation of microbial cultures.
 5. (a) Describe the principle, methodology and applications of HPLC.
(b) Describe the Centrifugation techniques and their applications.
 6. (a) Write an account on Electrophoresis.
(b) Describe the principle, methodology and applications of US-VIS Spectrophotometry.
-

(DMB03)

ASSIGNMENT - 1
M.Sc. DEGREE EXAMINATION, MARCH, 2023.
First Year
Microbiology
MICROBIAL PSYISIOLOGY AND BIOCHEMISTRY
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Measurement of cell number
2. Measurement of Bacterial growth
3. Hydrogen oxidisers
4. Methylootrophs
5. Fee energy
6. ATP structure

(DMB03)

ASSIGNMENT - 2
M.Sc. DEGREE EXAMINATION, MARCH, 2023.
First Year
Microbiology
MICROBIAL PSYCHOLOGY AND BIOCHEMISTRY
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Activation energy
 2. Properties of allosteric enzymes
 3. (a) Describe the Nutritional types of Bacteria.
(b) Describe the factors affecting Bacterial growth.
 4. (a) Describe the oxygenic Photosynthesis.
(b) Write an account on Nitrate oxidizers and Ammonia oxidizers.
 5. (a) Explain different types of phosphorylations.
(b) Describe the Glyoxylate pathway and its significance.
 6. (a) Describe the nature and classification of enzymes.
(b) Describe the structure and functions of Nucleic acids.
-

(DMB04)

ASSIGNMENT - 1

M.Sc. DEGREE EXAMINATION, MARCH, 2023.

First Year

Microbiology

ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY

MAXIMUM : 30 MARKS

ANSWER ALL QUESTIONS

1. Microbial propagules in Air
2. Aeroallergens
3. Components of soil
4. Soil environment
5. Utilization of Azatobacter
6. Rhizobacteria

(DMB04)

ASSIGNMENT - 2
M.Sc. DEGREE EXAMINATION, MARCH, 2023.
First Year
Microbiology
ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY
MAXIMUM : 30 MARKS
ANSWER ALL QUESTIONS

1. Biological control of plant diseases
 2. Soft rot of vegetables.
 3. (a) Describe the Air sampling techniques.
(b) Describe the methods of treatment of water for drinking purpose.
 4. (a) Describe the diversity and abundance of dominant soil microorganisms.
(b) Explain the methods of isolation of soil microflora.
 5. (a) Describe the mechanism of Biological Nitrogen fixation and its significance.
(b) Describe the types of Mycorrhizae and the importance of VAM fungi.
 6. (a) Describe the symptoms caused by plant pathogenic Bacteria and Viruses.
(b) Describe symptomatology, etiology and control of Late Blight of Potato.
-