

**(DMB01)**

**ASSIGNMENT - 1**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**MICROBIOLOGY**

**Introduction Microorganisms**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

**Q1)** Germ theory of diseases

**Q2)** Louis Pasteur

**Q3)** Bacillus

**Q4)** Cyanobacteria

**Q5)** Viroids

**Q6)** Prions

**Q7)** TMV

**Q8)** T4

**(DMB01)**

**ASSIGNMENT - 2**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**MICROBIOLOGY**

**Introduction Microorganisms**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

- Q1)** a) Write an account on the development of Vaccines.  
b) Describe the Ultra structure of Bacteria.
- Q2)** a) Write an account on the classification of Bacteria based Bergy's manual.  
b) Describe the classification and characters of Archaeobacteria.
- Q3)** a) Describe the morphology and chemistry of Viruses.  
b) Describe the symptoms and methods of transmission of Viruses.
- Q4)** a) Describe reproduction in Fungi.  
b) Write an account on the economic importance of Fungi.



**(DMB02)**

**ASSIGNMENT - 1**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**MICROBIOLOGY**

**Microbiological Methods**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

*Q1)* Physical methods of sterilization

*Q2)* Chemical methods of sterilization

*Q3)* Brewer Jar

*Q4)* Pyrogalllic acid

*Q5)* TLC

*Q6)* Applications of HPLC

*Q7)* Beer's lambert Law

*Q8)* GM counter

**(DMB02)**

**ASSIGNMENT - 2**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**MICROBIOLOGY**

**Microbiological Methods**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

- Q1)** a) Describe the principle, Methodology and applications of TEM.  
b) Describe the composition and preparation of bacteriological media.
- Q2)** a) Write an account on general methods of isolation of Bacteria.  
b) Describe the methods of preservation and maintenance of microbial cultures.
- Q3)** a) Describe isolation and purification of Viruses.  
b) Write an account on the principles of Centrifugation.
- Q4)** a) Describe two dimensional and pulse field gel electrophoresis.  
b) Describe the principle, methodology and applications of IR spectroscopy.



**(DMB03)**

**ASSIGNMENT - 1**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**Microbiology**

**Microbial Physiology and Biochemistry**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

- Q1)* Essential Macronutrients
- Q2)* Nutrient transport in Bacteria
- Q3)* Cyanobacteria
- Q4)* Green bacteria
- Q5)* ATP structure
- Q6)* Oxidation
- Q7)* Classification of enzymes
- Q8)* Properties of Allosteric enzymes

**(DMB03)**

**ASSIGNMENT - 2**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**First Year**

**Microbiology**

**Microbial Physiology and Biochemistry**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

- Q1)** a) Describe the typical growth curves of Bacteria.  
b) Describe the various methods of measurement of Bacterial growth.
- Q2)** a) Write an account on sulphur oxidizers.  
b) Describe Nitrate oxidizers and their importance.
- Q3)** a) Enumerate HMP pathway and its significance.  
b) Explain Lactate fermentations and their importance.
- Q4)** a) Describe the regulation of enzyme activity.  
b) Describe the structure and functions of DNA.



**(DMB04)**

**ASSIGNMENT - 1**  
**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**MICROBIOLOGY**

**First Year**

**Environmental and Agricultural Microbiology**

**MAXIMUM : 30 MARKS**  
**ANSWER ALL QUESTIONS**

- Q1)* Aeroallergens
- Q2)* Sewage treatment
- Q3)* Components of soil
- Q4)* Transformation of iron in soil
- Q5)* Symbiotic nitrogen fixers
- Q6)* Cyanobacteria as bioinoculants
- Q7)* Soft rot of vegetables.
- Q8)* Black stem rust of wheat

**(DMB04)**

**ASSIGNMENT - 2**

**M.Sc. (Previous) DEGREE EXAMINATION, MAY – 2019**

**MICROBIOLOGY**

**First Year**

**Environmental and Agricultural Microbiology**

**MAXIMUM : 30 MARKS**

**ANSWER ALL QUESTIONS**

- Q1)** a) Describe the seasonal and diurnal periodicities of Air spora.  
b) Describe the methods of treatment of water for drinking purpose.
- Q2)** a) Describe the transformation of phosphorous in soil.  
b) Write an account on soil organic matter decomposition.
- Q3)** a) Describe the structure and functions of legume root nodules.  
b) Describe the types of Mycorrizae and importance of VAM.
- Q4)** a) Describe the symptoms caused by plant pathogenic Bacteria.  
b) Write an account on Biological control of plant diseases.

