

## Half Yearly Examination 2020-21

### B.Sc. Part I

### Microbiology

### Paper - II

### Biochemistry and Physiology

*Note: Attempt all the questions each question carries equal marks.*

MM-50

**Q1. Describe structure, classification and properties of monosaccharides.**

**Or**

**Write short note on:**

**(a) Amino acids (b) Starch**

**Q2. Write a note on classification, structure and properties of Proteins**

**Or**

**Write short note on**

**(a) Oligosaccharides (b) Peptides**

**Q3. What are fatty acids? Describe saturated and unsaturated fatty acids with diagram**

**Or**

**Write short note on:**

**(a) Forms of DNA (b) Structure of Nucleotides**

**Q4. Give a detail account on Structure of DNA**

**Or**

**Write short note on**

**(a) Compound lipids (b) Properties of lipid**

**Q5. Explain structure, nomenclature and classification of enzymes**

**Or**

**Write short note on**

**(a) Isoenzyme (b) Allosteric enzymes.**

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# Half Yearly Examination 2020-21

## B.Sc. Part II

### Microbiology

#### Paper - II

#### Bioinstrumentation and Biostatistics

*Note: Attempt all the questions each question carries equal marks.*

**MM-50**

**Q1. Explain principle, instrumentation and application of phase contrast microscope.**

**Or**

**Write short note on:**

**(a) Numerical aperture (b) Resolving power & Magnification power**

**Q2. Describe principle and types of centrifuge**

**Or**

**Write short note on**

**(a) Ultracentrifuge (b) Applications of centrifugation technique**

**Q3. Write a detail note on HPLC**

**Or**

**Write short note on:**

**(a) Column Chromatography (b) Types of electrodes used in pH meter**

**Q4. Explain various factors affecting pH measurement**

**Or**

**Write short note on**

**(a) TLC (b) Principle of chromatography**

**Q5. Describe principle and instrumentation of UV – Vis Spectrophotometer.**

**Or**

**Write short note on**

**(a) Turbidometry (b) Instrumentation of colorimeter**

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**Half Yearly Examination 2020-21**

**B.Sc. Part III**

**Microbiology**

**Paper - II**

**Environmental and Medical Microbiology**

*Note: Attempt all the questions each question carries equal marks. MM-50*

**Q1. Describe airborne viral diseases in detail.**

**Or**

**Write short note on:**

**(a) Aerosol (b) Mycosis**

**Q2. Give a detail; account on assessment of air quality**

**Or**

**Write short note on**

**(a) Droplet nuclei (b) Meningitis**

**Q3. What do you mean by interaction? Describe various positive interaction**

**Or**

**Write short note on:**

**(a) Phyllosphere (b) Microflora of various soil types**

**Q4. Write a note on biofertilizer**

**Or**

**Write short note on**

**(a) VAM (b) nif gene**

**Q5. Describe fresh water ecosystem in detail.**

**Or**

**Write short note on**

**(a) Eutrophication (b) Upwelling**

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