

THE HNSB, LTD. SCIENCE COLLEGE HIMATNAGAR
MICROBIOLOGY DEPARTMENT
1st ASSIGNMENT SUBMISSION NOTICE

Year: 2023-2024

Date: 17/07/2023

This is to inform all the students of **BSC MICROBIOLOGY SEM 3** and **5** that students have to write down assignment in separate supply as shown below. Last date for submission is **03/08/2023**. Students must have to submit assignment before/on due date.

B.Sc. Sem-3

• **MB-301 – BIOCHEMISTRY**

1. What are the 4 types of Protein Structure? Explain it.
2. What are lipids? Describe classification of lipids with suitable examples.
3. Explain First law of Thermodynamics.

• **MB-302 – CELL BIOLOGY**

1. Explain transfer of small molecules through plasma membrane (only passive transport).
2. Draw a labeled diagram of mitochondria and explain its structure and function.
3. Write a brief note on Mitosis.
4. Write a short note on AMP Pathway of cell Signaling.

B.Sc. Sem-5

• **MB-501 – MOLECULAR BIOLOGY**

1. Write a note on Watson and Crick DNA double helix structure.
2. Explain mechanism of prokaryotic DNA replication.
3. Explain various models of DNA replication.
4. Write a note on transcription in Prokaryotes.

• **MB-502 – MICROBIAL PHYSIOLOGY AND METABOLISM**

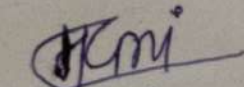
1. Write a brief note on TCA cycle.
2. Explain Glycolysis.
3. Give differences between anoxygenic and oxygenic photosynthesis.
4. Explain - Hydrogen oxidation.

• **MB-503 – IMMUNOLOGY**

1. Write a note on concept of Innate and Adaptive immunity.
2. Explain structure, types, functions and properties of antibody.
3. Write short note on T cells.
4. Write note on humoral immune response.

• **MB-504 – MICROBIAL DIVERSITY AND BACTERIAL SYSTEMATICS**

1. Write Difference between prokaryotic and eukaryotic microorganisms.
2. Explain in detail Binomial Nomenclature and Whittaker's five kingdom classification.
3. Explain in detail Gram Positive bacteria.
4. Write General characteristics of Fungi.


Head

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