THE HNSB. LTD. SCIENCE COLLEGE HIMATNAGAR MICROBIOLOGY DEPARTMENT

2nd ASSIGNMENT SUBMISSION NOTICE

Year: 2022-2023 Date: 07/09/2022

This is to inform all the students of **B.Sc. MICROBIOLOGY SEM 1, 3** and **5** that students have to write down assignment in separate supply as shown below. Last date for submission is **15/09/2022**. Students must have to submit assignment before/on due date.

B.Sc. Sem-1

• MB-101 - INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY.

- .1. Explain Whittaker's five kingdom Classification system.
- 2. Write down rules for binomial Nomenclature.
- 3. Write a short note on structure of Fungi and economic importance of Fungi.
- 4. Give a contribution of Edward Jenner.
- 5. Write in detail: Abiogenesis.
- 6. Give a contribution on Discovery (father) of Antibiotics.
- 7. Write a working principle of Autoclave.
- 8. Give difference between SEM and TEM.

B.Sc. Sem-3

• MB-301 - BIOCHEMISTRY

- 1. Give general formula of amino acid, structures and its classification.
- 2. Explain in detail fatty acid structures and its functions.
- . 3. Explain classification of enzyme.
 - 4. Give classification of carbohydrates.

MB-302 - CELL BIOLOGY

- 1. Explain Structure of Golgi apparatus.
- 2. Explain in detail protein glycosylation.
- 3. Draw a labeled diagram of chloroplasts and explain its structure and function.
- .4. Write a brief note on Meiosis phase I.
- 5. Explain function of Microtubules.

B.Sc. Sem-5

MB-501 – MOLECULAR BIOLOGY

- 1. Explain mismatch repair in detail.
- 2. Explain Polyadenylation and capping.
- 3. Write down properties of Genetic code.
 - 4. Give difference between Replication and transcription.

MB-502 – MICROBIAL PHYSIOLOGY AND METABOLISM

- 1. Explain different types of Extremophiles.
- 2. Write note on active and passive transport system of molecules.
- :3. Explain Lactic acid fermentation and alcoholic fermentation.
- 4. Write a note on Denitrification and DNRA.
- 5. Explain- Methanogenesis
- 6. Write a note on anoxygenic photosynthesis.
- 7. Explain chemolithoautotrophs.

MB-503 - IMMUNOLOGY

- 1. Write a note on ELISA.
- 2. Enlist types of Immune organs and explain any two in detail.
- 3. Write short note on Western Blotting.

• : MB-504 - MICROBIAL DIVERSITY AND BACTERIAL SYSTEMATICS

- 1. Write general characteristics of protozoa with amoeba, paramecium and plasmodium.
- 2. Write short note on Carl woese classification system.
- 3. Explain in detail Proteobacteria.

Department of Microbiology The H.N.S.B. Ltd. Science College

Himatnagar, Sabarkantha-383 001