# THE HNSB. LTD. SCIENCE COLLEGE HIMATNAGAR MICROBIOLOGY DEPARTMENT 2<sup>nd</sup> ASSIGNMENT SUBMISSION NOTICE

Year: 2022-2023 Date: 16/02/2023

This is to inform all the students of **B.Sc. MICROBIOLOGY SEM 2, 4** and **6** that students have to write down assignment in separate supply as shown below. Last date for submission is **24/02/2023**. Students must have to submit assignment before/on due date.

# B.Sc. Sem-2

- MB-201 INTRODUCTION TO BACTERIOLOGY.
  - 1. Explain any three methods of asexual reproduction in Bacteria.
  - 2. Write a short note on Cryopreservation.
  - 3. Discuss types of microorganism on basis of nutrition requirements.
  - 4. Write a short note on cell membrane in Bacteria.
  - 5. Write down Serial dilution technique method.

## B.Sc. Sem-4

- MB-401 FOOD AND DAIRY MICROBIOLOGY
  - 1. Write a short note on HACCP.
  - 2. Write short note on spoilage of canned food.
  - 3. Explain preservation by pasteurization.
  - 4. Intrinsic and Extrinsic factors that affect food.

## MB-402 – ENVIORNMENTAL MICROBIOLOGY

- 1. Explain micro flora of soil.
- 2. Write a brief note on microbial interactions.
- 3. Write a short note on Carbon cycle.
- 4. Explain in detail: MPN Test for water potability.

## B.Sc. Sem-6

## MB-601 – MICROBIAL GENETICS

- 1. Write a note on specialized transduction.
- 2. Explain mechanism of Non replicative transposition.
- 3. Explain various types of Gene mutation.
- 4. Write a note on conjugation between Hfr and f- cell.

## MB-602 – MICROBIAL PHYSIOLOGY AND METABOLISM

- 1. Explain Vitamin B12 production.
- 2. Write note on control parameters of fermenter.
- 3. Write a brief note on Airlift fermenter.
- 4. Explain strain improvement.

## MB-603 – MEDICAL MICROBIOLOGY

- 1. Write a note on Complement fixation test.
- 2. Explain in detail AIDS.
- 3. Explain anti bacterial agents.
- 4. Write short note on gastrointestinal disease.

#### MB-604 – R-DNA TECHNOLOGY

- 1. Write down restriction enzymes.
- 2. Write short note on Electroporation and microinjection.
- 3. Explain in detail genomic libraries.
- 4. Explain in detail: site directed mutagenesis (any two methods).