

B.Sc. CBCS Pattern Semester-II
014B - Microbiology Paper-II (Applied Microbiology)

P. Pages : 2

Time : Three Hours



GUG/W/23/11589

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks as indicated.
2. Draw diagram wherever necessary.

1. Describe in detail solid and liquid impingement techniques of microbial analysis of air. **10**

OR

- a) What is fumigation? Describe fumigation by Ethylene Oxide. **2½**
- b) Write a note on composition of air. **2½**
- c) Explain role of laminar air flow system. **2½**
- d) Describe sterilization of air by UV radiation. **2½**

2. Define chlorination. Explain its mechanism of disinfection of water. Describe different methods of chlorination. **10**

OR

- a) Explain mechanism of Indole test. **2½**
- b) Describe confirmed test in MTDT. **2½**
- c) Differentiate between faecal and non faecal coliforms. **2½**
- d) Enlist causative organisms of water borne diseases. **2½**

3. Describe in detail septic tank and Inhoff tank in sewage treatment methods. **10**

OR

- a) Explain why COD values are greater than BOD values. **2½**
- b) Describe RBC working in sewage treatment. **2½**
- c) Write a note on oxidation pond. **2½**
- d) Give flow sheet diagram for waste water treatment. **2½**

4. What is cheese? Describe the preparation of cottage cheese in detail. 10

OR

- a) Enlist causative organisms of milk borne diseases. 2½
- b) Write a short note on phosphatase test. 2½
- c) Describe the process of yoghurt production. 2½
- d) Discuss milk pasteurization methods UHT, HTST and LTHT. 2½

5. Solve **any ten**. (Each question carry one mark) 10

- i) What is aerosol?
- ii) What are sources of microorganism in air with causative organism.
- iii) Give the common airborne bacterial diseases.
- iv) Define coliform and enlist their types.
- v) What is meant by DSLB.
- vi) Write full form of MPN.
- vii) Define sewage?
- viii) What is preliminary treatment of sewage?
- ix) What is Th.O.D.?
- x) Write the name of sugar present in milk?
- xi) What is MBRT test?
- xii) Write any one name of micro organism involved in Yoghurt preparation.
