

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/11589(S)**

Max. Marks : 50

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

**1.** Discuss in detail chemical methods of Room sterilization. **10**

**OR**

- a) Describe the sources of microorganisms in air. **2½**
- b) Explain the working mechanism of Lemon's air sampler. **2½**
- c) Write a note on composition of air. **2½**
- d) Draw the diagram of Anderson's Air Sampler. **2½**

**2.** Explain the mechanism of chlorination of water? Give the various methods of chlorination. **10**

**OR**

- a) Write the principle of Indole test. **2½**
- b) Describe presumptive test for detection of coliforms. **2½**
- c) Give an account on collection & sampling of stagnant water for analysis. **2½**
- d) Describe break point chlorination in water treatment. **2½**

**3.** Explain activated sludge treatment for treatment of waste water. **10**

**OR**

- a) Describe working mechanism of Imhoff Tank. **2½**
- b) Write a note on Composition of Sewage. **2½**
- c) Write a note on Oxidation Pond. **2½**
- d) Write note on COD and BOD. **2½**

**4.** Describe the production of cheese in detail. **10**

**OR**

- a) Describe animal as a sources of contamination of milk. **2½**

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|---|----|
| b) Explain principle of phosphatase test. | 2½ |
| c) Write a note on - Yogurt production.   | 2½ |
| d) Write about MBRT test.                 | 2½ |

**5. Attempt any ten.**

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|---|---|
| a) What is droplet nuclei?  | 1 |
| b) Name any two air born diseases.                                  | 1 |
| c) Name any two chemical room sterilizer.                           | 1 |
| d) Write full form of IMViC.  | 1 |
| e) Name any one example of faecal coliform and non faecal coliform. | 1 |
| f) Name the nutrient media used in citrate utilization test.        | 1 |
| g) What is COD?   | 1 |
| h) What is dissolved oxygen?  | 1 |
| i) What is super chlorination.                                      | 1 |
| j) Give any two undesirable changes in milk.                        | 1 |
| k) Name any two milk born diseases.                                 | 1 |
| l) Name the indicator used in MBRT.                                 | 1 |

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