

**Bankura University**  
**B.Sc 3<sup>rd</sup> Semester (Honours) Theory Examination,2021**

SUB: Microbiology

Course ID: 32215

Course Code: SH/MCB/305/SEC-1

Course Title: Microbial Analysis of Air and Water

Time: 2h

Full Marks: 40

The figures in the margin indicate full marks

Answer all the questions.

**UNIT I**

1. Answer *any five* of the following questions: (5x2=10)

- a) What is CFU ?
- b) What is meant by MPN ?
- c) Define BOD.
- d) What is eutrophication ?
- e) What is aerosol ?
- f) Name one air-borne disease with its causal organism.
- g) Write the role of Laminar- air flow in controlling air- borne pathogens.
- h) What is meant by flocculation?

**UNIT II**

2. Answer *any four* of the following questions: (5x4=20)

- a) Describe different techniques for sampling of air- borne microorganisms.
- b) Name five important water borne diseases and their causal agents.
- c) Write the role of filtration and UV light in controlling microorganisms. 2.5 + 2.5 = 5
- d) Write the treatment process of municipal water.
- e) Write the characters of sewage. Describe different methods of sewage treatment. 2+3=5
- f) Define air-borne diseases. What are the common symptoms of air-borne diseases? 2+3=5

**UNIT III**

3. Answer *any one* of the following questions: (10x1=10)

- a) Name the air-borne microorganisms. Describe the impact of air-borne microorganisms on living beings. 3+7=10
- b) Describe presumptive and confirmative test of E. coli. What is the aim of completed test? 4+4+2=10