

B.Sc. Semester-III Examination, 2022-23**MICROBIOLOGY [Honours]****Course ID : 32215 Course Code : SH/MCB/305/SEC-1****Course Title : Microbiological Analysis of Air and Water**

Time : 2 Hours

Full Marks : 40

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer **all** the questions.**UNIT-I**1. Answer any **five** of the following questions:

2×5=10

- Define BOD.
- What is eutrophication?
- What are aerosols?
- What is CFU?
- What is meant by flocculation?
- What is the disadvantage of chlorination of drinking water?
- What is meant by 'biofencing' of ground water?
- Write the full form of IMViC.

UNIT-II2. Answer any **four** of the following questions:

5×4=20

- Name five important water-borne diseases and their causal agents.
- Describe coliform test technique.
- Write the indoor control of air-borne microorganisms.
- Write the role of filtration and UV light in controlling microorganisms. $2\frac{1}{2}+2\frac{1}{2}$
- Write the properties of sewage. Describe any one method of sewage treatment. 2+3
- Write the role of desiccation and incineration as inactivation mechanism. $2\frac{1}{2}+2\frac{1}{2}$

UNIT-III3. Answer any **one** of the following questions:

10×1=10

- Give a concise list of air-borne microorganisms. Describe different techniques for sampling of air-borne microorganisms. 2+8
- What is meant by potable water? Describe the methods to detect potability of water. 2+8