

BACHELOR OF SCIENCE (CBCS-2018 COURSE)
F. Y. B. Sc. Sem-II : WINTER- 2022
SUBJECT : MICROBIOLOGY : THE DIVERSITY OF MICROBIAL WORLD

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 9/12/2022

W-18332-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Draw neat and labeled diagram wherever necessary.
-

Q.1 Attempt **ANY TWO** of the following : **(12)**

- a) What is commensalism? Discuss with an example.
- b) Explain the functioning of Oxidation lagoons.
- c) Discuss Alkalophiles with examples.

Q.2 Attempt **ANY TWO** of the following : **(12)**

- a) Discuss the various modes of transmission of waterborne diseases.
- b) How bacteria are grouped based on the requirement of salt concentration?
- c) What is the significance of bioluminescent bacteria in the aquatic ecosystem?

Q.3 Attempt **ANY TWO** of the following : **(12)**

- a) Comment on – Microorganisms as fertilizers.
- b) What are the properties and applications of barophiles?
- c) How are aquatic microbes involved in controlling oil spills?

Q.4 Attempt **ANY THREE** of the following : **(12)**

- a) Comment on – Microbes as Superbugs
- b) Discuss the soil microflora.
- c) How does Laminar air flow help in maintaining sterile conditions?
- d) What are the various ways of treating sewage?

Q.5 Write short notes on **ANY FOUR** of the following : **(12)**

- a) Acidophiles
- b) *Bacillus thuringiensis*
- c) U-V radiations
- d) ESKAPE Theory
- e) Air Microflora
