

F.Y.B.SC. SEM – II (2014 Course) : WINTER - 2018

SUBJECT: MICROBIOLOGY : THE DIVERSITY OF MICROBIAL WORLD (MB – 22)

Day : Monday
Date : 15/10/2018

W-2018-0788

Time : 03.00 PM TO 05.00 PM
Max. Marks : 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Attempt **ANY TWO** of the following: [10]

- a) Define the term 'Biofertilizer' and discuss nitrogen fixing biofertilizers.
- b) Discuss the factors regulating distribution of microorganisms aquatic environment.
- c) In which conditions a specific microorganism can be claimed for intellectual property right?

Q.2 Attempt **ANY TWO** of the following: [10]

- a) What are 'Alkalophiles'? Give their significance.
- b) How *Bacillus thuringiensis* controls insect pests?
- c) Discuss the use of ultraviolet radiation for control of air contaminants.

Q.3 Write short notes on **ANY TWO** of the following: [10]

- a) Mutualism
- b) Halophiles
- c) Bioterrorism

Q.4 Attempt **ANY FIVE** of the following: [10]

- a) Mention the mechanism of bioluminescence by marine bacteria.
- b) Give the significance of 'oxidation lagoons'.
- c) What is 'HEPA filter'? Mention its significance.
- d) Give two examples each of bacterial and viral water borne diseases.
- e) Enlist **ESKAPE** organisms.
- f) Give any two examples of 'Antagonism'.
- g) Mention the use of *Pseudomonas fluorescens* in agriculture.

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