BCF-003-001525 Seat No. _____

B. Sc. (Sem. V) (W.E.F. 2012) Examination

August – 2021

MB - 501 : Microbiology

(Applied Microbiology)

(Old Course)

Faculty Code : 003

Subject Code : 001525

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instructions : (1) All questions are compulsory.
(2) Right side figures indicate mark of the questions.
(3) Draw the figure wherever necessary.

1 Answer following questions in short : **20**

(1) Give two examples of denitrifying bacteria.
(2) Explain pasteurization of milk.
(3) Give full form of MBRT.
(4) What is Rancidity ?
(5) Write full form of HTST pasteurization.
(6) Define : Milk.
(7) Give full form of B.O.D. and C.O.D.
(8) What is skimmed milk ?
(9) Give full form of M.P.N.
(10) Give types of milk spoilage.
(11) Which enzyme is used to make cheese ?
(12) Define Kefir.
(13) Name any two methods to preserve milk.
(14) Define starture culture.
(15) Recovery of valuable mineral from low grade ore with microbial process is known as _____

(16) What are pollutants ?

(17) Give types of pollutants (only names).

(18) Give full form of MEOR.

(19) Define Bioplastic.

(20) Give full form of PHAS.

2 (A) Answer in short : (any **three**) **6**

(1) What is "Functional Food" ?

(2) Write types of milk.

(3) What is Biofuel ?

(4) Write about single cell protein.

(5) Explain AG Mark.

(6) Explain bread as fermented food product.

(B) Answer in short : (any **three**) **9**

(1) Define Pollutants.

(2) Describe process of purification of water.

(3) Write role of bio-surfactant in reduction of pollution.

(4) Disadvantage of bioplastics.

(5) Write environmental conditions that affect bioleaching.

(6) Write a note on natural water.

(C) Write short note on : (any **two**) **10**

(1) Nitrogen cycle.

(2) MBRT

(3) Bacteriological analysis of water

(4) Spoilage of milk

(5) Sulphur cycle

3 (A) Answer in short : (any **three**) **6**

(1) Enlist biochemical conversions in Nitrogen cycle.

(2) Define : Biogeochemical cycle.

(3) Write about Winogradky's column.

(4) Write names of any two organisms found in milk.

(5) Define food born infection and intoxication.

(6) What is sausage ?

(B) Answer briefly : (any **three**) **9**

(1) What is Humus ?

(2) How spoilage of milk and milk products occur ?

(3) Write about canning process.

(4) Write beneficial interaction among soil microbes.

(5) Write advantages to use Bioplastics.

(6) Explain : Biotechnology as interdisciplinary science.

(C) Write short note on : (any **two**) **10**

(1) Carbon cycle.

(2) Food poisoning.

(3) Grading of milk.

(4) Pasteurization process and its type.

(5) Cheese making process.
