

B.Sc. Semester - 4 (CBCS) Examination
April/May -2022 [NEW COURSE]
Microbiology-Mi401 (Core)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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Q.1 (A). Answer the following (Compulsory) 4

1. What is humus?
2. What mycorrhiza?
3. What is rhizosphere?
4. What is the role of *Nitrobacter* in agriculture microbiology?

Q.1(B). Answer in brief (Any one out of two) 3

1. Define the chemical properties of soil.
2. Explain in brief biopesticides.

Q.1 (C). Answer in detail (any One out of two) 7

1. Discuss the phosphorus cycle with diagram.
2. Explain Winogradsky's column in detail.

Q.2 (A). Answer the following (Compulsory) 4

1. Define canned food.
2. What is effect of Botulism toxin?
3. What is silage? Explain.
4. What is AGMARK?

Q.2 (B). Answer in brief (Any one out of two) 3

1. Discuss single cell protein.
2. Explain spoilage of food.

Q.2 (C). Answer in detail (any One out of two) 7

1. Write a note on food preservation.
2. Explain food born intoxication with suitable examples.

Q.3 (A). Answer the following (Compulsory) 4

1. What is MBRT?
2. What is starter culture?
3. Explain composition of milk.
4. Give example of microorganism present in buttermilk

Q.3 (B). Answer in brief (Any one out of two) 3

1. Explain acidophilus milk.
2. Discuss the types of microorganism in milk.

Q.3 (C). Answer in detail (any One out of two) 7

1. Explain the principle and methods of preservation.
2. Discuss the spoilage of milk in detail.

Q.4 (A). Answer the following (Compulsory)	4
1. What is BOD?	
2. Explain single dwelling process.	
3. What is MPN?	
4. Define oxidation pond.	
Q.4 (B). Answer in brief (Any one out of two)	3
1. Define term COD and explain its importance.	
2. Explain sedimentation in water purification.	
Q.4 (C). Answer in detail (any One out of two)	7
1. Explain secondary treatments.	
2. Discuss the solid water process.	
Q.5 (A). Answer the following (Compulsory)	4
1. What is WHO?	
2. Explain QC in pharmaceutical industries.	
3. What is GLP?	
4. Give the full form of ISO.	
Q.5 (B). Answer in brief (Any one out of two)	3
1. What is GMP? Explain its role.	
2. Discuss total quality management.	
Q.5 (C). Answer in detail (any One out of two)	7
1. Write on note on sterility testing.	
2. Explain the quality assurance.	
