CLASS: **IMSc**   **SEMESTER: III**
BRANCH: **FOOD TECHNOLOGY**   **SESSION : MO/2019**

SUBJECT : FT203 FOOD MICROBIOLOGY

TIME: **2 HOURS**   **FULL MARKS: 25**

INSTRUCTIONS:
1. The total marks of the questions are 25.
2. Candidates may attempt for all 25 marks.
3. Before attempting the question paper, be sure that you have got the correct question paper.
4. The missing data, if any, may be assumed suitably.

Q1	(a)	Justify the need for control of a_w to enhance shelf life of foods?	[2]
	(b)	Defend the statement "Factors affecting microbial growth are interlinked" with a suitable example.	[3]
Q2	(a)	Describe pasteurization and appertization in brief.	[2]
	(b)	Discuss the differences between prokaryotic and eukaryotic cells (Any 3).	[3]
Q3	(a)	Determine the expression for D-value.	[2]
	(b)	Show how the expression for D-value is similar with Z-value with associated graphs.	[3]
Q4	(a)	Diagrammatically show the various morphologies of bacteria.	[2]
	(b)	Select an appropriate preservation technique for milk and justify how it is better than the other available technologies.	[3]
Q5	(a)	Define F-value and lethal rate.	[2]
	(b)	Describe the various phases of the microbial growth curve.	[3]