

G. S. Mandal's
Maharashtra Institute of Technology, Aurangabad
 (An Autonomous Institute)
 END SEMESTER EXAMINATION
First Year M.Tech(FPT) -April/May 2022

Course Code : MTF102

Course Name : Microb. & Chem. Of Foods

Duration : 2 Hrs

Max. Marks : 50

Date : 07/04/2022

Instructions :

- i) All questions are compulsory
- ii) Assume suitable data wherever necessary and clearly state it
- iii) Figures to the right indicate full marks

Q. 1	Solve/Answer Any Five (Marks: 10)			
	Questions	Marks	CO	BL
a)	Define the term food borne illness and enlist the factors responsible for it.	2	1	1
b)	Show the correct sequence of enzyme involved in specific food processing activity: i. Amylase a. Juice clarification ii. Invertase b. Dairy industry iii. Lactase c. Confectionary industry iv. Pectinase d. Bakery industry	2	5	1
c)	Give the three-three names for macro and micro-minerals	2	2	1
d)	Describe the various functions of water in context of human body.	2	1	2
e)	Define the term denaturation. Enlist physical and chemical agents responsible for denaturation.	2	6	1
f)	Define pigment and draw a structure of pigment 'anthocyanin'.	2	2	1
Q. 2	Define the term food microbiology and explain the role of food microbiologist in detail.	8	3	3
Q. 3	Explain the role of enzymes in food processing.	8	5	3
Q. 4	Classify rancidity? Explain the various factors affecting on rancidity.	8	2	4

Q. 5	Classify proteins on the basis of chemical nature and solubility. Discuss the properties of proteins (OR)	8	2	4
Q. 5	Classify vitamins on the basis of their solubility. Give the names of dietary sources for each vitamin.	8	1, 2	4
Q. 6	Outline in detail about the natural pigments that are used in food industry (OR)	8	3	5
Q. 6	In context of human body, justify the role of major and minor constituents present in food. Explain the nature of water present in food.	8	4	5