

Reg.No. _____



Karunya UNIVERSITY

(Karunya Institute of Technology & Sciences)
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – Nov/Dec – 2016

Code : **14FP3013**
Sub. Name : **Advances in food Microbiology**

Semester : **2016-17 ODD**
Duration : **3hrs**
Max. marks : **100**

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Describe the factors that affect the kinds and numbers of microorganisms in food with appropriate examples	CO1	15
	b.	Briefly explain the importance of inhibitory substances in food	CO1	5
(OR)				
2.	a.	What are the major causes of food spoilage? Discuss the process involved in dehydration of food	CO1	10
	b.	Explain the role and significance of microbes in any two fermented food products	CO2	10
3.	a.	Illustrate the importance of preservation by use of different preservative methods in meat and meat products	CO3	12
	b.	Add a note on the microorganisms involved in the spoilage of meat	CO1	8
(OR)				
4.	a.	Enumerate the principles of chill storage and freezing. How freezing may deteriorate the quality of food?	CO3	10
	b.	Enumerate the role of amylase and glucose oxidase in food industries	CO2	10
5.	a.	Explain the changes caused by microorganisms in egg and the bacterial rots found in eggs	CO1	10
	b.	What are chemical preservatives? Write the mechanism of any four chemical preservatives	CO3	10
(OR)				
6.	a.	Describe the impact of <i>Listeria monocytogenes</i> in food industries	CO1	12
	b.	Explain Enterotoxin mediated diarrhea	CO1	8
7.	a.	What is food borne disease?	CO1	2
	b.	Brief on the clinical symptoms of Bacillary dysentery and Salmonellosis	CO1	10
	c.	Enumerate the role of aflatoxins in food industry	CO1	8
(OR)				
8.	a.	Elaborate on preservation and spoilage of fruits and vegetables	CO3	20
<u>Compulsory:</u>				
9.	a.	What is botulism? Give an account on the effect of Botulism neurotoxin on human health and their prophylactic measures	CO1	15
	b.	State the benefits of an HACCP based food safety program	CO3	5

ALL THE BEST