

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2021

Course: Probiotics and Prebiotics
Program: M.Sc Microbiology
Course Code: HSMB 7018P

Semester: II
Time : 03 hrs.
Max. Marks: 100

Instructions: All Questions are compulsory

SECTION A

S. No.	MCQs or Fill in the blanks (1.5 marks each) (Maximum words 50)	30 Marks	CO
1	Name two milk products which contain alcohol.		CO1
2	Write down the most important flavouring compound present in yoghurt?		CO1
3	Define probiotics as per WHO.		CO4
4	Lactic acid bacteria are gram..... bacteria.		CO1
5	Write three advantages of cryopreservation of probiotic culture?		CO5
6	Write down two probiotic strains used for alleviating constipation?		CO1
7	Enlist two tripeptides having ACE inhibiting activity.		CO4
8	Write how short chain fatty acids effect human health?		CO1
9	The principal component of mucin is		CO4
10	Define defensins?		CO1
11	ISAPP stands for		CO1
12	Prebiotics are.....digested by human digestive enzymes.		CO5
13	Write down the linkages between monomers of fructans?		CO5
14	Why mother milk is superior than other sources of milk for infants?		CO1
15	After fermentation NADH converts into		CO5
16	Name the agency that gives regulation for use of probiotic microorganism in food?		CO5
17	After milk fermentation which acid is produced?		CO1
18	Molecular weight of bacteriocins is		CO5
19	Urinary tract infection are more prevalent in		CO1
20	The monomer of pectin is.....		CO5

SECTION B 20 marks 4 questions 5 marks each

Q	Short Answer Type Question (5 marks each) Scan and Upload 4 questions 5 marks each (300-400 words)	20 Marks	CO
1	Justify why probiotics are sustainable alternatives to antibiotics?	5	CO3

2	Write down the conclusive note on safety issues of probiotics?	5	CO4
3	Differentiate between kefir and koumiss?	5	CO1
4	Discuss the role of prebiotics on health? How they are helpful for probiotics?	5	CO2
SECTION C 30 marks			
Q	Two case studies 15 marks each subsections	30 Marks	CO
1	If an Industry starting a new probiotic food production, than how Industry justify the following thing a) Food is a probiotic. (3 marks) b) Shelflife of the food product. (4 marks) c) What Information should be present on packaging material? (8 marks)	15	CO3
2	If a patient suffering from constipation, then a) How it is managed in conventional way? (4 marks) b) What are the disadvantages of conventional treatment of constipation? (3 marks) c) How probiotics help in curing constipation? (8 marks)	15	CO2
SECTION- D 20 marks			
Q	Long Answer type Questions Scan and Upload (10 marks each) (500-750 words)	20 Marks	CO
1	Describe the role of probiotics in cancer prevention? Discuss the mechanism behind anticancer properties of probiotics?	10	CO5
2	Define hepatic encephalopathy? How it is progressed in a patients? How probiotics are helpful in it?	10	CO4

All Questions should be mapped with equal distribution of Cos ×÷