Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Food & Dairy Microbiology

Subject Code: 4SC06FDM1 **Branch: B.Sc (Microbiology)**

Semester: 6 **Date: 02/05/2018** **Time: 02:30 To 05:30** **Marks: 70**

Instructions:

(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1 **Attempt the following questions:** **(14)**

a) Define water activity
b) Define Blanching
c) Name different methods of drying used in food preservation
d) Define Redox potential
e) Botulism is caused by……
f) Enlist any two Gram positive spore forming bacteria important in food
g) Expand HACCP
h) Enlist any two bacteria present in human intestine
i) Define proteolysis
j) What is D value
k) Name the intrinsic factors affecting microbial growth of food.
l) Define BOD
m) What is TDT
n) What is the time and temperature relationship used in HTST method of pasteurization?

Attempt any four questions from Q-2 to Q-8

Q-2 **Attempt all questions** **(14)**

a) Write a short note on Mycotoxins **(5)**
b) Discuss the role of water in the growth of microorganisms **(5)**
c) How does the OR potential of a food influence microbial growth? **(4)**

Q-3 **Attempt all questions** **(14)**

a) Describe the preservation of food by canning. **(7)**
b) Define Pasteurization. Explain briefly any two methods of pasteurization **(7)**

Q-4 **Attempt all questions** **(14)**

a) Explain the process of food preservation by low temperature in detail **(7)**
b) Explain the process of wine production **(7)**

Q-5		**Attempt all questions**	**(14)**
	a)	Explain the microbial inhibition by weak organic acids	**(5)**
	b)	List the factors involved in the control of drying	**(5)**
	c)	Write a short note on clostridium botulism	**(4)**
Q-6		**Attempt all questions**	**(14)**
	a)	Explain spoilage of raw meat.	**(7)**
	b)	Write a note on use of hypochlorites	**(7)**
Q-7		**Attempt all questions**	**(14)**
	a)	Discuss the contamination of fruits and vegetables in detail.	**(7)**
	b)	Give the causal organism and symptoms of: i) Black mold rot ii) Blue mold rot iii) Grey mold rot	**(7)**
Q-8		**Attempt all questions**	**(14)**
	a)	Discuss salmonellosis in detail	**(7)**
	b)	Discuss staphylococcal food intoxication	**(7)**