Seat No: Enrollment No:___

PARUL UNIVERSITY

FACULTY OF APPLIED SCIENCE

B.Sc./IMSC, Summer 2017-18 Examination

Semester: 4 Date: 17/05/2018

Subject Code: 11101253 Time: 10:30am to 1:00pm

Subject Name: Food Microbiology Total Marks: 60

Instructions:

- 1. All questions are compulsory.
- 2. Figures to the right indicate full marks.
- 3. Make suitable assumptions wherever necessary.

4. Start new question on new page.	
Q.1. A) Essay type/ Brief note. (4x2) (Each of 04 marks)	(08)
(a) Explain normal microbial flora and types of microorganisms associated with food.	
(b) Write about food borne intoxication.	
Q.1. B) Answer the following questions. (Any two)	
(a) Short note/ Brief note (2x2)	(04)
1. Define fermentation with examples	
2. What is putrifaction?	
(b) Write short note on <i>E.coli</i> gastroenteritis.	(04)
(c) Write short note on staphylococcal food poisoning.	(04)
Q.2. A) Answer the following questions.	
(a) Short note/ Brief note (2x2)	(04)
1. Name any two microorganisms used for production of acetic acid.	
2. What is rancidity?	
(b) Describe fermentative production of Lactic acid.	(04)
Q.2. B) Answer the following questions. (Any two)	
(a) Write a short note on microbial spoilage of food.	(03)
(b) Write about fermentative production of cheese.	(03)
(c) Write about fermentative production of wine.	(03)
Q.3. A) Essay type/Brief note. (4x2) (Each of 04 marks)	(08)
(a) Write short note on Mushroom production.	
(b) Write short note on single cell protein	
Q.3. B) Answer the following questions. (Any two)	
(a) Short note/ Brief note (2x2)	(04)
1. Which organism produces aflatoxin?	
2. Give any two examples of food borne disease.	
(b)Write short note on factors effecting microbial growth.	(04)
(c) Describe pickle production.	(04)
Q.4. A) Answer the following questions.	(0.4)
(a) Short note/ Brief note (2x2)	(04)
1. Botulism toxin is produced by which organism?	
2. List out methods for the bacteriological examination of food.	(0.4)
(b) Write any two techniques for preservation of food.	(04)
Q.4. B) Answer the following questions. (Any two)	(02)
(a) Write short note on beer production.	(03)
(b) Describe food infection caused by Salmonella sp.	(03)

(c) Discuss common contaminants of various food products.

(03)