



ELIZADE UNIVERSITY,
ILARA-MOKIN, NIGERIA

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION

2020/2021 ACADEMIC SESSION

COURSE CODE: MCB 404

COURSE TITLE: FOOD AND DAIRY MICROBIOLOGY

COURSE Unit(s): 3 Units

DURATION: 2 hours



HOD's SIGNATURE

NAME:.....

MAT. No:.....

INSTRUCTIONS: Answer Question one (1) and any two questions from each section

1. (a) i. Define food Microbiology
ii. What are Indicator Organisms
iii. Highlight the significance of Mushroom cultivation
- (b) i. Describe the major roles played by microorganisms in food
ii. Mention the groups of microorganisms found in milk with two (2) examples

SECTION A

Answer Two (2) Questions from this section

2. a. Classify Dairy microorganisms based on their physiological grouping
b. Write short notes on the following potential pathogens found in milk
 - i. *L. monocytogenes*
 - ii. *E. coli*
 - iii. *B. cereus*
 - iv. *C. jejuni*
3. a. Describe in details the heat treatment of milk products by
 - i. Pasteurization method
 - ii. Ultra heat method
 - iii. Boiling method
b. State the principle behind and techniques involved in methylene blue reduction test
4. a. Write briefly on the fermentation processes of the following dairy products
 - i. Cheese
 - ii. Buttermilk
 - iii. Cream
 - iv. Yoghurt
b. "Starter cultures are microorganisms used in the production of dairy products".
Discuss.

SECTION B

Answer Two (2) Questions from this section

5. a. Mention and describe the (i) characteristics and (ii) signs of food spoilage
b. Write short notes on various types of food spoilage
c. Elaborate on the various steps and signs that take place during spoilage of meat
6. a. What are SCPs
ii. List the raw materials that are required for SCP production
b. Explain in details the steps involved in SCP production
7. a. Highlight the factors and criteria that must be considered for an indicator organism
b. Discuss the essential steps that are involved in attaining sanitary environment in the food processing Industry.