

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE AWARD OF
CERTIFICATE IN ANIMAL HEALTH**

DATM 00241: DAIRY TECHNOLOGY AND MANAGEMENT

STREAMS: CERT. ANIMAL HEALTH

TIME: 2 HOURS

DAY/DATE: TUESDAY 06/08/2019

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- **Answer ALL questions in section A and any other TWO in section B**

QUESTION ONE

- (a) Citing specific examples, explain the importance of keeping records at the dairy farm. (5 marks)
- (b) Outline five differences between butter and ghee. (5 marks)

QUESTION TWO

- (a) Explain the relevance of Biological Oxygen Demand and Chemical Oxygen Demand with respect to waste management. (4 marks)
- (b) Briefly describe common defects that might occur in flavored yoghurt. (4 marks)

QUESTION THREE

- (a) Explain the difference between thermisation and pasteurization as forms of heat treatment. (3 marks)
- (b) Briefly describe the production process of evaporated milk from raw milk. (5 marks)
- (c) Describe the principle behind production of soft cheese. (2 marks)

QUESTION FOUR

- (a) Outline the ingredients used in the manufacture of flavored icecream and their roles. (5 marks)
- (b) Explain five major effects of milk sterilization in the dairy industry. (5 marks)
- (c) State four importance of milk packaging. (2 marks)

SECTION B (30 MARKS)

QUESTION FIVE

- (a) Explain seven factors that affect milk composition of dairy goat at the farm level. (7 marks)
- (b) Discuss major sources of milk contamination and suggest ways of controlling them. (8 marks)

QUESTION SIX

- (a) Describe the production process of skim milk powder and precautions to be adhered to. (8 marks)
- (b) Discuss various milk components and their application in the dairy industry. (7 marks)

QUESTION SEVEN

- (a) Explain factors that affect the fouling rate of milk during pasteurization. (7 marks)
 - (b) Describe the production process of flavored milk and the role of the ingredients used. (8 marks)
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