

**CHUKA**



**UNIVERSITY**

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**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF  
CERTIFICATE OF ANIMAL HEALTH AND PRODUCTION**

**DATM 00241: DAIRY TECHNOLOGY AND MANAGEMENT**

**STREAMS: CERT (ANHE)**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 09/08/2018**

**2.30 PM – 4.30 PM**

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**INSTRUCTIONS:**

**Answer ALL Questions in Section A and any other Two in Section B**

**SECTION A (40 MARKS): ANSWER ALL QUESTIONS**

**Question One**

- (a) Outline five sources of milk contamination at farm level. [5 marks]
- (b) Explain four functions of milk packaging at the industrial level. [4 marks]
- (c) State the differences between natural yoghurt and 'mala'. [3 marks]

**Question Two**

- (a) Explain the principle behind cheese production. [4 marks]
- (b) Briefly describe the production of chocolate yoghurt. [6 marks]

**Question Three**

- (a) Highlight four differences between condensed and evaporated milk. [4 marks]
- (b) Outline six factors that affect the rate of fouling during pasteurization. [3 marks]

**Question Four**

- (a) Briefly describe the production of ghee. [5 marks]

- (b) Highlight the key components of Hazard Analysis Critical Control Pont. [4 marks]
- (c) Differentiate between quality control and quality assurance. [2 marks]

**SECTION B (30 MARKS): ANSWER TWO QUESTIONS**

**Question Five**

- (a) Discuss the procedural production of skim milk power. [8 marks]
- (b) Explain seven factors that affect milk composition. [7 marks]

**Question Six**

- (a) Describe the process production of butter. [5 marks]
- (b) Discuss the nutritive value of milk. [10 marks]

**Question Seven**

- (a) Describe various wastes produced at the dairy industry and suggest ways in which they can be managed. [9 marks]
  - (b) Explain the role of the key ingredients used in making ice-cream. [6 marks]
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