

TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE OF BACHELOR OF SCIENCE IN FOOD TECHNOLOGY AND QUALITY ASSURANCE

BSFO 14S, BSFO 15S2 YEAR 3 SEMESTER 2

AFS 4207: DAIRY SCIENCE PAPER 2

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attempt Choose instruction.

Do not write on the question paper.

Question ONE

a) Explain the term milk 1marks

b) Explain homogenization process in milk 4marks

c) Differentiate between flash pasteurization and holding pasteurization 4marks

d) Explain milk transportation guidelines 3marks

e) Explain three people who are at risk (vulnerable) of getting sick from drinking raw milk. 3marks

f) Explain the importance of freezing point determination in quality control of milk 4marks

g) Describe the constituents of whey in milk 3marks

- h) Discuss four ways of cleaning glass containers that are used for putting milk 4marks
- i) Your are quality control officer in Kwamaiko, where women have invited you to explain to them how to keep milk in its highest quality. Discuss with them how to store milk at home **4marks**

Question TWO

- a) Discuss six benefits accrued from consumption of colostrum by young mammals (12marks)
- b) Explain microbiological evaluation of milk quality (8marks)

Question THREE

- a) Explain four factors that affect milk production and composition (12marks)
- b) Describe mastitis and two symptoms of mastitis (8marks)

Question FOUR

Discuss the milk components under;

- i) Milk sugar 8marks
- ii) Milk enzymes 8marks
- iii) Ash and salt 4marks

Question FIVE

- a) Explain four ways in which milk can be contaminated (8marks)
- b) Discuss the effect of heat on milk constituents 12marks