



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION AUGUST -2018

EXAMINATION FOR THE DIPLOMA IN AGRIBUSINESS MANAGEMENT

(YR II SEM I)

UNIT CODE: DAFS 2116

UNIT TITLE: FOOD PROCESSING AND PRESERVATION TECHNOLOGIES

DATE: 27TH AUGUST, 2018

TIME: 2:00 PM – 4:00 PM

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- (a) Define the following terms; (4 Marks)
- Food
 - Food processing
 - Food preservation
 - Biodeterioration
- (b) Differentiate between psychrophilic and psychrotrophic microorganisms. (2 Marks)
- (c) With the aid of a diagram, explain the **FOUR** stages of bacterial growth. (8 Marks)
- (d) State **THREE** main reasons for food packaging. (3 Marks)
- (e) Outline **THREE** agents of food biodeterioration and briefly explain how they cause food spoilage. (6 Marks)
- (f) State **THREE** reasons why chilling is such a popular method of preserving food. (3 Marks)
- (g) Outline **TWO** changes that limit the shelf life of frozen foods. (2 Marks)
- (h) State **TWO** challenges of Milk collection. (2 Marks)

QUESTION TWO

- (a) Write short notes on the following;
- Curing (5 Marks)
 - Pickling (2 Marks)
 - Smoking (3 Marks)
- (b) Outline **FIVE** characteristics of clean milk (5 Marks)
- (c) Briefly explain **FIVE** techniques of clean milk production. (5 Marks)

QUESTION THREE

- (a) Discuss the following food preservation methods;
- High pressure processing (3 Marks)
 - Ohmic heating (3 Marks)
 - Irradiation (3 Marks)
 - Microwave processing (3 Marks)
- (b) Briefly explain **FOUR** causes of food biodeterioration. (8 Marks)

QUESTION FOUR

- (a) Discuss **FIVE** methods of cooling milk (10 Marks)
- (b) Write short notes on the general milk treatments. (10 Marks)