

The Co-operative University of Kenya
END OF SEMESTER EXAMINATION AUGUST-2018

EXAMINATION FOR THE DIPLOMA IN AGRIBUSINESS MANAGEMENT
(YR I SEM II)

UNIT CODE: DAFS 1209

UNIT TITLE: FUNDAMENTALS OF FOOD SCIENCE AND TECHNOLOGY

DATE: 24TH 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 (6 marks)
- i. Nutrients
 - ii. Digestion
 - iii. Food
 - iv. Protein Remuneration
 - v. Food industry
 - vi. Food packaging
- (b) List down FOUR methods of food preservation (4 marks)
- (c) Identify FIVE factors that influence food selection (5 marks)
- (d) Outline FIVE factors which contribute to hazard in foods (5 marks)
- (e) Describe FOUR types of food and give example in each case (6 marks)
- (f) List down FOUR main components of post-harvest industry (4 marks)

QUESTION TWO

- (a) Explain FOUR reasons for food preservation (8 marks)
- (b) Discuss THREE main element of food security (6 marks)
- (c) List down SIX benefits derived from study of food chemistry (6 marks)

QUESTION THREE

- (a) Write short notes on the following types of food processing (10 marks)
- i. Refining and milling
 - ii. Caning
 - iii. Freezing
 - iv. Drying
 - v. Explain FIVE objectives of food packages and package labeling (10 marks)

QUESTION FOUR

- (a) Explain factors that influence individuals basal metabolism rate (BMR) (10 marks)
- (b) List down FOUR characteristics of a nutritious diet (4 marks)
- (c) Distinguish between Ascorbic acid browning and caramelization (6 marks)

QUESTION FIVE

- (a) What are safety nets as used as used in food security (2 marks)
- (b) Discuss FIVE components of food industry (10 marks)
- (c) Describe FOUR sources of microorganisms in foods (8 marks)