



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Business & Social Studies

DEPARTMENT OF HOSPITALITY & TOURISM

CERTIFICATE IN CATERING

(CC J10)

FOOD SCIENCE AND NUTRITION

END SEMESTER EXAMS

SERIES: APRIL/MAY 2010.

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. The paper consists of **TWO** Sections **A** and **B**.
2. Section **A** is compulsory. Answer **ALL** questions.
3. Answer any **TWO** questions from Section **B**.
4. Switch off your mobile phones
5. Cheating in examination leads to disqualification.

SECTION A

(Compulsory)

- Q.1 Explain the fate of the following nutrients in the body.
- (i) Proteins (5 marks)
 - (ii) Carbohydrates (5 marks)
 - (iii) Fats (5 marks)
- Q.2 Explain the following juices and their functions:
- (i) Bile (5 marks)
 - (ii) Pancreatic Juice (5 marks)
 - (iii) Intestinal Juices (5 marks)

SECTION B

(Answer any **TWO** questions from this Section.)

- Q.3 (a) Differentiate between Essential and Non-essential amino acid with **FIVE** examples in each case. (4 marks)
- (b) List **TEN** vegetable sources of fat and **TEN** animal sources of fat. (16 marks)
- Q.4 (a) Explain the **THREE** main functions of minerals with examples in each. (10 marks)
- (b) Discuss iodine and its functions. (10 marks)
- Q.5 Discuss Nutrition for infants and young children with relevances to breastfeeding. (20 marks)
- Q.6 (a) Under energy value of food, calculate the energy content in Kcal and Kj for 100gms white bread containing 7.8g protein, 1.7g fat and 49.7g carbohydrates. When 1g carbohydrates yields 3.75Kcal or 16Kj, 1g fat yields 9 Kcal or 37 Kj, 1g protein yields 4 Kcal or 17 Kj and 1g alcohol yields 7Kcal and 29Kj. (10 marks)
- (b) Differentiate between:
- (i) Homogenized and Skimmed milk (2 marks)
 - (ii) Pasteurized and Sterilized milk (2 marks)
 - (iii) Evaporated and sweetened condensed milk. (2 marks)
- (c) List **FOUR** products of milk. (4 marks)