

2913/301
PRODUCT DEVELOPMENT, INDUSTRIAL
ORGANIZATION AND MANAGEMENT
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN FOOD SCIENCE AND PROCESSING TECHNOLOGY

MODULE III

PRODUCT DEVELOPMENT, INDUSTRIAL ORGANIZATION AND MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

You should have an answer booklet for this examination.

This paper consists of TWO sections; A and B.

Answer ALL the questions in section A and any TWO questions from section B in the answer booklet provided.

Each question in section A carries 15 marks while each question in section B carries 20 marks.

Maximum marks for each part of a question are as shown.

Candidates should answer the questions in English.

This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A (60 marks)

Answer ALL the questions in this section.

1. (a) Define each of the following as used in the food industry:
 - (i) new food product; (2 marks)
 - (i) innovative product. (2 marks)
- (b) Differentiate between consumer and customer as applied in product development. (4 marks)
- (c) Describe the success factors in product development process. (7 marks)
2. (a) State five sources of external recruitment in a food processing firm. (5 marks)
- (b) Explain five merits of internal recruitment sources in a food processing organization. (10 marks)
3. (a) State five tangible costs of quality in new food product development. (5 marks)
- (b) Explain five criteria used in testing shelf-life of a new product during development process. (10 marks)
4. (a) State four steps of controlling process as applied in industrial organization and management. (4 marks)
- (b) Distinguish between vertical charts and horizontal charts as applied in organization management. (4 marks)
- (c) State seven non-budgetary control techniques. (7 marks)

SECTION B (40 marks)

Answer any TWO questions from this section.

5. (a) State six factors considered when building a prototype during product development. (6 marks)
- (b) Explain seven ways in which government influence new product development. (14 marks)
6. (a) Explain five advantages of staffing in a food processing company. (10 marks)
- (b) Explain five basic principles of effective directing in an organization. (10 marks)
7. (a) Define each of the following terms as used in new product development:
- (i) protocept; (2 marks)
- (ii) prototype. (2 marks)
- (b) Outline six steps involved in the scale-up stage during food product development. (6 marks)
- (c) Discuss the types of organizational structure applied in food industries. (10 marks)
8. (a) State five benefits of informal organizing in industrial organization and management. (5 marks)
- (b) State five principles of sound organizing in a food processing industry. (5 marks)
- (c) Explain five features of formal organizing in a food organization. (10 marks)

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