

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN SECONDARY EDUCATION CERTIFICATE® EXAMINATION**

**MAY/JUNE 2014**

**FOOD AND NUTRITION  
GENERAL PROFICIENCY EXAMINATION**

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## GENERAL COMMENTS

The 33<sup>rd</sup> Food and Nutrition Examination was administered by the Caribbean Examinations Council in May 2014. Over ten thousand candidates participated.

This examination took the form of two externally marked papers: a multiple-choice paper (Paper 01) of 60 items worth 60 marks and a structured essay paper (Paper 02) of seven questions worth 16 marks each.

Paper 02 was divided into Parts A and B and reflected two profiles: Knowledge (candidates' ability to recall information), and Use of Knowledge (the ability to use such information to give context).

Part A, worth a total of 48 marks comprised three compulsory questions which were based on the following modules: Module 3 — Diet, Health and Nutrition; Module 6 — Food Preservation, and Module 11 — Food Preparation Methods.

Part B, worth a total of 32 marks comprised four optional questions which were taken from the remaining nine modules of the syllabus. Candidates were required to choose any two questions. Eighty marks were available for this paper.

Paper 03 consisted of three practical assignments, each worth 20 marks, for a maximum of 60 marks. All assignments were structured by the class teacher or groups of teachers. Assignments 1 and 3 were assessed by the class teacher, while Assignment 2 was jointly assessed by the class teacher and an external moderator.

### Paper 01 — Multiple-Choice Questions

The mean score on Paper 01 was 39.57 with a standard deviation of 8.58. The performance on Paper 01 was very good. Ninety-five per cent of the candidates gained passes in this paper.

### Paper 02 — Structured Essay

#### SECTION A

##### Question 1

This compulsory question was designed to test Module 3 of the syllabus: Diet, Health and Nutritional Status. The performance was satisfactory.

This question specifically tested

- (a) signs and symptoms of diabetes
- (b) effects of high levels of fat in the diet apart from developing diabetes
- (c) guidelines for the reduction of fat and sugar in the diet
- (d) health benefits in consuming a vegetarian diet apart from managing diabetes

Part (a) was well done as most candidates correctly stated the symptoms/signs of diabetes.

Although Part (b) limited the effects of a high intake of fat to conditions other than developing diabetes, it was apparent that few candidates did not exercise care in reading the question and repeated diabetes. The majority of candidates however handled this question well and gave correct responses such as

- Acne
- Stroke
- Cancer

In Part (c) responses given indicated that the majority of candidates interpreted the question precisely and gave suitable guidelines for the reduction of both sugar and fat in the diet. It should be noted however that

some candidates restated what was stated in the question for example “reduce the intake of fat”; “cut down on fat” and “eat less fat”.

In Part (d) the responses given about the benefits derived in consuming a vegetarian diet were inadequate. Many candidates stated relevant points but failed to discuss, develop or elaborate on each.

Correct responses included:

- Less at risk for heart disease since her diet will contain less saturated fat
- Less chances of getting diverticular disease or constipation since her diet will consist of more fibre.

### Question 2

This compulsory question was designed to test Module 6 of the syllabus: Food Preservation. The question tested

- (a) use and over-use of food additives
- (b) principle involved in the removal of excess water from cucumber during pickling
- (c) selection of bananas to be made into jam
- (d) process that causes bananas to darken

In Part (a) (i) a large number of candidates named sugar as the agent responsible for setting jams and jellies instead of pectin the correct response.

Correct responses to (a) (ii) included stabilizers such as egg and lecithin. Part (a) (iii) was not well answered as candidates named nutrients that did not improve the nutritional value of margarine. Correct responses included bicarbonate of soda, salt commercial meat tenderizers, and natural tenderizers such as papain named as meat tenderizes in Part (a) (iv).

In Part (b) many candidates gave correct responses for the use of additives in moderation. Correct responses included

- Children may suffer from hyperactivity
- May predispose one to diabetes
- Flavor enhancers may encourage over eating thus predisposing one to obesity
- Excessive use may be toxic

For Part (c) most candidates were unable to explain the scientific process involved in the removal of water from cucumbers during pickling. The correct response is ‘the movement of water from a high to a low concentration through a semi-permeable membrane’. Some candidates got the terms diffusion and osmosis mixed up.

In Part (d) (i) most candidates were able to state the guidelines used to select the bananas. However they were unable to provide explanation for the guidelines. In Part (d) (ii) most candidates suggested how the darkening of the bananas could have been avoided rather than to describe the process oxidation. Candidates response to this question was less than satisfactory.

### Question 3

This compulsory question was designed to test Module 11 of the syllabus: Food Preparation Methods. The question tested

- (a) types of icing or frosting used to decorate cakes
- (b) function of liquid (milk or water) and eggs in cake making
- (c) reasons for folding flour into cake mixture
- (d) effects of adding too much sugar in an yeast dough mixture
- (e) rules for making batter
- (f) procedures in making a baked egg custard

In Part (a), most of the candidates obtained full marks as they were able to list the icing or frosting used to decorate cakes.

Part (b), was done well, most candidates were able to state a function of liquid and eggs in cake making. Part (c), was also done well with most candidates giving correct reasons for the folding of flour into a cake mixture. Part (d), was poorly done as most candidates were unable to explain the effects of adding too much sugar to yeast dough. The correct response is too much sugar will retain the action of the yeast reaching in a dose or dense texture.

Part (e), was poorly done as most candidates were unable to give reasons for following the rules of batter making.

Part (f), was also poorly done, most candidates did not know the procedure for making a baked egg custard. Most candidates gave the procedure for making a cake.

Candidates performance on this question was less than satisfactory.

## **SECTION B**

### Question 4

This optional question was designed to test candidates' ability to:

- (a) define the term hydrogenation
- (b) name a hydrogenated product
- (c) state a guideline in planning meals for three health conditions other than diabetes
- (d) explain the effects of a prolonged deficiency in water
- (e) describe the effects of heat on flour, eggs and sugar in a sponge cake.

Part (a) was not well done, most candidates were unable to define the term hydrogenation and to give an example of a food product that is prepared by hydrogenation.

Part (b), was well done as the majority of the candidates were able to state appropriate guidelines for planning meals for the specified health conditions.

In Part (c), while most candidates were able to state the effects of a deficiency of water in the diet they were unable to explain the consequences of these effects on the functioning of the body.

Part (d) was poorly done, most candidates misinterpreted this question and stated the functions of the three ingredients in cake making instead of describing the effect of heat on the ingredients as required by the question.

Candidates performance on this question was fair.

### Question 5

This optional question was the least popular and tested Modules 4 and 5 of the syllabus. The question tested

- (a) materials used to manufacture saucepans
- (b) use of first aid items
- (c) factors responsible for the spoilage of cherries
- (d) care of packaging material to prevent spoilage during freezing
- (e) guidelines to prevent spoilage of cherries during freezing
- (f) factors of food hygiene and safety

Part (a) (i) and (ii) were well done by the majority of candidates as they were able to name materials used in the manufacture of saucepans and to state the advantages of using these materials. Part (b) was well done as most candidates were able to state the use of the first aid items.

Part (c), was well done by most candidates. Part (d) was also well done with most. Candidates being able to suggest workable factors of food hygiene and safety.

Candidates performance on this question was satisfactory.

### Question 6

This optional question was designed to test Modules 7 and 8. The question tested

- (a) knowledge of Textured Vegetable Protein (TVP) products provides
- (b) meaning of term 'expiry date'
- (c) food labelling information
- (d) disadvantages of using convenience foods
- (e) categories of convenience food that are suitable for the preparation of a main dish for a lunch menu

Part (a) (i) was not well done by most candidates. Most candidates were not aware of the term "Textured Vegetable Protein' (TVP).

Part (a) (ii) and (a) (iii) were well done. Most candidates were able to explain the term expiry date and to give information that is normally found on nutritional labels.

Part (b) (i) was not well done as some candidates chose to discuss one advantage and not the FOUR disadvantages as required by the question.

Part (b) (ii) was not well done as candidates did not seem to understand the term 'main dish'. Candidates response to this question was fair.

### Question 7

This question was the most popular optional question. It was designed to test Module 10. The question tested

- (a) factors that guide meal planning
- (b) knowledge of cutlery
- (c) knowledge of hygiene practices
- (d) the process of cooking using a pressure cooker

Part (a) was well done. Most candidates were able to state factors to be considered when planning meals. Part (b) was well done with most candidates scoring the maximum marks for matching the utensils with their names. Part (c) was also well done, most candidates were able to suggest suitable hygiene practices.

Part (d) was not done very well as most candidates were unable to explain the process of cooking used by a pressure cooker.

Candidates performance on this question was very good, overall.

### **RECOMMENDATIONS**

- Food and Nutrition is grounded in science. Therefore scientific terminologies and principles must be used and understood in its delivery.
- Students should be taught test-taking techniques, and shown how to interpret key words such as 'explain', 'discuss' and 'suggest'.
- Students should be helped with understanding of 'effect'.