

CARIBBEAN EXAMINATIONS COUNCIL

**REPORT ON CANDIDATES' WORK IN THE
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION**

MAY/JUNE 2003

FOOD AND NUTRITION

Copyright © 2003 Caribbean Examinations Council
St Michael, Barbados
All rights reserved

FOOD AND NUTRITION
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION
MAY/JUNE 2003

GENERAL COMMENTS

The Caribbean Examinations Council administered its first open examination in Unit I Food and Nutrition and its pilot examination in Unit II, in May 2003. There were some good responses to questions in both Units.

There are some areas of the syllabus where greater depth of coverage is required. These areas are highlighted in the detailed comments on individual questions.

PAPER 01 – SHORT ANSWER QUESTIONS

The format of both Units is similar. Paper 01 consisted of nine compulsory short- answer questions. Candidates were required to answer all questions. There were three questions on each of the three Modules in the Unit. Paper 01 tested the grasp of critical nutrition principles and mastery of relevant skills.

PAPER 02 – STRUCTURED ESSAY

This paper consisted of seven essay questions which tested objectives across all Modules. It was divided into four sections. Section I consisted of one compulsory question spread across all the Modules. Section II to Section IV each consisted of two optional questions and candidates were required to answer one question from each section. Questions in Section II were based on Module I, those in Section III on Module 2 while questions in Section IV were based on Module 3.

Some weak areas evident in candidates' performance were as follows:

1. Difficulty in reading questions carefully and responding to key words or phrases.
2. Difficulty in responding to instructions such as 'explain' 'describe' and 'discuss'. Some candidates simply listed information and so were unable to gain as many marks as possible.
3. Difficulty in developing ideas, and lack of clarity of expression. In many cases, candidates showed some knowledge of the concept being tested, but could not adequately respond to questions to the standard that is required at the Advanced Proficiency level.

General areas of concern were:

1. Many candidates ignored the instruction to begin each question on a new page, sometimes without even skipping a line. In some cases candidates did not keep parts of a question together. They should be advised to leave a blank page in the workbook when going on to a new question, if the previous question has not been completed.
2. Many candidates did not write the question number in the space provided.

DETAILED COMMENTS

UNIT I PAPER 01

SHORT ANSWER QUESTIONS

Question 1

This question tested candidates' understanding of breastfeeding and its benefits.

Part (a) of the question was well done by the majority of candidates who correctly identified the acronym CNFI.

Performance on Part (b) was good. Most candidates had a general idea of what 'exclusive breastfeeding' means. It is important to indicate that:

- (i) the child is fed on breastmilk and
- (ii) no other drink or food is given during the time of exclusive breastfeeding.

Performance on Part (c) was good. Candidates correctly gave benefits of breastfeeding for the mother and the child.

In Part (d), candidates listed two iron-rich foods from one group instead of listing a variety of sources from which a lactating mother can obtain a good supply of iron.

Question 2

This question tested candidates' understanding of a growth chart and energy intake and energy output.

Performance on Part (a) was weak. Most candidates did not understand the term 'anthropometric indicator'; therefore, they experienced difficulty interpreting the growth chart, and were unable to note reasonable observations.

Part (b) was well done. Most candidates correctly named obesity as the condition that results when energy intake exceeds energy output. Recommendations made to the mother whose child is reluctant to eat were for the most part plausible and gave the best candidates an opportunity to demonstrate their ability to analyse a situation and come up with suggestions.

Question 3

This question tested candidates' understanding of the functions of food, and the concept of satiety and dietary fibre.

Part (a) was poorly answered. Many candidates did not interpret the term 'psychological' correctly when asked to identify two psychological conditions that influence a person's diet. Therefore, responses were incorrect. The term 'social' was better understood by candidates who gave correct responses to social functions of food.

In Part (b), the candidates correctly identified the food group with the highest satiety value.

Performance on Part (c) was good. Dietary fibre and its sources were widely known.

Question 4

This question tested candidates' understanding of the nutritional needs of specific groups of individuals.

Part (a) of the question was generally well done by the majority of candidates who were able to plan suitable meals for a lacto-vegetarian.

Part (b) was poorly answered. Most of the candidates could not explain why aesthetics and palatability are major considerations in meal planning, even though they identified elements of aesthetics and palatability, such as colour, shape, size and texture.

Performance on Part (c) was satisfactory. Candidates were able to identify the ways in which protein needs can be met for a lacto-vegetarian. However, many candidates seemed not to be familiar with the use of the terms 'complementary proteins' and 'textured vegetable proteins'.

Question 5

This question tested candidates' understanding of dietary fat.

Performance on Part (a), which required candidates to state the functions of dietary fat, was good, although a few candidates listed the uses of fat in food preparation and cooking.

In Part (b), most of the candidates were able to correctly outline at least four out of the requested five health effects of excessive consumption of saturated fat.

Part (c), which required candidates to name the vitamins in margarine that are destroyed when exposed to oxidation, was satisfactory, although some candidates listed all the vitamins present in margarine and not necessarily those that are destroyed when exposed to oxidation.

Question 6

This question tested candidates' understanding of food safety.

Part (a), which required candidates to name agencies responsible for food safety in any Caribbean territory, was fairly well done. Some candidates had an idea of the agencies, but did not always give the correct name of the organisation.

Part (b) and Part (c), which tested candidates' understanding of the causes of food-borne illness and micro-organisms responsible for food spoilage, was fairly well done although, in some instances, the causes of food-borne illnesses were confused with micro-organisms responsible for food spoilage.

In Part (d), almost every candidate could identify conditions necessary for growth of micro-organisms, even though some answers were not specific enough. For example, some candidates wrote 'heat' rather than temperature or warmth.

Question 7

This question tested candidates' understanding of the principles of heat transfer and the preparation of garnishes.

Part (a), which required an explanation of the term 'cooking centre', was poorly answered. Candidates equated kitchen with cooking centre and therefore, were unable to respond appropriately.

Performance on Part (b) was weak as candidates were unable to explain or illustrate the principle of heat transfer. Principles of heat transfer need to be explored practically, and with the use of diagrams.

Performance on Part (c), which required candidates to list the steps involved in preparing celery curls or orange butterflies, was poor. Many candidates presented good illustrations and outlined steps carefully for the orange butterflies. However, celery curls were correctly explained and illustrated by only a few candidates.

Question 8

This question tested candidates' understanding of safety guidelines in the kitchen and first-aid procedures.

Performance on Part (a), which asked for safety guidelines when organising and using kitchen cupboards, was weak. Candidates confused organising and using cupboards with safety in the kitchen or kitchen layout.

In Part (b), candidates were required to list the first-aid procedures for chemical poisoning and this was well done.

Part (c) was answered very well as candidates gave correct responses for the factors to consider for efficient use of knives in the kitchen.

Question 9

This question tested candidates' understanding of the differences between an electric toaster and a toaster oven, and the principles of preparing and serving custard sauces.

Performance on Part (a) was fairly good. Most candidates correctly explained the differences between the two pieces of equipment.

Part (b) presented the greatest challenge to the candidates. Many were unable to explain the scientific principles underlying the cooking process of the custard. Many candidates did not interpret the test for doneness of a baked custard correctly.

Part (c) was satisfactorily done as most candidates identified at least one use of custards in cookery.

PAPER 02 - STRUCTURED ESSAY**Section 1 - Compulsory question, Modules 1, 2 and 3**Question 1

This question tested candidates' understanding of nutritional disorders, nutritional needs and lifestyle practices for persons suffering from those disorders, the nutritional needs of the elderly, and first aid measures for accidents in the kitchen that may be sustained by this group of individuals.

This compulsory question was attempted by all the candidates.

Part (a) was generally well done. However, many candidates listed obesity as a nutritional disorder. Candidates should not be taught that obesity is a nutritional disorder; rather it is an energy imbalance which raises risk, or is associated with, other nutritional disorders or health problems.

Performance on Part (b), which required that candidates list physical body changes that affect the nutritional status of the elderly, was satisfactory. Candidates listed one category of body changes, however, instead of listing a variety of changes. At the Advanced level, candidates should learn the names of different categories as well as strategies for discussing a variety of categories. For example, a candidate may have listed: diminished sense of taste, diminished smell, diminished sight, and hearing, which are all examples of sensory changes. Similarly, candidates were not very specific when discussing factors to consider when planning meals for the elderly. Concepts such as foods in season, cost of food, availability of equipment and the like, although not incorrect, are not the type of response expected at this level. Some acceptable specific responses are listed below:

1. **The form in which the food is presented** - Select foods that are easy to chew and use appropriate cooking methods: steaming, grilling and poaching. Prepare moist and softer foods. Modify the consistency of food.

2. **Palatability and digestibility of foods** - Some elderly persons no longer taste foods well, so they may need foods which are seasoned well. Spicy foods may cause heartburn or gastritis for others. The degree of spicing will depend on what can be tolerated.
3. **Condition of the intestinal tract** – To keep the intestinal tract performing efficiently, elderly people generally need to consume more dietary fibre than they may have had in their youth.
4. **Physical condition and attention to specific nutrients** – If nutrition-related disease such as diabetes or hypertension is present, modify the diet accordingly. It is important for the elderly to get calcium for healthy bones.

Part (c) was done fairly well.

Section II - Module 1

Question 2

This question tested candidates' understanding of the nutritional needs of infants and children as they relate to growth and development, and the synergistic relationship between diarrhoea and undernutrition in young children.

Performance on Part (a) was good. Most candidates gave detailed explanations of the nutritional needs of children.

In Part (b), candidates were able to outline at least three benefits of regular exercise.

Part (c) proved to be challenging as candidates were unable to explain the synergistic relationship. A few candidates gave only half of the explanation, and did not show how the cycle is continued. Many candidates listed drinking water alone as a measure to avoid dehydration. Candidates did not mention specialized fluids such as Pedialytes, or Nutralytes or homemade salt and sugar solutions and frequent breastfeeding.

Question 3

This question tested candidates' understanding of nutrition-related diseases that may affect the health and well-being of infants and young children in the Caribbean, and the effect on body weight of changes in the daily caloric intake.

Performance on Part (a) was good as evidenced by candidates being able to give correct responses to the requirement to name and define two nutrition-related diseases that affect infants and young children.

In Part (b), which required that candidates plan two multi-mix lunches, some candidates seemed not to be familiar with the term 'multi-mix', and in some cases were unable to plan suitable lunches.

In Part (c), most candidates were unable to calculate the weight loss expected from a decrease in daily caloric intake. Candidates were unable to note that a pound of fat tissue loss represents 3500 calories.

Section III - Module 2

Question 4

This question tested candidates' understanding of the principles of meal planning and the handling and storage of food.

Performance on Part (a) was poor. Many candidates were unable to discuss the concepts: adequacy; balance; calorie control; nutrient density; moderation and variety in meal planning.

In Part (b), candidates were not familiar with the term 'Food Exchange Lists', therefore, they were unable to describe their use in meal planning.

Performance on Part (c) was satisfactory as evidenced by the responses of the candidates to the acceptable practices for the handling and storage of frozen food.

Candidates responded fairly well to Part (d), although some did not focus on key words - flavour and texture - and made untenable responses regarding the negative changes in flavour and texture that occur when selected foods are frozen.

Question 5

This question tested candidates' understanding of planning meals with food appeal and palatability, nutrient loss associated with the storage of food, and the importance of nutrition information on a label.

Performance on Part (a) was poor. The majority of the candidates could not explain the importance of food appeal and palatability when planning meals, even though they identified elements of variety, colour and shape, and effects of food appeal on appetite.

Part (b), on the causes of nutrient loss, proved to be difficult as candidates focused on losses associated with preparation and cooking and not with storage of food.

Performance on Part (c) was fairly good, although many candidates did not focus enough on the nutrition information panel and mentioned concepts like list of ingredients, name of product, and address of manufacturer.

Section IV - Module 3

Question 6

This question tested candidates' understanding of efficiency in the kitchen, the use of knives in food preparation and the use of safety measures that may be taken to prevent injury when using a cooker.

Performance on Part (a), which was on the importance of the efficient organisation of the kitchen, was weak. Candidates focused mainly on kitchen planning and layout instead of on kitchen organisation of the food preparation area.

Part (b) was well done as evidenced by candidates correctly describing the use of five types of knives.

Part (c), on safety measures when using a cooker, was fairly well answered, although a few candidates did not correctly interpret the term ‘cooker’.

Question 7

This question tested candidates’ understanding of market forms of fish, suitable methods of cooking beef, and the adaptation of selected dishes for an obese adult.

Performance on Part (a) was good. Candidates correctly described market forms in which fish can be purchased.

In Part (b), candidates were not familiar with cuts of beef that are suitable for cooking using moist heat and dry heat. Some responses include: tongue, head and brain.

Performance on Part (c) was good, as evidenced by the adaptations made to the named dishes and the reducing strategies suggested by the candidates.

DETAILED COMMENTS

UNIT II

PAPER 01 – Short-Answer Questions

Question 1

This question tested candidates’ understanding of the factors that have influenced the diets of Caribbean people;

Performance on Part (a) was good. Candidates were required to name two major ethnic groups that have influenced Caribbean diets. The responses were correct even though some candidates interpreted ethnic groups to mean religious or cultural groups.

In Part (b), some candidates were unable to obtain the maximum mark allocated for this section. They listed some foods eaten by these groups but did not attempt any explanation of how these cultural origins affect present diets.

In Part (c), candidates gave appropriate dishes peculiar to the group they named.

Question 2

This question tested candidates’ understanding of indigenous tools used in preparing and cooking food.

In Part (a), the majority of candidates were able to list indigenous tools and their uses.

Performance on Part (b) was good. Candidates were required to outline the method of preparing an indigenous Caribbean dish. However, at this level of proficiency it is expected that candidates outline procedures clearly. They had the general idea about the steps involved in the method but did not focus on the following concepts: cleaning; marinating; preparation of equipment; method and procedures; cooking time; test for doneness; and service.

Question 3

This question tested candidates' understanding of 'HACCP' and the food relief programmes in the immediate aftermath of a natural disaster.

In Parts (a) and (b), candidates did not respond appropriately. They did not address the concepts of immediate aftermath, therefore invalid responses were given to the factors necessary for providing effective food relief after a natural disaster..

In Part (c), the meaning of HACCP was widely known by candidates.

Question 4

This question tested candidates' understanding of rancidity, and the process which converts vegetable oil into fat.

Performance on Part (a) was satisfactory. While candidates responded with the correct term for the process which converts vegetable oil into fat, they were unable to describe hydrogenation.

In Part (b), most of the candidates demonstrated by their responses that they fully understood rancidity. However, in Part (c), candidates were unable to explain the types of rancidity.

Question 5

This question tested candidates' understanding of the importance of food safety and the role of Food Protection Agencies in promoting food safety.

The overall performance on this question was satisfactory. Marks ranged from 1-10 and the mean mark was 4.18.

Performance on Part (a) was satisfactory, although most candidates gave only one reason for the importance of food safety, whereas they were required to state two reasons.

In Part (b), the role of Food Protection Agencies in promoting food safety was widely known by the candidates as evidenced by correct responses.

In Part (c), candidates gave responses for causes of food poisoning instead of explaining the following types of food poisoning as required by the question: physical, chemical and biological.

Question 6

This question tested candidates' understanding of the principles and aims of food preservation and use of additives.

Performance on Part (a) was poor. Candidates listed reasons for preserving foods instead of the aims of preservation.

Performance on Parts (b) and (c) was poor. Candidates seemed unfamiliar with the topics - milk sterilization and use of additives. Candidates must know the basic principles of food processing and preservation. Discussions related to the use of additives, and approval criteria for their uses, are imperative. Approval reasons include the following:

- (a) Additives must perform useful functions.
- (b) The consumer must not be deceived by the manufacturer obscuring use of low-quality ingredients or poor manufacturing.
- (c) The result is not a substantial reduction in the nutritive value of a food.
- (d) It does not merely accomplish the same result that improved manufacturing techniques could provide.
- (e) There are no faulty processing and handling techniques disguised.
- (f) Additives can be measured in a product by a recognized method of analysis.

Question 7

This question tested candidates' understanding of food safety in a food establishment.

Performance on Parts (a), (b) and (c) was very good as evidenced by the correct responses made by the candidates. The question required that they identify the importance of having a pest control programme, name the vectors that may affect food quality, and list ways of disposing of garbage in a food establishment.

Question 8

This question tested candidates' understanding of the factors that should be considered when solid foods are introduced into the diet of convalescents. They were required to use the multi-mix principle to plan three snacks for a convalescent child.

Performance on Part (a) was satisfactory. Some candidates repeated the same answer using different words. Most of them focused on texture and digestibility. Candidates were not able to give other explanations such as: providing a good balance of nutrients; serving small portions; providing adequate fluids to replace fluid loss; and following the instructions of the doctor regarding diet.

In Part (b), most candidates were able to give appropriate responses which indicated that they understood the multi-mix principle, even though they did not always plan suitable dishes for the group specified.

Question 9

This question tested candidates' understanding of the following terms: Semi a la Carte, Table d'hôte or prix fixe, Du jour menu, and Menu pattern. They were also required to plan a four-course menu for a business lunch.

Performance on Part (a) was satisfactory. Some candidates were not familiar with the terms, however.

In Part (b), the majority of candidates planned suitable nutritionally-balanced menus.

PAPER 02 - Structured Essay

Section 1 - Compulsory Question, Modules 1, 2 and 3

Question 1

This question tested candidates' understanding of the nutrient composition of foods, and the preparation practices that can be used to ensure that the maximum benefits are derived from the nutrients; suitable types of packaging and labelling and the calculation of the selling price for relishes or preserves; planning a picnic menu for a large family reunion including persons with varying nutritional needs and the special arrangements that are required to ensure quality meal service at the picnic.

This compulsory question was attempted by all candidates.

Part (a) was generally well done as evidenced by the correct responses given by candidates. However, some candidates were unable to state preparation practices which would ensure maximum benefit from nutrients.

In Part (b), candidates gave appropriate responses for labelling and packaging of popular relishes/preserves. However, the calculation of the selling price of the relish/preserve was extremely challenging for candidates.

Part (c) proved to be challenging as well, as candidates were unable to plan meals with the following elements: easy to pack, those with good keeping qualities, variety of dishes, beverages, flavours, textures, colours, and meals which were nutritionally balanced. Very few candidates discussed arrangements such as, inclusion of appropriate eating and serving utensils, proper packing of foods, and the inclusion of appropriate tablecloths.

Section II - Module 1

Question 2

This question tested candidates' understanding of the stages in the production process for locally produced sweets, the impact of excessive sugar intake on health, and the importance of observing strict personal hygiene at a milk plant.

This question was attempted by 11 per cent of the candidates. The mean mark was 12.57. The candidates who attempted the question made a commendable effort.

In Part (a), candidates outlined the production process of sweets but did not give the level of explanation expected for the Advanced Proficiency. Candidates made excellent responses for the impact of excessive sugar. However, they all incorrectly noted that it causes diabetes.

In Part (b), candidates listed examples of good hygiene practices instead of discussing their importance. In addition, they experienced difficulty outlining measures other than personal hygiene that can help to reduce the incidence of contamination.

Question 3

This question tested candidates' understanding of the regional organisations from which reliable information on food standards may be obtained, the rights and responsibilities of a consumer as they relate to food safety, and the impact of imported foods on Caribbean food systems.

In Parts (a) and (b), candidates listed local organisations from which reliable information on food standards may be obtained, instead of giving those at the regional level. While some candidates listed the known standard rights and responsibilities, others created plausible generic ideas.

Performance on Part (c) was poor. Candidates were unable to discuss a variety of ways in which imported foods impacted on Caribbean food systems. Most focused on farmers and manufacturers being forced out of business and the high cost of some imported foods.

Section III - Module 2

Question 4

This question tested candidates' understanding of the role of each of the three agents involved in the gelling process that occurs in the preparation of jams and jellies, the reasons for preserving fruits, the steps and importance of each step in the production of jelly, and the criteria for the selection of fruits that are suitable for jam and jelly making.

Performance on Part (a) was satisfactory. Candidates gave correct responses to the role of the gelling agents. However, many were not at the level expected at the Advanced Proficiency.

In Part (b), candidates gave appropriate reasons for preserving fruits but were unable to clearly explain the importance of the steps in jelly production.

Performance on Part (c), on the criteria for the selection of suitable fruit for jam and jelly making, was good, as evidenced by the appropriate responses given.

Question 5

This question tested candidates' understanding of the physical or chemical differences between fats and oils, hydrogenation, saturated fats, monounsaturated fats, polyunsaturated fats and the functions and oxidation of fat in food preparation.

In Part (a), candidates gave good responses for physical and chemical differences between fats and oils, but experienced difficulty explaining the terms from a scientific perspective.

Performance on Part (b) was good, although some candidates discussed the uses of dietary fats.

In Part (c), candidates' responses indicated that they were not familiar with factors which affect the oxidation of fats. They listed the vitamins in butter and those fortified in margarine instead of the additives, vitamins C, E, BHA, and BHT.

Section IV - Module 2

Question 6

This question tested candidates' understanding of the five principles that should be applied when organising the work in an institution's kitchen, and they were required to plan a five-day cycle menu for breakfast at a boarding school, using the multi-mix (three mix) principle as a guide.

Part (a) was challenging for the candidates because they confused the concept of organising work with that of kitchen design.

Performance on Part (b) was weak. Candidates were not familiar with the term 'cycle menus.'

Question 7

In this question, candidates were required to study a five-course menu planned for a festive dinner at a home for the elderly, discuss five faults in the menu, comment on the suitability of the menu for the elderly and suggest two suitable replacements for the main dish/entrée and two replacements for the dessert. They were expected to modify the main course to make it suitable for a toddler, giving one reason for the choice of each modified dish.

Part (a) was satisfactory. Candidates were able to note at least three faults in the menu.

In Part (b), candidates experienced difficulty commenting on the suitability of the menu for the elderly. Some mentioned the fat content, and the foods being soft and easy to digest. Many candidates were unfamiliar with the term 'entrée' as evidenced by the replacements attempted. Most listed suitable replacements for the desserts.

In Part (c), candidates gave suitable modifications for the main course for a toddler, but were unable to explain realistic reasons for the modifications.

INTERNAL ASSESSMENT

This paper consisted of a portfolio comprising three pieces of work which tested objectives across all Modules. Candidates, in consultation with the teacher and using the guidelines provided by the Caribbean Examinations Council, selected the activities.

The overall performance of the candidates was good. However, most candidates duplicated the suggested activities noted in the syllabus, instead of drawing from the myriad of objectives given for each Module.

The majority of portfolios exhibited a high level of professionalism in organization and were very well presented. Most of the illustrations were clear and creative. The quality of the assignments was appropriate for the Advanced Proficiency Level. It is imperative that teachers are aware that a portfolio should be submitted, instead of three distinct pieces.

Some candidates submitted exemplary portfolios. The work of these candidates was scientifically based and rigorous. These candidates are to be highly commended for their effort. In many instances there has been great improvement in the quality of portfolios submitted for moderation.

MODULE 1 - Research

Most of the candidates selected appropriate topics and demonstrated knowledge of relevant facts. However, adequate emphasis was not placed on developing the literature review, or drawing conclusions. Data was well presented, but very little reference was made to the data. In several cases, inferences, predictions, or conclusions were not attempted by the candidates. The conclusions and recommendations were not accurately or scientifically based. Similarly, they did not support the analysis of data.

MODULE 2 - Experimentation

Candidates selected appropriate experiments and demonstrated knowledge of relevant facts. Reports were well written and presented. Most of the candidates developed rationales and formulated valid hypotheses. However, there was no evidence to suggest that experimental methods were modified after critical or unexpected outcomes. This resulted in experiments which were done on a one-shot basis.

MODULE 3 - Recipe Modification

This assignment presented a challenge to some candidates. Candidates did not first establish a problem before they approached the task of attempting modification procedures. Some projects consisted primarily of preparing smaller or larger batches of the product. In many instances, the product development and modification were not given adequate attention.

RECOMMENDATIONS TO TEACHERS

External Assessment

Overall, the performance on the examinations was satisfactory. This performance can be improved if recommendations to teachers are used as guidelines to help address weaknesses of candidates. Although candidates had an understanding of concepts, they did not elaborate and fully develop answers as was expected at the Advanced Proficiency Level. Some candidates were not fully prepared for this level of examination. It was also clear that they were not familiar with some areas of the syllabus and so they performed poorly or omitted parts of questions. Candidates should therefore cover the entire syllabus so that they can satisfy the requirements of the examination. Greater emphasis must be placed on those concepts which can be regarded as current areas of nutrition.

The following suggestions are made:

Candidates are advised to:

- (a) Read questions carefully, paying attention to key words.
- (b) Place emphasis on comprehending reasons for certain principles and procedures, rather than just learning by rote.
- (c) Develop responses fully, paying attention to the marks allocated for each part of the question.
- (d) Practice answering questions with a variety of key words, namely: discuss; explain; list; describe; and define.
- (e) Do mock examinations using past examination papers and administered under examination conditions in order to develop good examination techniques.
- (f) Utilize different media to become familiar with current nutrition issues.
- (g) Place emphasis on research techniques, case studies and problem solving.
- (h) Engage in field trips and work attachments to understand fully many nutrition concepts such as methods for assessing nutrition status of children; complementary feeding and breastfeeding; nutrition-related disorders; and practices and procedures for ensuring safety of food, to mention a few.
- (i) Do practical exercises in the identification and use of the nutritive value of food not categorized in the food groups, namely; functional or genetically engineered foods; fat replacers; sugar, salt and other substitutes; and convenience foods.

Internal Assessment

The following suggestions are made to teachers:

- (a) Efforts should be made to guide students in choosing topics for projects as well as throughout the entire exercise.
- (b) Efforts should be made to encourage students to select topics that are of interest to them and that relate to a problem in the region or community. This should ensure that there is ownership and motivation for the project.
- (c) Literature reviews for each assignment do not have to be extensive, but should be thorough enough to outline the problem and research relevant to the same. This cannot be adequately done in two to three pages. Students must utilize a variety of sources and should be taught the APA referencing style for citing sources and developing a reference list.
- (d) Students should be advised to develop rationales and explain the significance of the topic.
- (e) Students should be encouraged to draw assignments from the variety of objectives suggested in the syllabus.

Module 1 - Research

- (a) Candidates must not only present the data but they should discuss the data clearly. They should attempt to discuss the most important or significant questions asked in the questionnaire or interview.
- (b) Efforts should be made to guide students in making simple inferences, and drawing conclusions yielded from the data. They should also be expected to give a summary or conclusion at the end of the project.

Module 2 – Experimentation

- (c) Students should be advised that a detailed report must be written which accurately records and reports all observations.
- (d) Efforts should be made for students to understand that experiments are not completed on a one-shot basis. It is necessary to repeat and modify experimental methods after critical or unexpected outcomes.

Module 3 – Recipe Modification

- (e) Efforts should be made to introduce students to the role of product development and recipe modification. In addition, demonstrations should be completed before students engage in their individual assignments.

- (f) Candidates should be advised that product development or recipe modification is more than removing or changing one ingredient or throwing ingredients together. This assignment entails detailed experimentation which usually necessitates several trials prior to achieving success. For this reason, it should involve the altering of several ingredients, hence baked products may be used as examples for modification. For example, at the Advanced Proficiency, it is unacceptable to modify the amount of fat in beef stew and view this as competent work.
- (g) Opportunities must be provided for candidates to fully understand that a recipe is a formula, thus any change in an ingredient will necessitate a substitution of ingredients. Reliable and quality products cannot be achieved on a one-shot basis.
- (h) Candidates should understand the role of major ingredients used in recipes, especially baked items. For example, if you change the amount of sugar in a creamed mixture there must be a suitable substitute or the texture and flavour of the cake will be changed. The goal of recipe modification is to make changes to the ingredients yet retain the flavour, colour, shape, texture and acceptability of the product. Similarly, product development entails creating a product which is pleasing to consumers.
- (i) Candidates should be encouraged to use food composition tables to determine energy values for the original and new product.
- (j) Candidates should be encouraged to formulate valid hypotheses.
- (k) Candidates should be encouraged to record and report methods, observations and results accurately.