

The Commonwealth  
of  
The Bahamas

BGCSE FAMILY AND CONSUMER  
SCIENCE

FOOD & NUTRITION

Syllabus

Revised 2017

Ministry of Education  
Examination & Assessment Division

## CONTENTS

### GENERAL INTRODUCTION

The Bahamas General Certificate of Secondary Examination is developed in consultation with the Cambridge University Local Examination Syndicate.

This examination is designed to assess the achievement of at least 80-85% of Bahamian students on completion of five or six years of secondary level education. It provides an opportunity for students to show what they know, understand and can do.

The BGCSE is intended to allow expression of concepts, skills, values and understanding by making use of differentiated assessment techniques.

Differentiation will be achieved by the levels of response to the same questions, it will cater to the different ability levels.

As this is a single examination suitable for almost all secondary students, those who meet the required standards will be awarded grades on a seven point scale A to G

The BGCSE syllabuses define achievable objectives and the teacher's involvement in coursework assessment should reinforce a sense of positive achievement so that students will strive to improve themselves while working towards realizable targets. This examination not only tests knowledge, but skills of data handling, analysis, judgment, decision making and creative thinking.

Besides the subject content, the syllabus includes wider defined aims which should be studied carefully by teachers.

## **SUBJECT INTRODUCTION**

Family & Consumer Science is a study of inter-relationships between the provision of food, clothing, shelter and related services, and man's physical, economic, social and aesthetic needs in the home.

The aim of BGCSE courses in FCS is to help students of both sexes to lead effective lives as individuals and as members of a family and community within the context of a culturally, socially and economically diverse society.

FCS is an integrated field of study. What unifies the subject is not the content, but the inter-relationships between the studies of the four major areas: family, food, home and textiles.

These inter-relationships are revealed through the study of a number of common themes: human development, health, safety, efficiency, values, aesthetics and interaction with the environment.

FCS is an applied subject, and is concerned with both theory and practice. The theoretical nature derives from the perception of family, food, home and textiles as resources. The practical nature derives from the need to manage these resources in practical situations. This syllabus for Food and Nutrition is designed to prepare candidates for the BGCSE which has replaced the GCE O Level Examination taken in the past. It is designed to accommodate 80-85% of the Bahamian school population.

Centres entering candidates for this exam must ensure that the specified facility is available. Additionally the facility must be in optimum condition.

**FOOD AND NUTRITION**

This syllabus was first examined by The Ministry of Education in the summer of 1993.

**ENTRIES**

All candidates should be entered through The Examination and Assessment Division, The Ministry of Education. The Examination & Assessment Division must be satisfied that the centre has the appropriate facilities and equipment for the practical component of this examination. Each candidate should have sole use of a cooker or stove, a range of basic cooking equipment and labour saving equipment during the practical test.

**CERTIFICATION**

This subject will be shown on the BGCSE certificate as Food and Nutrition

## **FOOD AND NUTRITION**

A course of study in Food and Nutrition should be a preparation for living in a contemporary, changing and multi-cultural society. Candidates may be prepared for entry-level positions in the food service industry and for advanced courses in this subject area.

### **AIMS**

1. To stimulate and sustain interest and enjoyment in the study of Food and Nutrition.
2. To develop an understanding of the relationship between diet and health.
3. To develop the ability to make informed choices concerning the use of food.
4. To develop an understanding and appreciation of socio-economic factors in relation to diet.
5. To develop an awareness of eating patterns and dietary needs of differing groups within society.
6. To develop an awareness of safety requirements.
7. To foster inventiveness, originality, creativity and academic rigour.
8. To develop competence in the use of labour-saving devices in the kitchen.
9. To develop an awareness of food policy at local, national and international levels.
10. To enable candidates to adapt to rapid technological changes and growth of scientific knowledge.
11. To develop the knowledge and skills relevant to food and those required for the effective organization and management of family resources.
12. To develop an interest in local dishes and the ability to analyze their nutritional value as part of the daily dietary requirements.

## ASSESSMENT OBJECTIVES

The candidates should be able to:

1. identify the varying human and dietary needs and material factors involved in a given situation and to recognize the relationship between them;
2. recall, seek out, record and apply knowledge relevant to the needs and factors identified;
3. use investigative procedures to test and compare the methods, materials and equipment used in food preparation, in order to obtain and interpret evidence on which to base judgments and choices;
4. justify choices in the light of evidence and to identify priorities;
5. decide upon and plan a course of action based upon the priorities previously identified;
6. carry out the planned course of action by developing and applying psychomotor, management and organization skills to food preparation in relation to the efficiency of time, energy, money, effort, space, materials, equipment and people;
7. assess and evaluate the effectiveness of the course of action.

## SCHEME OF ASSESSMENT

<b>No.</b>	<b>Paper</b>	<b>Duration</b>	<b>Weighting</b>	<b>Marks</b>
1A	Planning Paper	2 hrs.		
1B	Practical Examination	2 hrs. 30 mins.	70%	105
2	Theory Papers	2 hrs	80%	120
3	Coursework	1 assignment	50%	100

## PAPER 1-PRACTICAL EXAMINATION

This paper has a Planning Session (Paper 1A) and a Practical Session (Paper 1B).

### PLANNING

The date for this component is assigned by Examination & Assessment Division.

In the planning session of two hours, the candidates, under examination conditions, select and plan for an assignment from the five given by EAD.

The assignment consists of a based problem with at least two main parameters e.g. time, money, equipment, special diet, skills etc. to be considered.

### PRACTICAL

A period of 2 ½ hours will be allowed for the candidates to prepare all dishes chosen, clear up work area and serve dishes attractively. This examination is done under the supervision of a visiting invigilator. An invigilation roster for the practical examination is produced by EAD and dispatched to the centres.

The candidates are given a preparation period of thirty minutes to gather equipment and serving dishes, and to set up working and serving areas.

The practical component is scheduled for no less than two days after the planning session.

## PAPER 2 –THEORY

This paper consists of two sections, Section A and Section B.

**Section A** is composed of compulsory short answer questions of varying difficulty. The answers are to be written in the spaces provided on the question paper. These questions will test the candidates' ability to recall, select and apply knowledge from all parts of the syllabus. The questions will not necessarily carry equal marks. The mark for each question will be shown on the question paper. The allocation for this section is sixty marks.

**Section B** has three parts consisting of two structured, two data-response, and two free-response questions respectively. Candidates are required to answer one question from each part. All questions are worth twenty marks.

### **Structured Questions**

This type of question guides the candidate through different stages of the problem.

The parts of each question are assigned a mark and are in ascending order of difficulty. The candidates will be able to succeed with all parts of the question at their individual ability levels.

### Data-Response Questions

In this type of question, the candidate is required to extract and expand information from given data. The questions have separate points and their order represents an incline of difficulty.

### Free Response Questions

These types of questions are open-ended and differentiation is achieved through the candidate's response and interpretation rather than the questions themselves.

## SUBJECT CONTENT

	Topic	Areas of Study	
1. (a)	<b>Definition of Terms used in Nutrition:</b>	Food Nutrition Nutrients Diet Malnutrition	Under-Nutrition Balanced Diet Metabolism Calories Deficiency disease
(b)	<b>Common Nutritional Disorders:</b>	Obesity Anorexia Nervosa Diabetes	Kwashiorkor Marasmus Hypertension
(c)	<b>Nutrients:</b>	Five main groups of nutrients Sources and functions of nutrients:-water, starch proteins, fats (saturated, monounsaturated, polyunsaturated), vitamins A, D, C, B vitamins including B12 and folic acid; calcium, iron and trace mineral elements. Brief reference to vitamins E and K.  Digestion and absorption of food  Sources and measurement of energy. Energy requirements-Energy value of various foods. Sources and functions of dietary fibre (cellulose and pectin)	



	Topic	Areas of Study										
2.	<b><u>Dietary guidelines/goals:</u></b>	<p>Factors affecting nutritional needs</p> <p>Planning and serving family meals</p> <p>Meals for all ages and occupations</p> <p>Toddlers/children</p> <p>Adolescents</p> <p>Elderly</p> <p>Adults (Active/Sedentary Jobs)</p> <p>The health and food needs of the following individuals:</p> <p>Pregnant women</p> <p>Invalids</p> <p>Convalescents</p> <p>Vegetarians (lacto-vegetarians, vegans)</p> <p>Meals for special occasions, packed meals, celebrations(wedding showers/receptions, christening parties) festivals</p> <p>Nutritional and dietary requirements in terms of food combinations</p> <p>Dietary guidelines in relation to current dietary practices</p> <p>Meal planning considerations.</p> <p>The attractive presentation of food</p> <p>Table setting</p> <p>Table Etiquette</p> <p>Terminology associated with meal planning</p> <table data-bbox="792 1354 1315 1564"> <tr> <td>Balanced meal</td> <td>Breakfast</td> </tr> <tr> <td>Brunch</td> <td>Supper</td> </tr> <tr> <td>Lunch</td> <td>Tea</td> </tr> <tr> <td>Main meal</td> <td>Snack</td> </tr> <tr> <td>Fast foods</td> <td>Courses 1-3</td> </tr> </table> <p>Menu</p> <p>Dinner-mid-day/evening</p>	Balanced meal	Breakfast	Brunch	Supper	Lunch	Tea	Main meal	Snack	Fast foods	Courses 1-3
Balanced meal	Breakfast											
Brunch	Supper											
Lunch	Tea											
Main meal	Snack											
Fast foods	Courses 1-3											



	Topic	Areas of Study
4.	<b><u>Food Preparation:</u></b>	<ul style="list-style-type: none"> <li>-reasons for cooking food</li> <li>-sources of energy</li> <li>-transference of heat energy into food (conduction, convection, radiation), microwave energy</li> <li>Principles involved in the different methods of cooking-boiling, stewing, grilling, baking, roasting, frying steaming, pressure cooking</li> <li>Changes produced in food by various agents (i.e., heat, acids, alkalis, enzymes, non-enzymic browning)</li> <li>-methods of cooking; (moist methods, dry methods, microwave cooking)</li> </ul>
5.	<b><u>Flour Mixtures:</u></b>	<ul style="list-style-type: none"> <li>Cakes (one stage, creaming, melting and whisking methods)</li> <li>-to meet dietary guidelines</li> <li>-to produce different dishes</li> <li>-batch baking</li> <li>-all-in-one methods</li> <li>-choice and functions of ingredients</li> <li>biscuits, pastries (shortcrust, choux, rough puff, flaky)</li> <li>Yeast mixtures</li> <li>Quick breads</li> </ul>
	<b><u>Raising Agents:</u></b>	<ul style="list-style-type: none"> <li>Air, carbon dioxide, water vapour</li> <li>Ways of introducing these gases into a mixture (to include bicarbonate of soda, baking powder, yeast)</li> </ul>
6.	<b><u>Composition Value, Classification and Use of the Main Foods in the diet. Special Emphasis on the use of local foods:</u></b>	<ul style="list-style-type: none"> <li>Milk and milk products</li> <li>Meat</li> <li>Fish</li> <li>Poultry</li> <li>Eggs</li> </ul>

	Topic	Areas of Study
	<p><b><u>Composition Value, Classification and Use of the Main Foods in the diet. Special Emphasis on the use of local foods Contd.:</u></b></p>	<p>Pulses and nuts(emphasis on soya bean)  Cereals (wheat, rice, maize, oats  Alternative protein foods  Fruits and vegetables  Herbs/spices  Fats and oils  Sugar and sweeteners  Convenience foods</p> <p>All practical work should emphasize the management of time, money, energy and equipment in the home to produce palatable and aesthetically pleasing food for the family which reflects current nutritional thinking.</p>
7.	<p><b><u>The Production, Processing and Retailing of Food:</u></b></p>	<ul style="list-style-type: none"> <li>-Sources of food and availability</li> <li>-Food production in The Bahamas</li> <li>-Governmental policies regarding production, packaging and distribution of food products</li> <li>Food retailing in The Bahamas</li> <li>Advantages and disadvantages of the supermarket, small Independent grocer, specialist shop, open market</li> <li>Budgeting for food</li> <li>Buying in bulk</li> <li>Reading food labels</li> <li>-Food establishments-take away, café, restaurant, vendor, fast-food chains, etc.</li> <li>-Influence of advertising</li> <li>-Method of shopping/method of payment</li> <li>-Consumer protection</li> </ul>

	Topic	Areas of Study
	<b>Food Preservation:</b>	Reasons for preserving food Methods of preservation and an understanding of the principles involved Heating-canning, bottling Removal of moisture-drying. Reduction in temperature-freezing. Chemical preservation-sugar(jam making), salt, vinegar
8.	<b>Food Additives:</b>	Types Functions
9.	<b>Kitchen Planning:</b>	Organization of cooking area and equipment for efficient work. Kitchen surfaces-walls, floors, work surfaces.
10.	<b>Kitchen Equipment:</b>	Choice, use and care of cookers, thermostatic control, automatic control, automatic time-controlled ovens, microwave ovens, slow electric cook pots and other modern developments. Refrigerators, freezers, small kitchen equipment(knives, saucepans, oven tins, scales, etc.

### **PAPER 3 - COURSEWORK**

Coursework is internally assessed by the centre's teachers and moderated by Examination & Assessment Division. The candidates are required to complete one assignment in the exam year.

The five assignments on this component cover a range of topics in the syllabus. The centres receive the assignments from EAD during the month of September. The assignments which place emphasis on investigation vary from year to year. They are accessible to a wide range of abilities as they have a written and practical component.

The written component enables the candidates to demonstrate their ability to research, investigate, analyze, and document the evidence of their findings supported by illustrations, conclusions and evaluations.

The practical component gives the candidate the opportunity to:

- a. identify and analyze the factors in the given situation;
- b. select, organize and apply knowledge relevant to the given situation;
- c. obtain evidence on which to make judgments and choices;
- d. plan a course of action appropriate to the given situation;
- e. carry out the plan of action applying the required psychomotor, management and organizational skills;
- f. assess and evaluate the effectiveness of the action.

#### **THE BENEFITS OF COURSEWORK**

- a) Coursework can provide scope for greater creativity on the part of the candidates, as they make assumptions, deal with unforeseen factors and see the need for additional skills in the production of a unified piece of work.
- b) Coursework provides the flexibility needed for assessment across a wide ability range.
- c) Internally based assessment allows the possibility of giving credit for initiating tasks and assuming responsibility for organizing their own work.

- d) Coursework can offer a fairer treatment to candidates whose performance in formal examinations is not indicative of their achievement.
- e) Enables the communication skills, including reading, writing, of a candidate to be assessed.
- f) Coursework can stimulate a sense of exploration and discovery

