

General Certificate of Education
Ordinary Level

Syllabus

FOOD AND NUTRITION 6065

For examination in June and November 2010

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FOOD AND NUTRITION

GCE Ordinary Level/School Certificate

Subject 6065

This syllabus is available in June and November.

Available only at Centres approved by CIE as being adequately equipped.

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Exclusions

This syllabus must not be offered in the same session with any of the following syllabuses:

0639 Home Economics (Namibia)

0648 Food and Nutrition

6071 Food and Nutrition (Singapore)

6082 Food and Nutrition (Singapore)

INTRODUCTION

Entries for this subject cannot be accepted unless the Education Authority, Ministry or Centre/s concerned has cleared arrangements for the practical examination with CIE. The Education Authority, Ministry or Centre/s should be satisfied that there are appropriate facilities and equipment for the practical component of the examination. Each candidate should have sole use of a cooker or stove, a range of basic cooking equipment and access to labour saving equipment during the practical test.

Basic Equipment

Bowls, scales, measuring equipment, various knives for different purposes, various spoons and spatulas, baking tins, cake tins, greaseproof paper etc.

Specialised Equipment

Hand whisk, draining spoons, graters, pressure cookers etc.

Desirable Equipment (not essential)

Electric mixers, liquidisers/blenders etc.

It is expected that candidates will have access to refrigerators and freezers if possible.

Practical Examiners must be independent and qualified to teach this subject at this level. Education Authorities, Ministries or Centres must organise their own system of teacher moderation.

AIMS

- 1 to encourage an awareness of the relationship between diet and health in everyday life
- 2 to develop qualities of organisation of self and resources
- 3 to develop skills necessary to provide well-balanced meals for all members of the family considering age, health, occupation etc.
- 4 to develop an awareness of the nutritive value of basic foods
- 5 to encourage a discriminating and informed approach to the consumer society through the considerations of diet, specific nutritional requirements, safety requirements and recognition of quality in the context of Food and Nutrition
- 6 to stimulate and sustain an interest in and enjoyment of the creative use of food
- 7 to encourage high standards of personal and kitchen hygiene in order to ensure safety of food

ASSESSMENT OBJECTIVES

Candidates should be able to:

- 1 identify the varying human needs and factors in relation to social, economic and environmental implications;
- 2 correctly use equipment and tools;
- 3 understand basic safety and hygiene rules and regulations;
- 4 recall, interpret, select and apply knowledge relevant to the areas of study identified in the syllabus;
- 5 identify and justify priorities within a given situation and communicate ideas accurately and systematically;
- 6 interpret written information correctly;
- 7 demonstrate manipulative skills in food preparation;
- 8 show ability to work with precision within specified time and appreciate the need for accuracy;
- 9 plan and organise an area of study;
- 10 carry out the planned study using appropriate materials, processes and skills.

SCHEME OF ASSESSMENT

Paper 1 50% (100 marks)

Paper 2 50% (100 marks)

Paper 1 (2 hrs) – written paper. This will test the candidate's knowledge of theory and practice.

Section **A**: consisting of compulsory short-answer type questions of varying difficulty.

Section **B**: consisting of 6 questions from which candidates must answer 4.

Paper 2 (2 ½ hrs, with a planning session of 1 ½ hrs) – practical examination. This will consist of a number of alternative tests, one of which will be allocated to each candidate a week before the examination. The candidate will then be required within a 1½ hour planning session to state how they will carry out their test and to give in a shopping list. In the practical examination, the plans of work will be re-issued and the candidates allowed 2½ hours to carry out the tests.

The Examiner for the Practical will be required to follow an assessment scheme prepared by University of Cambridge International Examinations (CIE). The generic content of the mark scheme is printed in the syllabus. The marks available, and awarded, for the Practical are also recorded on the Practical Examination Working Marksheet, which is printed in the syllabus. **However**, the final marks awarded must reflect the requirements of the specific tasks given in each examination session.

November Re-entry The practical mark may be carried forward from the June examination to the November examination but **not** to the following June.

SYLLABUS CONTENT

- | | | |
|---|--|--|
| 1 | An understanding of the terms used in nutrition and nutrition related problems | Diet, balanced diet, metabolism, malnutrition, under-nutrition, over-nutrition, deficiency disease. |
| 2 | Nutritive value of foods | The sources and functions of: <i>proteins</i> (high biological and low biological value), <i>carbohydrates</i> (monosaccharide, disaccharide and polysaccharide), <i>fats</i> , <i>vitamins</i> (A, D, C, B group – thiamin, riboflavin, nicotinic acid and B ₁₂) <i>mineral elements</i> (calcium, phosphorous, iron, sodium chloride, chlorine, iodine, fluorine), <i>water</i> .
Sources and uses of food energy.
Sources and functions of dietary fibre. |
| 3 | Digestion and absorption | Digestion at each stage of the digestive system, mouth, stomach, duodenum, ileum.
Enzymes as catalyst in the digestive process.
Absorption – structure of ileum. |
| 4 | Dietary guidelines | Factors affecting food requirements.
Planning and serving of family meals. Meals for all ages and occupations. Special needs of pregnant and lactating women, convalescents, vegetarians (vegans and lacto-vegetarians). Meals for special occasions, festivals, packed meals, snacks (light refreshment), beverages. Use of herbs, spices and garnishes. Attractive presentation of food. |

5	Composition and value of the main foods in the diet	Milk, meat, fish, cheese, eggs, margarine and butter. Cereals (wheat, rice, maize, millet, oats), fruits and vegetables (importance of pulses and nuts as inexpensive sources of protein, especially the soya bean because of its higher protein value and content – contains high biological value protein).
6	Cooking of food	Transfer of heat by conduction, convection and radiation. Principles involved in the different methods of cooking – boiling, stewing, grilling, baking, roasting, frying, steaming, pressure cooking. Reasons for cooking food. Effect of dry and moist heat on proteins, fats and oils, sugars and starches, vitamins A, B, C and D. Preparation and cooking of food to preserve nutritive value and flavour. Traditional methods of cooking. Economical use of food, equipment, fuel and labour.
7	Convenience foods	Foods partly or totally prepared by a food manufacturer – dehydrated, tinned, frozen, ready to eat. Intelligent use of these foods. Advantages and disadvantages.
8	Basic proportions and methods of making	Biscuits, scones and cakes made by rubbing-in, creaming, melting, whisking and one-stage methods. Pastries – shortcrust, flaky and rough-puff. Sauces – pouring and coating; roux and blended methods. Batters – thin (pouring) and coating. Bread made with yeast.
9	Raising agents	Air, carbon dioxide, water vapour. Ways of introducing these gases into a mixture (to include bicarbonate of soda, baking powder, yeast).
10	Food spoilage, and hygiene in the handling and storage of food	Action of enzymes, bacteria, yeasts and moulds. Personal hygiene, hygiene in shops and markets, food storage at home, refrigeration, kitchen hygiene, waste disposal.
11	Food preservation	Reasons for preserving food. Methods of preservation, an understanding of the principles involved. Heating – canning, bottling. Removal of moisture – drying. Reduction in temperature – freezing. Chemical preservation – sugar (jam making), salt, vinegar. The processing of milk. The use of enzymes and bacteria in the manufacture of cheese and yoghurt.
12	Kitchen planning	Organisation of cooking area and equipment for efficient work. Kitchen surfaces – walls, floors, work surfaces.
13	Kitchen equipment	Choice, use and care of cookers, thermostatic 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.)
14	Kitchen safety, simple first aid	Awareness of potential danger areas in the kitchen. Safety precautions. First aid for cuts, burns and scalds, shock, electric shock, fainting.

RESOURCE LIST

<i>Author</i>	<i>Title</i>	<i>Publisher</i>	<i>ISBN</i>
Delia Clarke, Elizabeth Herbert	<i>Food Facts</i>	Nelson	017 438542 0
Anita Tull	<i>Food & Nutrition</i>	Oxford	019 832766 8 019 832768 4 019 832793 5
MAFF	<i>Manual of Nutrition</i>	HMSO	
P.M. Gaman, K.B. Sherrington	<i>The Science of Food: An Introduction to Food Science, Nutrition and Microbiology</i>	Pergamon	
Dr D. A. Bender, Prof. A. E. Bender	<i>Food Tables & Labelling</i>	Oxford	019 832724 2 019 832785 4
Helen McGrath	<i>All about Food</i>	Oxford	019 832767 6
Jenny Ridgwell	<i>Finding out about Food</i>	Oxford	019 832716 1

This generic mark scheme is for guidance only. It should be used in conjunction with the confidential mark scheme sent to Examiners for each examination session. The confidential mark scheme refers to the allocation of marks for the specific tasks set in the practical examination.

PAPER 2 – PRACTICAL TEST

GENERIC MARK SCHEME

The detailed mark scheme is to enable Practical Examiners to maintain a uniform standard.

To pass a candidate must work systematically using a reasonable degree of skill, good methods and sound recipes. At least **half** of the resulting dishes should be of a **good** standard – well served, with good appearance, consistency, texture and flavour. If the **main** dishes of the test are inedible, then a pass result should not be given.

Allocation of marks – 150

The marks should be recorded on the Practical Examination Working Marksheet.

The total of 150 is divided thus:

1	Preparation session – choice and plan	50
2	Method of working	55
3	Quality of dishes	35
4	Serving and appearance	10

DETAILED ALLOCATION OF MARKS

1	PREPARATION SESSION	(50 marks)	Choice	20
			Plan	30

(a) Choice (Max 20)

General Points – applicable to each test.

The dishes chosen should meet the requirements of the specific tasks and:

- (i) show a variety of skills and processes
- (ii) combine to form well balanced meals
- (iii) have attractive appearance
- (iv) show thought for economy in fuel and food
- (v) show an awareness of the time available for cooking and serving

Note **quantities** chosen – these should be adequate for the number being served.

Under choice, give credit for variety in texture and for inclusion of **local fruit** and **vegetables**.

(b) Plan of Work (Max 30)

Please note and mark the following points:

(i) Recipe section (5 marks)

Dishes chosen must be clearly listed with the quantity of each ingredient for each dish.

(ii) Planning section (23 marks)

- 1 A logical sequence of work from beginning of test to final serving – each item followed through to serving stage. This is the most important part of the plan. It should show the candidate's ability to visualise exactly what he/she is going to do throughout the test time and to write it down in clear sequence with adequate timing. (10 marks)
- 2 Clear indication of method for each dish, e.g. make cake – creaming method – make sauce – roux method. (5 marks)
- 3 Oven temperature required for each dish and cooking time – although this can be incorporated in (a). (3 marks)
- 4 Time allowed for cleaning and dish washing at convenient points in plan (**not** necessarily after every dish). (3 marks)
- 5 Allowance of time for serving meals in correct order of courses.
Detailed timing is **not** required – a sensible guide is preferable. (2 marks)

(iii) Shopping List (2 marks)

Should give correct total quantities of ingredients required under correct headings. Any special equipment should be stated. (2 marks)

2 MARKING OF METHOD OF WORKING (55 marks)

As a general guide, 28/55 for methods which just deserve a pass, 33/55 for a really sound pass and 44/55 for **very** good methods, excellent timing and a variety of skills shown – this mark will only be given to a very able candidate. A candidate who shows little skill and who has not chosen sufficient dishes for the available time cannot be given more than 25/55 for this section.

The majority of candidates will probably gain between 28 and 42 marks.

Method of Working (Maximum 55 marks)

The following points should be considered when deciding on this mark. The suggested sections are intended to guide the Examiner in assessing the total mark to be given for this section.

- (a) The candidate's **general approach** – business-like and confident – should show in working that she/he has knowledge and clear understanding of recipes and methods being used. Sense of timing. (5 marks)

- (b) **Manipulation** – correct use of tools, skill in handling mixtures, and large and small equipment. Correct preparation of dish, meat, vegetables, fruit, seasonings and flavourings, etc. (20 marks)
- (c) Judgement of consistencies of various mixtures for e.g. scone mixtures, cake mixture etc. **before** actual cooking. (10 marks)
- (d) Good **hygienic** methods and **economy** in the use of fuel and food. (5 + 5 marks)
- (e) **Oven management** – control of heat on top of stove. Knowledge of correct oven temperatures and positioning of dishes in the oven. (5 marks)
- (f) Tidy and methodical work throughout. (5 marks)

If a candidate is extremely untidy then more than 5 marks may be deducted – if this happens please comment on the mark sheet.

Where a candidate is preparing very simple dishes then the maximum mark of 55 should be reduced accordingly.

The term 'fresh vegetables' includes the preparation and cooking of root and/or green vegetables. Salads, which should include a variety of vegetables and fruits, may merit a maximum of 6, dressing up to 4 according to type and skill involved.

NB. Tinned, frozen and freeze-dried vegetables and instant coffee – maximum 1 mark each. Commercially prepared fruit juice or squash = 0. These marks apply to result only. If serving and presentation of vegetables good then give credit in last section, but for tinned juice etc. no mark.

3 QUALITY OF DISHES (maximum mark 35)

All dishes must be tasted. Each dish must be marked according to flavour, texture and edibility. Please note that the maximum marks must be reduced for simple dishes involving little skill. Dishes added after the planning session has been completed will not receive a mark.

In assessing the quality of finished dishes, comments should be written on the assessment sheet about the flavour, texture and edibility of each dish.

Serving and appearance are assessed with a separate mark.

4 SERVING AND APPEARANCE (maximum 10 (usually 5 + 5))

Serving – note the following points: sequence of serving meal, correct temperature of food and serving dishes.

Appearance – attractive presentation, tasteful garnishing and decoration. Cleanliness of dishes and tablecloth. Correct use of d'oyleys (doilies) and dish papers. Suitable simple flower arrangement.

NOTE: The raw mark awarded to each candidate out of 150 must be scaled to a mark out of 100 before transferring to the mark sheet (max 100).

PRACTICAL TEST ADMINISTRATION

Candidates will be allocated specific test questions according to the Confidential Instructions. Within the Planning time limit, of 1 hour 30 minutes, candidates are expected to complete three preparation sheets.

On the day of the Planning Session for the Practical Examinations, each candidate will be issued with the specific test allocated and three carbonised preparation sheets:

- Page 1 – Plan of Work;
- Page 2 – Time Plan;
- Page 3 – Shopping List.

Page 1 – Plan of Work

Candidates list the names of the dishes they have chosen in the correct order to answer the question set. Next to each named dish there should be a list of the exact amounts of ingredients required to make the dish.

Page 2 – Time Plan

Candidates should show clearly how they plan to cook their chosen dishes within the 2½ hour time limit. For each dish, methods, cooking times, temperatures, washing up and serving details should be included. A sensible sequence should be shown in order to serve the dishes, hot if required, at the end of the test time. Special points should be listed such as special tools, time preparation, consistencies etc.

Page 3 – Shopping List

Correct total quantities of all ingredients should be listed in the sections for the different types of foods. Special equipment could be cooking dishes, serving dishes etc.

At the end of the planning session the carbonised sheets should be separated. The *top copies* of all three sheets should be kept securely and should be available for use by the Practical Examiner. These sheets should be marked by the Practical Examiner **before** the actual cooking.

Pages 1 and 2 of the *duplicate* copies should be kept securely and should only be returned to the candidates on the day of the practical examination for use during cooking.

Page 3 – Shopping List should be available as soon as it is completed for the use of the teacher in the Centre to order ingredients for the candidate.

Practical Examination Working Marksheet (see page 12)

One copy should be available for the Practical Examiner to use to mark the work of each candidate. The three planning sheets should be marked **before** the actual cooking, using the specific *mark scheme for Choice* and the generic mark scheme. Marks should be transferred to the Practical Examination Working Marksheet. There should also be comments/annotation by the Practical Examiner to explain the awarding of marks.

During the time the candidates are cooking, the dishes they have planned, the Practical Examiner should complete the *method of working, results and serving* sections using the specific mark scheme for Quality/Results for each session and the generic mark scheme. It is particularly important that comments/annotation is included in these sections to support the marks awarded.

A *Summary Marksheet* (see page 13) should be provided for each Centre. Practical Examiners should complete this, listing in correct examination order the candidate numbers, names, marks for each section of the work, a total mark (out of 150) and a scaled final mark (out of 100) for each candidate. Marks should always be checked by an independent person.

FOOD AND NUTRITION (6065/2)
Practical Examination Working Marksheet
O LEVEL

Centre Number					Centre Name			
June/November	2	0	1		Examiner's Name			
Candidate Number					Candidate Name	Test No.		
Planning						Mark Available	Mark Awarded	
						Choice	20	
						(i)	5	
						(ii) 1	10	
						2	5	
						3	3	
						4	3	
						5	2	
						(iii)	2	
						Total	50	
Method of Working						General Approach	5	
						Manipulation	20	
						Consistency	10	
						Hygiene and Economy	5 + 5	
						Oven Management	5	
						Tidy and Methodical	5	
						Total	55	
Dishes Chosen	Quality/Results: Flavour/Texture/Edibility					Mark Available Each Dish		Mark Awarded Each Dish
						Name	Marks	
						Total	35	
Serving and Appearance						Serving	5	
						Appearance	5	
						Total	10	
						TOTAL	150	
						SCALED MARK	100	



FOOD AND NUTRITION (6065/2)
Practical Examination Summary Marksheet
O LEVEL

Centre Number					Centre Name			
June/November	2	0	1		Examiner's Name			

Candidate Number	Candidate Name	Preparation		Method of Working (max 55)	Quality/ Results (max 35)	Serving/ Appearance (max 10)	Total (max 150)	Scaled Total (max 100)
		Choice (max 20)	Planning (max 30)					

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