

MINISTRY OF EDUCATION, SCIENCE VOCATIONAL TRAINING AND EARLY EDUCATION

# FOOD AND NUTRITION SYLLABUS

**GRADES 10 – 12** 



Prepared and Published by: Curriculum Development Centre
P.O. Box 50092

LUSAKA

2013

## TABLE OF CONTENT

PREFACE	iv
ACKNOWLEDGEMENTS	V
1.0 INTRODUCTION	
5.0 ASSESSMENT OBJECTIVES	
6.0 METHODOLOGY	
7.0 GENERAL OUTCOMES:	
GRADE 10	
GRADE 12	11
SCHEME ASSESSMENT	
Paper I	16
Paper II	
REFERENCE BOOKS	20

## © Curriculum Development Centre, Lusaka, 2011

All rights reserved. No parts of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright holder.

### **PREFACE**

The review of this Syllabus was necessitated by the need to improve the quality of education at High School Level as stipulated in the national policy document, "Educating Our Future – 1996" and to meet the demands of society at large echoed in various forum.

Quality education helps develop a sound knowledge and skills base in learners that are capable of raising the standard of living for all as well as attain a sustainable national development. The syllabus further addresses issues of national concern such as Entrepreneurship and hospitality, Environmental Education, Gender and Equity, Health Education and HIV/AIDS, Family Life Education, Human Rights, Democracy, Reproductive Health, Population Education, Entrepreneurship and Vocational Skills, Life and Values Education.

This syllabus also builds on the foundation laid by the Home Economics Junior Secondary School syllabus. It is meant to equip learners with knowledge, skills, positive attitudes and values to enable them easily use the acquired skills in their daily lives and to ease choice of a career both in the formal and informal sector. It has taken into consideration the recommendations from the Curriculum symposium, the indaba and the Vision 2030.

It is hoped that this syllabus will provide the users with a sound knowledge and skills base for further studies in Home Economics related fields and a strong base of positive attitudes and values on which meaningful and effective learning experiences will be developed to help learners establish sustainable entrepreneurial activities for income generation formally or informally.

At the end of the course, the learners are expected to use the acquired knowledge and skills in income generation, an activity that will total up to raising Zambia to a medium income generating nation.

Chishimba Nkosha PERMANENT SECRETARY MESVTEE LUSAKA - ZAMBIA

### **ACKNOWLEDGEMENTS**

The Home Economics syllabus review exercise would not have been accomplished without the involvement, participation, and commitment of many people. We want to thank them all. Most importantly we must thank the Home Economics Association of Zambia (HEAZ); National Food and Nutrition Commission; Natural Resources Development College, for their numerous contributions towards the curriculum review process. The Institute of Hotel and Tourism (Fairview) for providing reference materials when integrating Hospitality components.

Secondly, we wish to thank the people, Government departments, and institutions of learning who, in many varied ways, contributed towards the production of this syllabus. These include all those who found time or were able to allow their staff to attend the review process.

We are greatly indebted to all learning institutions who participated in the Home Economics Technical review workshop.

Finally, we wish to acknowledge our indebtedness to the former Director Standards and Curriculum Mrs Florence Mfula and the Chief Curriculum Specialist Ms Georgina Hamaimbo for their valuable contributions in guiding the review exercise before they retired from the service.

C.N.M. Sakala (Mrs)
Director – Standards and Curriculum
Ministry of Education, Science, Vocational Training and Early Education.

### 1.0 INTRODUCTION

This Home Economics Syllabus has been reviewed to meet the needs of the family and society as a whole.

The syllabus incorporates the components of Fashion and Fabrics, Food and Nutrition and Home Management and each of the components form an area of specialisation and is an independent syllabus under the subject of home economics. Cross cutting issues and concepts on Environmental Education, Entrepreneurship, Sexually Transmitted Diseases, (STDs), HIV/AIDS, Population and Family Life Education, Reproductive Health, Gender, Human Rights, Substance Abuse and Life Skills have also been included.

To ensure that the Home Economics teacher does not provide only knowledge, the format of this new syllabus explicitly shows the knowledge to be taught under each topic, the skills, and values. Local knowledge and skills are particularly appreciated and they have been integrated. As far as possible, teachers should encourage the pupils to practice the knowledge they gain in class into the community so as to allow the modern Zambian child to take the most and give the most to our developing society.

### 2.0 RATIONALE

Home Economics is an interdisciplinary field of study which endeavours to equip students with knowledge, practical and social skills, attitudes that are essential for success in a global society. The program seeks to equip learners with life skills that will help the recipient to cope with changes in a technological, socio-economical, and multi-cultural society.

Home Economics incorporates the components of Food and Nutrition, Home Management, Hearth Education, Needlework, and crafts. New concepts of hospitality, Gender, Human Rights, Pollution, Entrepreneurship, and HIV/AIDS have been included. Learners engage in problem solving situations which require the application of knowledge and the use of practical skills. These situations take into account such factors as basic needs, lifestyles, financial resources, health, environment, and their effects on the individual, family, and society.

Home Economics inculcates positive attitudes towards cost effectiveness in the utilization of local and indigenous resources. It also looks closely at the use of other resources. The program teaches learners to be self-reliant, business minded and health conscious. These challenges promote the well-being of the individual, family and the society. This is due to the fact that Home Economics concepts are mainly introduced and taught within the concept of the home, the school, and the local environment therefore, making it easier for learners to easily and immediately apply whatever knowledge and skills at school in various phenomenon in their near environment.

### 3.0 PREAMBLE

1.1 Food and Nutrition deals with the food and nutrients that nourishes the body, including providing energy, maintenance and repair. These foods are provided for through the diet consisting of food mixtures in amounts which are eaten, usually each day.

#### The Course

- 1.1.1 Creates an understanding of nutritional needs of the various Zambian population groups.
- 1.1.2 Offers a combination of scientific community based approaches to identifying and solving food and nutritional related problems in Zambia.
- 1.1.3 Promotes self reliance in food related activities.
- 1.1.4 Provides strong foundation for further studies in food related disciplines.
- 1.1.5 Facilitates entry to other professions.
- 1.1.6 Encourages sound nutrition through promotion of dietary diversification through emphasis on growing and using indigenous and other locally related available foods.

### **4.0 AIMS**

The aims of the syllabus are:

- 2.1 To equip pupils with knowledge and skills necessary for problems-solving, decision making, self-awareness, assertiveness and creative thinking to enable them manage their lives more effectively and productively.
- 2.2 Impart knowledge and skills in food and nutrition in order to promote good health for all.
- 2.3 Develop the ability to demonstrate, analyse and evaluate the principles guiding food related studies.
- 2.4 Develop skills that encourage conservation of time, food nutrients, fuel and other resources in the planning and preparation of nutrition meals.
- 2.5 Develop practical and managerial skills in the cooking presentation and services of foods.
- 2.6 Develop aesthetic sense by encouraging and promoting creativity in using locally available and traditional foods.
- 2.7 Provide knowledge and skills on the use and care of appropriate technologies.
- 2.8 Foster co-operation ad self-reliance in relation to food and nutrition at various levels of operation.
- 2.9 Create a basis for employment and further studies.

#### 5.0 ASSESSMENT OBJECTIVES

Pupils should be able to:

- 3.1 Select and apply knowledge of the nature and composition foods in preparation of meals
- 3.2 Discuss the nutritional values of foods and their functions
- 3.3 Have a simple understanding of the causes and prevention of nutrition disorders prevalent in Zambia
- 3.4 Identify and apply basic scientific principles underlying the preparation, cooking and preservation of foods
- 3.5 Explain the uses of different methods, utensils and equipment in the preparation and serving meals
- 3.6 Explain and apply management and organisational skills to food preparation in relation to efficient use of time, money, fuel, labour and equipment
- 3.7 Discuss and apply rules of hygiene in handling of food, use of equipment and care of the immediate environment
- 3.8 Describe and apply safety precautions in the kitchen
- 3.9 Prepare, cook and serve nutritious and attractive dishes using indigenous and exotic foods

### 6.0 METHODOLOGY

Six periods per week should be allocated, three of which must be consecutive and used for practical lessons. To achieve the stated aims and objectives, the following are necessary:

- 4.1 Teaching of both theory and practical lessons
- 4.2 Teacher demonstrations followed by pupil practicals
- 4.3 Experimentation on food
- 4.4 Individual and group instruction and supervision
- 4.5 Audio-visual aids
- 4.6 Group discussions
- 4.7 Individual/group assignments and projects
- 4.8 Networking/community participation
- 4.9 School-community projects
- 4.10 Education tours
- 4.11 Team teaching

### 7.0 GENERAL OUTCOMES:

- Build in learners the capacity to apply principles of nutrition, adequately manage the kitchen and appropriately prepare, cook and present food.
- Adequately plan meals for various members of the family in different conditions
- Appropriately improvise and utilise ingredients, materials, utensils and equipment used in food and nutrition to create new interventions to suit the local environment
- Demonstrate an understanding of meal planning and dietary needs of different age groups and categories of family members
- Implement projects in food and nutrition.
- Demonstrate an understanding of the principles of art, art of food presentation, flower arrangement and food service management
- Develop knowledge on household budgeting and saving, entrepreneurship, consumer education, rights and responsibilities

## **KEY COMPETENCES**

- Demonstrate basic skills in practicing safety rules in the kitchen
- Show basic skills in analysing global and environmental health issues related to the production and consumption of food.
- Demonstrate basic skills in understanding the importance of nutrients during various stages of the life cycle, and the effects of deficiencies and excesses.

## **GENERAL OUTCOMES:**

 Build in learners the capacity to apply principles of nutrition, adequately manage the kitchen and appropriately prepare, cook and present food.

THEME	TOPIC	SPECIFIC OUTCOMES	C	ONTENT	
	TOTIC	SI ECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES
THE KITCHEN	10.1 The Kitchen, equipment	10.1.1 Design layouts of the kitchen.	• L- Shape, U- shaped and parallel lines kitchens.	• <b>Designing</b> kitchen layout.	• <i>Creating</i> a suitable kitchen.
	and utensils.	10.1.2 Explain good kitchen surfaces	Kitchen surfaces: floor type, work surfaces, cool colours, plastic, wood, ceramics and metal.	• Communicating information on good kitchen surfaces.	• Appreciating quality work.
		10.1.3 State suitable colour schemes for the kitchen.	Suitable colour schemes.	• Displaying knowledge of light and cool colours.	• Applying suitable colours in a kitchen creatively.
		10.1.4 Describe choice, care and use of equipment and utensils.	Choice, care and use of equipment and utensils.	• Investigating rules to follow in handling utensils and equipment.	• Applying knowledge in proper handling of equipment and utensils.
		10.1.5 Explain the use of labour saving devises	<ul> <li>Labour saving devises: blenders, vacuum cleaner, coffeemaker, electric cake mixer, washing machine etc.</li> <li>Advantages and disadvantages of labour saving devises</li> </ul>	• Showing understanding of vacuum cleaner, washing machine and polishers • Communicating information on the use of labour serving devices.	• Applying safe use of labour saving devices.
	10.2 Safety in the kitchen	10.2.1 Explain safety in the kitchen.	• Safety symbols: the kite mark, safety mark, furniture safety	• <i>Identifying</i> safety symbols.	• <i>Applying</i> safety symbols, in the kitchen.

THEME	TODIC	TOPIC SPECIFIC OUTCOMES -	CONTENT		
ITENIE	TOPIC		KNOWLEDGE	SKILLS	VALUES
		10.2.2 State common accidents in the kitchen	• Common accidents in the kitchen e.g. cut, scalds, burns, electrical suffocation, choking.	• <i>Identifying</i> common accidents in the kitchen.	• Applying safety rules in the kitchen.
		10.2.3 Describe ways of preventing accidents in a kitchen.	Preventing accidents in a kitchen: electric shocks, slippery floors	• Investigating ways of preventing accidents in the kitchen.	<ul><li> <i>Promoting</i> orderliness.</li><li> Appreciating safety.</li></ul>
		10.2.4 Explain the use of the First Aid box contents.	<ul> <li>Contents of the first Aid box: Scissors, tweezers, roll of surgical tape and their uses.</li> <li>Application of first aid on common accidents.</li> </ul>	• Identifying content in the first aid box.	• Applying first aid on simple ailments.
PRINCIPLES OF FOOD AND NUTRITION	10.3 Introduction to food and nutrition	10.3.1 Outline the principles / terms in food and nutrition.	• Principles of food e.g. nutrition, nutrients menu, balanced diet etc.	• <i>Identifying</i> principles / terms used in food and nutrition.	• Appreciating the nutritional value of food.
		10.3.2 Identify food nutrients.	• Nutrients: Protein, fats, carbohydrates, vitamins, minerals, roughage and water.	• <i>Identifying</i> food nutrients.	• Awareness of food nutrients.
	10.4 Dietary components	10.4.1 Outline the sources and functions of food.  10.4.2 Describe the main foods in the diet  10.4.3 Explain the use of water and dietary fibre in the body.  10.4.4 Identify sources and functions of dietary fibre	<ul> <li>Animal and plants sources and functions of food.</li> <li>Protein, carbohydrates and vitamins.</li> <li>Lubricating of joints and membrane, fibre helps in excretion.</li> <li>Sources (stringy parts of fruits and vegetables).</li> </ul>	<ul> <li>Identifying sources and functions of food.</li> <li>Communicating information on the main foods in the diet.</li> </ul>	• Appreciating food and its use in the body.

TOTTONATO	TODIC	CDECIEIC OUTCOMES	C	ONTENT		
THEME	TOPIC	SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
		10.4.5 Describe Genetically Modified Organisms (GMO)  10.4.6 Identify different healthy diets.	<ul> <li>Organisms or food produced by a method that involves changing the structure of its genes.</li> <li>Food groups and healthy diet pyramid e.g. following the national food guide, where one aims at eating foods from all the different food groups.</li> </ul>	• Interpreting knowledge on genetically modified Organisms.		
PRINCIPLES OF FOOD AND NUTRITION	10.5 Digestion, absorption and metabolism	10.5.1 Explain the digestion and absorption of food	Digestion and absorption: in the mouth, oesophagus, stomach, duodenum, ileum, and colon.	• Communicating knowledge on the passage of food in the body.	• Asking questions for more knowledge.	
		10.5.2 Identify enzymes involved in digestion.	• Salivary amylase, Pepsin, Rennin, Trypsinogen, bile etc.	• Analysing chemical reactions that take place in the body.	• Awareness of enzymes.	
		10.5.3 Explain the process of metabolism.	Metabolism: the chemical activity in the body that uses food to produce energy needed to work and grow.	• <i>Investigating</i> the process of metabolism.	• Asking questions for more knowledge.	
	10.6 Dietary guidelines	<ul> <li>10.6.1 Describe the nutritive value of main foods in the diet.</li> <li>10.6.2 Explain the use of dietary guidelines</li> <li>10.6.3 Describe the choice, use, storage of many foods in the diet.</li> </ul>	<ul> <li>Structure, composition and value of foods in the diet.</li> <li>Choice, use, storage of food and consumption</li> <li>Storage of vegetables, meat, following the nutritional labelling etc. Effects of heat on food</li> </ul>	<ul> <li>Identifying the nutritive value of food.</li> <li>Planning meals according to dietary needs.</li> <li>Communicating knowledge on how food reacts</li> </ul>	• Appreciatin g the use of food in the body.	

THEME	TODIC	SDECIEIC OUTCOMES	Co	ONTENT		
ITENIE	TOPIC	SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
INDIVIDUAL DIETARY NEEDS	10.7 Meal planning and dietary needs.	SPECIFIC OUTCOMES  10.6.4 Explain the effect of heat on foods  11.7.1 Identify factors affecting food requirements.  11.7.2 Explain the importance of breast feeding babies from 0-6 months (exclusive breast feeding)  11.7.3 Explain complementary feeding.  11.7.4 Explain the meal planning concept.	<ul> <li>Food tests, what happens when food is exposed to heat</li> <li>Health, age, type of occupation etc.</li> <li>Breast milk contains all the nutrients needed for baby to grow.</li> <li>Adding solids to baby apart from just breast milk.</li> <li>Meal planning         <ul> <li>Time plan (dishes chosen,</li> </ul> </li> </ul>		<ul> <li>• Awareness of the importance of feeding family members.</li> <li>• Caring for babies.</li> <li>• Cooperatively working as a class.</li> </ul>	
		11.7.5 Plan meals for all ages, occupations and other health dietary requirements.	shopping list, order of work) - Prepare meals for different dietary needs.  • Prepare meals for different dietary needs including issues such as; Recommended Daily Allowance (RDA), Reference Nutrition Intake (RNI) and Dietary need for all ages, occupation and health.			

## **Key competences**

- Show basic skills in planning meals through a meal appeal activity.
- Display knowledge to prepare meals in response to nutritional needs depending on life stage, activity level, health and gender.
- Demonstrate basic skills in using a variety of cooking methods to prepare food.
- Show knowledge and ability to use product labels to identifying and compare the nutritional value in a variety of food products.

## **General outcomes:**

- Develop the ability to appropriately improvise and utilise ingredients, materials, utensils and equipment.
- Demonstrate an understanding of meal planning and dietary need of different age groups and categories of family members.

THEME	TOPIC	SPECIFIC OUTCOMES	CONTENT			
IREVIE	TOPIC		KNOWLEDGE	SKILLS	VALUES	
PRACTICAL FOOD PREPARATION	11.1 Preparation and methods of cooking	11.1.1 Describe various methods of cooking.	Moist, dry methods of cooking food.	• <i>Identifying</i> various methods of cooking.	• <i>Appreciate</i> the value of various methods of cooking.	
	food	11.1.2 Identify different ways of heat transfer during the cooking process.	Conduction, convection and radiation.	• <i>Investigating</i> and observing effects of heat while cooking.	• Appreciate the effects of heat on food	
		11.1.3 Explain effect of heat on nutrients.	• Changes that take place on food when heat is applied.	• <i>Observing</i> the behaviour of heat on nutrients.	• <i>Appreciating</i> the value of nutrients in food	
		11.1.4 Describe economical tips in food preparation.	• Consider the aspects of saving fuel when meals are being prepared.	• Communicating information on fuel conservation	• Being <i>economical</i>	
		11.1.5 Explain the effects of fuel on environment.	• Pollution	• <i>Investigating</i> ways the environment is polluted.	• Appreciating clean environment.	
	11.2 Cooking different types of food.	11.2.1 Explain the process of cooking different types of food.	• Cookery of meat, cereals, egg, fish, poultry, milk and milk products, fruit and vegetables, insects, root and tubers dishes.	• Cooking different types of food.	• Applying different methods when cooking food	
	11.3 Sauces, stock, soup and gravy	11.2.2 Explain classes and types of sauces, soups and stocks	<ul><li>Classes and types of sauces, soups and stocks</li><li>Preparation of soups</li></ul>	<ul><li> Classifying sauces, soups and stocks.</li><li> Preparing soups</li></ul>	• <i>Appreciating</i> quality food.	
FOOD AND FOOD SCIENCE	11.4. Flour mixtures	11.4.1 Describe types of flour.	White meal, whole meal and brown four, cassava and sweet potatoes flour.	• <i>Identifying</i> types of flour.	• Appreciating the types of flour.	

THEME	TOPIC	SPECIFIC OUTCOMES	CONTENT			
IHEME	TOPIC	SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
			Advantages and disadvantages of flour and faults in flour mixtures.	• <i>Outlining</i> of faults in flour mixtures.	• Awareness of changes in flour mixtures.	
		11.4.4 Make dishes from different types of flour mixtures.	Baking – Sausage rolls, cakes etc	• <i>Baking</i> different foods.	• <i>Baking</i> using different types of flour mixtures.	
		11.4.5 Analyse faults in cake making.	Making of different flour dishes e.g. sunken cake, cracked cake.	• Analysing faults	• <i>Producing</i> quality work.	
FOOD AND FOOD SCIENCE	11.5. Raising agents	11.5.1 Identify different types of raising agents	Mechanical and Chemical raising agents.	• <i>Identifying</i> different raising agents.	• Appreciating the value of raising agents.	
		11.5.2 Explain the importance of yeast in cookery	Yeast as a raising agent.	• Communicating information on yeast cookery.	• Awareness of yeast as a raising agent.	
		11.5.3. Prepare and cook dishes using the different types of raising agents.	Making dishes using different types of raising agents (include batch baking).	• <i>Cooking</i> different dishes.	• Appreciating raising agents.	
		11.5.4 Describe problems encountered in the use of raising agents	• Problems with the use of raising agents.	• Communicating knowledge on faults the use of raising agents.	• Appreciation of raising agents.	

	TODIC	SPECIFIC OUTCOMES	CONTENT			
THEME	TOPIC		KNOWLEDGE	SKILLS	VALUES	
FOOD HYGIENE	11.6. Hygienic practices in food preparation	<ul><li>11.6.1 Describe food hygiene.</li><li>11.6.2 Explain food spoilage and contamination, and their causes.</li><li>11.6.3 Use appropriate methods of waste disposal.</li></ul>	<ul> <li>Hygiene in relation to; Personal hygiene, Kitchen hygiene, Food hygiene.</li> <li>Definition of food spoilage and causes of contamination</li> <li>Types of refuse.</li> <li>Methods of waste disposal (segregation of waste such as glass, vegetable matter and plastic/paper).</li> </ul>	<ul> <li>Observing the aspect of hygiene in the home</li> <li>Communicating knowledge of food contaminating</li> <li>Identifying various ways of disposing waste</li> </ul>	<ul> <li>Cleanliness in the home</li> <li>Applying hygienic practices in the home</li> <li>Appreciating a clean environment</li> </ul>	
PRESERVATIO N OF FOOD	11.7. Food preservation	<ul> <li>11.7.1 Describe food preservation</li> <li>11.7. 2 State reasons for preserving food.</li> <li>11.7.3 Identify methods of food preservation.</li> <li>11.7.4 Demonstrate the ability of preserving a variety of foods using the different methods of preservation.</li> </ul>	<ul> <li>Food preserved to prevent natural and microbial decay.</li> <li>Add variety to the diet, by making foods available out of season; make use of food when it is cheap and plentiful and to store it for later use etc.</li> <li>Heating, irradiation, addition of chemical preservation etc.</li> <li>Preservation of foods.</li> </ul>	<ul> <li>Experimenting         ways of preserving         food</li> <li>Communicating         information on         why food is         preserved</li> <li>Observing how         food is preserved</li> </ul>	<ul> <li>Applying         preservation         methods</li> <li>Awareness of         reasons for         preservation</li> <li>Applying safe         preservative         methods</li> </ul>	
	11.8 Convenience Foods.	11.8.1 Describe convenience foods.	Processed foods and partly prepared by a	<ul><li> Preserving foods</li><li> Classifying</li></ul>	• Appreciating preserved foods	

THEME	TOPIC	SPECIFIC OUTCOMES	CONTENT			
IHEME	TOPIC		KNOWLEDGE	SKILLS	VALUES	
FOODS AND FOOD	11.9 Herbs and	<ul> <li>11.8.2 Explain the advantages and disadvantages of convenience foods.</li> <li>11.8.3 Explain the importance of buying foods packed in environmentally friendly materials.</li> <li>11.8.4 Prepare meals using convenience foods.</li> <li>11.8.5 Use of additives</li> <li>11.9.1 Describe herbs and spices</li> <li>11.9.2 Identify common herbs and</li> </ul>	manufacturer.  Types of convenience foods e.g. canned, dehydrated etc.  Advantages and disadvantages of convenience foods.  Safety measures in use of convenience foods  Preparing meals  Additives enhance the flavours, colour and texture enhancers.  Herbs and spices	convenience foods  Comparing the positives and negatives of convenience foods  Communicating knowledge in the use of convenient foods  Planning meals  Communicating knowledge on additives  Communicating the importance of	<ul> <li>Awareness of the types</li> <li>Appreciating convenience food</li> <li>Applying safety in handling food</li> <li>Appreciating meals made from convenience foods</li> <li>Applying additives to food</li> <li>Applying herbs and spices</li> </ul>	
SCIENCE	spices.	spices  11.9.3 Compare and contrast herbs and spices 11.9.4 use herbs and spices accordingly	<ul> <li>Common herbs and spices (Turmeric, ginger, garlic, cinnamon, black pepper, white pepper, rosemary, thyme, parsley).</li> <li>Differences</li> <li>Appropriate use of herbs and spices</li> </ul>	the importance of herbs and spices	spices	
FOOD INTOLERANCE	11. 10 Food allergies	11. 10.1 Describe food allergies 11.10.2 Explain causes of food allergies	<ul><li>Food allergies</li><li>Causes of food allergies</li><li>Food malabsorption</li></ul>	Communicating     knowledge on     food allergies and     their causes	Asking questions for more understanding	

## **Key competences:**

- Demonstrate basic skills in serving styles, food presentation, table setting, hosting duties and table etiquette.
- Show basic skills in doing flower arrangement.
- Display effective skills in food marketing practices and handling of consumer behaviour.
- Show basic skills in describing food-related occupation and career.

### General outcomes:

- Demonstrate an understanding of the principles of the art of food presentation, flower arrangement and food service management.
- Develop knowledge on household budgeting and saving, entrepreneurship, consumer education, rights and responsibilities.

THEME	TOPIC	SPECIFIC OUTCOMES		CONTENT		
Inchie	THEME SPECIFIC	SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
PRACTICAL FOOD PREPARATION	12. 1. Food presentation	<ul> <li>12.1.1 Describe presentation of food.</li> <li>12.1.2 Identify methods of decorating and garnishing food.</li> <li>12.1.4 Identify styles of meal service.</li> <li>12.1.5 Describe ways of serving meals for different occasions.</li> <li>12.1.6 Make simple flower arrangements.</li> </ul>	<ul> <li>Food presentation: the visual impressions of serving food and the surrounding in which is eaten</li> <li>Decorating and garnishing: Saving foods for garnishing and decorating sweet dishes</li> <li>Styles of meal service: suitable garnishing of meals</li> <li>Formal/informal and traditional ways of serving meals. Prepare meal</li> <li>Flower arrangement.</li> </ul>	<ul> <li>Presentation of food</li> <li>Decorating and garnishing of dishes</li> <li>Serving meals properly</li> <li>Presenting meals according to occasion and environment</li> <li>Arranging flowers.</li> </ul>	<ul> <li>Application of styles in preserving foods.</li> <li>Creativity doing the work</li> <li>Awareness in styles of meal service</li> <li>Applying meals creativity</li> <li>Innovative way of flower arrangement</li> </ul>	
CONSUMER STUDIES	12. 2 Consumer Education	12.2.1 Identify organisations that protect the consumer.  12.2.2 Describe consumer rights	Local Authority Health Department, Competition and Consumer Protection Agency (CCPA), Zambia Bureau of Standards (ZABS), Human Rights Commission, Ministry of Health - Public Health)  • Consumer rights. And	<ul> <li>Identifying the consumer protection organisations.</li> <li>Communicatin</li> </ul>	<ul> <li>Awareness of consumer protection organisation</li> <li>Awareness of</li> </ul>	
		and methods of redress.  12.2.3 Explain the role of advertisements to the consumer	Methods of redress.  • Advertisements:  - Assertiveness in responding to adverts.	g knowledge on consumer rights  • Advertising goods	<ul><li>consumer rights</li><li>Asking questions for</li></ul>	

THEME	TOPIC	SDECIEIC OUTCOMES	CONTENT		
THEME	SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
		<ul><li>12.2.4 Importance of shopping.</li><li>12.2.5 Describe product labelling.</li></ul>	<ul><li> Wise shopping and reducing waste.</li><li> Product labelling</li></ul>	<ul> <li>Shopping         wisely for         home         requirements</li> <li>Labelling foods</li> </ul>	<ul> <li>more understanding</li> <li>Applying knowledge on wise shopping</li> </ul>
PRACTICAL FOOD PREPARATION	12.3 Alternative foods (Analogue foods)	12.3.1 Describe meat analogue. 12.3.2 Identify alternative sources of foods for meat analogue.	<ul> <li>- soya chunks, sausage.</li> <li>(Textured Vegetable. Proteins [TVP]) - Soya sausage</li> <li>Soya meal -Soya meal -Soya chunks</li> <li>Soya milk</li> <li>groundnuts</li> </ul>	for sale  Identifying sources of food for analogue Observation of foods that depict alternative sources of food for meat analogue.	Appreciating meat analogue
	12.4 Gelatine, sweets and puddings	<ul><li>12.4.1Explain gelatine.</li><li>12.4.3 Explain the importance of sweets and puddings.</li><li>12.4.2 Explain the importance of gelatine in the diet.</li></ul>	<ul> <li>Gelatine: tasteless, transparent, Odourless, brittle solid in which is fount yellow in colour.</li> <li>Importance and uses of sweets and puddings.</li> <li>Gelatine, sweets and puddings</li> <li>Preparation of gelatine</li> </ul>	<ul> <li>Identifying sources of food for analogue</li> <li>Observation of dishes that are decorated.</li> </ul>	Appreciating meat analogue
FOOD AND NUTRITION	12. 5 Food and nutrition security	12.5.1 Describe food path and food security	Food security	• Communicatin g knowledge on	• Awareness of food security.

THEME	TODIC	SPECIFIC OUTCOMES	CONTENT		
THEME	TOPIC		KNOWLEDGE	SKILLS	VALUES
PRACTICAL FOOD PREPARATION	TOPIC  12. 6 Traditional cookery	12.5.2 Identify types of food security  12.5. 3 Explain food losses along the food path  12.5.4 Explain the causes of food insecurity  12.8.6 Explain the effects of food insecurity  12.6.1 Describe traditional cookery  12. 6.2 Identify prominent			<ul> <li>Appreciating food security</li> <li>Asking questions for more understanding</li> <li>Applying methods food insecurity.</li> <li>Applying food security</li> <li>Awareness of traditional dishes.</li> </ul>
		traditional dishes and beverages in Zambia 12.6.3 Explain the loss of nutrients and supplements through traditional cookery. 12.6.4 Prepare a traditional dish.	<ul> <li>Deverages: Chikanda,         Tobwa, chibwantu</li> <li>Nutrient losses and         supplements: addition at         soda, over boiling</li> <li>Preparation of traditional         dishes</li> </ul>	<ul> <li>Identifying         Zambian             traditional             dishes and             beverages     </li> <li>Communicatin             g knowledge on             how nutrients             are lost and             added.</li> <li>Making dishes</li> </ul>	<ul> <li>Appreciating traditional dishes</li> <li>Applying additional nutritional value of food</li> <li>Appreciating the Zambian tradition</li> </ul>

THEME	ТОРІС	SPECIFIC OUTCOMES	CONTENT			
IRENIE		SPECIFIC OUTCOMES	KNOWLEDGE	SKILLS	VALUES	
Entrepreneurship	12.7 Entrepreneurship as a career.	12.7.1 Form small entrepreneurship groups for small scale businesses	Business ventures found in the community (Baking, preparation of different meals)	• Advertising goods	• Working cooperatively in groups.	

### SCHEME ASSESSMENT

### Paper I

Nature of paper Theory/written

Weighting 50%
Marks awarded 100
Time 2 hours

Paper I consists of two sections; A and B. Section A is compulsory and consists of short answers and/or structured questions based on nutrition concepts (covering various themes in food and nutrition namely the kitchen, principles of food and nutrition, practical food preparation, food science and hygiene, presentation of food, financial management, food and nutrition security, food intolerance, consumer studies, individual dietary needs and food hygiene). This section is worth forty (40) marks.

Section B carries six (6) structured questions covering the whole syllabus. Candidates must answer four (4) questions. This section is awarded sixty (60) marks, (15 marks per question)

### Paper II

Nature of paper	<b>Practical</b>
Weighting	50%
Marks awarded	100

Time -planning session 1½ hours

-practical examination 2½ hours

Paper II consists of eight (10) tests. The examiner will choose 8 tests on the day of planning and allocate one test to each candidate (shuffle). The candidate will be required within one and half hours to plan how she/he will carry out the test. The candidate will also be required to prepare a shopping and equipment list.

## FOOD AND NUTRITION

GRADE 10		GRADE 11		GRADE 12	
TOPIC	CONTENT	TOPIC	CONTENT	TOPIC	CONTENT
1.The kitchen and the kitchen equipment	<ul> <li>Kitchen layouts.</li> <li>Kitchen surfaces and colour schemes.</li> <li>Equipments and utensils.</li> <li>Safety in the kitchen.</li> <li>Common accidents in the kitchen.</li> <li>Prevention of accidents.</li> <li>Contents of the first Aid box.</li> <li>Apply first Aid.</li> </ul>	6.Meal planning and dietary needs	<ul> <li>Meal patterns.</li> <li>Factors affecting food requirements.</li> <li>Mixed/ balanced meals.</li> <li>Breast feeding and HIV/AIDS</li> <li>Meal planning</li> <li>Time plan</li> <li>Recommended daily allowances (RDA)</li> <li>Reference Nutrition in Intake (RNI)</li> <li>Dietary needs for all ages, occupation and health.</li> </ul>	15.Food presentation in homes and hospitality facilities	<ul> <li>Food presentation.</li> <li>Styles of cutting food for us.</li> <li>Herbs and species in food preparation.</li> <li>Styles of meal service in homes and hospitality facilities.</li> <li>Formal/ informal and traditional ways of serving meals.</li> <li>Flower arrangement.</li> </ul>
2. Introducton to food and nutrition.  3.Dietary	<ul> <li>Principles of food and nutrition.</li> <li>Basic concepts and diet.</li> <li>Importance of eating variety of foods.</li> <li>Metabolism of food nutrients.</li> <li>Animal and plants</li> </ul>	7.Prepara-tion and cooking of food,  8.Cooking	<ul> <li>Methods of cooking.</li> <li>Transference of heat.</li> <li>Effects of heat on nutrients.</li> <li>Types and conservation of fuel.</li> <li>Effects of fuel.</li> <li>Cookery of meat, cereals,</li> </ul>	16.Cons-umer Education  17.Altern-ative foods	<ul> <li>Consumer protective organization</li> <li>Consumer rights.</li> <li>Methods of redress.</li> <li>Product labeling.</li> <li>Advertisement.</li> <li>Wise shopping and reducing waste.</li> <li>Meat analogue</li> </ul>
components	sources of food, obtained in the local environment • Functions of food.	different types of food.	<ul><li>milk and milk products, fruits and vegetables.</li><li>Preparation of stock, soups and gravy.</li></ul>	(analogue foods)	<ul><li>Milk-coffee cream.</li><li>Sauces and juices.</li></ul>

GRADE 10		GRADE 11		GRADE 12	
TOPIC	CONTENT	TOPIC	CONTENT	TOPIC	CONTENT
4 Direction	<ul> <li>Main foods in the diet.</li> <li>Classify nutrients.</li> <li>Use of water and dietary fiber in the body.</li> <li>Sources (stringy parts of fruits and vegetables).</li> <li>Genetically modified foods.</li> <li>Healthy diet pyramid.</li> </ul>		<ul> <li>Additives</li> <li>Reuse bottles and containers</li> </ul>	19 Calati na avvasta	
4.Digetion absorption and metabolism	<ul> <li>Digestion and absorption of various nutrients.</li> <li>Enzymes at each stage of digestion.</li> <li>Process of metabolism.</li> </ul>	9.Flour mixtures	<ul> <li>Types of flour.</li> <li>Types of flour mixtures.</li> <li>Faults in flour mixtures.</li> <li>Classification of raising agents.</li> <li>Types of yeast.</li> </ul>	18.Gelati-ne sweets and puddings.	<ul> <li>Gelatin, sweets and puddings.</li> <li>Place of sweets and puddings in the diet.</li> <li>Importance and uses of sweets and puddings.</li> </ul>
5. Dietary guidelines	<ul> <li>Structure, composition and value of foods in the diet.</li> <li>Choice, use, storage of food.</li> <li>Effects of heat on the food.</li> <li>Use of dietary</li> </ul>	10.Raising agents	<ul> <li>Raising agents.</li> <li>Making dishes using different types of raising agents.</li> <li>Yeast cookery.</li> <li>Batch baking.</li> </ul>	19.Food allergies.	<ul> <li>Food allergies.</li> <li>Causes of food allergies.</li> <li>Food malabsorption</li> </ul>

GRADE 10		GRADE 11		GRADE 12		
TOPIC	CONTENT	TOPIC	CONTENT	TOPIC	CONTENT	
	guidelines.					
		11.Hygie-nic practices in food preparat-ion	<ul> <li>Person, kitchen and food hygiene.</li> <li>Definition of food spoilage and causes of contamination.</li> <li>Types of refuse.</li> <li>Methods of waste disposal.</li> </ul>	20.Food and nutrition security.	<ul> <li>Types of food security.</li> <li>Post-harvest losses</li> <li>Causes of food insecurity.</li> <li>Effects of food insecurity.</li> </ul>	
		12.Food preservation	<ul> <li>Food preservation.</li> <li>Methods and principles of preservation.</li> <li>Reasons</li> <li>Types of preserved foods.</li> </ul>	21.Tradit-ional cookery	<ul><li>Traditional cookery.</li><li>Prominent Zambian dishes.</li><li>Nutrients losses.</li></ul>	
		13.Convi-nience foods	<ul> <li>Convenience food.</li> <li>Types of convenience foods.</li> <li>Advantages and disadvantages of convenience foods.</li> <li>Safety measurements in use of convenience foods.</li> </ul>	22.Entrep-renureship as a career.	Business ventures found in the community.	
		14.Herbs and spices.	<ul> <li>Herbs and spices.</li> <li>Common herbs and spices.</li> <li>Differences</li> <li>Appropriate use of herbs and spices.</li> </ul>			

### **REFERENCE BOOKS**

Burgess, A and Glassier, P. (2005), Family Nutrition Guide, ISBN: 92-5-1052 33-6

Davies, J. (1997) Hammonds Cooking Explained, 4th Edition ISBN: 0 582 30573 X

Grislier, C. And Powers, H. (2011) Human Nutrition, 12<sup>th</sup> Edition, ISBN: 9780 7020 31182

Molewa, J. (2000) Modern and Traditional Recipes

Neal, M and James, J. (1983) Good Homemaking, ISBN: 0 216 91377 2

NFNC (2011) Nutrition guidelines for care and support for people living with HIV and AIDS

Neil, A and Hesmondhalgh, Z (1985), Revise Home Economics: A complete revision course for O level and CSE; ISBN: 0 850 97603 0

Trswell, S. A (2003) ABC of Nutrition, 4<sup>th</sup> Edition, ISBN: 0 7279 1664 5

Tull, A. (1996) Food and Nutrition. Oxford University Press ISBN: 978-0-19-832766-0

Whitney, E and Rolfs, S. R (2011) Understanding Nutrition, 12<sup>th</sup> Edition, ISBN: 0 978 0538 – 73476-9