

**GRZ
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**Republic of Zambia
Ministry of Education**

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FOOD AND NUTRITION SYLLABUS
SECONDARY EDUCATION ORDINARY LEVEL
FORM 1 – 4



**DEVELOPED BY THE CURRICULUM DEVELOPMENT CENTRE
LUSAKA
2024**



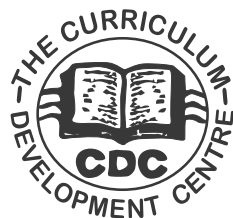
Republic of Zambia

MINISTRY OF EDUCATION

FOOD AND NUTRITION SYLLABUS

ORDINARY LEVEL SECONDARY EDUCATION

FORM 1-4



Developed by The Curriculum Development Centre

2024

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VISION

Quality, Lifelong education for all which is accessible inclusive and relevant to individual, national and global needs and value system.

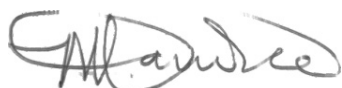
PREFACE

The **Food and Nutrition** Syllabus has been developed to provide a national curriculum for Zambia aligned with the **Competence-Based Curriculum** and 21st Century Skills. It aims to impart the knowledge, skills, values, and positive attitudes that are aimed at enabling learners to live and grow into productive and useful members of their communities and the Zambian society. This syllabus comprises a variety of themes that can be applied in the food industry.

The topics and content provided in this syllabus are aimed at facilitating the holistic development of learners' *creativity, initiative, problem-solving, physical, mental, and emotional* skills among others. The suggested activities are designed to offer learners hands-on experiences through the manipulation of real objects, interaction with nature, and learning through practice. Thus, the learners will develop knowledge, desirable lifelong skills, values, and positive attitudes needed for their personal and national development.

Cross-cutting themes and emerging issues such as Life Skills, Entrepreneurship, Climate Change, and Financial Education have been incorporated into the syllabus to ensure that children cultivate a mindset, skills, values, and positive attitudes that prepare them for sustainability and suitability in the labour market.

It is envisaged that the syllabus will make learning at this level more meaningful and enjoyable as it is highly activity oriented and allows for a smooth transition to Advanced Secondary School Level.



Joel Kamoko (Mr)

Permanent Secretary- Educational Services
MINISTRY OF EDUCATION

ACKNOWLEDGEMENT

The **Food and Nutrition** syllabus presented here is a result of broad-based consultation involving several stakeholders within and outside the education system.

Many individuals, institutions, and organizations were consulted to gather their views on the existing syllabus and to accord them an opportunity to make suggestions for the reformed syllabus. The Ministry of Education wishes to express heartfelt gratitude to all those who participated for their valuable contributions, which resulted in the development of this syllabus.

The Curriculum Development Centre worked closely with other sister departments and institutions to create this document. We sincerely thank the Directorate of Secondary, the Directorate of National Science Centre, the Examinations Council of Zambia, both public and private universities, various Colleges of Education, the Zambia Institute for Tourism and Hospitality Studies (ZITHS), schools, and other institutions too numerous to mention, for their steadfast support.



Charles Ndakala (Dr.)
Director, Curriculum Development Centre
MINISTRY OF EDUCATION

INTRODUCTION

The **Food and Nutrition** syllabus is a **Competence Based** syllabus that provides a strong background in the principles underlying the science of food technology and human nutrition. This includes the dietary needs of different groups of people, food preservation, and the practices of nutritional assessment. The subject is anticipated to serve as a tool for helping learners acquire the knowledge, abilities, and attitudes necessary to take care of their families and families and engage in entrepreneurial activities. Additionally, the subject will serve as a tool for eradicating malnutrition in society and enhancing family health and well-being.

This syllabus is designed to guide the teaching and learning of Food and Nutrition for O Level Secondary Education, Form 1 to 4 in the Republic of Zambia. The syllabus interprets the **Competences** indicated in the 2024 Zambia Education Curriculum Frame Work. It emphasizes a hands-on approach throughout the entire teaching and learning process, including fieldwork and projects. The syllabus provides information that will enable teachers to plan their teaching and learning processes effectively. It also provides teaching and learning opportunities that will help teachers apply different methods and strategies to promote learners' nutritional skills and develop 21st-century skills which include *critical thinking, creativity, collaboration, communication, and problem-solving*.

Food and Nutrition as a STEM Subject

Food can be used as a tool to teach math and science. This is imperative to stimulating interest in research careers and can empower learners to be effective and productive citizens. It can also be used as a teaching tool because learners encounter it daily.

Science: Integrating chemistry and biology, helps the learners understand the chemical composition of food and its impact on health. Food can be used to teach science material and basic research methods. This approach uses food as a tool to encourage learning in microbiology, chemistry, biology, nutrition, health science and math. Hands-on lessons are used that allow for interdisciplinary learning in STEM subjects.

Technology: By introducing apps and tools that help track and nutritional intake and health metrics. Learners can use these tools to monitor their own diets and make improvements. Once technology and health science is integrated, it promotes digital literacy and personal health management.

Engineering: Exploring the environmental impact of food production by researching on sustainable farming practices and proposing ways to reduce the carbon footprints of diets for individuals will encourage learners to think about sustainability and innovation thus, integrating engineering.

Mathematics: Nutrition education is used to help learners learn statistics, probability, proportions, measuring, converting units, problem solving, and collecting, organizing, describing, and displaying data. Using food to teach nutrition, science, and math will lead to strong associations between the different science subjects within the classes. The interaction between nutrition, science, and math learning will show that teachers can combine these subjects to some degree without losing time in teaching. Integrating nutrition and food education into math and science classes will have a meaningful impact on learning in the subject areas. It also shows the value of applying real-life situations to standard science and math classes. Using a hands-on approach can prepare learners in a better way to understand mathematics and science while simultaneously supporting a healthy lifestyle.

Teaching and Learning Methods

Teaching food and nutrition in a competence-based classroom emphasizes practical application, critical thinking, and real-world skills. The following methodologies can effectively facilitate this approach:

1. Active Learning

- This involves learners in the learning process by encouraging them to take an active role through discussions, problem-solving, and hands-on activities.
- Such as:
 - **Cooking Demonstrations:** Learners observe or participate in cooking classes where they apply nutritional principles by preparing meals.
 - **Interactive Case Studies:** Present scenarios such as dietary issues or meal planning challenges, where learners analyse the situation and propose solutions.
 - **Problem-Based Learning (PBL):** Give learners a real-world food or nutrition-related problem (e.g., creating a healthy school cafeteria menu) and ask them to develop solutions collaboratively.

2. Project-Based Learning (PBL)

- Learners work on extended projects that require them to apply a variety of skills and knowledge to produce a real-world outcome.
- Such as:
 - **Meal Planning Projects:** Assign learners the task of creating a balanced meal plan for a week, considering budget, nutrition, and food preferences.
 - **Community Outreach:** Learners design a nutrition education campaign or cooking workshop to share with others (e.g., in schools, at community centers).
 - **Sustainable Eating Projects:** Learners research and design initiatives on sustainable food practices, such as reducing food waste or promoting local food sources.

3. Collaborative Learning

- Learners work in small groups to achieve shared learning outcomes, fostering teamwork, communication, and the exchange of ideas.
- Such as:
 - **Group Meal Preparation:** Learners collaborate to prepare meals, practicing division of tasks, teamwork, and applying nutritional knowledge in real-time.
 - **Peer Teaching:** Learners take turns teaching specific topics or cooking skills to their peers, reinforcing their own learning while helping others.

- **Group Discussions and Debates:** Facilitate debates on controversial nutrition topics, such as the benefits and risks of certain diets or food trends.

4. Experiential Learning

- **This involves** learning through direct experience, where learners actively engage in real-world activities and reflect on their experiences to gain deeper insights.
- **Such as:**
 - **Field Trips:** Organize visits to farms, food production facilities, or local markets, allowing students to experience where food comes from and learn about food sourcing.
 - **Kitchen Labs:** Hold practical cooking sessions where learners prepare meals while practicing food safety, nutritional planning, and healthy cooking techniques.
 - **Food Journals:** Have learners maintain food diaries for a period, recording their meals and reflecting on nutritional content, portion sizes, and food choices.

6. Flipped Classroom

- Learners learn new content at home (through reading, videos, or online resources) and apply it during class time through practical activities or discussions.
- Such as:
 - **Online Tutorials and Videos:** Provide videos on topics like food safety, nutrition labels, or cooking techniques for learners to watch before class.
 - **In-Class Application:** In class, learners apply their knowledge by designing meals, analysing the nutritional value of dishes, or cooking in groups.
 - **Discussion and Problem-Solving:** During class time, facilitate discussions on nutrition and food science topics, encouraging learners to analyse and solve problems with their prior knowledge.

7. Simulation and Role-Playing

- Learners act out real-world scenarios to practice decision-making, communication, and problem-solving in food and nutrition-related contexts.
- **Such as:**
 - **Nutrition Counseling Role Play:** Learners role-play as nutritionists, advising a client on healthy eating, meal planning, or managing a specific dietary condition (e.g., diabetes).

- **Cooking Show Simulation:** Have learners create a cooking show where they demonstrate healthy meal preparation while explaining the nutritional benefits of each dish.
- **Food Safety Scenarios:** Set up simulations where learners respond to food safety emergencies (e.g., food contamination, cross-contamination), practicing their knowledge of hygiene and safety protocols.

8. Inquiry-Based Learning

- Learners explore food and nutrition topics through questioning, investigation, and research, guided by their curiosity and interest.
- Such as:
 - **Research Projects:** Learners research topics like the environmental impact of food choices or the link between diet and chronic diseases, then present their findings.
 - **Problem Solving:** Pose real-world nutrition challenges (e.g., “How can we improve the diet of children in our school?”) and have learners work through solutions by researching, experimenting, and presenting their ideas.
 - **Nutrition Experiments:** Have learners test hypotheses related to nutrition, such as comparing the nutritional content of different food preparations (e.g., raw vs. cooked vegetables).

9. Gamification

- Incorporating game-like elements (points, levels, rewards) to motivate learners, making learning fun and interactive.
- Such as:
 - **Nutritional Quiz Competitions:** Create quizzes or trivia games on food science, dietary guidelines, and nutrition facts, where learners compete individually or in teams.
 - **Cooking Challenges:** Set up timed cooking challenges where learners must prepare a meal using a set list of ingredients, meeting nutritional goals or themes.
 - **Interactive Simulations:** Use apps or online games where learners manage a virtual restaurant or a food truck, making decisions related to nutrition, budgeting, and customer preferences.

10. Differentiated Instruction

- **Definition:** Adapting the content, process, and products of learning to accommodate the diverse needs, interests, and abilities of learners.
- **Such as:**
 - **Flexible Grouping:** Assign learners to groups based on their strengths, needs, or interests to foster diverse learning experiences.
 - **Personalised Nutrition Plans:** Have learners create individual nutrition plans or goals based on their health status, lifestyle, or dietary preferences.

- **Varied Assessment Types:** Offer different types of assessments (e.g., written reports, cooking demonstrations, oral presentations) to suit different learning styles and strengths.

Time Allocation

Contact time in Food and Nutrition is as follows:

Eight (8) hours, **twelve (12)** periods a week. The duration for a single period is **40 minutes**

Assessment

Assessment for the four-year Ordinary Secondary Education programme shall include a variety of methods to evaluate learners' competences. Formative and summative assessments shall be conducted at the school and national levels. Regular assessments designed to evaluate learners' ability to apply their learning in real-life situations, focusing on practical competencies. Such as:

- **Practical Skills Evaluation:** Assess learners' cooking techniques, food presentation, and adherence to food safety standards during hands-on tasks.
- **Portfolio-Based Assessments:** Learners compile a portfolio of their work (e.g., meal plans, recipes, research on food topics) which is assessed based on their demonstrated skills and learning.
- **Self-Assessment and Peer Feedback:** Encourage learners to reflect on their learning and competencies by assessing their own work and providing feedback to their peers.

School-Based Assessment (SBA)

The purpose of SBA in Food and Nutrition is to measure learners' continuous achievement in the prescribed competencies outlined in the Zambia Curriculum Framework 2023. The Examinations Council of Zambia (ECZ) will provide an assessment guideline.

Trade Test Assessment

Additionally, trade test assessment in Food Production will be assessed and certified by TEVETA. This means that schools shall receive syllabuses from TEVETA.

FORM 1

COMPETENCES AND DESCRIPTORS

COMPETENCES	DESCRIPTORS
Analytical Thinking	<ul style="list-style-type: none"> Analyse gathered information on the introduction to food and Nutrition Practice the good food Habits Analyse the process of digestion, Absorption of Nutrients and Metabolism of food
Collaboration	<ul style="list-style-type: none"> Being able to participate fully in groups towards accomplishing given tasks such as: preparation of meals in different activities such as; in topics under food commodities.
Communication	<ul style="list-style-type: none"> Use appropriate cookery terms when performing practical tasks in food and serving activities, such as; in using the prescribed equipment in the food laboratory, cookery practicals and in the art of entertainment. Demonstrate understanding of nutritional disorders
Creativity and innovation	<ul style="list-style-type: none"> Generate new ideas, possibilities and actions from existing ones such as; Research into Local Dishes and Drinks and Improvement of Existing Recipes. Prepare using various methods of cooking
Critical Thinking	<ul style="list-style-type: none"> Assessing different types of kitchen. Solving complex problems and establishing opinions about what is right and wrong, such as; in the use if the kitchen utensils, Safety and Sanitation Demonstrate principles underlying heat transfer.
Environmental Sustainability	<ul style="list-style-type: none"> Demonstrate an understanding of environment protection and protection and pollution control measures, such in proper waste disposal. Show personal roles in environmental management Manage hazardous waste, emissions, and pollutants
Financial Literacy	<ul style="list-style-type: none"> Set financial goals. Demonstrate understanding on food purchasing Plan food budgets
Problem Solving	<ul style="list-style-type: none"> Identify problems and plan for investigations in order to find solutions, such as: in exploring ways of preserving food. Demonstrate safety precautions. Apply first aid on common accidents

TOPIC	SUB – TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
1.1 KITCHEN AND FOOD LABORATORY	1.1.1 Types of Kitchens	1.1.1.1 Design different types of kitchens	<ul style="list-style-type: none"> Comparing and contrasting types of kitchen :(<i>home, industrial and mobile kitchen...</i>) Demonstrating the functions of the kitchen: (<i>Meal preparation, storage, cleaning, work triangle...</i>) Designing different kitchen layouts and their characteristics: (<i>L-shaped, U-shaped...</i>) 	Different types of kitchen designed correctly
	1.1.2 Kitchen Utensils and Equipment	1.1.2.1 Use utensils and equipment in the kitchen	<ul style="list-style-type: none"> Classifying kitchen utensils and equipment: (Utensils - <i>Cutting, serving, baking ...;</i> equipment – <i>Cooking, storage, food preparation...</i>) Discussing the choice, care and use of utensils and equipment: (<i>Cooker, refrigerator, blender...</i>) Demonstrating the correct use of utensils and equipment safely and effectively: (<i>modern and traditional utensil and equipment</i>) 	Utensils and equipment in the kitchen used appropriately
	1.1.3 Improvisation of Kitchen Utensils	1.1.3.1 Make kitchen utensils	<ul style="list-style-type: none"> Discussing improvisation of kitchen utensils and equipment:(definition, benefits of improvisation...) Identifying situations that require improvisation of kitchen utensils: (<i>where kitchen utensils are not available, power outage, outdoor cooking or camping, ...</i>) Demonstrating how to improvise kitchen utensils and equipment using everyday household items: (<i>Grater, oven...</i>) 	Kitchen utensils made correctly
	1.1.4 Food Laboratory	1.1.4.1 Use food Laboratory tools and equipment	<ul style="list-style-type: none"> Identifying food laboratory tools and equipment: (<i>PH meters, thermometers, incubators...</i>) 	Food laboratory tools and equipment used appropriately.

TOPIC	SUB – TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<ul style="list-style-type: none"> Analysing roles of the food laboratory: (<i>Food testing, quality control, product development...</i>) 	
	1.1.5 Safety	1.1.5.1 Practice safety precautions	<ul style="list-style-type: none"> Discussing different types of safety: (<i>Environmental, Physical, Health...</i>) Explaining safety rules: (<i>Wearing protective clothing, proper tool handling...</i>) Analysing safety symbols: (<i>Warning signs, hazard symbols, fire safety symbols...</i>) Designing safety posters: (<i>Emergency exit, fire, no smoking ...</i>) 	Safety precautions practiced appropriately
	1.1.6 First Aid	1.1.6.1 Apply first aid on Common accidents	<ul style="list-style-type: none"> Analysing common accidents in the kitchen and food laboratory: (<i>falls, burns, scalds...</i>) Discussing contents of the first aid box and their uses: (<i>Pain killers, cotton wool, bandages...</i>) Role playing first aid on common accidents: (<i>Cuts, burns, fracture...</i>) 	First aid applied on common accidents appropriately
1.2 NUTRITION	1.2.1 Nutritional Terms	1.2.1.1 Apply nutritional terms	<ul style="list-style-type: none"> Discussing nutritional terms :(<i>food, calories, nutrients...</i>) Interpreting nutritional term: (<i>identify nutritional terms in food...</i>) Assess nutritional status: (<i>Anthropometric Measurements, Dietary Assessment, functional test....</i>) Visiting a health center to identify potential deficiencies or excesses: (<i>deficiencies -anemia, night blindness, Rickets excesses- heart disease, obesity, type 2 diabetes...</i>) 	Nutritional terms applied correctly

TOPIC	SUB – TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
	1.2.2 Food Groups	1.2.2.1 Develop health food choices.	<ul style="list-style-type: none"> • Categorizing food groups: (<i>fats, oils and sweets, milk and milk products, meat and meat products...</i>) • Illustrating the food pyramid diagram: (<i>Cereals and grains, milk and products...</i>) • Creating the food serving portions and choices for a healthy diet :(<i>healthy plate creation, Personalised food pyramid using local foods...</i>) 	Health food choices developed appropriately
	1.2.3 Food Nutrients	1.2.3.1 Prepare healthy nutrient dense meals	<ul style="list-style-type: none"> • Analysing nutrients: (<i>Macronutrients, micronutrients and essential elements in the diet- sources, functions, deficiency...</i>) • Assessing nutritional value of foods: (<i>analysing personal food habits comparison...</i>) • Producing materials to determine the nutritional value: (<i>Chromatography, Titration, Nutrition Facts Panel...</i>) • Experimenting food tests: (<i>fats, proteins, starch...</i>) 	Health nutrient dense meals prepared methodically
	1.2.4 Nutritional Disorders	1.2.4.1 Apply healthy nutritional eating habits	<ul style="list-style-type: none"> • Discussing nutritional disorders: (<i>over nutrition, under nutrition, psychological, eating habits...</i>) • Analysing the causes, signs, symptoms and risk factors of nutritional disorders • Role playing on eating habits:(<i>skipping meal, snacking...</i>) • Researching on nutritional disorders 	Healthy nutritional eating habits applied correctly
1.3 DIGESTION AND ABSORPTION OF NUTRIENTS	1.3.1 Digestion	1.3.1.1 Trace the path way of food through digestion	<ul style="list-style-type: none"> • Discussing the physical and chemical digestion of nutrients at different stages: (<i>mouth, stomach...</i>) • Illustrating the digestive system: (<i>build a model, draw.</i>) 	Path way of food through digestion traced accordingly

TOPIC	SUB – TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<ul style="list-style-type: none"> Researching on physiological processes involved in digestion system. 	
	1.3.2 Absorption	1.3.2.1 Make dietary and lifestyle choices to optimize nutrient absorption and overall health.	<ul style="list-style-type: none"> Explaining the absorption of nutrients: (simple diffusion, active transport, facilitated diffusion...) Analysing the structure and importance of the villi in absorption of nutrients Assessing factors that affect absorption (<i>PH, temperature...</i>) Drawing the villi and labeling the parts Practicing correct habits which will enhance absorption of nutrients: (<i>Mindful chewing, Regular Exercise, Pair Foods Wisely...</i>) 	Dietary and lifestyle choices to optimize nutrient absorption and overall health made correctly.
	1.3.3 Metabolism	1.3.3.1 Design a Personalised nutritional plan	<ul style="list-style-type: none"> Analysing the process of metabolism: (<i>Anabolism, catabolism...</i>) Examining factors that affect the use of energy in the body :(<i>Age, sex, size of the body...</i>) Designing a personalized nutritional plan based on an individual metabolic need:(<i>age, genetics, sex...</i>) 	Personalised nutritional plan designed correctly
1.4 COOKING FOOD	1.4.1 Cookery Terms	1.4.1.1 Apply cookery Terms in meal preparation	<ul style="list-style-type: none"> Interpreting cookery terms: (<i>Au gratin, croutons, bake blind...</i>) Demonstrating the use of cookery terms in meal preparations. Preparing dishes using specific cooking terms: (potato au gratin, Sauté, Stir-fry ...) 	Cookery terms in meal preparation applied correctly
	1.4.2 Fuel	1.4.2.1 Make use of different types of fuel	<ul style="list-style-type: none"> Discussing different types of fuel: (<i>solid, liquid, solar ...</i>) Comparing and contrasting different types of fuel. Researching on the other sources of fuel :(<i>Biogas, solar...</i>). 	Different types of fuel used appropriately

TOPIC	SUB – TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
	1.4.3 Heat Transfer	1.4.3.1 Apply principles underlying heat transfer	<ul style="list-style-type: none"> Analysing methods of heat transfer: (Conduction, <i>convection</i>, <i>radiation</i>...) Associating methods of heat transfer to methods of cooking: (<i>Radiation - Grilling: convention-boiling, conduction - frying ...</i>) 	Principles underlying heat transfer applied methodically.
	1.4.4 Methods of Cooking	1.4.4.1 Prepare dishes using various methods of cooking	<ul style="list-style-type: none"> Explaining reasons for cooking food Discussing methods of cooking food: (<i>Moist, dry, combination...</i>) Preparing and cooking dishes using different methods of cooking: (Festival dishes –<i>Matebeto, chilanga mulilo, weddings...</i>). 	Dishes prepared using various methods of cooking appropriately

FORM 2

COMPETENCES AND DESCRIPTORS

COMPETENCES	DESCRIPTORS
Analytical Thinking	<ul style="list-style-type: none"> • Plan meal patterns and courses of meals • Prepare meals for special groups
Collaboration	<ul style="list-style-type: none"> • Develop different recipes • Package foods • Prepare meals
Communication	<ul style="list-style-type: none"> • Apply table etiquettes
Creativity and innovation	<ul style="list-style-type: none"> • Formulate a time plan. • Set a table for different occasions • Store foods
Critical Thinking	<ul style="list-style-type: none"> • Label food packages • Use food additives • Make condiments
Entrepreneurship	<ul style="list-style-type: none"> • Demonstrating understanding of how to create a basic business plan, do market research, financial projections and marketing strategies in all the food and nutrition products, such as; baked products.
Financial Literacy	<ul style="list-style-type: none"> • Plan food budgets

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
2.1 PRACTICAL PLANNING	2.1.1 Time Planning	2.1.1.1 Formulate a time plan	<ul style="list-style-type: none"> Designing a time plan: (<i>Dishes chosen, Order of work, Shopping list ...</i>) 	Time plan formulated correctly
	2.1.2 Food Budgeting	2.1.2.1 Plan food budgets	<ul style="list-style-type: none"> Explaining reasons for budgeting: (Prevent over spending, Save money...) Outlining factors influencing Food budgeting: (<i>overall income, Food needs of those being catered for...</i>) Planning food budgets: (<i>Long term -Annual, capital, strategic..., Short term- monthly, weekly, daily...</i>) 	Food budgets planned appropriately
	2.1.3 Food Purchasing	2.1.3.1 Apply different modes of food purchasing	<ul style="list-style-type: none"> Analysing the purchasing of foods: (<i>food choices, shopping habits, budgeting ...</i>) Explaining guidelines for purchasing food: (<i>Visiting different shopping outlets; Consider bulk purchasing...</i>) Comparing methods of purchasing food: (<i>online, open market, instore, mobile purchasing, hire purchase...</i>) Making up a shopping plan: (<i>Make a list, Research and compare prices ...</i>) Practicing food purchasing using different modes:(<i>online, open market, instore, mobile purchasing, hire purchase...</i>) 	Different modes of food purchasing applied correctly
2.2 RECIPES	2.2.1 Formulation of Recipes	2.2.1.1 Develop different recipes	<ul style="list-style-type: none"> Outlining key considerations in recipe formulation: (<i>Flavour balance, Texture contrast...</i>) Developing different recipes: (<i>Ingredient selection, Measurement Techniques...</i>) Interpreting recipe instructions: (<i>Main sections of the recipe, arranging ingredients of the recipe in order of use...</i>) Experimenting on the formulated recipes: (<i>Identifying Variables, Conducting</i> 	Different recipes developed skillfully

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<p><i>Experiments, Analyzing Results, Iterative Process...</i></p> <ul style="list-style-type: none"> Documenting the formulated recipes: (<i>Recipe name, Ingredients, Procedure...</i>) 	
2.3 MEAL PLANNING	2.3.1 Meal Patterns and Courses	2.3.1.1 Plan meal Patterns and courses	<ul style="list-style-type: none"> Explaining points to consider when planning meals: (<i>state of health, sex, Age ...</i>) Discussing meal course: (<i>one, two, three ...</i>) Developing different types of Meal Patterns: (<i>Three-Meal Pattern, Five- to Six-Meal Pattern...</i>). Preparing meals that fits a specific meal pattern (<i>high tea, breakfast, Brunch...</i>). 	Meal patterns and courses planned appropriately
	2.3.2 Meals for Special Groups	2.3.2.1 Prepare meals for special groups	<ul style="list-style-type: none"> Discussing meals for special groups and special health conditions. Preparing meals for special groups: (<i>Pregnant women, Lactating...</i>). Preparing meals for special health conditions: (<i>Obesity, Diabetes HIV and AIDS ...</i>) 	Meals for special groups prepared correctly
	2.3.3 Beverages	2.3.2.2 Prepare different types of beverages	<ul style="list-style-type: none"> Discussing the types and importance of beverages: (Type- <i>stimulating, Nourishing, refreshing, Importance- Contribute water to the diet, some are stimulants, medicinal...</i>) Demonstrating methods used in the preparation of beverages: (<i>Infusion Filtration, blended...</i>) Preparing different types of beverages: (<i>Stimulating, Nourishing, Refreshing Medicinal...</i>) 	Different types of beverages prepared skillfully
2.4 TABLE SETTING AND TABLE ETIQUETTES	2.4.1 Table Setting	2.4.1.1 Practice table Settings for different occasions.	<ul style="list-style-type: none"> Comparing types of table setting: (Formal- <i>table decorations, cloth or formal paper napkins, multiple courses, more dinner and glass ware... informal-</i> <i>place mats, no place cards, paper napkins, single course, less dinner and glass ware, traditional- reed mat, enamel, wooden plates ...</i>) 	Table Settings for different occasions Practiced methodically

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<ul style="list-style-type: none"> Setting a table: (<i>Flatware Glass and dinner ware, Centre piece, Table coverings/linen...</i>) 	
	2.4.2 Table Etiquettes	2.4.2.1 Apply Table etiquettes	<ul style="list-style-type: none"> Discussing table etiquettes. Applying Basic Table Etiquettes Guidelines: (<i>Set utensils and glasses correctly, do not talk with your mouth full...</i>) Role playing table Etiquettes: (<i>passing dishes, accidents, serving oneself...</i>) 	Table etiquettes applied correctly
2.5 PACKAGING	2.5.1 Packaging Materials	2.5.1.1 Package foods	<ul style="list-style-type: none"> Discussing reasons for packaging food: (<i>To prevent dehydration and oxidation, to prevent contamination...</i>) Analysing qualities of packaging materials: (<i>Vapour-proof, greaseproof, water proof...</i>) Selecting suitable packaging materials for various foods: (<i>Sheet wrapping material, Bags Rigid containers...</i>) Packaging various foods: (practical) 	Foods packed correctly
	2.5.2. Food Labeling	2.5.2.1 Label food packages	<ul style="list-style-type: none"> Discussing information found on food labels: (<i>The ingredients, Nutritional content...</i>) Explaining the Importance of food labels: (<i>Inform consumers about ingredients, allergens, and nutritional content. Comply with regulations...</i>) Designing food labels: (<i>using auto CAD-3D and 2D designs...</i>) Labelling food packages (<i>preserved dried fruits, roasted nuts ...</i>) 	Food packages labeled suitably
2.6 FOOD ADDITIVES	2.6.1 Food Additives	2.6.1.1 Use food Additives in meal preparation	<ul style="list-style-type: none"> Discussing food additives Analysing types of food additives: (<i>Preservatives, Antioxidants, Emulsifiers ...</i>) Explaining the functions of food additives: (<i>Enhance nutrient content, Preserve food...</i>) Making use of food additives: (<i>Baked foods, beverages, snacks...</i>) 	Food additives used in meal preparation appropriately

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
	2.6.2 Condiments	2.6.2.1 Make condiments	<ul style="list-style-type: none"> Demonstrating an understanding of condiments: (<i>types, purpose, nutritive value, cultural significance...</i>) Making different types of condiments: (<i>Sauces, Relishes, Pickles, Jam, syrups Dressings...</i>) 	Make Condiments appropriately
		2.6.2.2 Use condiments in meal preparation	<ul style="list-style-type: none"> Using different types of condiments: (<i>Relishes, Pickled items, Dressings...</i>) 	Condiments used in meal preparation appropriately
	2.6.3 Seasonings	2.6.3.1 Use Seasonings in meal preparation	<ul style="list-style-type: none"> Explaining seasonings: (Definition, types, use...) Comparing and contrasting Herbs and spices; (Similarities- <i>both got from plants, can be used fresh or dried, used to add flavor, aroma and colour to food...</i>, Differences- <i>spices strong flavors. than herbs, herbs are derived from leaves, stems, or flowers, while spices come from bark roots seeds...</i>) Prepare dishes using different types of seasonings: (<i>Salt and pepper, Blended seasonings, Herbs and spices...</i>) 	Seasonings used in meal preparation skillfully
2.7 STOCKS, SOUPS, SAUCES AND GRAVY	2.7.1 Stock	2.7.1.1 Prepare stock	<ul style="list-style-type: none"> Discussing stocks:(definition, types, rules...) Analysing the uses of stock in meal preparation: (<i>base for soups, sauces, enhancing flavour...</i>) Preparing different types of stocks: (<i>chicken, fish, Vegetable stock...</i>) Cooking dishes using stock: (<i>curries, casseroles, risottos...</i>) Making homemade stock cubes (project) 	Stock prepared proficiently
	2.7.2 Soups	2.7.2.1 Prepare and serve soups	<ul style="list-style-type: none"> Explaining soups and their functions: (<i>appetizer, flavour enhancer, texture contrast...</i>) Exploring utensils for serving soup: (<i>cups, soup bowl, under plate ...</i>) Preparing different types of soups: (<i>Thin, thick, Thickened...</i>) 	Soups prepared and served skillfully

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<ul style="list-style-type: none"> Serving soups with accompaniments: (<i>crackers, salads, roasted vegetables...</i>) 	
	2.7.3 Sauces	2.7.3.1 Prepare and serve Sauces	<ul style="list-style-type: none"> Discussing sauces:(<i>definition, Classes - Roux-Based Sauces, Emulsion-Based Sauces, Reduction-Based...</i>) Analysing the uses of sauces: (<i>moisturising food, flavour, adding colour....</i>) Exploring utensils for serving sauces: (<i>sauce boat, sauce bowl, ladle ...</i>) Preparing different types of sauces: (<i>BBQ, curry, sweet and sour sauce, hot, dips...</i>) Serving sauces with suitable accompaniments: (<i>grilled meat with BBQ sauce, pasta with tomato sauce...</i>) 	Sauces prepared and served correctly
	2.7.4 Gravy	2.7.4.1 Prepare Gravy	<ul style="list-style-type: none"> Discussing gravy: (definition, functions of Gravy-Moisture addition, Visual Appeal, Texture modification...) Classifying different types of gravy: (<i>Brown gravy, White gravy, Herb gravy, Red wine gravy, Vegetable gravy...</i>) Exploring utensils for serving gravy: (<i>gravy boat, sauce boat, pouring jug ...</i>) Preparing gravy and suitable accompaniments: (<i>roasted meat, mashed potatoes, vegetables...</i>) 	Gravy prepared appropriately
2.8 CONVENIENCE FOODS	2.8.1 Convenience Foods	2.8.1.1 Prepare meals using convenience foods	<ul style="list-style-type: none"> Discussing convenience foods: (<i>definition Classes-Ready to use foods, Ready to serve, Frozen, Canned. Advantages and disadvantages ...</i>) Preparing meals using Convenience foods: (<i>one pot pasta, tacos...</i>) Making convenience foods using locally available foods: (project) 	Meals using convenience foods prepared correctly

TOPIC	SUB -TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
2.9 FOOD STORAGE	2.9.1 Food Storage	2.9.1.1 Store different foods	<ul style="list-style-type: none"> • Explaining the importance of food storage: (<i>To cut down on food costs, to prevent spoilage...</i>) • Classifying types of foods to be Stored: (<i>perishable and non-Perishable foods...</i>) • Demonstrating storage of foods in a home and industry :(<i>refrigerator, pantry ...</i>) • Exploring food industries (<i>food processing industries, institutions, hospitality industries...</i>) 	Different foods stored correctly
	2.9.2 Storage Equipment	2.9.1.1 Store food using different Equipment	<ul style="list-style-type: none"> • Classifying food storage equipment: (<i>Refrigeration, humidity controlled, air-tight, temperature controlled, dry storage...</i>) • Storing food using different Equipment: (Traditional- <i>Clay pots, Food bans, Reed baskets, Leaves, Food Ladders</i> Modern- <i>Refrigerators, Deep Freezers, Shelves, Food racks, Meat safe...</i>) • Making storage equipment: (Project) 	Food stored in different Equipment appropriately

FORM 3

COMPETENCES AND DESCRIPTORS

COMPETENCES	DESCRIPTORS
Analytical Thinking	<ul style="list-style-type: none"> • Make use of different raising agents in flour mixture
Collaboration	<ul style="list-style-type: none"> • Make use of different food products under food commodities.
Communication	<ul style="list-style-type: none"> • Use appropriate cookery terms when performing practical tasks in food and serving activities, such as; in using the prescribed equipment in the food laboratory, cookery practicals and in the art of entertainment.
Creativity and innovation	<ul style="list-style-type: none"> • Preserve foods using traditional methods • Make and decorate cakes and pastries
Critical Thinking	<ul style="list-style-type: none"> • Demonstrate the use of different ingredients in flour mixtures
Digital Literacy	<ul style="list-style-type: none"> • Use modern methods of preserving food
Entrepreneurship	<ul style="list-style-type: none"> • Demonstrating understanding of how to create a basic business plan, do market research, financial projections and marketing strategies in all the food and nutrition products, such as; baked products.
Environmental Sustainability	<ul style="list-style-type: none"> • Apply personal hygiene practices • Demonstrate food hygiene practices • Practice kitchen hygiene • Demonstrate understanding of food spoilage

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
3.1 FOOD CONTAMINATION	3.1.1 Personal Hygiene	3.1.1.1 Apply personal Hygiene practices	<ul style="list-style-type: none"> • Discussing personal hygiene practices: (<i>body hygiene, oral hygiene, health and communicable diseases...</i>). • Illustrating hand washing and sanitising techniques: (<i>Wet your hands, scrub your hands, Rinse your hands...</i>) • Developing and implementing a personal hygiene plan including habits and routines: (<i>schools, kitchen, hotel...</i>) 	Personal hygiene practices applied appropriately
	3.1.2.1 Food Hygiene	3.1.2.1 Practice food hygiene	<ul style="list-style-type: none"> • Analysing safe food handling practices: (<i>food storage, food handling, food safety...</i>) • Demonstrating ways of preventing food contamination: (<i>food preparation, cooking, serving, leftover foods...</i>) • Designing and developing a food hygiene training program for food handler. 	Food hygiene practiced appropriately
	3.1.3 Kitchen Hygiene	3.1.3.1 Practice kitchen hygiene	<ul style="list-style-type: none"> • Discussing kitchen hygiene: (<i>Food Handling Practices, Kitchen Cleaning and Sanitizing...</i>) • Demonstrating waste disposal techniques: (<i>land filling, recycling, composting...</i>) • Developing a pest management plan: (<i>Monitor pest activity, identify any changes in pest population and identify changes in the environment that may impact pest activities...</i>) • Making home - made pesticide: (project) 	Kitchen hygiene practiced correctly
3.2 FOOD SPOILAGE AND POISONING	3.2.1 Food	3.2.1.1 Apply techniques to reduce food spoilage	<ul style="list-style-type: none"> • Explaining food spoilage: (<i>types, causes, foods that spoil easily...</i>) • Analysing factors that lead to food spoilage: (<i>enzymatic reactions, microbial growth, and chemical reactions</i>). • Elaborating the conditions that favor food spoilage: (<i>temperature, humidity, light...</i>). 	Techniques to reduce food spoilage applied correctly

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
			<ul style="list-style-type: none"> Experimenting on food spoilage: (<i>carrots, milk, bread...</i>). Applying techniques to reduce food spoilage: (<i>storage, food preparation, food preservation techniques...</i>) 	
	3.2.2 Food Poisoning	3.2.2.1 Apply techniques to prevent food poisoning	<ul style="list-style-type: none"> Categorising food poisoning: (<i>Biological, physical chemical...</i>) Discussing symptoms of food poisoning (<i>nausea, vomiting...</i>) Applying techniques to prevent food Poisoning:(<i>Kitchen Cleaning and Sanitation, Food Handling Practices...</i>) Conducting a case study on food poisoning 	Techniques to prevent food poisoning applied correctly
3.3 FOOD PRESERVATION	3.3.1 Traditional Methods	3.3.1.1 Preserve foods using traditional methods.	<ul style="list-style-type: none"> Discussing food preservation: (<i>aims, reasons,</i>). Investigating the techniques involved in traditional methods of preservation: (<i>drying, fermentation, curing...</i>). Preserving foods using traditional methods: (<i>sun drying, smoking, ash or earth storage, potting...</i>) 	Foods preserved using traditional methods methodically
	3.3.2 Modern Methods	3.3.2.1 Preserve foods using modern methods	<ul style="list-style-type: none"> Demonstrating the understanding of advanced modern food preservation technologies: (<i>modified atmosphere packaging (MAP), refrigeration, ultra-high temperature...</i>) Discussing alternative methods of food preservation due to emerging issues: (<i>natural disaster and power outages ...</i>). Preparing different types of preserves: (<i>jam, pickles, pepper...</i>) Inventing and designing a high technique food preservation system: (<i>vacuum packaging, UV light treatment to kill bacteria...</i>) 	Modern methods of preserving food used appropriately
3.4 FOOD COMMODITIES	3.4.1 Animals and Animal Products	3.4.1.1 Make use of animals and animal	<ul style="list-style-type: none"> Discussing the different animals and animal products: (<i>structure, composition, nutritive value, choice ...</i>). 	Animals and animal products in meal preparation used properly

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
		products in meal preparation	<ul style="list-style-type: none"> • Testing on the effects of heat on animals and animal products: (<i>coagulation, shrinkage, denaturing...</i>). • Preparing different dishes using animals and animal products 	
	3.4.2 Fruits	3.4.2.1 Use fruits in meal preparation	<ul style="list-style-type: none"> • Discussing fruits: (<i>classification, nutritive value, choice...</i>). • Using scientific principles underlying preparing, cooking and serving of fruits: (<i>oxidation, ripening ...</i>) • Preparing fruit dishes and beverages. • Researching on indigenous fruits to make interesting beverages and dishes. 	Fruits used in meal preparation methodically
	3.4.3 Vegetables	3.4.3.1 Use vegetables in meal preparation	<ul style="list-style-type: none"> • Discussing vegetables: (<i>classification, nutritive value, choice...</i>). • Using scientific principles underlying preparing, cooking and serving of vegetables: (<i>oxidation, ripening ...</i>) • Preparing vegetable dishes and beverages. • Researching on indigenous vegetables to make interesting dishes: (<i>salads, juices, smoothies...</i>) 	Vegetables used in meal preparation methodically
	3.4.4 Legumes and Oily Seeds	3.4.4.1 Use legumes and oily seeds in meal preparation	<ul style="list-style-type: none"> • Discussing legumes and oily seeds: (<i>sources, nutritive value, use...</i>) • Preparing different dishes using legumes and oily seeds. • Creating new interesting legumes and seeds dishes: (<i>pumpkin seed stew, cowpea fritters, porridge, muesli...</i>) 	Legumes and oily seeds used in meal preparation skillfully
	3.4.5 Alternative Proteins	3.4.5.1 Make alternative protein foods	<ul style="list-style-type: none"> • Discussing alternative protein foods: (<i>sources, nutritive value, advantages, disadvantages ...</i>) • Producing new interesting alternative proteins: (<i>milk from almonds, vegan cheese, alternative based juices...</i>)(projects) 	Alternative protein foods made correctly

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
	3.4.6 Grains and Cereals	3.4.6.1 Use grains and cereals	<ul style="list-style-type: none"> Analysing of grains and cereals: (<i>classification, sources, nutritive value...</i>) Illustrating the structure of a grain. Demonstrating the stages of flour extraction: (<i>cleaning, grinding, sifting, purification and packaging.</i>) Experimenting on the effects of heat on cereals and grains: (<i>gelatinization, caramelization, dextrinization, syneresis...</i>). Cooking different dishes using cereals and grains: (<i>use bran in soups, sauces...</i>) Producing new interesting cereal and grain dishes and products: (<i>rice wine, muesli, porridge...</i>) 	Grains and cereals used appropriately
3.5 FLOUR MIXTURES	3.5.1 Ingredients in Flour Mixtures	3.5.1.1 Apply the culinary science behind using different ingredients flour mixtures	<ul style="list-style-type: none"> Explaining the uses and role of different ingredients in flour mixtures: (<i>flour, sugar, fat, raising agents, liquid...</i>). Analysing and adjusting ingredient ratios to achieve desired outcomes in flour mixtures: (<i>ingredient ratios</i>). Experimenting on ingredient substitution challenge: (<i>substituting sugar for honey, making an evaluation...</i>). 	The culinary science behind using different ingredients in flour mixtures applied correctly
	3.5.2 Raising agents	3.5.2.1 Apply culinary science behind using different raising agents in flour mixtures	<ul style="list-style-type: none"> Discussing raising agents: (<i>classes, types, uses, functions...</i>) Experimenting the chemical reactions involved in raising agent activity: (<i>acid- base reactions, fermentation...</i>) Testing on raising agent substitutions: (<i>test substituting one raising agent for another and evaluate the results...</i>) 	Culinary science behind using different raising agents in flour mixtures applied methodically
	3.5.3 Batters	3.5.3.1 Use batteries in cookery	<ul style="list-style-type: none"> Analysing batters: (<i>types, consistencies, uses, rules and faults...</i>). Composing different dishes from batter mixtures: (<i>pancakes, fritters, toad in a hole...</i>) 	Batters used in cookery appropriately

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	EXPECTED STANDARDS
	3.5.4 Cakes and Biscuits	3.5.4.1 Make cakes and biscuits	<ul style="list-style-type: none"> Discussing cakes and biscuits: (<i>classifications, methods, faults ...</i>). Adjusting ingredient proportions to achieve desired outcomes in cakes and biscuits making. Designing and construction of cakes and biscuits: (<i>cake structure experiment – multi – tiered, spherical. Cake engineering challenge; hanging cake, cake with moving parts...</i>). 	Cakes and biscuits made skillfully
	3.5.5 Cake decorations	3.5.5.1 Decorate cakes	<ul style="list-style-type: none"> Decorating cakes: (<i>tools- piping bags, nozzles, smoothers., cake coverings – fondant, ganache, butter cream, Fino whip...</i>) Demonstrating creativity in cake decorating: (<i>showcasing artistic expressions, themed cake design; style...</i>) 	Cakes decorated skillfully
	3.5.6 Pastries	3.5.6.1 Make pastries	<ul style="list-style-type: none"> Discussing pastries: (<i>types, uses, rules to follow, faults and remedies...</i>) Making different dishes from pastries: (<i>pies, flans,</i>) 	Pastries made methodically
	3.5.7 Wraps	3.5.7.1 Make wraps	<ul style="list-style-type: none"> Discussing wraps: (<i>types, uses, accompaniments...</i>) Making wraps: (<i>tortilla, chapatti, pitta bread, naan...</i>). Showing styles of serving wraps: (<i>classic, folded, rolled ...</i>) 	Wraps made skillfully
	3.5.8 Yeast mixtures	3.5.8.1. Prepare yeast mixtures	<ul style="list-style-type: none"> Discussing yeast mixtures: (<i>types, uses, storage...</i>). Demonstrating the basic method in bread making: (<i>the steps of making bread</i>). Creating new yeast- based dishes: (<i>mealie bread, sweet potato yeast buns, ground nut yeast bread...</i>). Researching on the effectiveness of yeast: (<i>PH, temperature, sugar...</i>). 	Yeast mixtures prepared accordingly

FORM 4

COMPETENCES AND DESCRIPTORS

COMPETENCES	DESCRIPTORS
Analytical Thinking	<ul style="list-style-type: none"> • Demonstrate understanding of research
Collaboration	<ul style="list-style-type: none"> • Demonstrate the art of entertainment during food service • Serve festival dishes
Communication	<ul style="list-style-type: none"> • Explain food presentation
Creativity and innovation	<ul style="list-style-type: none"> • Generate new ideas, possibilities and actions from existing ones such as; Research into Local Dishes and Drinks and Improvement of Existing Recipes. • Designing menu plan
Critical Thinking	<ul style="list-style-type: none"> • Explore areas of research in food and nutrition • Design a research format in food and nutrition
Entrepreneurship	<ul style="list-style-type: none"> • Demonstrating understanding of how to create a basic business plan, do market research, financial projections and marketing strategies in all the food and nutrition products, such as; baked products • Demonstrate understanding of consumer education. • Establish business ventures in food and nutrition

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
4.1 RESEARCH IN FOOD AND NUTRITION	4.1.1 Understanding Research	4.1.1.1 Apply research techniques in Food and Nutrition	<ul style="list-style-type: none"> • Discussing research :(<i>definitions, importance- advancement of information, informed decision-making, problem-solving...</i>) • Analysing the different types of research: (<i>applied, action, basic research...</i>) • Applying research techniques in food and Nutrition: (experimental and interventional research methods, food composition analysis...) 	Research techniques in food and nutrition correctly
	4.1.2 Areas of Research	4.1.2.1 Research in various areas of food and nutrition	<ul style="list-style-type: none"> • Discussing areas of research in food and nutrition: (<i>dietetic, public health and nutrition, food security and sustainability, food chemistry...</i>) • Examining research method according to area of research:(<i>data collection techniques, Sampling, research design...</i>) 	Various areas in food and nutrition researched appropriately
	4.1.3 Research Format	4.1.3.1 Design a research format in food and nutrition	<ul style="list-style-type: none"> • Discussing a research procedure: (<i>identify a problem, proposal, research and report</i>) • Designing a research report format: (<i>Title, Introduction, Literature review...</i>) 	Research format in food and nutrition designed correctly
	4.1.4 Carry Out a Research	4.1.4.1 Conduct research in food and nutrition	<ul style="list-style-type: none"> • Discussing types of research tools: (<i>questionnaire, interviews, survey...</i>) • Conducting research in food and nutrition: (<i>dietetic, public health and nutrition, food security and sustainability, food chemistry...</i>) 	Research in food and nutrition conducted correctly

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
4.2 FOOD SERVICE	4.2.1 Food Presentation	4.2.1.1 Apply principles of food presentation	<ul style="list-style-type: none"> • Discussing food presentation: (<i>classes tools, styles ...</i>) • Determining fundamental rules in food presentation :(<i>balance, harmony, proportion...</i>) • Illustrating basic elements of food presentation: (<i>Colour, texture, variety...</i>) • Presenting food: (<i>plating, portion control, garnishing and decorating...</i>) 	Principles of food presentation applied skillfully
	4.2.2 Meal Service	4.2.2.1 Apply different meal service techniques	<ul style="list-style-type: none"> • Examining meal service: (<i>types, menu planning, food presentation, meal service styles ...</i>) • Designing menu plan: (<i>a la carte, table d'hote, cycle...</i>) • Demonstrating customer care in meal service: (<i>taking orders, communication...</i>) • Presenting different meal service styles (<i>plated, buffet, tray...</i>) 	Different meal service techniques applied accurately
	4.2.3 The Art of Entertaining	4.2.3.1 Create the art of entertainment during food service	<ul style="list-style-type: none"> • Analysing ways of entertaining guests during food service :(<i>live music, visual entertainment, themed events...</i>) • Explaining the type of entertainment conducted during festivals and celebrations: (<i>Holiday classics, Seasonal foods, Performing arts ...</i>) • Demonstrating different ways of entertaining guest during meals: (<i>Engaging Conversation, Live Entertainment...</i>) 	The art of entertainment during food service create appropriately

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
	4.2.4 Festival Dishes	4.2.4.1 Prepare festival dishes	<ul style="list-style-type: none"> Preparing different festival dishes :(<i>traditional festivals, wedding, Christmas, anniversary...</i>) 	Festival dishes prepared methodically
4.3 CONSUMER EDUCATION	4.3.1 Consumer Education	4.3.1.1 Practice Consumer Education rights	<ul style="list-style-type: none"> Explaining consumer education: (<i>defining, aims, purpose. Consumer rights, organisations...</i>) Showing ways of financial literacy: (<i>Saving and investing, Debt management, Credit scores...</i>) Showing the merits of consumer education: (<i>Protection against fraud, Consumer rights awareness, Reduced financial stress ...</i>) Describing the roles of advertisement in consumer education: (<i>benefits to a producer-increased sale, market expansion ..., benefits to a consumer-persuading, informing, reminding...</i>) Designing adverts in food and nutrition. 	Consumer education rights practiced correctly
4.4 ENTREPRENEURSHIP	4.4.1 Business Ventures in Food and Nutrition	4.4.1.1 Establish business ventures in food and nutrition	<ul style="list-style-type: none"> Explaining entrepreneurship: (<i>defining, qualities of a good entrepreneur, skills in financial, leadership...</i>) Inviting a business motivation speaker Establishing businesses in food and nutrition: (<i>corporate wellness programs, meal kits, health food restaurant or café, Meal preparation services</i>) 	Business ventures in food and nutrition established correctly

TOPIC	SUB-TOPIC	SPECIFIC COMPETENCE	LEARNING ACTIVITIES	EXPECTED STANDARDS
	4.4.2 Business Plan	4.4.2.1 Make a business plan in food and nutrition	<ul style="list-style-type: none"> Constructing a business plan in food and nutrition: (<i>Stages- Executive summary, Company description, Organization and management, Products or services ...</i>) 	Business plan in food and nutrition made correctly

SCOPE AND SEQUENCE: FORM ONE TO FORM FOUR

Form 1		Form 2		Form 3		Form 4	
Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content
-Types of kitchen	- Design different types of kitchen	-Time Planning	- Formulate a time plan	-Personal Hygiene	- Apply personal hygiene practices	-Understanding Research	- Apply research techniques in food and Nutrition
-Kitchen utensils and equipment	- Use utensils and equipment in the kitchen	-Food Budgeting	- Plan food budgets	-Food Hygiene	- Practice food hygiene	-Areas of Research	-Research in various areas of food and nutrition
-Improvisation of kitchen utensils	- Make kitchen utensils	-Food purchasing	- Apply different modes of food purchasing	-Kitchen Hygiene	- Practice kitchen hygiene	-Research Format	- Design a research format in food and nutrition
-Food laboratory	- Use food Laboratory tools and equipment	-Formulation of recipes	- Develop different recipes	-Food	- Apply techniques to reduce food spoilage	-Carry Out a Research	- Conduct research in food and nutrition
-Safety	- Practice safety precautions	-Meal Patterns and courses	- Plan meal Patterns and courses	-Food Poisoning	-Apply techniques to prevent food poisoning	-Food Presentation	- Apply principles of food presentation
-First Aid	-Apply first aid on common accidents	-Meal for special groups	-Prepare meals for special groups	-Traditional Methods	- Preserve foods using traditional methods.	-Meal Service	- Apply different meal service techniques
-Nutritional terms	-Apply nutritional terms	-Beverages	- Prepare different types of beverages	-Modern Methods	- Preserve foods using modern methods	-The Art of Entertaining	- Create the art of entertainment during food service

Form 1		Form 2		Form 3		Form 4	
Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content
-Food groups	- Develop health food choices.	-Table setting	- Practice table Settings for different occasions.	-Animals and animal products	- Make use of animals and animal products in meal preparation	-Festival Dishes	- Prepare festival dishes
-Food nutrients	- Prepare healthy nutrient dense meals	-Table etiquettes	- Apply Table etiquettes	-Fruits	- Use fruits in Meal preparation	-Consumer Education	-Practice Consumer Education rights
-Nutritional disorders	- Apply healthy nutritional eating habits	-Packaging materials	- Package foods	-Vegetables	- Use vegetables in meal preparation	-Business ventures in Food and Nutrition	- Establish business ventures in food and nutrition
-Digestion	- Trace the path way of food through digestion	-Food Labeling	- Label food packages	-Legumes and oily seeds	- Use legumes and oily seeds in meal preparation	-Business Plan	- Make a business plan in food and nutrition
-Absorption	-Make dietary and lifestyle choices to optimize nutrient absorption and overall health.	-Food Additives	-Use food Additives in meal preparation	-Alternative proteins	- Make alternative protein foods		
-Metabolism	-Design a Personalised nutritional plan	-Condiments	- Make condiments - Use condiments in meal preparation	-Grains and cereals	-Use grains and cereals		
-Cookery terms	-Apply cookery -Terms in meal preparation	-Seasonings	- Use Seasonings in meal preparation	-Ingredients in flour mixtures	- Apply the culinary science behind using different ingredients in flour mixtures		
-Fuel	- Make use of different types of fuel	-Stock	- Prepare stock	-Raising agents	- Apply culinary science behind using different raising agents in flour mixtures		

Form 1		Form 2		Form 3		Form 4	
Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content	Sub - Topic	Content
-Heat transfer	- Apply principles underlying heat transfer	-Soups	- Prepare and serve soups	-Batters	- Use batters in cookery		
-Methods of cooking	- Prepare dishes using -various methods of cooking	-Sauces	- Prepare and serve Sauces	-Cakes and biscuits	- Make cakes and biscuits		
		-Gravy	- Prepare Gravy	-Cake decorations	- Decorate cakes		
		-Convenience foods	- Prepare meals using convenience foods	Pastries	- Make pastries		
		-Food Storage	- Store different foods	-Wraps	- Make wraps		
		-Storage Equipment	- Store food using different Equipment	-Yeast mixtures	- Prepare yeast mixtures		