

The following topic areas will be largely, although not exclusively, tested through the Section B higher tariff questions (4 marks and above). Other subject content will be covered in the remaining questions.

Component 1: Principles of food preparation and nutrition

1. Food commodities	
For:	
<ul style="list-style-type: none"> • bread, cereals, flour, oats, rice, potatoes, pasta • meat, fish, poultry, eggs 	
learners need to know and understand:	
<ul style="list-style-type: none"> • the value of the commodity within the diet • features and characteristics of each commodity with reference to their correct storage to avoid food contamination • the working characteristics of each commodity, with reference to the skill group and techniques table listed in Appendix A, e.g. when subjected to dry/moist methods of cooking • the origins of each commodity 	

2. Principles of nutrition	
Macronutrients and micronutrients	<ul style="list-style-type: none"> • the definition of macronutrients and micronutrients in relation to human nutrition • the role of macronutrients and micronutrients in human nutrition <p>Macro-nutrients to include:</p> <p>(i) protein: to include essential amino-acids in relation to nutritional requirements (histidine, isoleucine, lysine, leucine, methionine, phenylalanine, threonine, tryptophan, valine) and non-essential (alanine, asparagine, aspartic acid glutamic acid)</p> <p>For protein, learners must know and understand:</p> <ul style="list-style-type: none"> • the specific function • the main sources • dietary reference values • the consequences of malnutrition (over and under) • complementary actions of the nutrients

3. Diet and good health	
Energy requirements of individuals (and) Plan balanced diets	<ul style="list-style-type: none"> (i) a range of life-stages: toddlers, teenagers, early, middle and late adulthood (ii) individuals with specific dietary needs or nutritional deficiencies to include coeliac disease; diabetes (type 2 diabetes only to be considered), dental caries; iron deficiency anaemia; obesity; cardiovascular disease (CVD); calcium deficiencies to include bone health; nut or lactose (dairy) intolerances (iii) individuals with specific lifestyle needs to include vegetarians: lacto-ovo, lacto, vegan, and those with religious beliefs that affect choice of diet, to include Hindu, Muslim, Jewish
Calculate energy and nutritional values of recipes, meals and diets	<ul style="list-style-type: none"> • calculate the energy and main macronutrients and micronutrients in: <ul style="list-style-type: none"> (iii) an individual's existing diet over a period of time • use nutritional information/data to determine why, when and how to make changes to: <ul style="list-style-type: none"> (iii) a diet • Show how energy balance can be used to maintain a healthy body weight throughout life

4. The science of food	
The effect of cooking on food	<p>how preparation and cooking affect the sensory and nutritional properties of food</p> <ul style="list-style-type: none"> • why food is cooked, to include, digestion, taste, texture, appearance and to avoid food contamination • how heat is transferred to food through conduction, convection and radiation and how and why the production of some dishes relies on more than one method of heat transference • how selection of appropriate cooking methods can: <ul style="list-style-type: none"> (i) conserve or modify nutritive value, e.g. steaming of green vegetables (ii) improve palatability, e.g. physical denaturation of protein • reasons why particular results may not always be achieved, e.g. a sponge cake sinks, a sauce goes lumpy • how to remedy situations when desired results may not be achieved in the first instance
Food spoilage	<p>microbiological food safety principles when buying, storing, preparing and cooking food.</p> <ul style="list-style-type: none"> • how to store foods correctly: refrigeration/freezing, dry/cold storage, appropriate packaging/covering of foods • the importance of date-marks, labelling of food products to identify storage and preparation • the growth conditions, ways of prevention and control methods for enzyme action, mould growth and yeast production • the signs of food spoilage, including enzymic action, mould growth, yeast production and bacteria • the role of temperature, pH, moisture and time in the control of bacteria • the types of bacterial cross-contamination and their prevention

5. Where food comes from	
Food provenance	<ul style="list-style-type: none"> • food miles, impact on the carbon footprint, buying foods locally
Food manufacturing	<ul style="list-style-type: none"> • secondary stages of processing and production to include how primary products are changed into other types of products

6. Cooking and food preparation	
Factors affecting food choice	<ul style="list-style-type: none"> • the range of factors that influence food choices, including enjoyment, preferences, seasonality, costs, availability, time of day, activity, celebration or occasion and culture • how to make informed choices about food and drink to achieve a varied and balanced diet, including awareness of portion sizes and costs