GCSE

FOOD PREPARATION AND NUTRITION

C560QS

Summer 2022 examinations

Component 1	Principles of food preparation and nutrition	Monday, 20 June 2022

Advance Information

General information for students and teachers

This advance information provides the focus of the content of the Summer 2022 examination paper.

It does not apply to any other examination series.

It is intended to support revision.

It may be used at any time from the date of release.

It must not be taken into the examination.

Subject information for students and teachers

A guidance document on advance information has been produced by The Joint Council for Qualifications (JCQ) on behalf of all awarding organisations. It can be found here.

This advance information covers Component 1 only. There is no advance information for Component 2 (NEA).

The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the Summer 2022 examination.

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.

The aim should still be to cover all specification content in teaching and learning.

Component 1: Principles of food preparation and nutrition

1. Food commodities
For: • bread, cereals, flour, oats, rice, potatoes, pasta • meat, fish, poultry, eggs learners need to know and understand: • 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	• the definition of macronutrients and micronutrients in relation to human nutrition • the role of macronutrients and micronutrients in human nutrition Macro-nutrients to include: (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) For protein, learners must know and understand: • 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	(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	• calculate the energy and main macronutrients and micronutrients in: (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: (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	how preparation and cooking affect the sensory and nutritional properties of food • 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: (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	microbiological food safety principles when buying, storing, preparing and cooking food. • 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	• food miles, impact on the carbon footprint, buying foods locally
Food manufacturing	• 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	• 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

End of advance information