

# FOOD AND NUTRITION

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Paper 0648/01  
Theory

## Key Messages

Candidates must take the time to read through the Question Paper thoroughly.

## Comments on Specific Questions

### Question 1

Most parts of this question were answered well. Part (a) was the most challenging for candidates with many referring to the rate of energy use, rather than to *how* the body uses energy.

Many candidates gave “energy” as an answer to part (c) but this was not credited as it was given in the question.

### Question 2

Most parts of this question were answered well with many candidates giving the correct responses. In part (b), many candidates incorrectly gave “ileum” or “small intestine” as their response.

### Question 3

Many candidates were able to give at least one food source of thiamine and were aware of the associated deficiency diseases. However, some candidates needed to be clearer about the deficiency diseases, and many answers were not specific enough.

### Question 4

(a) There were some good responses to this question with many candidates giving at least two functions of vitamin A.

(b)(i) This question was answered well. The most common mistake was to give vegetable sources for retinol.

### Question 5

This was a very well answered question with many candidates gaining full credit.

### Question 6

(a) This question was well answered in general, but some candidates incorrectly gave wheat as a response and there were a few candidates who gave named breakfast cereals as examples. A wide variety of answers was seen.

(b) There were some good responses with many candidates gaining full credit; many candidates mentioned nutrients and some mentioned more practical reasons, e.g. easy to store and easy to grow.

### Question 7

- (a) There were some good responses to this question with many candidates mentioning wholemeal flour, dried fruit, bran and oats. However, a number of candidates gave incorrect responses or gave only one correct example.
- (b) and (c) These parts were generally well answered with some candidates mentioning “a firm shape” or “better structure” as well as “more gluten”.
- (d) In most responses there was no reference to what high or low temperatures would do to the yeast or that yeast needs warm temperatures to be activated. Many candidates referred to “optimum temperature” which was too vague.
- (e) Most candidates referred to flavour or taste. Some candidates referred to the function of salt in the body.
- (f) This part was generally well answered with many candidates making at least three valid points. The most common correct responses mentioned carbon dioxide being released; gluten coagulating; and dextrinisation of starch. Some accounts needed to be clearer and to use correct terminology.
- (g) Several candidates referred to water /moist/damp. This was given in the question and so was not awarded credit. Reference to pH needed to refer to an appropriate pH for microorganism growth.

### Question 8

- (a) Some candidates mentioned pan frying or flash frying which were not credited.
- (b) and (c) There were generally good responses given.
- (d) Candidates needed to be specific about the time that the burn should have been immersed in water. Many candidates incorrectly referred to putting cream, toothpaste, etc. on the burn. A few candidates gave correct responses by mentioning removing jewellery and wrapping in a plastic bag or cling film, and also by stating hold long they would immersed the burn in water.

### Question 9

- (a) Many candidates gave at least two correct points, usually size and price.
- (b) Many candidates gave responses which did not gain credit, for example, suggesting that “only ready meals could be made” in a microwave and hence that this meant that “using microwave ovens make people lazy and they will lose their cooking skills as a result”. Responses also focused on electricity being expensive and how microwave ovens are unreliable. However, some candidates correctly mentioned no browning or crisping of foods, hot spots, no metal dishes and that it is easy to overcook foods. These responses were awarded credit.
- (c) There were some good responses with most candidates mentioning radiation. Many candidates went on to discuss the agitation of molecules and conduction.

### Question 10

- (a) Some candidates gave extremely detailed answers about labelling; they need to be aware that some of the credit for the question was awarded for answers about packaging and the rest for answers about labelling. Few candidates discussed packaging and labelling equally and, although in some cases correct reasons and functions were given, better qualification of points was required.
- (b) Reasons for preservation were answered to a satisfactory standard, with many candidates able to give at least four points, most commonly, to avoid waste, to enjoy food out of season, for ease of transport and to avoid food spoilage. Ways of preventing spoilage were quite well answered with most candidates giving good explanations and examples. Some candidates discussed many different methods of preservation; however, they also needed to discuss the reasons for preserving food.

# FOOD AND NUTRITION

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Paper 0648/02  
Practical

## Key Messages

From 2017, the inclusion of photographs as supporting evidence will be compulsory. One good quality, clear picture of the candidates' finished dishes and table settings is required.

All Centres must ensure they are familiar with the instructions published by Cambridge, which is sent to all Centres. These instructions clearly state that **five** of the eight published tests are to be used in each Centre and that these are allocated to candidates in strict alphabetical order (by surname). Test numbers (not syllabus number) are to be written on the Preparation Sheets and Practical Test Working Mark Sheets.

Centres should ensure that they are using the up-to-date documents for administration of the practical tests. The Practical Test Summary Mark Sheet, attendance register and MS1 should all be included with the sample of work.

Examiners should refer to the Practical Test Training Handbook and ensure that the mark scheme is accurately, rigorously and consistently applied. All examiners should refresh their knowledge of the instructions and mark scheme annually.

## General Comments

Many Centres presented work of a good standard and submitted interesting and varied work which met the assessment criteria. However, in a number of Centres, candidates chose low-skilled dishes or ones which did not meet the requirements of the test. Many candidates need more guidance and practice with menu planning so that they can accurately respond to the demands of the test allocated to them. They need to demonstrate sufficient skills in using a wide range of ingredients; in the manipulation of various mixtures; and in the use of different cooking methods that make full and sensible use of the oven, grill and the top of the cooker.

Candidates' Time Plans should include brief but accurate details of preparation and cooking methods, cooking times and oven temperatures. They should indicate how to test that each item of food or recipe is cooked. For example, candidates should state that a sponge cake will be baked until "golden brown and springy to touch" or pasta cooked "until al dente". Candidates should also be encouraged to develop the skill of dovetailing when writing their Time Plans. For example, while one dish is cooking, another can be prepared or decorated. In general, the timing of dishes should be more carefully considered, with dishes requiring cooling being made first and hot dishes planned later for in the test.

Centres are reminded that only one set of Preparation Sheets should be issued to each candidate. Only one copy is to be forwarded to the Moderator. Preparation sheets should be fastened together with staples or treasury tags in the correct order. Marks should be carefully totalled, scaled and transferred to the Practical Test Summary Mark Sheet and MS1. These marks must be checked by another person for accuracy. Where half marks appear in the final total, these should be rounded down, not up.

All candidates' work must show evidence of having been marked, with annotation clearly written on the work to evidence how and where credit has been awarded. Examiners need to annotate in sufficient detail to make the moderation process straightforward. Candidates should indicate in the Choices section of the Choices and Recipes Preparation Sheet for which part of the test each dish is being made. Examiners are reminded to indicate on the Choices and Recipes Preparation Sheet how much credit has been awarded for each individual dish with justification given on the Practical Test Summary Mark Sheet. All of the Preparation Sheets should be clearly and concisely annotated using the codes provided in the handbook.

## Comments on Specific Questions

### Test 1

This was a popular choice with many Centres. In **part (a)**, most candidates made suitable choices for vegetarians, although candidates must remember not to include fish, stock made from meat or chicken, or gelatin. The best choices included a good selection of complementary low biological value (LBV) proteins, tofu or other soya ingredients, eggs and/or dairy food.

For **part (b)**, most candidates chose the correct recipe for scones; although instead of making “small cakes by the creaming method” some candidates made muffins or one large cake instead. As with all two-course meals, correct choices included one main dish with two suitable accompaniments, plus either a complementary starter or dessert.

### Test 2

This was another popular test. In **part (a)**, many candidates wisely chose a range of protein foods that included one type each of fish, meat, eggs, dairy, tofu/soya alternatives or complementary LBV proteins. In some Centres, candidates relied on using meat in all three dishes. Many of the dishes chosen for this test were low-skilled, such as simple roast, grilled or poached items that did not allow candidates to demonstrate their skills in using a range of ingredients and mixtures.

For **part (b)**, the pastry choices were generally suitable, although candidates need to avoid repeating ingredients and skills from **part (a)** of the test. Correct choices for “a dish using batter” included fritters, pakoras and pancakes. The choice of a cake for this part was incorrect as a cake mixture is not technically a batter.

### Test 3

This test was also popular with many Centres. In **part (a)**, the best-performing candidates chose a well-balanced meal which would appeal to teenagers. Some candidates chose low-skilled dishes, such as savoury rice, and many had difficulty choosing appropriate accompaniments to go with their main dishes, often adding mashed potato to rice or pasta dishes, or choosing another savoury meat-based dish.

For **part (b)** there were some excellent sponge cakes and Swiss rolls produced for the “cake by the whisking method”. However, in many Centres, candidates incorrectly interpreted this as any cake made using an electric whisk. A whisked method cake specifically consists of eggs and sugar vigorously whisked into a thick foam, followed by carefully folded in flour and flavourings. For a Genoese sponge, a small amount of butter is added with the flour. For a “dish which includes rice”, candidates made generally suitable choices, unless they had also included a rice dish for **part (a)**.

### Test 4

Almost every Centre allocated this test and candidates clearly had fun choosing their party dishes. This test also proved to be the most problematic as many candidates interpreted the brief as being a “dinner party”, choosing dishes and setting up their tables accordingly. For a party, candidates should bear in mind that guests would most likely want to take a small portion of every dish onto one plate; therefore dishes chosen should complement each other. Soups, stews and other main meal dishes are not suitable party food. The best responses to this test included a good range of finger food such as scotch eggs, pasties and mini pizzas with salad garnishes; or themed buffets, for example, a range of curries, breads, rice and complex salads with one or two party-style desserts. Simple cakes or tea-time bakes were not suitable choices and candidates needed to choose either an all finger-food buffet or all fork-food buffet, not a combination of both, which would be difficult to serve and eat in practice.

### Test 5

In **part (a)**, candidates seemed to have difficulty choosing suitable accompaniments for the main course dish, especially where this was a rice or pasta dish. Many tended to choose low-skilled dishes or repeat ingredients and skills, especially where they chose a starter for the meal. A dessert choice often gives the candidate an opportunity to use quite different ingredients and skills, particularly in decorating flans, trifle, gâteaux, cheese-cakes and so on.

For **part (b)**, flaky pastry was required and some candidates managed this. However, the moderation process showed that shortcrust pastry had often been made for this task therefore equated to a wrong choice. Biscuits made by the melting method specifically have a mixture of butter, sugar, syrup or sometimes honey melted over heat and then the dry ingredients added. There were few correct choices for this. Some candidates stated that they were using the melting method but then used a rubbed-in or creamed mixture. This should be carefully checked by the examiner.

### Test 6

This was quite a popular test with mainly suitable choices made by candidates in most Centres. The best-performing candidates chose dishes where the specified ingredient featured heavily in the recipe; others chose less wisely, for example, including only a small amount of milk in a cake or scone to show use of milk. Several candidates interpreted “wheat flour” as “wholemeal flour”, whereas any flour made from wheat (as opposed to corn, rye, millet etc.) was acceptable.

### Test 7

This was a less popular test overall and, although, in **part (a)**, choices were mainly correct for each specified method, they were often low-skilled dishes and so could not be awarded high credit.

For **part (b)**, many candidates chose scones to demonstrate “dish which includes dried fruit”, although this meant that they could not be awarded credit as it was a repetition of the rubbing-in method that was required for the biscuits. In most cases, the biscuits chosen by candidates were not, in fact, made by the rubbing-in method meaning that less credit was awarded.

### Test 8

In **part (a)**, candidates need to carefully consider that a packed meal must consist of food that is easily transported, kept and served cool, and is conveniently portioned or sized. A balance of savoury and sweet foods is required and the meal for this test needed to suit young children.

For **part (b)**, some suitable choices were made for the “hot savoury dish”, although ingredients and skills were often repeated from **part (a)**. For the “cold dessert” the best-performing candidates made a mousse, cheese-cake, fruit flan or similar item, rather than a cake or small cakes.