

PRINCIPAL EXAMINER'S REPORT



BOTSWANA
EXAMINATIONS
COUNCIL

BGCSE FOOD & NUTRITION 2024

PAPER 1: WRITTEN PAPER

General Comments

Generally, most candidates attempted all the questions that needed a sentence, phrase or one word answer but failed when they were to explain or discuss concepts as compared to the previous cohort while the minority left questions unattempted. There was a slight increase in the total candidature.

This time around, there were many cancellations, other candidates were writing outside the borders. Candidates did not do well on consumer education subject but for the past years, it was boosting their performance. Diagrams were visible and communicating well.

Comments on Individual Items

- 1 (a) This question was correctly answered by most candidates. The possible answers were carbon hydrogen and oxygen. The most used answers were hydrogen and carbon, however there were few candidates who failed to score it can wrote answers like proteins, nitrogen and carbohydrate
- (b) (i) Fairly answered and the most common correct answers were **simple sugar or building blocks for carbohydrates** and correct answers were given as glucose, galactose and fructose. Few candidates gave incorrect answers like maltose and sucrose.
- (ii) Fairly attempted by most candidates however others defined disaccharide instead of polysaccharides. The correct answers mostly written down were complex sugars or they contain many varying chains of monosaccharides. Correct examples were stated as pectin starch, non-starch polysaccharides, dextrin and cellulose were rare answers. There were few candidates who gave examples of disaccharides such as maltose, sucrose
- (c) The question was not well asked by most of the candidates. The observation was that the candidates did not understand the question well. Instead of correct ways of using the knives but focused on storage of knives and safety precautions. The correct answers used were use of chopping board, cut away for the body, use the correct knife for its job.
- (d) The majority of the candidates managed to score good marks on this question. Popular answers were proteins, calcium, Phosphorus and vitamin D.
- (e) This question was well answered by most of the candidates; however, some candidates were omitting the word essential when trying to explain the difference between HBV and LBV, which led to an incorrect answer. They just wrote amino acids instead of essential amino acids. They also omitted the word **mainly** when trying to explain that others were found in animal foods and others in plant foods. The word mainly was important since not all HBV proteins were found in animal foods and not all LBV proteins are found in plant foods. However, some candidates stated correct differences, and the most common correct answers were that HBV are complete proteins while LBV are incomplete proteins, HBV proteins contain all the essential amino acids while LBV lack one or more essential amino acids.
- (f) (i) There was only one answer to this question and that was goitre. Almost all candidates scored it correct though there were the minority that wrote answers like anaemia, gout, and marasmus which were not credited as they were wrong, but it was generally a well-answered question.

- (ii) A well answered question with correct examples given however, there were candidates who seemed not to understand the difference between table salt and iodized salt so they would write table salt, which in this case was not correct, the also gave leafy vegetables instead of green leafy vegetables, common correct answers were milk, fish, cheese and eggs.
- (g) This question was fairly done by the majority of candidates. The correct answers given were sole proprietorship, partnership, company and franchise those who were unable to remember the name write answers like street vendor, restaurant, and chef -giving examples of businesses and careers.
- (h) It was not well answered by most candidates. The correct examples given were tuna, sardines, pilchards, salmon, herring while the wrong answers given were catfish, Barbra and others. The minority of the candidates were unable to recall the correct answers and left blank spaces.
- (i) Most candidates gave examples of types of convenience foods. The few correct answers given were: Ready to eat, dehydrated. Canned, frozen. Most incorrect answers given were canned fish, frozen vegetables, russian.
- (j) This question was not done well by most candidates. The common correct answers were to see if the business is running at a loss or making a profit, for tax purposes and to keep customers' records up to date. Common incorrect answers were obtain the loan from the bank, to check if there was any theft taking place.
- (k) The question was fairly done by the majority of candidates brilliant answers like (a model to healthy eating, model for classifying foods that contribute to healthy eating however we still had wrong answers like food broken down into hierarchy, food groups and so on, a triangle showing food to be eaten to make a balanced diet.
- (l) The question was well done by most candidates. The most frequently used correct answers were, family size, family budget, family needs and preferences, income, lifestyle, values. Common incorrect answers were religious beliefs, customs.
- (m) This question was correctly answered by the majority of the candidates. There was no repetition of methods of cooking observed, but a few would write dry heat methods, moist heat and combination methods. Therefore, for fish the correct common answers were poaching, boiling, steaming and frying, while for oxtail the correct common answers were boiling, stewing, grilling common incorrect answer was frying and steaming and for apple are correct common answers were stewing, roasting, baking, poaching, boiling, frying.
- (n) There are only two selling techniques (direct and in direct). Few of the candidates answered correctly and a bigger percentage failed to write the correct answers and wrote answers like online selling, ewallet and other methods of payment. Some went on and wrote answers like radio, broadcasting, and television and so on.
- (o) For beef, it was easy for candidates to score 1 mark on the red colour of the meat. Some candidates did not read the question well, they fail to give physical characteristics and wrote about the smell of the meat, original colour instead of red, others were giving pink as the answer which was not correct.

For leafy vegetable, well answered question by the majority of the candidates. They gave answers like crisp and firm. Some candidates wrote that they should have green colour which was not the correct answer, the correct answer was good colour.

Section B

- 2** This question was not well attempted by the majority of the candidates. Candidates were writing too much information that was not correct however, the correct part was fairly done by the majority of the candidates.
- (a) The answers that were expected were dish washing soap or detergent, baking soda, wood ash, vinegar and lemon juice were only a few candidates were able to recall them, the majority wrote answers like sunlight, steel wool, vim and abrasives which were mainly scouring agents.
 - (b) This question was not well answered by the majority of the candidates. The majority of the candidates stated general points to consider when choosing kitchen equipment. Some would state the correct points but failed to explain it. Some of the expected answers with explanation were, should have thick base and sides, handles should be made from plastic or insulated material, should be a stable design, must suit the cooking stove.
 - (c) This part of the question was done well by few candidates; candidates were able to state the factors and failed to explain them well. Common factors given were size and capacity, additional features, amount of money, space available in the kitchen.
- 3**
- (a) The question was fairly done by most candidates. Most of them did not read the question well and failed to know that they were supposed to name herbs not any ingredient that can be used to add flavour to the basic recipe. Some candidates stated correct examples of herbs that can add flavour to the basic recipe. Most common correct answers were mint leaves, parsley garlic and mixed herbs. However, there are some candidates who gave incorrect answers, and the most common incorrect answers were cinnamon, mixed spice and ginger. A few gave other correct answers to include basil and coriander.
 - (b)
 - (i) Most candidates stated correct functions of sugar, and the most common correct answers were to sweeten/ add flavour, for fermentation and to activate the yeast. However, some were giving incorrect answers like to make the dough rise. This part of the question was generally well scored the majority of the candidates.
 - (ii) Some candidates stated correct functions of warm water to include activation of yeast, for fermentation and to bind/ mix ingredients together. Some were stating wrong answers like to activate enzymes, to dissolve ingredients together, which were not credited.
 - (c) Steps to be followed when preparing a dough using the ingredients for the basic recipe were correctly stated by most candidates but they failed to explain those steps, which led to loss of marks since the question required an explanation. Most common stated but not explained steps were preheating the oven, sieving dry ingredients, kneading the dough and covering with a damp cloth. A few managed to state and explain the steps. The most common correct answers were sieving the dry ingredients to incorporate air, kneading the dough to develop gluten, proving the

dough to rise/ for fermentation. A few wrote correct steps like preheating the oven to maintain correct temperature.

- (d) Some candidates stated correct reasons why a cooked loaf of bread has not risen. The most common correct answers were no yeast or raising agent/insufficient, yeast expired, yeast killed, insufficient kneading and oven temperature low. However, there are some who stated incorrect answers to include too much yeast, too much sugar. Some used incorrect terms when describing processes e.g. instead of dough they wrote the bread when trying to explain that there was insufficient proving/ kneading, of which bread is a cooked product which cannot be proved/ kneaded, hence the loss of marks.

- 4 (a) This part of the question was fairly done by the majority of the candidates; however, some candidates were not able to pin into physical factors and wrote any factor that came in to their minds. The expected answers were packaging, store location, cleanliness and store layout/display. The popular answer was packaging and shop layout. Common incorrect answers were price and personal preference.

- (b) (i) This was supposed to be an easy question to answer but most candidates failed to score it all. The explanations were not coming out well leading to candidates not scoring all the marks. It was however well attempted the majority of the candidates. The common answer was the place accessible / convenient.

- (ii) The question was fairly answered by the majority of the candidates though the minority failed to score or left the blank spaces. The discussions were to be on the value of the product to customers, the price in relation to the competitors and methods used to the price the product. The common correct answer was value of the product/ affordability.

- (c) This part of the question was not done well by most candidates. Most of them were able to state the points by failed to explain them making them fail to score it. The minority were able to state and explain in full all the four points that were expected. Correct answers that were frequently used was to attract more customers for the success of the business or help the business to grow.

- 5 (a) (i) This part of the question was done very well by the majority of the candidates. The nutrients were stated and at times B group vitamins were named for an example B1, B2, B3, B6, B7, B12 and candidates were credited. low biological value proteins, carbohydrates, phosphorus, fats were amongst the most commonly named nutrients. There were, however, few candidates who included Vitamin C and Vitamin D in their answers and it was not credited.

- (ii) This part of the question was also done very well by the majority of the candidates. Correct answers stated were to lower cholesterol, reduce the risks of cardio heart diseases, removal of toxic substances from the from the body, aids peristalsis.

- (b) This part of the question was correctly answered by the majority of the candidates. Some candidates were able to add bran or mixed vegetables to their stews to show understanding by

increasing the amount of fibre in the diet, whole meal cereals were chosen in most cases. We still had candidates who planned for a two-course meal as they will include soups, cakes and desserts. Some candidates stated ingredients instead of dishes.

Section C

- 6** This was an essay question, which required candidates to discuss facts in depth. This year's candidates discussed in full unlike previous cohorts who would just write short sentences.
- (a)** This part of the question was fairly done by the majority of the candidates. Most of them wrote answers like to prevent illness or injury to stop the onset of deficiency diseases like anaemia in girls who losses blood monthly due to menstruation. There were some who would just list points like improve or maintain good health and failed to discuss further such candidates were not credited. There was still another group of candidates who would write points like to address vitamin deficiency.
 - (b)** The effects were also fairly done by most candidates. It was however evident that some candidates misunderstood supplements with fast food and additives as most of them included points like they contain a lot of fats and therefore can cause obesity or they can add flavour and nutrients to food. There was still another group of candidates who would write correct points but failed to discuss them like supplements can worsen existing health conditions and failed to explain how or even give example leading to them not being awarded a mark. Some candidates were giving positive effects which were the same as reasons.
- 7** This was an essay question where candidates were expected to discuss the concepts. It is recommendable that the candidates were discussing instead of writing in a point form. Generally, the question was done fairly well.
- (a)** This part of the question was not well done as compared to that of fuel. Instead of discussing ways of saving food, most of them discussed way of saving money. They gave answers like buy food in season as they tend to be cheaper, buy food at the end of the month, as food is usually cheaper or discounted. Some candidates were able to write correct answers like prepare enough food for a family to avoid left over food that can be wasted, preserve food when in season since it is plentiful. Keep leftovers safe and use them as leftover dishes to avoid throwing food away which is a waste. Apart from the confusion of food and money the question would have been credited by the majority of the candidates.
 - (b)** The part on fuel was well done than that of food. The majority of the candidates did well under this part of the question and scored better marks than the part of food. The most frequently used answers were use of residual heat to save fuel. Batch baking. Soaking of pulses and whole grain to reduce cooking time, cook the whole meal in the oven to avoid waste of fuel and such answers were well discussed. However, we still had some candidates who were not able to score good marks under this part because they failed to discuss the points well. There were other candidates who gave general knowledge in answering this question like: use firewood instead of electricity, plan shopping trips well on time to reduce frequent visit to the shops to save fuel in the car.

PAPER 2: PRACTICAL PAPER

General Comments

Centres are commended that majority of the candidates were able to use the hob, oven and grill well except, though they were shortage of that in most centres, for a few who grilled in closed ovens. With regards to the preparation of salads, candidates' knife skills were fairly done, e.g. potatoes cut into cubes. Regarding preparation of decorated cakes using creaming method, most of the candidates especially those who were creaming manually, inadequately creamed sugar and margarine and some had cuddled mixtures. In most cases candidates did not carry out folding-in of the dry ingredients into the creamed mixture properly, which resulted in cakes not being as spongy as was expected, in some cases the mixtures were over-beaten. Therefore, centres are urged to give more practice to their candidates for practice. Lining of the baking tin was well done. The wax paper was cut out to the shape and size of the base of the loaf/cake tin, greasing was well done by most candidates. Mostly candidates in regard to carbohydrate vegetable salad dishes, e.g potato salad, boiled potatoes rapidly and placed the potatoes in cold water to boil. Cutting of oranges and straining when preparing drinks was mostly done correctly by candidates.

Comments on Individual Items

CHOICE OF DISHES

(a) Savoury Protein Dishes 1 and 2

Most of the candidates chose correct High Biological Value (HBV) protein dishes using varied methods of cooking to include the following:

Grilling (Grilled fish, Grilled Chicken, Grilled Steak, macaroni cheese), Frying (Deep fried chicken, Scotch eggs). Steaming - Steamed chicken. Stewing - Brown Stew, savoury mince. Roasting – roasted Chicken, Savoury: A few candidates' choice 2-in-1 dishes such as Macaroni Cheese. A few candidates did not vary the cooking methods resulting in them losing a mark on variety of skills and processes.

(b) Carbohydrate Salad Dish

Majority of the candidates correctly answered this part of question with the most common correct dishes being Potato salad and rice salad. A Few candidates incorrectly answered this part, and the common incorrect dishes included mashed potatoes, green salad and coleslaw salad.

(c) Creamed Decorated Cake

Most of the candidates chose correct dishes with the most common correct dishes including Vanilla cake, Carrot cake, cupcakes, Victoria sandwich cake and Queen cakes.

(d) Refreshing Drink

The majority of the candidates chose correct refreshing drinks, and the common ones were orange juice, varied mocktails and orangeade. Very few candidates chose ginger and lemon punch which is correct but less skilful.

Variety of Skills

The majority of the dishes chosen by most candidates showed varied skills and processes and this made the candidates to access marks. A few candidates who chose savoury protein dishes that use

the same method of cooking lost some marks also a few candidates that chose a cake that does not use the creaming process lost some marks.

Meeting Requirements of the test

Very few of the candidates did not do well in this part and were not able to access the mark as they did not choose a suitable salad to be served with dishes in (a). Most of the recipes were savoury protein dishes prepared with varied cooking methods, carbohydrate salad with suitable dressing to be served with dishes in (a), decorated cake using creaming method and a refreshing drink.

Demonstration of awareness for time for Cooking and Serving

Most of the candidates addressed this part of the question correctly, hence accessed the marks. However, those who had either over-planned or under-planned didn't access the mark.

RECIPES

Recipes for dishes chosen were copied out correctly by most candidates, however, a few candidates did not specify the type of ingredients clearly in some areas e.g. seasoning, pepper and stock. A few candidates incorrectly wrote parsley sprig as spring or sprit. Again a few candidates omitted water for dishes that use moist method of cooking like potato salad and rice salad.

TIME PLAN

Sequence

Most candidates had a logically sequenced order of work, correct time-break down for the tasks carried out, evaluation was stated and correctly placed and timed. However, quite a considerable number of candidates demonstrated lack of understanding on how tasks are dovetailed hence only stated some follow ups.

Methods

A great improvement was noted as a significant number of the candidates either well summarised or fairly summarised the methods. A few number of the candidates copied out the methods, accessing half the total marks awarded for this part of the plan.

Cooking temperatures and cooling times

The majority of the candidates indicated cooking methods such as simmering, boiling, preheating oven/grill, steaming and cooling temperatures and times. The majority of the candidates also indicated that they would chill their drinks and salads in the plan.

Washing-Up

Most of the candidates indicated washing up at convenient points in the plan and was correctly timed. Only a few candidates stated the final washing-up within the practical time but before serving. A very few number had one or two of the washing-ups embedded within other tasks.

Serving

The majority of the candidates indicated serving of the dishes, correctly placed and correctly timed. Some candidates even indicated decoration of the cake and garnishing of the dishes prior to serving which was a good initiative which needs to be commended.

SHOPPING LIST

The majority of the candidates had the shopping list correctly compiled. Some candidates misplaced the items e.g. straws, salad dressings, vanilla essence, cocktail umbrella under others. A few candidates didn't add up quantities correctly or didn't add up the quantities of the same ingredients correctly. Very few omissions of eggs and other ingredients were noted. Most of the candidates correctly stated the serving equipment, specifying the type of dish to be used for each dish to be served. Only a few stated serving/packaging materials and equipment. For this part, the majority of the candidates accessed good marks. Very few candidates did not answer the part for serving/serving equipment correctly.

METHOD OF WORKING (PREPARATION AND COOKING SESSION)

General Approach

The majority of the candidates worked at a very slow pace at the beginning and tried to be faster towards the end. A fair number of candidates demonstrated some confidence in the way they approached the practical session of the examination. Most candidates were methodical and completed each task well and followed their time plans throughout. However, very few referred too much to the recipe cards or copies of their plan of work during working.

Manipulation

The majority of the candidates were able to use the hob, oven and grill well except for a few who grilled in closed ovens. In addition, the majority of candidates boiled the stews and savoury mince instead of simmering, which resulted in dishes having no or very little gravy. With regards to the preparation of salads, candidates' knife skills were fairly done, e.g. potatoes cut into cubes. Regarding preparation of decorated cakes using creaming method, most of the candidates especially those who were creaming manually, inadequately creamed sugar and margarine and some had cuddled mixtures. In most cases candidates did not carry out folding-in of the dry ingredients into the creamed mixture properly, which resulted in cakes not being as spongy as was expected, in some cases the mixtures were over-beaten. Lining of the baking tin was well done. The wax paper was cut out to the shape and size of the base of the loaf/cake tin, greasing was well done by most candidates. Mostly candidates in regard to carbohydrate vegetable salad dishes, e.g potato salad, boiled potatoes rapidly and placed the potatoes in cold water to boil. Cutting of oranges and straining when preparing drinks was mostly done correctly by candidates.

Economy of Utilities

Majority of candidates preheated the grill, oil and oven with a few candidates preheating the oven for a very long time resulting in them being penalised for not being economic on fuel. Enough dishwashing liquid was used. Boiling was used instead of simmering for cooking stews/curries. Most candidates used correct sizes of saucepans on the burner especially those who were using gas however most candidates who were using electric stoves placed small pan on a bigger burner. In most cases candidates used enough water for washing up and rinsing.

Economy of food

Most candidates were economic except for a few candidates who did not scrape off all the flour mixture from the mixing bowls and blenders. When preparing vegetables, most candidates peeled the vegetables thinly, while very few threw away pieces of left over vegetables which could still be

put into use in the bin. A fair number of candidates did not adequately squeeze all the juice from the oranges.

Hygiene: Personal hygiene

Most candidates were well groomed, wore clean aprons, had their hair covered, and their nails were clean, short without nail polish.

Food hygiene

It was well practiced by most candidates, e.g. ingredients were covered. However, a significant number of candidates over-handled food especially the salad ingredients and those who did not follow the hygiene rules during evaluation when tasting food. A fair number of candidates did not wash vegetables and oranges before use. Only a few candidates washed the chopping board before using it again. Some candidates did not change water for washing utensils.

Washing-up

Almost all candidates did the first and second washing-up using warm soapy water and rinsing with warm water, however majority didn't complete the final washing-up. Most candidates didn't wipe spills from cookers as they occurred but did wipe them at the final washing-up. A few candidates were able to complete the final wash up on time.

EVALUATION

Processes Undertaken

Most candidates stated the processes they under-took in the preparation of their chosen dishes correctly except a few who indicated the methods of cooking.

Quality of Products/dishes (Sensory Evaluation)

Majority of the candidates were able to evaluate the texture, taste and colour of each dish. However, in a few cases, description of taste was inappropriate as some candidates stated that the stew, fried chicken and or savoury mince was salty, chilly meaning that it was well-seasoned/flavoured. A few cases of dishonesty were noted as stock and salt were used but candidates would report as bland or tasteless. Candidates would state that the meat dishes were hard, instead of writing under-cooked or tough or tender. Regarding taste, most relevant terms were used like sweet, As for colour, quite a noticeable number of candidates stated the actual colour of the food/ingredient e.g. brown for Savoury mince.

Successes

Most candidates stated two successes, hence accessing all the marks, with only a few candidates not being sincere.

Constraints

This was well addressed, though a few of the candidates didn't give justification to the comment. Some constraints stated by candidates were not truthful e.g. power failure as a challenge, but the practical session started when the electricity was re-connected.

Modifications

A considerable number of the candidates stated correct modifications. With only a few not justifying their modifications hence the point not being credited.

PRESENTATION (EXAMINERS' EVALUATION)

Serving

This part was well addressed. Most of the candidates used the correct serving or packaging materials and equipment, and the dishes were well labelled too. Table linens, picnic mats and placemats, flower vases were also provided. Most candidates used doilies and underplates where relevant.

Picnic Mood

This was set by most candidates. Attractive menu cards were presented. Majority of the candidates fairly garnished and decorated their dishes.

Cleanliness

Most of the candidates served in clean serving utensils, table linens were clean, and the serving environment was clean in most centres.

SENSORY EVALUATION OF CANDIDATES' PRODUCTS BY EXAMINERS

Protein dishes

Most dishes were well cooked, with only a few being under-cooked. Stews and curries were mostly dry due to boiling not simmering. Some of the grilled/roasted meats were undercooked in the inside. Most grills and roasted meats were juicy and not dry due basting during cooking by most candidates. Most of the dishes were well seasoned/flavoured while a few were greasy. Regarding colour, majority of the dishes had an appropriate colour.

Carbohydrate vegetable salad dishes

Majority of the dishes were well cooked (texture), well-seasoned/flavoured, based on the salad dressing used and the colour was appropriate or original, or colourful depending on the type of salad and ingredients used.

Decorated Creamed Cake

With regards to cakes, most came out well as expected (well risen, moist and spongy) while a few were undercooked on the inside, sunk-in or hard/close textured. Most candidates tried their best to decorate their cakes.

Refreshing Drink

The consistency for almost all drinks was appropriate, as they were well strained. The taste/flavours of the drinks were original, and the colour was appropriate or original e.g. orange juice.