



GCSE MARKING SCHEME

SUMMER 2019

**FOOD PREPARATION AND NUTRITION
COMPONENT 1
C560UA0-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2019 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

**GCSE FOOD PREPERATION AND NUTRITION 9-1
COMPONENT 1**

SUMMER 2019 MARK SCHEME

Guidance for examiners

Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

For questions that are objective or points-based the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision made.

Banded mark schemes

For band marked questions mark schemes are in two parts.

Part 1 is advice on the indicative content that suggests the range of food preparation and nutrition, concepts, facts, issues and arguments which may be included in the learner's answers. These can be used to assess the quality of the learner's response.

Part 2 is an assessment grid advising bands and associated marks that should be given to responses which demonstrate the qualities needed in AO1, AO2 and AO4. Where a response is not creditworthy or not attempted it is indicated on the grid as mark band zero.

Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied.

This is done as a two stage process.

Stage 1 – Deciding on the band

Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content. Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

| Question | Section A Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|----------------------------|-----|-----|-----|-------|
| 1. (a) | <p>Award 1 mark for each correct response.</p> <p>(i) True (ii) True (iii) True (iv) False</p> | <p>1 1 1 1</p> | 4 | | | 4 |
| (b) | <p>Outline three safety rules to follow when shallow frying fish.</p> <p>Award 1 mark for each correct response up to a maximum of 3.</p> <ul style="list-style-type: none"> • Responses may be generic or specifically mention fish • Check suitable amount of fat in pan • Fish may spit water content, so lower gently • Use tongs to turn fish or fish slice, as fish is quite fragile • Do not touch the pan • Never leave a frying pan unattended/ concentrate and pay attention • Check frying pan is sitting on hob correctly (no wobble!) • Always turn frying pan handle inwards • Hold handle when frying • Make sure you know the location of the fire blanket/fire extinguisher • Control the heat carefully • Cautionary references to haze, smoke, fire • Allow the frying pan to cool prior to washing • Not using excess oil • Apron to avoid splashes/hair tied back – maximum of 1 mark for personal safety points • Use cloth or pan holder to hold handle • Use a splatter guard for the pan • Lie the fish away from you when placing in the pan <p>No marks for food safety points.</p> <p>Credit any other acceptable response.</p> | 3 | | 3 | | 3 |

| Question | Section A Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (c) | <p>Name two methods of heat transference used during cooking.</p> <p>Award 1 mark for each correct response up to a maximum of 2.</p> <ul style="list-style-type: none"> • Radiation • Conduction • Convection | 2 | 2 | | | 2 |
| (d) | <p>Name two preparation processes used to improve the palatability of meat when preparing a stir fry.</p> <p>Award 1 mark for each correct response up to a maximum of 2.</p> <ul style="list-style-type: none"> • Marinade • Tenderising meat using a mallet/ beating/bashing • Dicing meat/Cutting in strips • Deboning meat • Remove gristle/fat/trim • Rub with oil/spices/seasoning • Equal size | 2 | 2 | | | 2 |

| Question | Section A Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (e) | <p>Describe one advantage of using a microwave oven when preparing family meals.</p> <p>Award 1 mark for one advantage.</p> <p>Award 1 mark for description.</p> <ul style="list-style-type: none"> • Quick/fast (1) because the magnetron passes electromagnetic rays quickly through food (1)/Because uses less energy • Easy (1) because food can be cooked and served in the same dish – less washing up (1) • Cheaper (1) because it uses less fuel than a conventional hob/oven as cooking time is shortened/reduced (1) • Microwaves pass straight through glass, plastic, china (1) and makes serving easier in the cooking vessel/some do not heat them up depending on the food product or conduction rate (1) • Defrosting (1) food quicker than waiting (1) • Quicker (1) for busy family life (1) • Cook quickly and brown if grill integral • Healthier way of cooking (1) Reduces the loss of vitamin B, C/less nutrient loss (1) don't add fat (1) • Takes pressure off the hob • Easy (1) Range of different age groups can use (1) Helps when lack of cooking skills in the family (1) | 2 | | 2 | | 2 |

| Question | Section A Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-----------|
| (f) | <p>Describe one effect of cooking on the nutritional value of foods.</p> <p>Award 1 mark for a basic response.</p> <p>Award 2 marks for a detailed response with linked answer.</p> <ul style="list-style-type: none"> • Increase/Decrease in nutritional value for some cooking methods (1) • Dry cooking methods: BBQ, Grilling: fat melts (1) and reduces total fat content. Some loss of Vitamins A&D (1) • Moist methods of cooking: boiling (1) causes loss of water soluble vitamins (B & C) (1) • Frying in fat or oil (1) increases total fat content due to cooking medium (1) • Braise, stew, casserole, soup uses leached vitamins B & C (1) in cooking stock/gravy/sauce and can retain some nutritional value (1) • Microwaving can be used to steam, poach, melt, cook, defrost foods (1) with negligible effect on the nutritional value of foods (1). <p>Credit any other acceptable response.</p> | 2 | | 2 | | 2 |
| | Total marks section A | | | | | 15 |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| 2. (a) | <p>State how many glasses of water should be consumed daily.</p> <p>Award 1 mark for the correct response:</p> <ul style="list-style-type: none"> • 6-8 or 6, 7 or 8 glasses a day • also accept 2 litres • 3½ pints/4 pints/half a gallon <p>Must refer to volume – metric or imperial.</p> | 1 | 1 | | | 1 |
| (b) | <p>Give three functions of water in our daily diet.</p> <p>Award 1 mark for each correct response up to a maximum of 3.</p> <ul style="list-style-type: none"> • Essential for life/staying alive/body function normally • Control body temperature by perspiration/ ensures sweat glands work correctly • Lubricates joints • Maintains healthy skin/stops drying out • Aids digestion/Flush out/filter • Prevents constipation/urination • Prevents dehydration/headaches • Helps to remove harmful excess or foreign substances from our blood • Transports nutrients, oxygen and carbon dioxide around the body/blood • Performance of a named body function/body functions/lining of throat, lungs, digestive tract, cognitive functions • Can reduce appetite <p>Credit any other acceptable response.</p> | 3 | 3 | | | 3 |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (c) | <p>Describe one nutritional benefit of having 2-3 portions of fish per week.</p> <p>Award 1 mark for stating one benefit of eating fish.</p> <p>Award 1 marks for describing the benefit.</p> <ul style="list-style-type: none"> • Fish is composed of HBV protein/protein/ amino acids (1), needed for growth and repair/good source of protein (1) • The fat in oily fish is mainly oils and this is high in essential fatty acids (1) which can lower blood cholesterol/protect the heart (1) reference to Omega Oil – low in saturated fat /improves the brain function (1) • If eat oily fish it is high in the fat soluble vitamins A needed for night vision (1) • If eat oily fish it is high in the fat soluble and D (1) needed for absorption of calcium (1) • Most fish contain small amounts of vitamin B (1) complex needed for energy release (1). • Calcium (1) in fish is found in bones. In some canned fish bones softened during processing, maybe eaten. (1) Needed for strong teeth and bones (1) • Fluoride (1) is found in all fish, Needed for strong teeth and bones (1) • sodium is found in sea water fish (1), needed for body function. (1) | 2 | 2 | | | 2 |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (d) | <p>Explain two reasons why a third of our daily intake should be based on starchy carbohydrate.</p> <p>Award 1 mark for each basic response.</p> <p>Award 2 mark for each detailed response.</p> <ul style="list-style-type: none"> • They are filling and provide us with many other nutrients such as the vitamin B complex. • Provides energy (1g = 3.75kcal) • Aids digestion (fibre) by absorbing body fluids during digestion and increasing transit time. • Adds bulk to our diet (fibre and starch) and satisfies hunger/prevents snacking • Help to protect the body from digestive problems (fibre) by increasing transit time/prevents constipation • Helps to lower blood cholesterol levels (fibre) by soluble fibre lining the small intestine and reducing absorption of fat. • Slow release energy/insoluble soluble etc. <p>Credit any other acceptable response.</p> | 4 | | 4 | | 4 |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (e) | <p>Evaluate the consequences of having a diet high in fat.</p> <p>Indicative content.</p> <p>Answers could include:</p> <ul style="list-style-type: none"> • Too much saturated fat can be linked to high blood cholesterol- too much cholesterol in the blood deposited on walls of arteries causes them to narrow restricting blood flow and making them less efficient which can lead to a heart attack and if severe can cause death. • Excess saturated fat is linked to coronary heart disease (CHD) hence by reducing saturated fat intake the risk of CHD is reduced. • Too much is linked to obesity (excessive fatness measured as a ratio of weight to height), which causes additional physical and emotional risks to health. • Too much saturated fat can cause weight gain/obesity which can cause strain on joints/heart/lead to mobility problems. • Too much saturated fat is also linked to type 2 diabetes: glucose in blood stream not being balanced correctly. • Reducing the amount of saturated fat eaten will ensure no excess fat is stored in the liver which could reduce the risk of poor liver function and liver disease. • May increase the chance of cancer (there has been some connections made between eating too much saturated fat and bowel/breast cancer but evidence is limited, however there are links between obesity and cancers such as bowel, pancreatic, uterus and kidneys). • Fat provides energy 1 gram is 9 kcals. • Warmth, energy, and protection. <p>Credit any other acceptable response.</p> | | | | | |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|------|-----|-----|-----|-------|
| (e) | <p>Candidates may refer to examples of saturated and unsaturated fats within their responses.</p> <p>Indicative content.</p> <p>Answers may refer to:</p> <ul style="list-style-type: none"> • Saturated fats are solid at room temperature and are mainly found in foods that originate from animals. Saturated fat is found in butter and lard, pies, cakes and biscuits, fatty cuts of meat, sausages and bacon, and cheese and cream. • Monounsaturated fatty acids These fats are soft at room temperature. Research has suggested that maybe healthier for us, as they might lower blood cholesterol; reduce the risk of cancer and diabetes. • Polyunsaturated fats These fats are liquid or very soft at room temperature. • Essential fatty acids cannot be made in the body. but are vital for the health and function of the body. Omega 3 EFA help to protect the heart and is found in oily fish, seeds, green leafy vegetables. Omega 6 EFA helps to lower blood cholesterol and is found in vegetables, grains, seeds and poultry. <p>Credit any other acceptable response.</p> | 7 | | | 7 | 7 |

| AO4 Band | |
|----------|---|
| 3 | <p>Award 6-7 marks</p> <p>Excellent evaluation of the impact on health of having a diet high in fat. Within the response the candidate has demonstrated in depth nutritional knowledge and 3-4 points have been evaluated in depth and accurately interpreted in order to make judgements which address the indicative content. Examples have been included and the response accurately identifies the difference between saturated and unsaturated fats. There is excellent use of correct terminology.</p> |
| 2 | <p>Award 3-5 marks</p> <p>A good attempted to evaluate of the impact on health of having a diet high in fat. Nutritional knowledge is good and 2-3 of the reasons highlighted within the indicative content have been addressed within the response. The selected facts have been adequately analysed and evaluated in order to make judgements. The candidate has used examples within the response. There is good use of correct terminology.</p> |
| 1 | <p>Award 1-2 marks</p> <p>A limited evaluation which discusses some of the benefits of having a diet high in fat. The response has made basic reference to 1-2 of the consequences within the indicative content. There is some attempt to analyse and interpret reasons and some basic judgements have been made. There is limited use of technical terminology.</p> |
| 0 | <p>Award 0 marks</p> <p>Not credit worthy or not attempted.</p> |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|------|-----|-----|-----|-------|
| 3. (a) | <p>Name two nutrients found in eggs.</p> <p>Award 1 mark per correct nutrient up to a maximum of 2.</p> <ul style="list-style-type: none"> • Protein (1) • Fat (1) • Vitamin A (1) • Vitamin D (1) • Vitamin E (1) • Vitamin K (1) • Vitamin B2 (1) • Iron (1) • Sulphur (1) • Poly/unsaturated fats/omega 3 <p>Do not accept just vitamins or minerals.</p> | 2 | 2 | | | 2 |
| (b) | <p>Explain one reason why people may choose to buy eggs produced from free range poultry.</p> <p>Award 1 mark for a basic response.</p> <p>Award 2 marks for a more detailed response.</p> <ul style="list-style-type: none"> • Free range poultry enjoy outdoor life/ fresh air/normal feeding regimes/pecking (1) unlike factory farmed birds (1) • Free to roam/no over crowding (1), not locked in a cage therefore less likelihood of disease (1) • Free range eggs may have better taste/ flavour/colour (1) nutrients because better living/feeding conditions (1) If fed specific feeds - enhanced nutrients may be found in the eggs/Additional vitamin D as out in the sunshine • Supermarkets and shops may sell local free range eggs (1) therefore this supports local farmers/consumer demand (1) • People find battery farming morally wrong (1) because of unnatural living conditions for birds (1) <p>Two marks may only be awarded for the reason and related explanation.</p> | 2 | | 2 | | 2 |

| Question | Section B Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (c) | <p>Describe the functions of eggs when making baked products, using examples in your answers.</p> <p>Indicative content.</p> <p>Answers could refer to:</p> <ul style="list-style-type: none"> • Whisking/Aeration/Foams are created by trapping air as protein is stretched and denatured in egg white and egg yolk with egg white. • Holding and trapping air allows eggs to act as raising agents in cakes. • Aerating swiss rolls, meringues, soufflés as proteins coagulate and set with heat. • Thickening custards/curds due to the coagulation of proteins. • Emulsifying properties allow oil and water to be mixed to an emulsion without separating (cakes). • Binding ingredients together to create different flavours and textures through the use of coagulation of proteins (rock cakes, fish cakes, meat balls). • Coating food with egg or a combination of egg and breadcrumbs to create a protective layer around food. • Glazing pastries, bread, scones to enhance the colour of baked products. • Enriching puddings by adding additional protein and fat from an egg. • Sensory properties: colour/texture/flavour (accept only one). • Add nutritional value to a meal with HBV protein, Vitamin A, D, B, iron. <p>Credit any other acceptable response.</p> | 6 | | 6 | | 6 |

| | AO2 |
|----------|---|
| 3 | <p style="text-align: center;">Award 5-6 marks</p> <p>For an excellent answer which shows in depth application of knowledge and understanding, when describing in detail the function of eggs when making baked products. The majority of the points in the indicative content have been addressed with relevant, accurate examples to support the description. Response shows accurate use of technical and food science terminology.</p> |
| 2 | <p style="text-align: center;">Award 3-4 marks</p> <p>For a good answer which shows some understanding and knowledge when describing the function of eggs when making baked products. The majority of the points in the indicative content have been addressed. Candidates use technical terms with some accuracy.</p> <p>Award no more than 3 marks for just a list.</p> |
| 1 | <p style="text-align: center;">Award 1-2 marks</p> <p>For a limited answer which gives basic descriptions of the functions of eggs when making baked products with little or no reference to how they work together. Answers show little or no use of specialist vocabulary.</p> |
| 0 | <p style="text-align: center;">Award 0 marks</p> <p>Not credit worthy or not attempted.</p> |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| 4. (a) | <p>Modern Technology can be used to create new food products.</p> <p>Give Two reasons why safety standards are needed for GM foods:</p> <p>Award 1 mark per correct response up to a maximum of 2.</p> <ul style="list-style-type: none"> • Prevent mutation • Prevent cross breeding • Prevent disease • Prevent contamination • Reassure consumers • Maintain quality • Reference to possible long-term risks – poisoning, allergies, illness, toxins, side effects – issues unknown • Protects eco-system, flora, fauna | 2 | 2 | | | 2 |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|----------|----------|-----|-----|----------|
| (b) | <p>Explain the use of one safety features found on packaging for food products.</p> <p>Award 1 mark for a basic response.</p> <p>Award 2 marks for a more detailed response.</p> <p>Indicative content.</p> <p>Answers may refer to:</p> <p>Labelling on the packaging:</p> <ul style="list-style-type: none"> • Date marks, use by dates, batch numbers, allergy information, cooking instructions, storage information, ingredients list <p>The packaging itself:</p> <ul style="list-style-type: none"> • Tamper-evident seals are used by manufacturers to ensure a food product has not been contaminated or misused (1) by mistakenly opening and resealing foods (1). • The seals also reassure customers (1) and act as a form of QC. (1) • There are a number of different types of seals available: • Plastic collars on bottles e.g. sauces and marmalades (1) • Tear-away strips around the top of bottles e.g. milk and drink products (1) • Tin foil seals in pourable boxes e.g. cartons of juice (1) • Plastic film wraps on cardboard boxes e.g. biscuits, chocolates (1) • Plastic film on ready-meal trays (1) • Jam jar lids with press-to-check feature (1) • Ring pull on a tin • Tamperproof packaging on a food products for children (baby milk) • Holes in plastic in supermarket carrier bags to prevent suffocation <p>Credit any other acceptable response.</p> | 2 | 2 | | | 2 |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|-----------|-----|----------|----------|-----------|
| (c) | <p>Discuss and evaluate the role of food packaging to ensure that the food remains in prime condition for the consumer.</p> <p>Indicative content.</p> <p>Answers may refer to:</p> <ul style="list-style-type: none"> • The type of food, preparation, processing and production methods that have been used to create the food product and the desired storage life of the food product will determine the type of packaging selected for each product. • Legislation from the Food Safety Act 1990 applies to the packaging of food products and links to the functions of food packaging. • Protect food from damage and reduce food wastage. • Physical damage such as bruising • Deterioration through high or low humidity. • Temperature change which can cause over ripening of fruits. • Resealable packaging. • Safety and hygiene of foods to prevent contamination from chemicals, micro-organisms and insect attack and cross contamination from other foods. • Increase the storage life of food by maintaining the food in the condition that consumers expect. This might be as fresh food or processed food that has been subjected to preservation treatments. • Contain the food in a condition appropriate for consumption. • Storage, transportation and retail of food, requires packaging to maintain food in the condition appropriate for consumption. • Convey information using the label, found on the packaging. This must include details about, date marks, storage and cooking guidelines, where appropriate to the food product. • Specialist packaging materials: Ovenable paperboard/Modified atmosphere packaging (MAP/Tamper-evident seals). • Named packaging materials (glass/paper/cardboard/plastic/metal/polystyrene) linked to advantages/disadvantages for each type and relevance to named food products. • Reference to stacking in storehouses, shops etc. to keep food in prime condition. <p>Credit examples.</p> <p>Credit any other acceptable response.</p> | 10 | | 3 | 7 | 10 |

| Band | AO2 | AO4 |
|------|---|--|
| 3 | <p>Award 3 marks</p> <p>An excellent answer which shows in depth application of knowledge and Understanding, when describing in detail the functions of the roles of packaging and explains accurately how they work together to ensure food remains in prime condition. The majority of the points in the indicative content have been addressed. Answers show accurate use of technical terminology.</p> | <p>Award 5-7marks</p> <p>An excellent evaluative answer with advantages and disadvantages explored by the candidate with associated developments linked to the roles of packaging showing a detailed understanding of the issues concerning safety and quality.</p> |
| 2 | <p>Award 2 marks</p> <p>A good answer which shows some understanding and knowledge when describing the role of packaging and makes some reference to how they work together to ensure food is kept in prime condition. Candidate uses technical terms with some accuracy.</p> | <p>Award 3-4 marks</p> <p>A good evaluative answer with some advantages and disadvantages explored by the candidate with associated developments linked to the roles of packaging showing an understanding of the issues concerning safety and quality.</p> |
| 1 | <p>Award 1 mark</p> <p>A limited answer which gives basic descriptions of 1 role of the packaging with little or no reference to how they work together. Answers show little or no use of specialist vocabulary.</p> | <p>Award 1-2 marks</p> <p>A limited answer with some simple evaluative comments. The candidate identifies the issues with no development OR identifies and develops one area. Shows limited understanding of the issues.</p> |
| 0 | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|------|-----|-----|-----|-------|
| 5. (a) | <p>Name three senses.</p> <p>Award one mark for each correct response.</p> <ul style="list-style-type: none"> • Sight/vision • Sound/hearing • Aroma/smell • Touch/texture • Taste/mouth feel | 3 | 3 | | | 3 |
| (b) | <p>Discuss other factors that influence food choices.</p> <p>Award one mark for recall (AO1) answer up to a maximum of 4 and one mark up to a maximum of 2 for linked responses (AO2).</p> <ul style="list-style-type: none"> • Previous other experiences with food • Hunger and satiety • Mood • Where you eat: home, canteen, picnic • Time of day • Time of year (winter/summer etc.) • Beliefs and values • Social aspects (special occasions, events) • Cost/price of food • Physical activity levels/occupation • Health and well being • Age • Likes and dislikes • Special diets • Packaging/marketing • Income • Time available to cook • Offers/special deals/BOGOF • Name of the dish • Environmental – Fairtrade, local sourced, ethical <p>Credit any other acceptable response.</p> | 6 | 4 | 2 | | 6 |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| (c) | <p>Explain the role of sensory evaluation testing in food production.</p> <p>Indicative content.</p> <p>Answers could refer to:</p> <p>How is it used? Why it is used?</p> <p>Sensory evaluation can be used to:</p> <ul style="list-style-type: none"> • Compare similarities/differences in a range of dishes/products (1) when trialling products for development (1) • Evaluate a range of existing dishes/food products (1) and compare them against competitors (1) • Analyse food samples (1) for improvements (1) • Gauge responses to a dish/product, e.g. acceptable v unacceptable (1) prior to product launch (1) • Explore specific characteristics of an ingredient or dish/food product (1) to aid recipe development (1) • Check whether a final dish/food product meets its original specification (1) during product development (1) • Provide objective and subjective feedback data (1) to enable informed decisions to be made during product manufacture (1) <p>Relevant named examples of sensory tests worthy of credit:</p> <ul style="list-style-type: none"> • Preference test - These types of tests supply information about people's likes and dislikes of a product. They are not intended to evaluate specific characteristics, such as crunchiness or smoothness. They are subjective tests and include hedonic, paired comparison and scoring, ranking into order • Discrimination test - asks people to describe/ rate a particular attribute of a product, e.g. Rating test, Star profile <p>Credit any other acceptable response.</p> | 6 | 6 | | | 6 |

| | AO1 |
|----------|---|
| 3 | <p style="text-align: center;">Award 5-6 marks</p> <p>An excellent answer which shows in depth application of knowledge and understanding, when explaining in detail the role of sensory evaluation testing and explains accurately how it is used in food production. The majority of the points in the indicative content have been addressed. Answers show accurate use of technical terminology.</p> |
| 2 | <p style="text-align: center;">Award 3-4 marks</p> <p>A good answer which shows some understanding and knowledge when explaining the role of sensory evaluation testing and explains accurately how it is used in food production. Candidate uses technical terms with some accuracy.</p> |
| 1 | <p style="text-align: center;">Award 1-2 marks</p> <p>A limited answer which gives a basic explanation of the role of sensory evaluation testing in food production. Answers show little or no use of specialist vocabulary.</p> |
| 0 | <p style="text-align: center;">Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> |

| Band | AO2 |
|------|--|
| 3 | <p style="text-align: center;">Award 5 marks</p> <p>An excellent answer which shows in depth application of knowledge and understanding, when describing 3-4 points in detail how food waste can be reduced and explains accurately how when buying and cooking foods. The majority of the points in the indicative content have been addressed. Answers show accurate use of technical and specialist terminology.</p> |
| 2 | <p style="text-align: center;">Award 3-4 marks</p> <p>A good answer which shows some understanding and knowledge when describing 2-3 points how food waste can be reduced and explains accurately how when buying and cooking foods. The majority of the points in the indicative content have been addressed. Candidate uses technical terms with some accuracy.</p> |
| 1 | <p style="text-align: center;">Award 1-2 marks</p> <p>A limited answer which gives basic descriptions at least 1 point how to reduce food waste, with little or no reference to how preparation and cooking issues are addressed. Answers show little or no use of specialist vocabulary.</p> |
| 0 | <p style="text-align: center;">Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|------|-----|-----|-----|-------|
| 7. | <p>Assess how a refrigeration can be best used to store food successfully.</p> <p>Indicative content.</p> <p>Answers could refer to:</p> <ul style="list-style-type: none"> • Refrigeration is not preservation, as temperatures are not low enough. • Microbial growth and enzyme action is slowed down or stopped at very low temperatures. Bacteria remain dormant at low temperatures, but refrigeration temperatures are not low enough to halt growth completely. • Check internal temperature of fridge (1-5°C) by using a thermometer to ensure optimum temperature for short term storage of fresh, perishable food. • Chilled foods may be purchased, cooked and eaten without delay. • Little effect on nutritional content. • Sensory properties may result in a change in consistency (sauces), texture (cheese). • Wide range of products can be refrigerated - drinks, foods, desserts, fruit, vegetables. Some fruit (bananas, tropical fruits cannot be refrigerated due to climacteric ripening. • Minimises food waste as temperatures reduce some bacterial growth to 2-5 days. • Store food correctly to avoid cross contamination. (Reward accurate examples keeping strong smelling foods away from dairy, crisper drawers for salad ingredients, fish and meat covered and sealed). • Suitable packaging. • Zone storage-overpacking the fridge. • Check date mark of food and use accordingly to ensure food is safe to eat. • Good stock rotation is essential to maintain food safety, <i>Rotating stock</i> reduces the potential for throwing out food that expires or perishes. • Never put warm foods into the fridge as this will increase the temperature of the fridge. • Avoid opening the fridge door more than necessary to prevent hot air raising the internal temperature. • 2-5 days storage for most high risk foods as they are susceptible to bacterial growth. • Excessive use of packaging materials on pre-packed items can be detrimental to the environment. | 9 | | 3 | 6 | 9 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | <ul style="list-style-type: none"> • Clean regularly to prevent build up of contaminants (dirt, debris). <p>Credit responses that mention negative e.g., do not put hot foods into the refrigerator.</p> <p>Credit any other acceptable response.</p> | | | | | |
|--|--|--|--|--|--|--|

| Band | AO2 Max 3 marks | AO4 Max 6 marks |
|------|---|--|
| 3 | <p>Award 3 marks</p> <p>The candidate has produced an excellent response showing very good application of knowledge of food storage and safety to avoid some of the storage risks linked to refrigeration. All suggestions are realistic and achievable in relation to the foods under discussion.</p> | <p>Award 5-6 marks</p> <p>The candidate has produced an excellent response showing very good assessment and evaluation of how a refrigerator contributes towards successful food storage.</p> |
| 2 | <p>Award 2 marks</p> <p>The candidate has produced a good response demonstrating adequate application of knowledge when applying food storage and safety to avoid some of the storage risks linked to refrigeration. The majority of suggestions are realistic and achievable.</p> | <p>Award 3-4 marks</p> <p>The candidate has produced a good response demonstrating adequate assessment and evaluation of how a refrigerator contributes towards successful food storage.</p> |
| 1 | <p>Award 1 mark</p> <p>The candidate has demonstrated limited application of knowledge when applying refrigeration to food storage. They have produced a simple list or bullet points of foods to eat with little or no explanation.</p> | <p>Award 1-2 marks</p> <p>The candidate has demonstrated limited assessment and evaluation of how a refrigerator contributes towards successful food storage.</p> |
| 0 | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|--|------|-----|-----|-----|-------|
| 8. | <p>Discuss the nutritional needs of the following groups:</p> <p>Indicative content.</p> <p>Answers could refer to:</p> <p>(i) Pre-school children</p> <ul style="list-style-type: none"> • A period of rapid growth and development. • Protein for growth, repair and energy (1g=4kcal) • Starchy carbohydrates for warmth and energy (1g=3.75kcal) • Dietary fibre to aid digestion/prevent constipation (but not too much to bulk out diet) • Vitamins (Vit A, B, C, E, K) with linked responses to functions • Minerals (Iron, fluoride, calcium, phosphorous) with linked responses to functions • Reliant on their parents for choosing and providing food • Eating habits and patterns can be established from an early age • Regular meal patterns to reduce snacking on high sugar/fat items • Encourage snacking on fruit and vegetables (if needed) as part of five a day • Use the Eatwell guide dietary guidelines • Breakfast, lunch and tea, with healthy snacks as appropriate to minimise high fat, sugar and salt foods <p>Functions of nutrients to be credited.</p> <p>(ii) Teenagers</p> <ul style="list-style-type: none"> • Protein for growth, repair and energy (1g=4kcal) • Starchy carbohydrates for warmth and energy (1g=3.75kcal) • Dietary fibre to aid digestion/prevent constipation (but not too much to bulk out diet) • Vitamins (Vit A, B, C, E, K) with linked responses to functions • Minerals (Iron, fluoride, calcium, phosphorous) with linked responses to functions • Continue to use the Eatwell plate dietary guidelines and eat a variety of foods | 12 | 4 | 8 | | 12 |

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
|----------|---|------|-----|-----|-----|-------|
| | <ul style="list-style-type: none"> • Breakfast, lunch and tea, with healthy snacks as appropriate • Activity levels increase/decrease, leading to a greater /reduced need for energy • Environmental, social, economic, moral and health issues – vegetarianism – B12 • Puberty is a period of rapid development, growth and change in the human body. Girls have a greater need for iron to replace that lost during menstruation. Boys need more energy from starchy carbohydrates • Importance of breakfast as ‘fuelling the brain’ – starchy carbohydrate | | | | | |
| | <p>(iii) Later adulthood</p> <ul style="list-style-type: none"> • Nutritional needs vary depending on lifestyle and occupation • Osteoporosis - calcium, vit D, phosphorous • Coronary heart disease • Energy balance – depending on lifestyle and exercise patterns • Continue to use the Eatwell plate dietary guidelines and eat a variety of foods • Increased life expectancy. As people live longer, food needs and eating patterns change according to health, activity and companionship • Continue to use the Eatwell plate dietary guidelines and eat a variety of foods • Smaller quantities needed as energy levels decrease – linked to protein/carbohydrate/fat • Loss of appetite <p>Credit any other acceptable response.</p> | | | | | |

| | A01 | A02 |
|----------|---|--|
| 3 | <p>Award 4 marks</p> <p>The candidate has written an excellent response which demonstrated clear knowledge understanding of the specific dietary requirements. The candidate has used highly appropriate technical terminology confidently and accurately in relation to the indicative content.</p> | <p>Award 6-8 marks</p> <p>For an excellent answer which shows in depth application of knowledge and understanding, when explaining in detail the concept of individual nutritional needs. The majority of the points in the indicative content have been addressed. Answers show accurate use of technical terminology.</p> |
| 2 | <p>Award 2-3 marks</p> <p>The candidate has written a good response that demonstrates an adequate level of knowledge and understanding of the dietary requirements. The candidate has used appropriate technical terminology referring to the indicative content.</p> | <p>Award 4-6 marks</p> <p>For a good answer which shows good understanding and knowledge when explaining in detail the concept of an individual nutritional needs. The majority of the points in the indicative content have been addressed. Candidates use technical terms with some accuracy.</p> |
| 1 | <p>Award 1 mark</p> <p>The candidate has written a limited response that demonstrates a basic level of knowledge and understanding of the dietary requirements of people.</p> | <p>Award 1-3 marks</p> <p>For a limited answer which gives basic descriptions of individual nutritional needs, with little or no reference to how they work together. Answers show little or no use of technical vocabulary.</p> |
| 0 | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> | <p>Award 0 marks</p> <p>Response not credit worthy or not attempted.</p> |

| Q | Mark | AO1 | AO2 | AO4 | Total |
|------------|------|-----|-----|-----|-------|
| 1. (a) | 4 | 4 | | | 4 |
| (b) | 3 | | 3 | | 3 |
| (c) | 2 | 2 | | | 2 |
| (d) | 2 | 2 | | | 2 |
| (e) | 2 | | 2 | | 2 |
| (f) | 2 | | 2 | | 2 |
| 15 | | | | | |
| 2. (a) | 1 | 1 | | | 1 |
| (b) | 3 | 3 | | | 3 |
| (c) | 2 | 2 | | | 2 |
| (d) | 4 | | 4 | | 4 |
| (e) | 7 | | | 7 | 7 |
| 17 | | | | | |
| 3. (a) | 2 | 2 | | | 2 |
| (b) | 2 | | 2 | | 2 |
| (c) | 6 | | 6 | | 6 |
| 10 | | | | | |
| 4. (a) | 2 | 2 | | | 2 |
| (b) | 2 | 2 | | | 2 |
| (c) | 10 | | 3 | 7 | 10 |
| 14 | | | | | |
| 5. (a) | 3 | 3 | | | 3 |
| (b) | 6 | 4 | 2 | | 6 |
| (c) | 6 | 6 | | | 6 |
| 15 | | | | | |
| 6. (a) (i) | 1 | 1 | | | 1 |
| (ii) | 1 | 1 | | | 1 |
| (iii) | 1 | 1 | | | 1 |
| (b) | 5 | | 5 | | 5 |
| 8 | | | | | |
| 7. | 9 | | 3 | 6 | 9 |
| 9 | | | | | |
| 8. | 12 | 4 | 8 | | 12 |
| 10 | | | | | |
| Totals | 100 | 40 | 40 | 20 | 100 |
| % AO | | 20% | 20% | 10% | 50% |