## eduqas

## GCSE MARKING SCHEME

## SUMMER 2022

GCSE
FOOD PREPARATION AND NUTRITION COMPONENT 1 C560UA0-1

## INTRODUCTION

This marking scheme was used by WJEC for the 2022 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 PREPARATION AND NUTRITION - COMPONENT 1 

## SUMMER 2022 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.

SECTION A

| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1. (a) | Award 1 mark for each correct response <br> (i) False <br> (ii) True <br> (iii) True | 3 | 3 |  |  | 3 |
| (b) | Name two ingredients that could be added to <br> change the colour of the pasta <br> Award 1 mark for each correct response <br> - beetroot <br> - tomato/tomato puree/ketchup <br> - spinach <br> - squid ink/cuttlefish ink <br> - herbs <br> - spices (e.g., saffron/paprika/turmeric) <br> - carrot puree <br> - red cabbage <br> - broccoli <br> - egg <br> - orange/red/green peppers <br> - wholemeal flour / bran <br> - chocolate / cocoa powder <br> Credit any other acceptable response <br> Take care with vegetables - they must action a <br> different colour <br> No to food colouring | $2 \times 1$ | 2 |  |  |  |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (c) | Standard ingredients are used when making pasta. Complete the table below. <br> Award 1 mark per correct response x3 <br> Flour: <br> - bulking agent <br> - high protein content for elasticity <br> - adding structure/ helps the shape <br> - reference to gluten/stretch of dough <br> Eggs: <br> - Binding/stick/combine/bonds together <br> - Improves texture <br> - Adds flavour <br> - Moisture <br> - Adds colour <br> Salt: <br> - Flavour (taste) <br> - Reference to gluten development | $3 \times 1$ |  | 3 |  | 3 |
| (d) | State four guidelines to successfully cook fresh pasta. <br> Award 1 mark for statement <br> Answers could refer to: <br> - Make sure you have enough water in the saucepan /1 litre per 100 grms of pasta. <br> - Use a large/deep pan <br> - Make sure the water is always fast boiling/fully boiling/ rolling boil / use boiling water before adding the pasta. <br> - Never cook pasta with the lid on the saucepan. <br> - Add salt/ / add seasoning <br> - Add the pasta to the water and stir to stop it sticking <br> - Stir the pasta into the boiling water at least every two minutes during cooking. <br> - There is never any need to add oil to the boiling water. <br> - Make sure the pasta is al dente, firm to bite. <br> - Do not overcook- Fresh pasta cooks quicker than dried. Stop cooking when it floats <br> - Drain fully | 1x4 |  | 4 |  | 4 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (e) | Describe ways in which flavour can be added to fresh pasta during preparation, cooking or serving. <br> Award 1 mark for a basic description of ways in which flavour can be added to fresh pasta during preparation or cooking or serving. <br> Award 2 marks for a good description of ways in which flavour can be added to fresh pasta during preparation cooking OR serving. <br> Award 3 marks for an excellent description of ways in which flavour can be added to fresh pasta during preparation, cooking and serving. <br> Answers could refer to <br> Preparation <br> - Incorporating fresh or dried herbs (basil/parsley) within the pasta <br> - Adding spices to the pasta <br> - Adding vegetables to pasta <br> - Adding grated parmesan to the pasta <br> - Adding ground black pepper to the pasta <br> Cooking <br> - Creating a ravioli/stuffed pasta <br> - Adding a sauce (bolognaise, cheese sauce, pesto, tomato, mushroom) <br> - Cook in stock / with a stock cube <br> - Seasoning added to the water / add salt <br> Serving <br> - Adding cheese to the top of the sauce <br> - Adding chopped basil/ other named herb on top of the pasta <br> - Combine pasta with melted butter when serving <br> - Add rocket / tomato / serve with salad - any appropriate named veg <br> - Herbs and garnishes/ black pepper / chilli flakes/ <br> - Add a flavoured oil/ butter / oil <br> Credit any other valid response | 1x3 |  | 3 |  | 3 |
|  | Total marks for section A |  |  |  |  | 15 |

## SECTION B

| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. (a) (i) | State which bread has the most energy value per serving size. <br> Award 1 mark for the correct response: <br> Wholemeal bread | 1 | 1 |  |  | 1 |
| (ii) | State which bread has the highest protein content. <br> Award 1 mark for the correct response. <br> Wholemeal bread | 1 | 1 |  |  | 1 |
| (iii) | Name two minerals found in bread. <br> Award 1 mark for any two of the correct response: <br> - Iron <br> - Calcium <br> - Sodium | 2x1 | 2 |  |  | 2 |
| (iv) | Describe why wholemeal bread has more dietary fibre (NSP) content than white bread <br> Award 1 mark for basic description of why wholemeal bread has more dietary fibre (NSP) content than white bread: E.g. It has the whole wheat grain <br> Award 2 marks for a detailed description of why wholemeal bread has more dietary fibre (NSP) content than white bread <br> - Wholemeal flour is made from the whole wheat grain/ 100\% extraction rate. <br> - Wheat bran provides dietary fibre as it contains the whole grain/bran layer <br> - White flour has most of the bran and wheat germ removed, so it is lower in fibre. | 2x1 |  | 2 |  | 2 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (b) | Give two reasons why bread is a popular commodity. <br> Award 1 mark for any two correct responses. <br> Answers may refer to: <br> - cheap to buy/affordable <br> - different varieties <br> - high in starchy carbohydrate <br> - fortified with vitamins and minerals <br> - low in fat <br> - easy to store/freeze at home <br> - widely available <br> - eaten on the go/snack <br> - no prior preparation <br> - easy to change into other products: breadcrumbs/toast/puddings <br> - its versatile/ used in lots of different ways/dishes <br> - sweet or savoury <br> - multicultural varieties <br> - it is a staple food <br> - its filling <br> - good energy source <br> Credit any other valid response | 2x1 |  | 2 |  | 2 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (c) | A baker has produced a batch of bread rolls which are heavy and small. <br> Give two reasons why this has happened and suggest how this could have been avoided. <br> Award 1 mark for each correct reason and 1 mark for how this could have been avoided. <br> Reason: <br> - Yeast is not active/yeast out of date <br> - Not enough CO2 produced <br> - Mixing yeast and salt together <br> - Not enough liquid so the dough cannot expand with steam <br> - Not enough liquid added <br> - Proving time too short. <br> - Wrong flour used /Protein content in flour too low. <br> - Dough under-kneaded / insufficient kneading / longer kneading required <br> - Yeast killed - water too hot <br> - Not enough yeast <br> How this can be avoided: <br> - Ensure that $37^{\circ} \mathrm{C}$ liquid is used during fermentation/warm liquid used/ use water at right temperature / hand hot /tepid <br> - Liquid hydrates yeast - so must measure liquid and follow recipe <br> - Use sufficient liquid to form correct dough consistency/soft sticky dough, enables the dough to stretch <br> - Keep yeast and salt separate to prevent salt killing yeast/yeast becomes inactive <br> - Liquid hydrates proteins (gliadin and glutenin) so ensure adequate used <br> - Use Sugar as needed for food for yeast <br> - Use Strong plain flour with high gluten content <br> - Use enough yeast/ fresh yeast / quick action yeast <br> - Adequate Proving of bread is needed to ensure starch present in the flour is broken down and fermented by the yeast. CO 2 is produced and causes the gluten network to expand and make the dough rise. <br> - Ensure adequate kneading of bread (810 mins ) to develop gluten and stretch/elasticity. | 4x1 | 2 | 2 |  | 4 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (d) | Outline how bread is mass produced by manufacturers to meet consumer demand. <br> Award 1 mark for a basic outline of how bread is mass produced by manufacturers to meet consumer demand. <br> Award 2 marks for a more detailed outline of how bread is mass produced by manufacturers to meet consumer demand. <br> - They use computer integrated manufacture (CIM). (1) CAM Made in large batches <br> - Cooked in large ovens <br> - Large machines are used to combine/mix/knead ingredients1) this speeds up the process as a large volume can be produced in one go (1) <br> - They use a lower protein wheat (1), which means UK grown wheat can be used, reducing food miles/improving the environmental credentials. (1) <br> - Ascorbic acid/Vitamin C (1) is used as an improver which speeds up the fermentation process/ reduces manufacture time (1) <br> - Fast and vigorous kneading (1) using high speed mixers (1) develops the gluten structure more quickly and gives dough elasticity. (1) <br> - Flour to loaf is 3.5 hours (1) meaning consumer demand can be met for this staple food in a suitable amount of time <br> - They Use the Chorley Wood process (or similar) (1) | 2 |  | 2 |  | 2 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3. (a) | Define what is meant by obesity. <br> Award 1 mark for a basic definition of what is meant by obesity <br> Award 2 marks for a good definition of what is meant by obesity <br> Answers may refer to <br> - Obesity is a chronic condition characterised by excessively high body fat in relation to lean body tissue which can lead to adverse effects on health. <br> - Obesity is classified as having a Body Mass Index (BMI) $>30$ (1) (High BMI is acceptable) <br> - Being overweight is classified as having a BMI $>25$, Morbid Obesity is defined as having BMR>35 <br> - Energy balance/ eating and drinking too much and not exercising/moving enough <br> - Obesity is when someone is severely overweight <br> - Can cause mobility issues <br> - Can cause high blood pressure <br> Do not accept just "overweight" just "fat"- unless qualified eg. Very overweight | 2 |  | 2 |  | 2 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (b) | Obesity is a national health issue, Discuss the consequences of obesity. <br> Award 1 mark for a limited discussion of the consequences of obesity <br> Award 2 marks for a basic discussion of the consequences of obesity Max 2 marks for bullet points or a list Award 3 marks for a good discussion of the consequences of obesity, one of two conditions / points clearly explained <br> Award 4 marks for a very good discussion of the consequences of obesity - two or more conditions/ points - explained in detail <br> Answers may refer to <br> - Type 2 diabetes <br> - cardiovascular disease/coronary heart disease <br> - High blood pressure <br> - some cancers <br> - Gall stones <br> - Osteo-arthritis / painful joints due to excess weight <br> - Depression and mental health issues <br> - As well as reducing both life quality and life expectancy Poor mobility - Physical activity is not always able to be completed, also linked to breathing difficulties <br> - Obesity also has wider implications <br> - Skin sores/rashes due to excess folds of skin <br> - Additional costs for society /NHS . <br> Credit any other acceptable response | 4 | 4 |  |  | 4 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (c) | Explain the difference between the two types of cholesterol. <br> Award 1 mark for a limited explanation of the differences in types of cholesterol <br> Award 2 marks for a basic explanation of the differences in types of cholesterol <br> Award 3 marks for a good explanation of the differences in types of cholesterol <br> Award 4 marks for a very good explanation of the differences in types of cholesterol <br> Low - density lipoprotein (LDL) <br> Bad cholesterol (1) <br> LDL Transports cholesterol to body cells but does not take excess amounts back to the liver. Instead the excess cholesterol is deposited in nether artery walls and forms atheroma. <br> For an adult 3mmol/L or lower <br> Causes heart attack/stroke <br> Raised by consumption of saturated fats (1) and maybe lowered by soluble fibre in oats (2) <br> Can cause heart issues - heart attacks <br> High - density lipoproteins (HDL) <br> Good cholesterol (1) <br> Lot of protein, little fat <br> Omega 6 <br> HDL transports cholesterol away from body cells and back to the liver where it is either removed as a waste product or broken down. <br> Lower risk of heart disease and stroke <br> Credit any other acceptable response | 4 | 4 |  |  | 4 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. (a) | Name two functions of protein in the diet. <br> Award 1 mark for each correct response <br> - Growth <br> - Repair (body cells and tissues) renewal of cells <br> - Maintenance <br> - Production of hormones, enzymes, antibodies <br> - Secondary source of energy/excess protein used as energy source <br> - Maintain muscle mass | 2 | 2 |  |  | 2 |
| (b) (i) | Proteins can be High Biological Value or Low Biological Value. <br> State what is meant by Low Biological Value. <br> Award 1 mark for the correct response <br> - A LBV protein is missing one or more of the essential amino acids. <br> - Contains some of the essential amino acids | 1 | 1 |  |  | 1 |
| (ii) | Describe how a vegan can ensure they achieve their daily intake of protein in their diet <br> Award 1 mark for basic description of how a vegan can ensure they achieve their daily intake of protein in their diet e.g. named example of a food with limited description <br> Award 2-3 marks for a good description of how a vegan can ensure they achieve their daily intake of protein in their diet- e.g. named examples with some additional facts - 2 marks <br> Reference made to LBV proteins - 3 marks <br> Award 4-5 marks for a detailed description of how a vegan can ensure they achieve their daily intake of protein in their diet - excellent response includes explanation of protein complementation and some examples <br> NB. A list of foods with no description is a basic response - max 1 mark <br> Answers may refer to <br> - Soya products - Only HBV plant protein <br> - Protein complementation where a mixture of LBV proteins are combined to provide all the essential amino acids we need (equivalent to HBV protein) <br> - Baked beans on toast/hummus on pita bread/lentil soup with bread <br> - Eat a wide range of LBV proteins <br> - Vegan Quorn ( without egg white) <br> - Pulses /legumes (beans, chickpeas) | 5 |  | 5 |  | 5 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Quinoa <br> - Nut roast/ mixture of nuts and seeds <br> - TVP <br> - Tofu <br> - Cereals <br> - Protein shakes - nut milk / vegan (home made): protein bars/ vegan protein balls - <br> - Read packaging on vegan meals <br> Accept any other acceptable response |  |  |  |  |  |
| (c) | Describe two health problems that might be caused by a protein deficiency <br> Award - 2 marks $\times 2$ per description <br> Award 1 mark for a basic description of problems that might be caused by a protein deficiency. Award 2 marks for good description of problems that might be caused by a protein deficiency. <br> Answers may refer to <br> - Stunted growth in children because less protein means the growth rate is slower and less protein for muscle mass <br> - Hair and nails in poor condition (weak/brittle) because they don't grow as fast <br> - Wounds make take longer to heal because the immune system in less efficient <br> - Oedema (water retention) a build up of fluid in the body eg swollen ankles/ can be swollen belly <br> - You lack energy / weak / fatigue <br> - Loss of fat and muscle from your body/ loss of weight <br> - Muscle and tissue injuries take longer to heal <br> - You can catch infections more easily because you are not consuming enough of a macronutrient / antibodies are not made <br> - Can experience digestive problems if enzymes are not produced- building of gut, digestive juices, repair of gut all require regular protein intake <br> - Extreme protein deficiency - Kwashiorkor oedema/poor growth/brittle hair <br> - Anaemia <br> Credit any other valid response | 4 | 2 | 2 |  | 4 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5. | Assess the impact of importing foods from other countries and suggest how customers can be more environmentally friendly when food shopping. <br> Maximum of 3 marks for a bullet pointed list of suggestions - no assessment evident <br> Indicative content. <br> Answers could include: <br> Impact <br> - Rising carbon dioxide emissions from transport, farming, processing of foods Contributing to the damaging greenhouse gases <br> - Planes contribute to the highest amount of CO 2 emitted into the atmosphere <br> - Food imports contribute to the global footprint <br> - Fashionable foods can be more expensive for country of origin, e.g. Quinoa originates from Peru, and however, local Peruvian people cannot afford it. Higher price tag for fashionable foods <br> - Trade wars <br> - Provides income for some countries <br> - Reduces/increases air miles <br> - Buying imported foods does not necessarily improve the lives of developing world population who often are living in poverty. <br> Alternative suggestions <br> - Buy locally grown foods <br> - Grow your own <br> - Avoid short car journeys or using the car at all <br> - Plan one big trip if using a large supermarket instead of going two or more times per week <br> - Buy fair-trade goods which support third world communities and are usually transported by sea <br> - Buy fresh seasonal produce grown locally <br> - Buy food with as little packaging as possible / environmentally friendly packaging <br> - Take re-useable shopping bags with you so that you do not have to keep buying plastic bags <br> - Take re-useable/your own food bags for loose fruit and vegetables to reduce plastic waste <br> - Buy organic produce <br> - Buy seasonal foods - helps to reduce environmental costs associated with the food ripened on the farm before being harvested food fresher tastes better and is more nutritious <br> - Shop at farmers markets - foods may not be chemically treated because it does not have to be transported long distances. / uses less fossil fuel energy to transport the food <br> - Labelling on food products | 8 |  |  | 8 | 8 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Shop online / book 'green' delivery slots [Sainsbury has green slots] <br> - Walk / cycle/ car share when going to shops <br> - Buy and freeze reduced food items / foods about to go out of date <br> - Have milk delivered in reusable glass bottles <br> - Buy Red Tractor logo meat <br> - Only buy what's needed / buy less to reduce waste / use a shopping list / don't get influenced by BOGOF <br> Credit any other acceptable response. |  |  |  |  |  |


| Band | AO4 <br> Max 8 marks |
| :---: | :--- |
| $\mathbf{3}$ | Award 6-8 marks <br> The candidate has produced an excellent response showing good analysis and <br> evaluation of the impact of importing foods from other countries and has suggested 3-4 <br> ways in which a customer can be more environmentally friendly when food shopping. <br> Candidate has produced an excellent response which shows in depth application of <br> knowledge and understanding. Reasons have been discussed in full and accurate <br> examples have been used to analyse and evaluate on the points within the indicative <br> content. Specialist vocabulary related to the indicative content is used with ease and <br> accuracy. |
| $\mathbf{2}$ | The candidate has produced a good response demonstrating some analysis and <br> evaluation of the impact of importing foods from other countries and has suggested 2-3 <br> ways a customer can be more environmentally friendly when food shopping. Candidate <br> has produced a good response which shows clear application of knowledge and <br> understanding of shopping for food. Some reasons have been discussed and some <br> accurate examples have been given. Some attempt to use specialist vocabulary. |
| $\mathbf{1}$ | Award 1-2 marks <br> The candidate has demonstrated limited analysis and evaluation of the impact of <br> importing foods from other countries. Candidate has mentioned 1-2 points on how a <br> customer can more environmentally friendly when food shopping. Little or no reference <br> to examples. Little or no use of specialist vocabulary. |
| $\mathbf{0}$ | Response not credit worthy $\quad$ Award 0 marks <br> Respord |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. | Evaluate the food diary and suggest changes that could be made to meet current dietary recommendations. <br> Answers may refer to <br> Healthy e.g. <br> - The student eats some non-starch polysaccharides/dietary fibre because he has an apple and rice. This will help him to digest his food, give bulk to his waste products by retaining water and avoid constipation. Eating /choosing brown rice can help reduce cholesterol levels as well. <br> - Protein in milk, chicken and sausage roll for growth and repair of his body cells and tissues e.g. muscles As this protein is an animal source, it is HBV (high biological value) protein so contains all of the essential amino acids necessary for the body. <br> - Quite a good intake of liquids in coffee, cola and water for hydration of all his body cells and body processes such as digestion, respiration and temperature control. <br> - Plenty of starchy carbohydrates in the form of starch from bread, rice for energy. These provide slow release energy. These foods also give Vitamin B group, which contribute to good health and assist in energy release. <br> - Milk which will give him calcium for strong bones and teeth. <br> Less healthy e.g. <br> - The student does not eat breakfast and this will affect energy levels, brain and memory function, performance and tiredness. It is likely to increase snacking during the day. <br> - High in saturated fat from the whole milk in his coffees and tea, processed meats for tea and in his sandwich, chocolate biscuit, cookie. This may contribute to making him prone to coronary heart disease and increase his cholesterol levels. The body does need a little fat for health but this should be unsaturated fat from plant sources e.g. olive oil. It could also make him overweight if he is not very active. | 8 |  |  | 8 | 8 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - High in salt. Processed foods, such as the sausage roll, chocolate bar tend to be quite high in salt. They also often contain sugar (empty calories, extrinsic) which will add to the high amount of sugar that he already consumes. The cheese is also high in salt, which is not good for high blood pressure and can raise it further <br> - High in sugar from the amount of added sugar in his teas and coffees, and the cookie and biscuits he eats. This is going to cause weight gain, as he is sedentary/inactive, so is not a very active person. It also could contribute towards tooth decay. <br> - The student does not have 5 portions of fruit and vegetables. This may mean he is short of vitamins and minerals e.g. vitamin $A$ and $C$ and minerals, such as iron which can give him e.g. poor red blood cell levels, low energy levels and can result in anaemia and poor resistance to infection such as colds and flu. <br> - The diet is quite high is salt, especially from processed foods which add salt as a preservative. <br> - The student is not eating fresh foods, or cooking homemade foods. <br> - He is eating readymade meals that usually have higher levels of salt, fats and sugars. <br> - Too much salt can cause high blood pressure, he needs to avoid salty foods. He can look at the labels and choose low salt versions of ready meals. <br> - Low fibre intake due to insufficient wholegrain cereals, fruit and veg <br> - He may become overweight due to the high amounts of fat and sugar. <br> - He is short of vitamins as he does not eat enough fresh fruit and vegetables so can be showing symptoms such as poor healing of cuts and he may be prone to catching infections easily. <br> The student could make the diet healthier by e.g. <br> - Getting up earlier to eat breakfast, or eating a piece of fruit or carbohydrate (bread, toast, muffin) to start the day. |  |  |  |  |  |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Reducing the amount of fat he is eating by using semi skimmed milk in his tea and coffee. He could make a sandwich the night before and use low fat cheese such as Edam in his sandwich or maybe have some mixed salad to reduce the amount of saturated fat which can contribute to heart disease. <br> - He could replace the sausage roll with a tuna and sweetcorn wholemeal wrap <br> - Eat wholemeal bread instead of white. This will add dietary fibre to his diet to prevent constipation. It also aids digestion. <br> - Reduce the amount of sugar in his diet; he could do this by cutting down on sugar in tea and coffee or using a sweetener and by cutting out biscuits, cakes and chocolate except as an occasional treat. <br> - Eat more fruit as a snack instead of the cakes and biscuits which would also add vitamins and minerals and dietary fibre. <br> - He could replace cheesy chips with skin on baked potato wedges <br> - replace evening cola drink with a glass of water <br> - Increase the amount of dietary fibre by eating more fruit and vegetables. The fruit would provide Vitamin C. <br> - Use frozen/ fresh vegetables providing vitamins and fibre. <br> - Helpful to eat some dark green vegetables such as spinach or broccoli every day to increase his iron intake. Eating more fruit containing Vitamin C e.g. oranges and blackcurrants would help him to absorb the iron. <br> - Fruit smoothie instead of cola <br> - Smoothie for breakfast <br> - Diet cola instead of cola <br> Credit any other acceptable response. |  |  |  |  |  |
|  | Total marks for question | 8 |  |  | 8 | 8 |


| Band | AO4 <br> Analyse and evaluate different aspects of nutrition, food, cooking and preparation, <br> including food made by themselves and others. |
| :---: | :--- |
| 3 | Award 7-8 marks <br> Candidate has produced an excellent response which shows in depth application of <br> knowledge and understanding of the typical food diary - Food diary has been evaluated in <br> detail. At least 4 suggested changes to the diet have been discussed in full. Specialist <br> vocabulary is used with ease and accuracy. |
| 2 | Candidate has produced a good response which shows clear application of knowledge <br> and understanding of the typical food diary. Some evaluation of the food diary has been <br> made. At least 2-3 suggestions for changes are made with some discussion. Some <br> attempt to use specialist vocabulary. <br> No evaluation of food diary at all - max mark should be 6 marks |
| 1 | Award 1-3 marks <br> Candidate has produced a limited response, with little or no evaluation of the food diary <br> and 1 or 2 suggestions for changes have been made. Little or no suggestions for changes <br> that could be made to the diet. 1-2 points within the indicative content may be listed. <br> Limited knowledge or application of knowledge is evident. Little or no use of specialist <br> vocabulary. |
| 0 | Response not credit worthy or not attempted |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. (a) | Give three reasons for cooking food. <br> Award 1 mark for each correct answer. <br> - Make food safe to eat/kill micro-organisms <br> - Add variety to our diet <br> - make food smell more appetizing <br> - change colour of food to make more appealing <br> - enhance the flavour of the food <br> - Make food hot / heat it up <br> - Easier to eat/bite/chew/digest/ make food softer so that it is more palatable <br> - improves texture of foods <br> - Improve nutritional value (grilling)/ fat runs out so healthier <br> - Can preserve food and make it last longer/ improves shelf life | 3x1 | 3 |  |  | 3 |
| (b) (i) | Cooking can transfer heat energy to food in different ways. <br> Describe how heat energy is transferred when: Grilling bacon: <br> Award 1 mark for basic response <br> Award 2 marks for a more detailed response must mention radiation <br> - Heat energy is passed directly from the grill to the bacon by (waves of) radiation <br> - Waves are absorbed by the bacon and heat it up <br> - Conduction - from the pan / through the foods | 2 |  | 2 |  | 2 |
| (ii) | Cooking soup in a saucepan on the hob: <br> Award 1 mark for limited description Award 2 marks for basic description (conduction / convection - no description) Award 3 marks for good description - refers to conduction or convection <br> Award 4 marks for a detailed description must mention conduction and convection. <br> Answers may refer to <br> - Heat energy is transferred from the hob to the pan and soup by conduction 1) <br> - Particles in the hob and pan vibrate (1) with <br> - colliding particles. (1) <br> - Heat energy is then transferred through the soup by convection (1) <br> - Convection currents circulate around the pan (hot currents rise/ cooler currents drop in a circular motion) (1) until the soup is hot and simmering (1) | 4 | 2 | 2 |  | 4 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (c) | Outline the process of blanching. <br> Award 1 mark for each correct statement. <br> - Blanching is a short heat treatment/scalding vegetables in boiling water or steam for a short time <br> - Vegetables <br> - Kills surface micro-organisms/inactivates enzymes which can cause loss of flavour, colour and texture <br> - Boiling water 2 mins <br> - Blanching time depends on size of vegetable/surface area. <br> - After heat, quickly putting it into cold/iced water <br> - Halts the heating process | 2 |  | 2 |  | 2 |
| (d) | Describe the effect of cooking on meat. <br> Award 1 mark for a limited description of the effect of cooking on meat. E.g. colour changes <br> Award 2 marks for a basic description of the effect of cooking on meat. E.g. colour changes from red to brown or structure of meat changes from soft to solid/rigid/set structure <br> Award 3 marks for good description of the effect of cooking on meat. E.g. colour changes from red to brown. The protein coagulates causing the structure of meat to change from soft to solid/rigid/set structure, the flavour develops <br> Award 4 marks for an excellent description of the effect of cooking on meat. E.g. colour changes from red to brown. The protein coagulates causing the structure of meat to change from soft to solid/rigid/set structure, the flavour develops as it undergoes a Maillard reaction and the meat turns brown. <br> Answers could refer to <br> - Protein coagulates between $40^{\prime} \mathrm{C}$ and $60^{\prime} \mathrm{C}$. <br> - Meat muscle shrinks. <br> - Moisture is lost/ juices released <br> - The fat melts/renders <br> - Colour changes depending on method of cooking. red to brown (1) / pink to white (1) <br> - Vitamin B loss in moist methods of cooking. <br> - Collagen softens and is broken down/ converted to gelatine/ tenderises in moist cooking methods | 4 | 2 | 2 |  | 4 |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Increases tenderness of meat and makes it more digestible Decreases nutritional value of meat <br> - Meat undergoes the Maillard reaction as the meaty flavour is developed or as meat goes brown <br> - Meat protein denatures - muscle fibres become firmer and meat juices are squeezed out <br> - In dry methods juices are lost from the surface leaving a more concentrated meat flavour on the surface. <br> - Improves texture |  |  |  |  |  |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. | Micro-organisms are transferred by cross contamination. <br> Discuss how cross contamination can occur when making a chicken and bacon salad and describe the methods of control that can be used to ensure food safety. <br> Award 1-3 marks <br> A limited discussion of the sources of cross contamination when making a chicken and bacon salad. There is basic recall of controls to ensure food safety. Limited food examples given. <br> Award 4-6 marks <br> A basic discussion of the sources of cross contamination when making a chicken and bacon salad. There is clear recall of controls to ensure food safety and controls are clearly discussed. Some food examples are given. <br> Award 7-8 marks <br> A very good discussion of the sources of cross contamination when making a chicken and bacon salad. There is clear recall of facts and a range of controls (not just personal) are discussed in full. Food examples support the response. <br> Sources of contamination: <br> - Contaminated food (raw chicken/bacon/salad ingredients) <br> - Contaminated work surfaces <br> - Contaminated utensils (knives. chopping boards, scissors) <br> - Contaminated equipment (salad spinners, chopping boards, dirty tea towels) <br> - People (poor personal hygiene, hair, jewelry, coughs and sneezes, nails, wounds/ blue plasters <br> - Don t wash chicken <br> - incorrect storage causes - blood/juices dripping onto other foods <br> Methods to prevent cross contamination <br> - Separate raw and cooked foods <br> - wash salad ingredients thoroughly <br> - Anti bac/sanitize/disinfect surfaces/ and thoroughly cleaning/wiping down surfaces with hot soapy water/paper towels/ clean cloths <br> - Use different utensils (different knives for prepping each ingredient, no double dipping when tasting foods) <br> - Use coloured of boards eg red raw meat/yellow cooked/green salad etc <br> - Check date marks and ensure good stock rotation /FIFO | 8 | 4 | 4 |  | 8 |


| Question | Answer | Mark | A01 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - Use different equipment (coloured chopping boards, clean tea towels, hand washing routines and paper towels) <br> - Cover all food when its not in use <br> - Prevent pests/insects landing on food <br> - Keep pets out of the kitchen <br> - Wash hands frequently eg prior to starting to prepare the food, after handling raw chicken/bacon <br> - Do not touch face/hair and wear a hairnet/beard net/gloves when preparing food <br> - Wear a clean apron/overalls to avoid spreading of germs/dirt <br> - Cover cuts/sores/wounds/ blue plasters <br> - Keep chicken/bacon in fridge until needed <br> - If chicken is pre-cooked it should be kept in a sealed container in fridge 5 c - not bottom shelf <br> - If chicken is to be cooked - store in fridge on the bottom shelf <br> - If mayo is used it should be kept in the fridge <br> - Place the completed salad into the fridge asap <br> - Wrap the plate of salad with cling [or equivalent] before refrigerating <br> Credit any other suitable responses |  |  |  |  |  |


| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. | Discuss the influences cultural and lifestyle changes have had on food choice and availability. <br> Answers could refer to <br> - a time poor society <br> - globalisation <br> - multi-cultural society / increased ethnic population travel experiences <br> - Lifestyle changes - age/work/ stage in life eg starting a family/ eating habits e.g. vegetarians / obesity <br> - people want healthier choices <br> - Medical - recognised /diagnosed allergies eg lactose intolerant/coeliac disease-/diabetes necessitate-lifestyle changes <br> Examples of influence could include <br> - ready meals (which reflect these influences)/ example <br> - Shopping for convenience <br> - Consumers want more variety <br> - Ethnic influence with typical associated food (product) (e.g. Mediterranean influence pasta dishes, olive oil, herbs) <br> - snack products (which reflect these influences)/ example of <br> - fusion foods / hybrid foods <br> - import of exotic foods/ traditional foods from other countries <br> - British/regional foods <br> - food assembly kits - Hello fresh/ Gousto <br> - takeaway ranges <br> - dining-in range <br> - pop-up restaurant <br> - 'on the go' food <br> - Meal habits related to patterns in culture (timings/style of food eg tapas, grazing habits). <br> - Street food <br> - foods to celebrate customs /festivals/religious celebrations <br> - Using Halal meat in products to supply needs of Muslim community, Kosher food for Jewish culture <br> - Wide variety of different bread products <br> - Positive dietary influences from ethnic diets e.g Mediterranean diet promoted as being better for heart health/ any correct example <br> - Increased understanding of and interest in vegetarian and vegan recipes/ meat free Monday's <br> - Celebrity chefs promoting products using ethnic ingredients <br> - Social media influences - Instagram/ Facebook etc | 10 |  | 6 | 4 | 10 |


\left.| Question | Answer | Mark | AO1 | AO2 | AO4 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | - Influence of TV shows- Masterchef/Bake off |  |  |  |  |  |
|  | etc on food preparation and cooking |  |  |  |  |  |
| Opening of many shops specialising in ethnic |  |  |  |  |  |  |
| ingredients for immigrant communities |  |  |  |  |  |  |$\right)$


| Band | $\begin{gathered} \text { AO2 } \\ \text { Max } 6 \text { marks } \end{gathered}$ | AO4 <br> Max 4 marks |
| :---: | :---: | :---: |
| 3 | Award 5-6 marks <br> Candidate has produced an excellent analytical response which shows Influences (5-6) have been clearly justified and reasons have been discussed in full and accurate examples have been used to exemplify the points within the indicative content which support judgements with analysis and evaluation. | Award 4 marks <br> The candidate has produced an excellent response showing very good application of knowledge of how influences cultural and lifestyle changes have had on food choice and availability. All suggestions are realistic and achievable in relation to the indicative content. Technical terms are used with ease and accuracy. |
| 2 | Award 3-4 marks <br> Candidate has produced a good analytical response which shows clear application of knowledge and understanding. Influences (3-4) have some justification. Some discursive comments linked within the indicative content and accurate examples have been given to support judgements with analysis and evaluation. | Award 3 marks <br> The candidate has produced a good response demonstrating adequate application of knowledge of how influences cultural and lifestyle changes can affect food choice and availability related to some points within indicative content. Some attempt to use specialist vocabulary. |
| 1 | Award 1-2 marks <br> Candidate has produced a limited analytical response. 1-2 points within the indicative content may be listed. Limited application of knowledge is evident with basic analysis and evaluation. | Award 1-2 marks <br> The candidate has produced a limited response demonstrating adequate application of knowledge of how influences cultural and lifestyle changes have had on food choice and availability. They have produced a simple list or bullet points with little or no explanation as indicated in the indicative content but lacks exemplification. Little or no use of specialist vocabulary. |
| 0 | Award 0 marks <br> Response not credit worthy or not attempted. | Award 0 marks <br> Response not credit worthy or not attempted. |



## AO1

Demonstrate knowledge and understanding of nutrition, food, cooking and preparation.
AO2
Apply knowledge and understanding of nutrition, food, cooking and preparation.
AO4
Analyse and evaluate different aspects of nutrition, food, cooking and preparation, including food made by themselves and others.

