

**GCE** 

# **Home Economics Food Nutrition & Health**

Advanced GCE A2 H511

Advanced Subsidiary GCE AS H111

### Mark Scheme for the Units

January 2010

HX11/MS/R/10J

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Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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## **G001 Society and Health**

| Que | estion |       | Expected Answers  | Rationale                                 | Marks |
|-----|--------|-------|---|---|-------|
| 1   | (a)    | (i)   | State the population of people under the age of 16 in 2006.  The correct answer is greater than or equal to 11 and less than 12 and is worth one mark.  | Any number between 11 and 11.9 inclusive. | [1]   |
| 1   | (a)    | (ii)  | State the projected population of people aged 65 and over in 2026.  The correct answer is greater than or equal to 15 and less than 15 and is worth one mark.   | Any number between 14 and 14.5 inclusive  | [1]   |
| 1   | (a)    | (iii) | State the first year when the projected number of people aged 65 and over will be greater than the number of people under 16.  The correct answer is 2021 and is worth one mark.  | 2019, 2020, 2021 are all acceptable.      | [1]   |
| 1   | (b)    |       | Give two reasons for the decline in birth rate from 1971 to 2006.  One mark is available for each correctly identified reason.  Answers may include:  Very large families are now considered unusual  Limited family size is usually more economical  Fertility problems due to more women have children in later life.  Widely available and easy access to effective contraception methods  More women choose to remain childless  Women investing more time in their education and careers instead of having children.  Role of women has changed from being primarily a wife and mother  It is now acceptable to have a smaller family  Religious beliefs may no longer have strong influence today |   |       |
|     |        |       | Credit will be given for all valid points.  |   | [2]   |

| Question | Expected Answers  | Rationale  | Marks |
|----------|---|--|-------|
| 1 (c)    | Give two reasons why the number of people aged 65 and over is increasing.  One mark is available for each correctly identified reason.  | Do not accept healthy lifestyle Do not accept increased life expectancy Do not accept better standard of living. |       |
|          | <ul> <li>Answers may include:</li> <li>Advances in hygiene and medicine.</li> <li>Drug treatments used for previously fatal conditions.</li> <li>Preventative medicine and immunisation widely available.</li> <li>Improved diagnostic equipment making treatment more effective.</li> <li>New surgical procedures</li> <li>Greater awareness of the health risk involved with diet, smoking, alcohol and lack of exercise.</li> <li>Large number of people born after the Second World War and the 1960's baby boom are now becoming older</li> <li>Better social care provision and services available</li> </ul>   |  |       |
|          | Credit will be given for all valid points.  |  | [2]   |
| 1 (d)    | Identify and explain two implications of an increasing elderly population for society.  |  |       |
|          | <ul> <li>Four marks are available. One mark for each correctly identified implication (maximum two marks) and one mark for each explanation.</li> <li>Answers may include:</li> <li>Increased cost - of social care, health care, pensions, adaptations to the home and specialist equipment. Some parts of the UK have greater concentrations of elderly people</li> <li>Economy - More dependency on the working population.</li> <li>Increasing retirement age. Raising of the retirement age.</li> <li>Increased need for housing – specialist accommodation, care homes,</li> <li>Influence on culture – growing need for social activities that engage the elderly, leisure activities.</li> <li>Age of workforce increasing – fewer jobs available for younger people.</li> <li>Increased poverty – inadequate state pension.</li> </ul> |  | F41   |
|          | Credit will be given for all valid points.  |  | [4]   |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 1 (e)    | Describe three ways that a change in dietary habits can influence life expectancy of an individual.  |           |       |
|          | Six marks are available. One mark given for each correctly identified change in dietary habits (maximum three marks) and one mark given for the description.   |           |       |
|          | <ul> <li>Examples may include:</li> <li>Reduce fats in the diet (especially saturated fat) – saturated fat can increase cholesterol levels in the blood leading to atherosclerosis and cardiovascular disease.</li> <li>Increase calcium consumption – prevention of osteoporosis.</li> <li>Reduce salt in diet – helps to maintain a healthy blood pressure</li> <li>Reduce sugar in the diet – empty calories can cause weight gain leading to obesity and can encourage the development of diabetes</li> <li>Increase portions of fruit and vegetables in the diet (five a day) – increases total intake of nutrients/antioxidants, vitamins and minerals.</li> <li>Increased intake of fibre (fruit and vegetables) which has been linked to preventing the onset of bowel cancer.</li> <li>Alcohol in moderation – prevents liver cirrhosis/disease/obesity.</li> <li>Energy balance – obesity can increase the risk of CHD and weight related problems.</li> </ul> |           |       |
|          | Credit will be given for all valid points.   |           | [6]   |

| Question | Expected Answers   | Rationale  | Marks |
|----------|--|--|-------|
| 1 (f)    | The National Health Service provides a valuable range of care to individuals, families and household groups.   |  |       |
|          | Describe the range of primary services provided by the National Health Service.  |  |       |
|          | High 7-8  The candidate is able to describe most of the primary services provided by the National Health Service. Information will be expressed clearly and fluently and will be supported by the use of appropriate examples. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4-6  The candidate is able to describe some of the primary services provided by the National Health Service. Information will be well expressed though ideas may not be fully developed and examples may not be used to illustrate the answer. There may be occasional errors of grammar, punctuation and spelling.  Low 0-3  The candidate is able to give a superficial description of a limited number of the primary services provided by the National Health Service. Information given may be general and superficial and ideas will be poorly expressed with little supporting evidence. Errors of grammar, punctuation and spelling may be intrusive. | Any four services listed and described for top band. |       |

| Question          | Expected Answers  | Rationale       | Marks |
|-------------------|---|-----------------|-------|
| Question<br>1 (f) | Answers may include:  Primary care aims to prevent illness or problems getting worse Referrals are made to secondary health care  Examples of primary care: NHS Direct telephone helpline for advice and support – particularly out of hours NHS walk in centres for out of hours care provision – can be referred to walk in centre to see a health professional GP practices – cover a wider range of health services eg vaccinations, prescriptions, health screening, referrals and medical tests Dentists – can provide out of hours and emergency care/look for signs of tooth decay Opticians – look for signs of eye disease; prescribe and fit glasses; referral to eye specialists Pharmacists/Chemists – experts in medicine; will give advice and dispense the prescription. Some pharmacists can now prescribe for minor ailments Emergency Ambulance and A and E. | Rationale       | Marks |
|                   | Credit will be given for all valid points.  | Section A Total | [8]   |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 2 (a)    | Unemployment in the United Kingdom is a concern to both individuals and society.   |           |       |
|          | Describe the support services available to the unemployed.   |           |       |
|          | High 8-10  The candidate is able to clearly describe the support services available to the unemployed. Information will be clearly and fluently expressed with relevant examples and appropriate detail given to illustrate the points made. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4-7  The candidate is able to satisfactorily describe some of the support services available to the unemployed. Information will be well expressed and some detail will be included with some examples given to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.  Low 0-3  The candidate is able to give a brief description of at least one or more of the support services available to the unemployed. Information may be simplistic with few examples given to illustrate the points made. Ideas may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive. Spelling may be intrusive. |           |       |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 2 (a)    | Answers may include description of the following:   |           |       |
|          | Jobseeker's allowance – must be available for work, able to work and seeking employment; allowance is available to the unemployed and those working less than 16 hours per week   |           |       |
|          | <ul> <li>Income support – for individuals who cannot work and do not have enough money to maintain a reasonable standard of living; individuals savings will be taken into consideration; may be suitable for lone parents, registered sick/disabled and carers. There may be other benefits available –eg free school meals and EMA.</li> <li>Housing benefit including council tax benefit – helps towards payment of rent and council tax</li> </ul> |           |       |
|          | Job grants – one off payment to help with the cost of moving from unemployment to work.   |           |       |
|          | Government employment schemes – local job centres have employment service advisers. May be compulsory schemes where claimants must take part in order to receive support; or voluntary schemes where claimants are encouraged to join   |           |       |
|          | Work based learning for adults— for the over 25s who are unemployed for long periods. It offers focused training and helps with the development of basic work skills  |           |       |
|          | <ul> <li>Job clubs – offer training on the completion of CV and preparation for<br/>interviews. Centres may have internet access, telephones and<br/>photocopying services for people to use</li> </ul>   |           |       |
|          | <ul> <li>Work trials – enables employers to try out unemployed people in a job<br/>for up to 15 days. The aim is to encourage employers to permanently<br/>employ a person on the trial.</li> </ul>   |           |       |
|          | <ul> <li>Training schemes – these are aimed at young people who do not<br/>qualify for job seekers allowance or income support. They provide<br/>work based training</li> </ul>   |           |       |
|          | <ul> <li>Apprenticeship programmes – help young people leaving school or<br/>college to achieve vocational qualifications and skills. May apprentices<br/>are employed after completing their apprenticeship</li> </ul>   |           |       |
|          | New Deal (now called flexible new deal) – They offer intensive support to find work, give subsidised employment opportunities and specialist training.  |           |       |
|          | Credit will be given for all valid points.  |           | [10]  |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 2 (b)    | Explain the effects of unemployment on individuals.  |           |       |
|          | High 12-15  The candidate is able to give a detailed explanation of the effects of unemployment on individuals. Information will be clearly and fluently expressed with relevant examples and appropriate detail given to illustrate the points made. There will be few, if any errors of grammar, punctuation and spelling.  Middle 6-11  The candidate is able to satisfactorily describe the effects of unemployment on individuals. Information will be well expressed and some detail will be included with some examples given to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.  Low 0-5  The candidate is able to demonstrate a superficial understanding of the effects of unemployment on individuals. Information may be simplistic with few examples given to illustrate the points made. The description and explanation will be generalised. Errors of grammar, punctuation and spelling may be intrusive. |           |       |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 2 (b)    | <ul> <li>Effects on individuals:</li> <li>Self respect and identity – employment gives self respect and a sense of identity/unemployed may feel worthless and have low self esteem/some individuals may feel embarrassed about their dependency on state welfare benefits/they may stay at home for long periods of time/changes in the family could cause stress/may be unwilling to take a greater share of domestic responsibilities to fill their time/it may be possible to arrange a role reversal in the family where the individual takes on domestic responsibilities.</li> <li>Confidence – unemployment can remove confidence and lead to depression/reduces attempts to find employment/may blame others or feel guilty/may take up smoking or drinking due to feelings of inadequacy/may become suicidal</li> <li>Financial security – a lack of money may cause poverty/unemployed worry about debt and the responsibilities of feeding and clothing the family/meeting housing costs may be a burden/may have to give up hobbies and leisure pursuits/low income can lead to a poor diet and health issues/could resort to gambling/young unemployed may rely heavily on parents</li> <li>Stimulation and enjoyment – find difficulty occupying themselves/more disturbed sleep patterns and anxiety/boredom as at home for long periods of time</li> <li>Opportunities and skills – unemployed may become out of touch with skills needed in the work place/opportunities to retrain can be available/unemployed can develop new skills</li> <li>Leisure activities may change due to finances and resources available. Less socially active outside of the home, Activities may become more solitary.</li> <li>Social relationships – loss of social contact/tension in the home can cause mood swings and in the extreme cases violence and marital breakdown/may not want to share their worries and concerns with their family</li> </ul> |           |       |
|          | Credit will be given for all valid points.  |           | [15]  |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 3 (a)    | Changes in society have affected the standard of living, households and family groups.  |           |       |
|          | Explain the factors that affect the standard of living for households and families.   |           |       |
|          | High 8-10  The candidate is able to clearly explain the factors that affect the standard of living for households and family groups. Information will be clearly and fluently expressed with relevant examples and appropriate detail given to illustrate the points made. There will be few, if any errors of grammar, punctuation and spelling.  Middle 4-7  The candidate is able to satisfactorily explain some of the factors that affect the standard of living for households and family groups. Information will be well expressed and some detail will be included with some examples given to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.  Low 0-3  The candidate is able to superficially explain a limited number of the factors that affect the standard of living for households and family groups. Information may be simplistic with few examples given to illustrate the points made. Errors of grammar, punctuation and spelling may be intrusive. |           |       |

| Question          | Expected Answers   | Rationale | Marks |
|-------------------|--|-----------|-------|
| Question<br>3 (a) | Answers may include:  Availability of financial resources Income from employment, welfare benefits and investments Large income families tend to have higher standard of living Some households have more than one wage due to the high costs of running the home  The number of people Large households need large incomes to sustain the standard of living Collective income of a large family can increase standard of living  The number of dependents Could include children, the elderly, unemployed or the disabled May make a limited contribution to the household income but require a greater proportion of the resources A household with dependant members may have a lower standard of living | Rationale | Marks |
|                   | <ul> <li>The profession or occupation of individuals</li> <li>Certain professions and occupations have larger salaries</li> <li>Individuals in these profession provide a higher standard of living within their household</li> <li>Income from unskilled manual work or part time work may lower standard of living</li> <li>Education must be considered as graduates tend to earn more than non graduates.</li> </ul>   |           |       |
|                   | <ul> <li>The health of individuals</li> <li>Illness and disability can affect earning potential</li> <li>May lead to a loss of earnings</li> <li>Costs include: prescription charges, special diets, heating the home all day, transport to hospital.</li> <li>Other family members may have to give up work to provide a caring role</li> </ul>   |           |       |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
|          | The geographical location   |           |       |
|          | Fewer employment opportunities in some areas of the UK                            |           |       |
|          | Living in rural areas can increase transport costs                                |           |       |
|          | It is more expensive to buy property in certain parts of the UK                   |           |       |
|          | no more expensive to saly property in contain parts of the ort                    |           |       |
|          | The amount of debt  |           |       |
|          | Households now spend more of their income of repaying debt.                       |           |       |
|          | Consumer borrowing has risen  |           |       |
|          | A household with substantial debt will have a lower standard of living            |           |       |
|          | The cost of housing   |           |       |
|          | House prices have increased and mortgage repayments can be difficult to meet.     |           |       |
|          | Interest rates may rise and reduce the amount of available money in the household |           |       |
|          | Maintenance of the home can be expensive especially in older properties           |           |       |
|          | Older properties can be more expensive to heat in the winter                      |           |       |
|          | Credit will be given for all valid points.  |           |       |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 3 (b)    | Describe the changes in household and family group composition.  |           |       |
|          | High 12-15  The candidate is able to clearly describe the changes in household and family groups. Information will be clearly and fluently expressed with relevant reasons and appropriate detail given to illustrate the points made. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 6-11  The candidate is able to satisfactorily describe some of the changes in household and family groups. Information will be well expressed and some detail will be included with some reasoning given to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.  Low 0-5  The candidate is able to give a limited description of a few of the changes in household and family groups. Information may be simplistic with few reasons given to illustrate the points made. Ideas may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive. Spelling may be intrusive. |           |       |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 3 (b)    | Answers may include description of the following:  |           |       |
|          | <ul> <li>Changing nature of the extended family:</li> <li>Traditional extended family is in decline due to greater mobility and higher standards of living.</li> <li>Most families with dependent children live in nuclear families/ technology plays a role in maintaining links</li> <li>Rising care costs/lack of pension provision may cause a return to generations living together</li> <li>Grandparents may become live in child minders</li> </ul> |           |       |
|          | <ul> <li>Changing roles within the family</li> <li>Traditional male role was to provide but now more women are working Women still tend to earn less money than men.</li> <li>Some men have become 'househusbands'</li> <li>Changes in legislation have bought about more equality between the sexes</li> </ul>  |           |       |
|          | <ul> <li>Smaller family sizes</li> <li>The number of births has declined Widespread availability of contraception/accessibility of abortion</li> <li>Improvements in health care have reduced infant mortality so parents do not need to create large families</li> <li>Society is more child centred smaller families tend to have a higher standard of living</li> <li>Increase in women choosing not to have children.</li> </ul>                       |           |       |

| Increase in older mothers  Women now continue education beyond 18 years  Average age for a first child is increasing  Change in family structure.  There has been an increase in divorce rates  Decline in marriage rates  Number of remarriages has increased.  A large increase in people living together in the same households  Increased birth outside marriage.  Lone parents due to divorce, separation, widowhood or births to single women outside of marriage  Social acceptability of lone parents is a contributing factor  Majority of lone parent families headed by women  The number of adults living with parents has increased due to higher education costs and the shortage of affordable housing could be factors.  Significant number of pensioners live alone, these tend to be females Civil Partnerships  Legal relationships between couple of the same sex | Question | Expected Answers   | Rationale | Marks |
|---|----------|--|-----------|-------|
| The Adoption and Children Act 2002 allowed same sex couples and single people to adopt children   |          | Increase in older mothers  Women now continue education beyond 18 years  Average age for a first child is increasing  Change in family structure.  There has been an increase in divorce rates  Decline in marriage rates  Number of remarriages has increased.  A large increase in people living together in the same households  Increased birth outside marriage.  Lone parents due to divorce, separation, widowhood or births to single women outside of marriage  Social acceptability of lone parents is a contributing factor  Majority of lone parent families headed by women  The number of adults living with parents has increased due to higher education costs and the shortage of affordable housing could be factors.  Significant number of pensioners live alone, these tend to be females Civil Partnerships  Legal relationships between couple of the same sex  The Adoption and Children Act 2002 allowed same sex couples and | Rationale | Marks |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 4 (a)    | Adequate housing and shelter is a necessary requirement for individuals, families and household groups.   |           |       |
|          | Discuss the range and type of housing available.  |           |       |
|          | High 8-10  The candidate is able to fully and clearly discuss the range and type of housing available. The information will be expressed clearly and fluently with specific detail and relevant examples used to illustrate the answer. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4-7  The candidate is able to satisfactorily discuss the range and type of housing available. The information will be expressed clearly, though the ideas may not be fully developed, and examples may not be used to illustrate the answer. There may be occasional errors of grammar, punctuation and spelling.  Low 0-3  The candidate is able to superficially discuss the range and type of housing available. The information may be generalised and simplistic and may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive. |           |       |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 4 (a)    | The answer may include:   |           |       |
|          | <ul> <li>Types of housing:</li> <li>House or bungalow – detached, semi detached or terraced</li> <li>Flat – a room or set of rooms located in a larger building</li> <li>Maisonette – an apartment or flat on two levels with internal stairs/may have an entrance at street level</li> </ul>   |           |       |
|          | <ul> <li>Social Housing.</li> <li>Homes can be rented from registered social landlord (RSL) (housing association) or from the local authority (council). They work together to meet housing need.</li> <li>Most local authorities and RSLs operate a waiting list. Individuals and families have to apply to rent property, applicants are assessed and prioritised</li> <li>Homes can be allocated using a points based system.</li> </ul> |           |       |
|          | <ul> <li>Private Renting.</li> <li>Homes can be rented from a private landlord</li> <li>Increase in 'buy to let' investments.</li> <li>Large variety of housing options around universities.</li> <li>Private rented housing can vary in size, quality, price and services provided.</li> <li>Renting out a room in a house.</li> </ul>   |           |       |
|          | Buying a home.  Conventional home purchase involves funding through a mortgage.  The type of mortgage can be chosen to suit an individual's needs.  Homebuy schemes aid the purchase of homes to lower income families, families part buy and part rent the property  |           |       |
|          | <ul> <li>Sheltered Accommodation.</li> <li>Sheltered accommodation is available to elderly people allowing them to live independently due to the services that are attached to the accommodation eg wardens and alarm systems.</li> <li>Care homes.</li> </ul>  |           | [10]  |
|          | Credit will be given for all valid points.  |           | [10]  |

| Question | Expected Answers  | Rationale | Marks |
|----------|---|-----------|-------|
| 4 (b)    | Describe how housing design can meet the differing needs of individuals, families and household groups.   |           |       |
|          | High 12-15  The candidate is able to clearly describe how housing design can meet the needs of individuals, families and household groups. Information will be clearly and fluently expressed with appropriate detail given to illustrate the points made. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 6-11  The candidate is able to satisfactorily describe how housing design can meet the needs of individuals, families and household groups. Information will be well expressed and some detail will be included to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.  Low 0-5  The candidate is able to give a limited description of how housing design can meet the needs of individuals, families and household groups. Information given may be simplistic when illustrating the points made. Ideas may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive. |           |       |

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
| 4 (b)    | Answers may include:   |           |       |
|          | <ul> <li>Families with dependent children</li> <li>Children need a safe place to play, possibly a garden</li> <li>The number of bedrooms should be adequate for the number of children</li> <li>Children of the opposite sex over the age of ten ideally should not share a room</li> <li>Family space may be required for a range of activities.</li> <li>Families whose children have left home.</li> <li>Downsizing to a more appropriately sized house.</li> <li>Students</li> <li>The housing needs to be safe and appliances serviced.</li> <li>The accommodation needs to be inexpensive; students live on a relatively low income.</li> <li>Students need space to sleep, wash, study and prepare meals.</li> <li>The accommodation needs to be secure as students may have valuable electrical equipment</li> </ul> |           |       |
|          | <ul> <li>Families with dependent older members</li> <li>Some houses include a 'granny flat' or an extension to house extra family members.</li> <li>A downstairs room may need to be converted into a bedroom.</li> <li>The relative will need some privacy from the rest of the family</li> <li>The design could include a downstairs toilet, wider doorways, hand rails, alarm systems and level entrances.</li> <li>The home should be warm and well insulated, being draft free.</li> <li>Good lighting needs to be considered</li> </ul>  |           |       |

#### G001 Mark Scheme January 2010

| Question | Expected Answers   | Rationale | Marks |
|----------|--|-----------|-------|
|          | Physically disabled individuals  Modifications to the home will depend on the nature of the disability.  Examples may be given such as Sockets, switches and service controls may need to be lowered to enable greater access.  Newer homes may have benefited from the lifetime home standards considerations for housing design.   |           |       |
|          | <ul> <li>Single person household</li> <li>The size of the property needs to be considered, larger houses would have unused rooms.</li> </ul>   |           |       |
|          | <ul> <li>The Lifetime Home Standards 1999 applies to new build.</li> <li>Car parking should be next to the home and be capable of widening/distance from house to car should be kept to a minimum</li> <li>Entrances to the house should be level or gently sloping</li> <li>Stairs should have easy access/lifts should have wheelchair access</li> <li>The width of doorways should accommodate a wheelchair/there should be space for turning a wheelchair in key rooms</li> <li>Living room windows should be low and easy to operate</li> <li>A toilet should be available at entrance level</li> <li>Switches, sockets, ventilation and service controls should be at a practical height for all</li> <li>The design should take into consideration the layout of housing in the community.</li> </ul> |           |       |
|          | Credit will be given for all valid points.   |           |       |

## **G002** Resource Management

| Qu | estio | n     | Expected Answers  | Marks | Rationale |
|----|-------|-------|---|-------|-----------|
| 1  | (a)   | (i)   | State the percentage that wages and salaries account for total household income.                    | 1     |           |
|    |       |       | The correct answer is <b>51</b> and is worth <b>one mark</b> .                                      |       |           |
|    |       | (ii)  | State the source of income that accounted for 19% of total household income in 2006.                | 1     |           |
|    |       |       | The correct answer is <b>benefits and pensions</b> and is worth <b>one</b> mark.                    |       |           |
|    |       | (iii) | State which type of income accounted for the smallest proportion of total household income in 2006. | 1     |           |
|    |       |       | The correct answer is <b>grants and transfers from abroad</b> and is worth <b>one</b> mark.         |       |           |

| Question     | Expected Answers  | Marks      | Rationale                                  |
|--------------|---|------------|--|
| Question (b) | State two welfare benefits available in the United Kingdom.  One mark for each correctly identified welfare benefit.  • Child benefit • Working family tax credits  | Marks<br>2 | Rationale Only accept correct terminology. |
|              | <ul> <li>Pension</li> <li>Job seekers allowance</li> <li>Housing benefit</li> <li>Incapacity benefit</li> <li>Disability living allowance</li> <li>Education maintenance allowance</li> <li>Income support</li> <li>Carers allowance</li> <li>Council tax benefit</li> <li>Maternity allowance</li> </ul> |            |  |

| Question     | Expected Answers  | Marks      | Rationale               |
|--------------|---|------------|-------------------------|
| Question (c) | State two methods of payment when purchasing goods or services, giving an advantage of each method.  Four marks are available. One mark for each correctly identified payment method (maximum two marks) and one mark for each advantage.  Cash- accepted everywhere/easier to control budget/ overspending is less likely/no interest charges incurred in its use /don't need to remember the PIN/own the goods outright immediately Direct debit card/debit card – speed up transactions/retailer has less money to process/transactions are cleared quickly/chip and pin system is safe and quick for customers/ customers do not need to carry cash / can only spend money if you have it in your account/ can shop on line Credit card – spending can be spread over a length of time/can be used worldwide/reduce the need to carry large amounts of money / can shop on line / some offer "perks"/chip and pin system is safe Store card/charge card – reduces need to carry cash/loyalty discounts available with some store cards/may have up to 60 days before customer has to pay for spending on the card Hire purchase agreement – goods purchased in advance even if the consumer does not have the actual funds available/regular payments can be arranged for customers to purchase expensive items eg furniture, cars/usually have an agreed fixed term and fixed interest rate Credit agreement – some credit agreements can be interest free/enables consumer to buy and then pay later for goods/regular payments can be agreed/may be taken over a fixed term and at a fixed interest rate Bank loan – often have lower interest rates/fixed terms | Marks<br>4 | Rationale Accept paypal |
|              | agreed with the bank     Bank overdraft – flexible/interest only charged on the overdrawn amount  |            |                         |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>Direct debits/Standing orders – easy to setup/can help with budgeting/convenient</li> <li>Bank transfer/BACS – quick method of transferring funds to pay for goods and services/convenient as easy to use through on line banking and internet shopping</li> <li>PayPal internet account –convenient/easy to budget as consumer receives online statements (purchasing activity)/accepted by a wide range of online shops and service providers/ quick clearing of funds to retailer</li> <li>Micropayments eg oyster card/use of mobile phone SMS messaging payment – no need to carry cash/easy to budget as cards are topped up when necessary/safer as can only be used for specific goods or services</li> <li>Cheques – useful for sending payment through the post/paying for services eg school trips and tradesmen</li> <li>Credit will be given for all valid points.</li> </ul> |       |           |
| (d)      | Define the term 'disposable income'.  Two marks are available.  One mark is available for referring to disposable income being available for non-essential spending and/or saving  One mark is available for defining disposable income as income after subtracting essential expenses  | 2     |           |

| (e) Careful money management within the household leads to successful financial planning for the family.  Describe three factors that influence how money is managed in the home.  One mark is available for each correctly identified factor and one mark is available for each correct description.  Answers may include:  • Age – the number of dependants in the household and their needs (eg health or special diets)  • Employment – type/self employment/short term contracts/annual bonuses/seasonal work  • Income – the number of working people / level of income affects how carefully you manage money  • Budgeting – knowledge/ability to budget carefully  • Location – where people live affects expenditure due to access to social opportunities and transport costs. Some parts in the UK more expensive to live.  • Housing costs – mortgage/rent payments/ energy efficiency • Recreation – holidays/swimming lessons/gym membership etc  • Technology – increased use of internet, mobiles and email • Number of people in the household • Health – poor health, conditions requiring long term treatment • Access to credit  Credit will be given for all valid points. |
|---|
|   |

| Question     | Expected Answers  | Marks      | Rationale   |
|--------------|---|------------|---|
| Question (f) | Explain the sources of information available to the consumer when purchasing goods and services.  High 7-8  The candidate is able to clearly explain a range of sources of information available to the consumer when purchasing goods and services. The information will be expressed clearly and fluently with specific detail and relevant examples used to illustrate the answer. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4-6  The candidate is able to satisfactorily explain sources of   | Marks<br>8 | Rationale   |
|              | information available to the consumer when purchasing goods and services. The information will be expressed clearly, though the ideas may not be fully developed, and examples may not be used to illustrate the answer. There may be occasional errors of grammar, punctuation and spelling.  Low 0–3  The candidate is able to give a limited explanation of sources of information available to the consumer when purchasing goods and services. The information may be generalised and simplistic and may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive. |            | Identification of a source of information without an explanation will not be credited |
|              | Media consumer reports (e.g. Which?) – non biased/give good amount and detailed information/show prices at various outlets and shops/give gradings and ratings/comparisons given between similar goods and services/show results of testing goods and services.   |            |   |

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
|          | <ul> <li>Television programmes eg Panorama, Watchdog and Dispatches – many people have access to television/specialist programmes cover certain products and services informing about any issues/information given is up to date and accurate/can highlight unsafe items and dishonest traders/product demonstrations given on dedicated shopping channels eg Ideal World and QVC.</li> <li>Internet – many people have access/source of research into products and services/read other consumers online reviews/view video demonstrations of products/see detailed pictures/access manufacturer's site and information/download product manuals and user guides/comparison sites highlight advantages and disadvantages of goods and service, also compare costs.</li> <li>Consumer help lines – one to one discussions and advice with technical experts and customer services.</li> </ul> |       |           |

| Question | Expected Answers   | Marks | Rationale          |
|----------|--|-------|--------------------|
|          | <ul> <li>Consumer exhibitions eg ideal home – specialist advice given/highlight availability from variety of suppliers/accurate and up to date information given/special offers available at the shows/live demonstrations/consumers can be 'hands on' with goods</li> <li>Advertising – informs consumers about new and existing products/gives descriptions and details of goods and services/accessible as shown in magazines, on television and radio, through the internet, on flyers and leaflets, and on film trailers. Use with caution, may be biased</li> <li>Shops – advice from sales assistants ( may be biased ) / can physically view goods</li> <li>Labels/packaging – eg energy efficiency, nutritional information</li> <li>Leaflets/ brochures</li> <li>Consumer Direct/CAB</li> <li>Financial adviser (e.g. for financial services)</li> <li>Friends and family advice.</li> <li>Credit will be given for all valid points.</li> </ul> |       |                    |
|          |  |       | Section A Total 25 |

| Qu          | estio | n Expected Answers   | Marks       | Rationale   |
|-------------|-------|--|-------------|---|
| <b>Qu 2</b> | (a)   | The consumer has rights when purchasing goods and services.  Describe how to make an effective complaints procedure when purchasing faulty goods and services.  High 8–10  The candidate is able to fully and clearly describe how to make an effective complaints procedure when purchasing faulty goods and services. The information will be expressed clearly and fluently with specific detail and relevant examples used to illustrate the answer. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4–7  The candidate is able to satisfactorily describe how to make an effective complaints procedure when purchasing faulty goods and services. The information will be expressed clearly, though the ideas may not be fully developed, and examples may not be used to illustrate the answer. There may be occasional errors of | Marks<br>10 | For highest marks, there should be some indication of sequence. |
|             |       | grammar, punctuation and spelling.  Low 0–3  The candidate is able to give a limited description of how to make an effective complaints procedure when purchasing faulty goods and services The information may be generalised and simplistic and may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive.  |             |   |
|             |       | Answers may include :  |             |   |
|             |       | <ul> <li>The complaints procedure:</li> <li>All facts should be accurate and information correct before starting a complaint.</li> <li>Return any goods or services to place of purchase with receipts</li> </ul>  |             |   |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>Consumer must calmly explain problems, taking note of any agreements/discussions.</li> <li>Speak to someone in a position of authority.</li> <li>Communicate any issues via letters or emails/talk to the head office of larger organisations.</li> <li>Consumers must explain what they would like to happen in regard to their complaint eg returns, repair or refund.</li> <li>The consumer must keep copies of any letters/communications with suppliers/firms/shops</li> <li>Retain original proof of purchase</li> <li>Record the number, date and time of any communications regarding the complaint.</li> <li>Seek advice eg Consumer Direct/ CAB</li> <li>Contact any trade organisation associated with the supplier of goods or services detailing action that has taken place.</li> <li>If outcome is unsatisfactory, conciliation and/or arbitration can be considered, and as a last resort, court action ( small claims court)</li> <li>Credit will be given for all valid points.</li> </ul> |       |           |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
| (b)      | Identify the relevant legislation and describe the rights of a consumer who has purchased faulty goods and services   | 15    |           |
|          | High 12-15  The candidate is able to identify relevant legislation and fully and clearly describe the rights of a consumer who has purchased faulty goods and services. Information will be expressed clearly and fluently and will be supported by the use of appropriate examples. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 6-11  The candidate is able to identify relevant legislation and satisfactorily describe the rights of a consumer who has purchased faulty goods and services. Information will be well expressed though ideas may not be fully developed and examples may not be used to illustrate the answer. There may be occasional errors of grammar, punctuation and spelling.  If a candidate gives a detailed description of the rights of the consumer, without identifying relevant legislation, they can only be awarded a maximum of 8 marks. |       |           |
|          | Low 0-5  The legislation is not identified or is incorrect but the candidate is able to give a limited description of the rights of a consumer who has purchased faulty goods and services. Information given may be general and superficial and ideas will be poorly expressed with little supporting evidence. Errors of grammar, punctuation and spelling may be intrusive.  |       |           |

| Question | Expected Answers   | Marks | Rationale   |
|----------|--|-------|---|
|          | <ul> <li>Answers may include:</li> <li>Main relevant legislation is the Sale and Supply of Goods Act 1979/1994.</li> <li>Other legislation which can be discussed includes:     Trades Description Act 1968/1972     Weights and Measures Act 1963     The Consumer Protection (Distance Selling) Regulations 2000     The Supply of Goods and Services Act 1982     The Food Safety Act 1990</li> </ul>   |       | Dates of legislation can be inaccurate or omitted.                    |
|          | <ul> <li>The Consumer Safety Act 1978</li> <li>The Sale and Supply of Goods Act states:-</li> <li>Goods and services must be of a satisfactory quality – should meet the standards that the consumer expects. Description, price and other relevant information about the goods and services should be considered.</li> <li>Goods must be fit for purpose – must be fit for specific purpose.</li> <li>Goods and services must be as described – the description of the product must match the goods and services.</li> <li>The Act applies to second hand goods.</li> </ul> |       | Relevant examples to support provisions in the Acts will be credited. |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>The rights of the consumer include:</li> <li>A full refund should be made available so that the consumer gets their money back in full.</li> <li>Compensation or damages which can be based on the cost of repair of the goods or services.</li> <li>Repair or replacement of the goods should be completed quickly and not inconvenience the consumer.</li> <li>The trader can offer a reduction in the price of the goods and services.</li> <li>Goods and services have to function correctly for a reasonable amount of time.</li> <li>Some retailers issue refunds for unused goods and services within a short time period irrespective of the reason for the return.</li> <li>If bought from a private trader the consumer has little rights however they do have rights that goods and services should be 'as described'.</li> <li>If the consumer knew about the fault before purchase there would be no entitlement for a refund. However, if sale goods are purchased, and are subsequently found to be faulty, normal rights apply.</li> <li>No rights if consumer damages the goods</li> <li>No rights if consumer changes mind about the purchase of goods which are not faulty.</li> <li>Consumers have the right to pursue a complaint through arbitration, conciliation or small claims court.</li> <li>Credit will be given for all valid points.</li> </ul> |       |           |

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
|          | Answers may include:   |       |           |
|          | Campylobacter Sources: Intestines of animals and birds; raw poultry; inadequate pasteurised milk; contaminated water supplies  Methods of transmission: Birds peck foods; bird droppings; cross contamination of raw to cooked foods; not washing hands when handling pets/animals  Salmonella Sources: Eggs; poultry; cooked meats; unpasteurised milk; insects and sewage. |       |           |
|          | Methods of transmission: cross contamination of raw to cooked foods and person to person due to poor hygiene; animal and insect excretions.  |       |           |
|          | Listeria Souces: Soil; sewage; water; animals and people; unpasteurised dairy products; cooked meat; pates; smoked fish; cook chill meals.  Methods of transmission: Consumption of chilled food products that have been incorrectly stored; consuming unpasteurised food; salads and raw vegetables before washing can carry the bacteria.                                  |       |           |

| Question E | Expected Answers  | Marks | Rationale |
|------------|---|-------|-----------|
|            | Escherichia coli 0157 Sources: Intestines of animals and humans; faeces; raw and undercooked meats; unpasteurised milk and fruit juice; dairy products; raw vegetables; water.  Methods of transmission: Consuming undercooked and unpasteurised foods; unwashed vegetables. Human to human.  Clostridium perfringens Sources: Raw meat; soil from root vegetables; dust and animal excreta; sewage.  Methods of transmission: Hot holding of foods at incorrect temperature for long periods of time; unwashed vegetables.  Staphylococcus aureus Sources: Human skin; mucus linings; droplet infection; raw milk; meat; meat products  Methods of transmission: Person to person contact; cross contamination by poor hygiene methods; incorrect storage temperatures  Bacillus cereus Sources: Rice that has been kept warm. Cereals and cereal products. Dust and soil.  Methods of transmission: Not cooling food quickly; hot holding of rice; insufficient re-heating of food; not washing food.  Credit will be given for all valid points. | Walks | reaconate |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>EHOs have the right to enter premises for inspection and may visit as a result of a complaint.</li> <li>No notice is needed.</li> <li>The frequency of the visit can be determined by the potential risk posed by the type of business, and its previous record.</li> <li>The EHO may collect samples of suspect foods or testing and analysis; work surfaces and equipment may be swabbed.</li> <li>The EHO will discuss the nature of the food premises business and identify associated hazards and risks.</li> <li>Verbal feedback will be given during an inspection.</li> <li>Food safety management systems and plans will be inspected.</li> <li>Check that staff have received appropriate hygiene training.</li> </ul> |       |           |

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
|          | <ul> <li>A formal inspection letter may be produced outlining areas and issues that need to be addressed at the food premises. It will identify which regulations have not been met and give recommendations for improvement.</li> <li>An EHO can serve a Hygiene Improvement Notice – this gives details of contraventions, remedies and a time scale for improvement on the part of the food premises. An EHO may revisit the premise once the notice is served.</li> <li>A Hygiene Emergency Prohibition Notice can be served if the EHO believes that there is an immediate danger to the health of the public. The notice stops the use of the premises, any equipment or a specified handling process.</li> <li>The EHO then applies to the magistrate within three days for a Prohibition Order.</li> <li>The EHO can inspect and seize foods suspected of not meeting food safety regulations. It may be a whole batch, lot or consignment of food. The food may go through microbiological testing.</li> <li>In order to condemn or seize food, an application to The Justice of the Peace has to be made. The EHO must present their findings to a Justice of the Peace. If condemned the cost of destruction of the food falls to the food premises/owner.</li> <li>The EHO may use powers under the Food Safety Act 1990 to prosecute food premises/owners who are found to be breaking its safety clauses. This may result in fines, closure of the business and/or a prison sentence.</li> <li>Credit will be given for all valid points.</li> </ul> |       |           |

| Qu | estio | n | Expected Answers   | Marks | Rationale  |
|----|-------|---|--|-------|--|
| 4  | (a)   |   | Households and individuals eating patterns constantly change.  Describe how eating patterns have changed over the years.  High 8–10  The candidate is able to clearly describe how eating patterns have changed over the years. The information will be expressed clearly and fluently with specific detail and relevant examples used to illustrate the answer. There will be few, if any, errors of grammar, punctuation and spelling.  Middle 4–7  The candidate is able to give some description of how eating patterns have changed over the years. The information will be expressed clearly, though the ideas may not be fully developed, and examples may not be used to illustrate the answer. There may be occasional errors of grammar, punctuation and spelling.  Low 0–3  The candidate is able to give a limited description of how eating patterns have changed over the years. The information may be generalised and simplistic and may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive.  Answers may include: | 10    |  |
|    |       |   | <ul> <li>Changes to eating patterns:</li> <li>Snacking and grazing becoming more common</li> <li>Meals eaten while working eg "deskfast"/travelling/at the road side/dashboard dining due to busy lifestyles</li> <li>Eating at irregular times to fit around work and social life</li> <li>Families and households less likely to eat together</li> <li>Less people spend time preparing food but opt for convenient alternatives</li> <li>More eating out/take away meals – greater choice of places to eat out and a range of prices to suit all budgets/increase in fast food outlets</li> </ul>   |       | If snacking and grazing are clearly discussed as two separate points, credit can be given to both. |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>Eating out has become a family activity/perception of eating out as being a luxury has changed</li> <li>Food catering market has changed – many offers eg meal deals/two for one/all you can eat</li> <li>People skip breakfast</li> <li>People spend less time eating</li> <li>Increased eating of sandwiches</li> <li>More disposable income – money spent on premium food products/higher quality food minimum preparation</li> <li>More women working/working mothers - reducing amount of time and motivation to cook meals every evening</li> <li>More people living alone – led to an increase in single portion ready meals</li> <li>Limited skills and knowledge of how to cook – contribution of schools over the years has been reduced however now beginning to change/can create dependence on ready meals and convenience foods</li> <li>Change in leisure activities eg children eating in their rooms while playing computer games</li> <li>Government health promotion e.g. eatwell plate, 5 a day</li> <li>Influence of the media e.g. TV cooking programmes</li> </ul> Credit will be given for all valid points. |       |           |

15

(b) Discuss how technological, economic and cultural issues affect food choice.

#### High 12-15

The candidate is able to clearly discuss how technological, economic and cultural issues affect food choice. Information will be clearly and fluently expressed with relevant examples and appropriate detail given to illustrate the points made. There will be few, if any, errors of grammar, punctuation and spelling.

Middle 6-11

The candidate is able to satisfactorily discuss how technological, economic and cultural issues affect food choice. Information will be well expressed and some detail will be included with some examples given to illustrate the points made. There may be occasional errors of grammar, punctuation and spelling.

#### Low 0-5

The candidate is able to give a limited discussion of how technological, economic and cultural issues affect food choice. Information may be simplistic with few examples given to illustrate the points made. Ideas may be expressed awkwardly. Errors of grammar, punctuation and spelling may be intrusive.

Answers may include:

### Technological issues include:

- Ownership of fridges, freezers
- Ownership of microwaves
- Increased range of kitchen appliances eg breadmaker
- Development in packaging eg MAP, recyclable
- New food products developed eg mycoprotein (Quorn) and smart foods
- Development in food production techniques eg farmed fish/fortification of foods/ accelerated freeze drying
- Internet use has increased enabling consumers to buy food from large online retailers and also specialist food suppliers.
- Improvements in transport has enabled access to perishable food products and improved consumer choice. Food is no longer seasonal.

In order to achieve high band marks, there should be a balanced discussion of all three issues.

Lower Band – the candidate may only focus on one or two of the issues. Marks should be awarded appropriately.

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
| Question | <ul> <li>Expected Answers</li> <li>Economic issues include:         <ul> <li>Advertising and marketing strategies – use of role models to influence popularity of products and brand images. In store marketing methods now more complex to tempt shoppers to purchase.</li> <li>Government policies – the common agricultural policy set up to avoid food shortages. Some food prices kept high by the policy affecting low income families. Fishing quotas have restricted the type, amounts and quality of fish caught. Replacement of traditional cereal crops with bio fuel crops has led to the price of wheat increasing.</li> <li>Income – choice is directly related to income</li> <li>Range of products has grown to suit all budgets eg value ranges up to luxury</li> <li>Recession may be affecting food choice</li> <li>Geographical location eg reliance on frozen food in remote</li> </ul> </li> </ul> | Marks | Rationale |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | <ul> <li>Cultural issues include: <ul> <li>In many cultures food and drink are associated with hospitality</li> <li>Food can be used to celebrate a person's special occasions – birthdays/marriage</li> <li>Religious festivals have food associations eg Some cultures celebrate festivals with specific meals and food eg the end of Ramadan is celebrated by exchanging sweets/Judaism, Matzo (unleavened bread) is broken to celebrate Passover.</li> <li>Some cultural groups have guidelines regarding acceptable slaughter and preparation of foods/food combinations</li> <li>Some foods are forbidden</li> <li>Food can create a sense of identity and belonging to your culture.</li> <li>Migration has brought new food tastes and styles of cooking into the community.</li> <li>The arrival of Polish workers has swelled the market for Polish food/specialists polish food shops now offering Polish products.</li> </ul> </li> <li>Credit will be given for all valid points.</li> </ul> |       |           |

# **G004** Food, Nutrition and Health

| Q | uestion | Expected Answers  | Marks | Rationale   |
|---|---------|---|-------|---|
| 1 | (a)     | One mark for each good vegetable source. Maximum 2 marks. Peas Beans Lentils Bread Maize Rice Nuts Soya Quorn Tofu Tempah Pulses Seeds Pasta TVP  | [2]   | Credit will be given if types or varieties are given. |
| 1 | (b)     | One mark is required for each correctly stated function.  Two marks are required for a description of the function.  The growth of body cells particularly during growth spurts of adolescents and a growing foetus.  The maintenance and repair of body cells and tissues as a result of wear and tear or injury.  A source of energy. If other sources of energy are lacking in the diet protein is used first to meet energy needs.1 gram provides 17 kJ (4 kcal). | [2]   |   |

| Question |     | n Expected Answers   | Marks | Rationale |
|----------|-----|--|-------|-----------|
| 1        | (c) | One mark for either statement.  HBV supply all of the essential amino acids  LBV lack one or more of the essential amino acids.  | [1]   |           |
| 1        | (d) | TWO effects are required.  2 marks available for answers demonstrating a clear description of each effect.  1 mark for a brief response describing one effect.  Calcium and vitamin D deficiency  Osteoporosis can be due to vitamin D and calcium deficiency in adults. Osteoporosis involves loss of calcium from the bones and reduced bone density. This causes bones to be brittle and liable to fracture.  A lack of calcium can cause rickets in children. Rickets occurs because a lower than normal amount of calcium and phosphate is deposited in the bones, which may cause bones to weaken and become softer. The result may be bowing of the legs, curvature of the spine, and an increased risk that the bones will fracture or break easily.  Vitamin D deficiency can cause poor bone growth in children.  Rickets in adults is known as osteomalacia (soft bones). Symptoms include bone pain affecting the legs, thighs, back, knees and feet. In more severe deficiency, this may cause difficulty standing up or climbing stairs, or can lead to the person walking with a 'waddling' pattern.  Calcium and vitamin D deficiency can cause muscle pains or muscle weakness.  A low level of calcium in the blood and tissues can cause muscle spasms, sensations of tingling and numbness and muscle twitches. This is called tetany. | [4]   |           |
|          |     |  |       |           |

| Q | uestion | Expected Answers   | Marks | Rationale |
|---|---------|--|-------|-----------|
| 1 | (e)     | This question is marked according to the quality of response.  Bullet point <b>sentences</b> can achieve up to the <b>medium level</b> response only.  | [6]   |           |
|   |         | High 5-6 Candidates are able to explain clearly how vitamin C can be retained during the preparation and cooking of food. The explanation will be well developed and supported by the use of subject specific examples. Ideas will be expressed clearly and fluently. There will be few, if any, errors of grammar, punctuation or spelling. Technical terms will be used. |       |           |
|   |         | Middle 3-4 Candidates are able to explain satisfactorily how vitamin C can be retained during the preparation and cooking of food. The explanation may not be fully developed and may lack specific examples. There may be occasional errors of grammar, punctuation or spelling.  |       |           |
|   |         | Low 0-2 Candidates are able to explain superficially how vitamin C can be retained during the preparation and cooking of food. The information may be poorly expressed and errors of grammar, punctuation and spelling will be intrusive.  |       |           |
|   |         | The enzyme <b>ascorbic acid oxidase</b> will destroy the vitamin C. <b>Ascorbic acid oxidase</b> is released from plant cells by bruising, cutting, slicing and with exposure to the air vitamin C is destroyed.   |       |           |

| Question |  | Expected Answers   | Marks | Rationale |
|----------|--|--|-------|-----------|
|          | How to prepare foods to retain Vitamin C | Rip or tear fruit and vegetables when possible this reduces cell wall damage.  |       |           |
|          |  | Use a sharp, stainless steel vegetable knife. Using a blunt knife will damage more cells than necessary.                           |       |           |
|          | How to cook foods to retain vitamin C    | Peeling and soaking potatoes before cooking will increase the amount of vitamin C lost.  |       |           |
|          |  | Avoiding fine chopping, slicing and dicing to retain vitamin C. Vitamin loss is greater when vegetables are cut into small pieces. |       |           |
|          |  | Blanching slows down enzyme activity.  |       |           |
|          |  | Avoid cooking and serve fruits and vegetables raw whenever possible.   |       |           |

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
|          | Avoid soaking in cold water since vitamin C is water-soluble it will leach out of fruit and vegetables.  |       |           |
|          | Use minimal amounts of cooking water. Cook vegetables in a small quantity of water and by using a saucepan with a lid the steam generated will complete the cooking process quickly.                             |       |           |
|          | Cook quickly. When vegetables are put in cold water and brought to the boil slowly it destroys a large proportion of the vitamin C.  |       |           |
|          | Use the cooking water to make gravies, soups and sauces can help to ensure that some of these water soluble vitamins are consumed.   |       |           |
|          | Choose an appropriate cooking method. Steaming uses very little water so the loss of water soluble vitamins should be smaller.   |       |           |
|          | Using a pressure cooker or stir frying are the most effective cooking methods when cooking vegetables to conserve vitamins.  |       |           |
|          | Cooking utensils made of Pyrex, stainless steel, aluminium or enamel or lined with a non stick coating have little effect on vitamin content. The use of iron or unlined copper saucepans can destroy vitamin C. |       |           |
|          | Never add bicarbonate of soda to cooking water. Vitamin C or ascorbic acid is a weak acid and it is easily destroyed by a mild alkali such as bicarbonate of soda.   |       |           |
|          | Serve immediately. To avoid further vitamin C loss cooked vegetables should not be kept warm for long periods before serving.  |       |           |

| Q | uestion |                                  | Expected Answers  | Marks | Rationale |
|---|---------|----------------------------------|---|-------|-----------|
| 1 | (f)     |                                  | for stating a different function, use or a type of food additive. rrect answer. <b>FOUR required</b>  | [4]   |           |
|   |         | Preservatives                    | To preserve and prevent food spoilage food products eg sulphur dioxide in many processed foods  To keep the price of the food competitive and reduce wastage for the manufacturer.  |       |           |
|   |         | Antioxidants                     | Antioxidants are used to slow down the process of oxidation. This extends the shelf life and reduces wastage of food products. To slow down enzyme activity in fruit and vegetables by extending shelf life and delay the process of rancidity in fats.   |       |           |
|   |         | Colourings                       | To meet consumer expectations about a product eg tinned salmon should be pink or red. Colour maybe used to replace the natural colour lost during food processing or storage. To make a food products a consistent colour between different batches of the same food product. Food colouring can also reinforce or strengthen an existing pale colour making a product more aesthetically acceptable to a consumer. |       |           |
|   |         | Flavourings/Flavour<br>enhancers | To develop a product range eg potato crisps with new flavours To strengthen the flavour of a food product eg strawberry yoghurt with a strawberry flavour. To reduce manufacturing costs as the use of a flavouring can save money.   |       |           |

| Qı | uestion |  | Expected Answers  | Marks | Rationale |
|----|---------|--|---|-------|-----------|
|    |         | Emulsifiers and stabilisers  | Emulsifiers and stabilisers allow fat and water to be mixed together to create low fat spreads. They also give food products a smooth, creamy flavour/improves texture.  To help maintain the consistency and texture in large scale food production.  To produce a wide range of food products to meet consumer demands for greater choice eg ice creams, baked products, chilled ready meals and fat spreads. |       |           |
|    |         | Nutritional additives  | To promote the qualities and advantages of the product to the consumer eg micronutrients being added to baby foods, sugar free drinks.  To restore the original characteristics to a product after processing eg adding nutrients to bread or breakfast cereals.  |       |           |
| 1  | g       | explanation will be<br>examples. There mu<br>Ideas will be express | to describe clearly the current approach to nutritional labelling. The well developed and supported by the use of subject specific st be reference to both GDA and Traffic Light System sed clearly and fluently.  any, errors of grammar, punctuation or spelling.   |       |           |
|    |         | labelling. May mention The explanation may                         | to describe satisfactorily the current approach to nutritional on either GDA or Traffic Light System on the fully developed and may lack specific examples. There may of grammar, punctuation or spelling.  |       |           |
|    |         |  | to describe superficially the current approach to nutritional labelling. be poorly expressed and errors of grammar, punctuation and sive.   |       |           |
|    |         |  | n on the nutrient content of a product is not currently required by law m (ie low in fat, rich in calcium) is made on pack.   |       |           |

| Q  | Question  |   |                                      | Ex  | pected Answers   | Marks | Rationale |  |
|--|---|---|--------------------------------------|---|--|-------|-----------|--|
| 1 (g) However, the UK food industry is committed to providing nutri consumers make informed choices about the food they eat ar voluntarily provide this information on pack. |   | bout the food they eat and most companies | [6]                                  |   |  |       |           |  |
|  |   |   | The nutritional inforr be listed as: | mation stated on  | labels must comply with EC regulations and may   |       |           |  |
|  |   |   | Grou<br>Energ<br>Prote               | gy  | Group 2 Energy Protein Carbohydrate Fat Sugars Saturates Fibre Sodium  |       |           |  |
|  | Manufacturers often present the information in different ways so it is difficult to make comparisons.  January 2007 saw the launch of two systems to provide consumers with nutritional information on the front label of pre-packed foods.  The aim of each scheme is to provide consumers with clear nutritional information to help them make healthier choices. |   |                                      |   | rmation in different ways so it is difficult to make systems to provide consumers with nutritional backed foods.   |       |           |  |
|  |   |   | Traffic Light<br>System              | Launched by colours to inc for certain nu This assessn 100g of the fo | the Food Standards Agency uses the traffic light dicate if a food is considered high, medium or low atrients.  The label also details the number of grams of in a portion of the food. |       |           |  |

| Question |                            | Expected Answers  | Marks | Rationale |
|----------|----------------------------|---|-------|-----------|
|          |                            | The scheme has been adopted by some supermarkets eg Sainsbury's.  |       |           |
|          |                            | The disadvantage of the scheme is that the traffic light colour does not take into consideration the portion size of the food. Some foods are awarded a red light but are healthy if eaten in moderation eg hard cheese.      |       |           |
|          |                            | Scheme is based on the guideline values for the quantity of a nutrient an adult should eat in a single day.   |       |           |
|          | Guideline Daily<br>Amounts | The front of pack label displays the percentage of the guideline daily amount that each portion of the food provides. It will also detail how many calories and how many grams of each nutrient are in a portion of the food. |       |           |
|          |                            | The advantages of the scheme are that it provides details on how much each food is contributing towards daily intake of particular nutrients. It also allows the nutritional content of different products to be compared.    |       |           |
|          |                            | The disadvantages of the scheme are that consumers may need to examine the product labels in more detail.   |       |           |
|          |                            |   |       |           |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
| 2        | Several factors affect the food industry.  Explain how environmental and moral concerns, health issues and social change are affecting the food industry.   |       |           |
|          | High 19-25 marks The candidate demonstrates an accurate knowledge of how environmental and moral concerns, health issues and social change are affecting the food industry. The explanation will show detailed understanding. The information will be presented in a fluent and well structured manner. Subject specific terminology will be used accurately. There will be few, if any errors of grammar, punctuation and spelling.                        |       |           |
|          | Middle 13-18 marks  The candidate demonstrates a good knowledge of how environmental and moral concerns, health issues and social change are affecting the food industry. The explanation will show understanding. The information will be presented clearly and some subject specific terminology will be used. There may be occasional errors of grammar, punctuation and spelling are able to explain satisfactorily.                                    |       |           |
|          | Middle 7-12 marks  The candidate demonstrates some knowledge of how some environmental and moral concerns and/or health issues and/or social change are affecting the food industry. The explanation will show a limited understanding and may lack detail. The information will be presented simply and some subject specific terminology will be used, although not always used appropriately. There will be errors of grammar, punctuation and spelling. |       |           |
|          | Low 0-6 marks The candidate demonstrates superficial knowledge of how some environmental and moral concerns and/or health issues and/or social change are affecting the food industry. They will show very limited understanding. The information will be poorly expressed with little or no use of subject specific terminology. Errors of grammar, punctuation and spelling may be intrusive.   |       |           |

| Question |                                  | Expected Answers   | Marks | Rationale |
|----------|----------------------------------|--|-------|-----------|
|          | Environmental/<br>moral concerns | Fair Trade products offered by retailers give the consumer more choice.  Freedom Food is a farm assurance scheme dedicated to  |       |           |
|          |                                  | improving farm animal welfare. Consumer can support this by choosing products with the Freedom Food logo.  Intensive farming/farming methods. Use of pesticides, antibiotics, fertilisers and GM animal feeds. |       |           |
|          |                                  | The selection of food and its impact on the global environment eg beef production.  Organic foods are increasingly popular.  Reducing food waste by the consumer and food industry.                            |       |           |
|          |                                  | There is more concern about packaging and waste. Packaging is required to contain components, which can be recycled.   |       |           |
|          |                                  | Biodegradable packaging and reduced use of plastic bags more evident.  |       |           |

| Question |                | Expected Answers  | Marks | Rationale |
|----------|----------------|---|-------|-----------|
|          |                | Air miles and the transportation of food creating 'eco footprint' are becoming significant.   |       |           |
|          | Social factors | Locally sourced products more evident.  |       |           |
|          |                | Due to better communication and globalisation individuals are more aware of fashions and social trends. This has an impact on the food we purchase and eat.  Where we live and the lifestyle we lead affects our consumption of food. |       |           |
|          |                | People eat at different times within a family/ household unit eg microwaveable food.  |       |           |
|          |                | Increased leisure time for families and individuals means that less time may be spent in the home preparing meals. More products are available requiring limited preparation eg part cooked meals, stir in sauces.                    |       |           |
|          |                | Price ranges within a product vary so the consumer can purchase a value brand or a luxury brand eg Finest range Poverty restricts food choice.  |       |           |
|          |                | Eating out and the consumption of takeaway food have dramatically increased. A variety catering establishments exist for every budget and palate. More disposable income is available to spend on food.                               |       |           |
|          |                | More women work full and part time and have less time to spend preparing meals; choice of convenience foods continues to rise.  |       |           |
|          |                | More single person household exist so increasingly single portion foods can be purchased eg half loaves of bread.   |       |           |

| Question |               | Expected Answers   | Marks | Rationale |
|----------|---------------|--|-------|-----------|
| Question |               | More people travel greater distances to work, food products reflect the more flexible lifestyle eg snack foods, 'deskfast' products.  Cooking is a leisure activity for many people and ingredients, equipment and recipes and new ideas are widely available.   | Walks | Rationale |
|          |               | Celebrities on TV use products a demand is created.  The influence of the media and role models within popular culture influence our choices as we aspire to their lifestyles. The increase in travel and the opportunities to try foods from different cultures have widened the choices available in shops for everyone. |       |           |
|          | Health issues | Migration has ensured people bring their food tastes and style of cooking into the community. Demand for these products increase and retailers meet this demand.  Consumer interest and knowledge of diet has increased. Functional foods such as lower cholesterol spreads, probiotic                                     |       |           |
|          |               | drinks have been introduced.  Food manufacturers develop products to meet the demands for healthier lifestyles eg Low fat ready meals Retailers are more responsive to special diets eg gluten free products.  |       |           |
|          |               | Artificial sweeteners developed for products requiring sweetness but low energy.   |       |           |
|          |               | The use of food additives in products aimed at children has decreased as public concern about the effect of additives has increased.   |       |           |

| Question | Expected Answers   | Marks | Rationale |
|----------|--|-------|-----------|
|          | Manufacturers use nutritional food labelling to inform consumers about products eg GDA.  Reduced use of hydrogenated fats by some food manufacturers. Consumption of fruit and vegetables has increased eg 5 a day campaign.  School meals and the choice of food eaten inside schools have changed. Department for Education guidelines mean meals must include at least two portions of fruit and vegetables and deep-fried foods are restricted.  |       |           |
|          | Television advertising of junk food aimed at has been restricted.  |       |           |
| 3        | Explain the nutritional and dietary needs of the elderly.  High 19-25 marks  The candidate demonstrates an accurate knowledge of the nutritional and dietary needs of the elderly. The explanation will show detailed understanding. The information will be presented in a fluent and well structured manner. Subject specific terminology will be used accurately. There will be few, if any errors of grammar, punctuation and spelling.  Middle 13-18 marks  The candidate demonstrates a good knowledge of the nutritional and dietary needs of the elderly. The explanation will show understanding. The information will be presented clearly and some subject specific terminology will be used. There may be occasional errors of grammar, punctuation and spelling.  Middle 7-12 marks  The candidate demonstrates some knowledge of the nutritional and dietary needs of the elderly. The explanation will show a limited understanding and may lack detail. The information will be presented simply and some subject specific terminology will be used, although not always used appropriately. There will be errors of grammar, punctuation and spelling.  Low 0-6 marks  The candidate demonstrates superficial knowledge of the nutritional and dietary needs of the elderly. They will show very limited understanding. The information will be poorly expressed with little or no use of subject specific terminology. Errors of grammar, punctuation and spelling may be intrusive. |       |           |

|   | Marks   | Rationale  |
|---|---|--|
| Meeting the nutritional needs of the elderly.   |   |  |
| Energy requirements decrease gradually after the age of 50 in women and age 60 in men because of the reduction in physical activity.  |   |  |
| Protein requirements decrease for men but continue to increase slightly in women. The requirement for vitamins remains the same but an elderly person's diet is more likely to be deficient in vitamin C, D and folate.   |   |  |
| Elderly people are thought not to consume enough green leafy vegetables which would account for the lack of folate in the diet. The elderly who are housebound may be lacking in Vitamin D because they may have limited exposure to sunlight.  |   |  |
| Foods that are rich in Vitamin D and calcium should therefore be included in the diet. If dexterity is a problem in peeling fruit or potatoes then they may lack sufficient vitamin C. The requirements for minerals remain the same but an elderly person's diet would benefit from the recommended amounts of Iron, Zinc and calcium. |   |  |
| Anaemia can occur in elderly people due to poor absorption and blood loss so foods rich in Iron should therefore be included in the diet.   |   |  |
| Zinc is needed for a healthy immune system and to help with wound healing such as pressure sores and leg ulcers. Therefore the elderly would benefit from adequate requirements of zinc. Lack of zinc is also thought to be a factor in dementia.   |   |  |
| Adequate intakes of calcium should be included in the diet of the elderly for good bone health. Elderly people who are well should restrict saturated fat intakes.  Some elderly people may suffer with constipation and bowel problems due a reduced gut mobility and inactivity. The consumption of cereals can help this.            |   |  |
| If the elderly are dehydrated it can interfere with digestion and may lead to constipation. It is therefore very important to drink a variety of drinks to keep water intake up.  |   |  |
|   |   |  |
| Br H I Hall Ha Ai 14 Ki Allaha  | Energy requirements decrease gradually after the age of 50 in women and age 60 in men because of the reduction in physical activity.  Protein requirements decrease for men but continue to increase slightly in women. The requirement for vitamins remains the same but an elderly person's diet is more likely to be deficient in vitamin C, D and folate.  Elderly people are thought not to consume enough green leafy vegetables which would account for the lack of folate in the diet. The elderly who are housebound may be acking in Vitamin D because they may have limited exposure to sunlight.  Foods that are rich in Vitamin D and calcium should therefore be included in the diet. If dexterity is a problem in peeling fruit or potatoes then they may lack sufficient vitamin C. The requirements for minerals remain the same but an elderly person's diet would benefit from the recommended amounts of Iron, Zinc and calcium.  Anaemia can occur in elderly people due to poor absorption and blood loss so foods rich in Iron should therefore be included in the diet.  Zinc is needed for a healthy immune system and to help with wound healing such as pressure sores and leg ulcers. Therefore the elderly would benefit from adequate requirements of zinc. Lack of zinc is also thought to be a factor in dementia.  Adequate intakes of calcium should be included in the diet of the elderly for good bone health. Elderly people who are well should restrict saturated fat intakes.  Some elderly people may suffer with constipation and bowel problems due a reduced gut mobility and inactivity. The consumption of cereals can help this. | Energy requirements decrease gradually after the age of 50 in women and age 60 in men because of the reduction in physical activity.  Protein requirements decrease for men but continue to increase slightly in women. The requirement for vitamins remains the same but an elderly person's diet is more ikely to be deficient in vitamin C, D and folate.  Elderly people are thought not to consume enough green leafy vegetables which would account for the lack of folate in the diet. The elderly who are housebound may be acking in Vitamin D because they may have limited exposure to sunlight.  Foods that are rich in Vitamin D and calcium should therefore be included in the diet. If dexterity is a problem in peeling fruit or potatoes then they may lack sufficient vitamin C. The requirements for minerals remain the same but an elderly person's diet would benefit from the recommended amounts of Iron, Zinc and calcium.  Anaemia can occur in elderly people due to poor absorption and blood loss so foods rich in Iron should therefore be included in the diet.  Zinc is needed for a healthy immune system and to help with wound healing such as pressure sores and leg ulcers. Therefore the elderly would benefit from adequate requirements of zinc. Lack of zinc is also thought to be a factor in dementia.  Adequate intakes of calcium should be included in the diet of the elderly for good bone health. Elderly people who are well should restrict saturated fat intakes.  Some elderly people may suffer with constipation and bowel problems due a reduced gut mobility and inactivity. The consumption of cereals can help this. |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | Meeting the dietary needs of the elderly.   |       |           |
|          | The elderly should aim to eat meals based upon starchy foods – pasta, potatoes, rice and bread. These are filling sources of carbohydrate.  A useful source of protein is oily fish; consumption of oily fish may help reduce the risk of thrombosis.   |       |           |
|          | Fruit and vegetables provide valuable vitamins, minerals and fibre. They also contain antioxidants. Antioxidants mop up damaging 'free radicals'.   |       |           |
|          | Crucial antioxidant vitamins (A, C, E) and minerals (zinc, copper, manganese, selenium) in fruit and vegetables can stop free radicals in their tracks.   |       |           |
|          | An intake of iron is very important and should come from haem (meat, offal) and non-haem sources (fortified cereals, dried fruit, pulses and green leafy vegetables) every day. Absorption of iron is increased by consuming vitamin C at the same time, such as a glass of fruit juice with meals.   |       |           |
|          | An intake of Zinc is very important; Zinc is found in meat and meat products, seafood, milk and dairy products, wholemeal bread, lentils, eggs, nuts, sweetcorn and rice.   |       |           |
|          | Calcium-rich foods such as: milk, cheese and other dairy products, green leafy vegetables, sesame seeds, bony fish, dried fruit and baked beans are needed for good bone health.  |       |           |
|          | For those elderly people who live alone they should cook at least one well balanced meal a day. This does not necessarily have to be a hot meal. It is also useful for them to have a well stocked store cupboard full of essential items such as long life milk, cereals, canned foods, pulses, pasta, and a freezer with some ready made meals, bread in case they are ill or housebound. |       |           |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
| 4        | Discuss the importance of food packaging and describe the materials used to package food.   |       |           |
|          | High 19-25 marks The candidate demonstrates an accurate knowledge of the importance of food packaging and describe in detail the materials used to package food. The explanation will show detailed understanding. The information will be presented in a fluent and well structured manner. Subject specific terminology will be used accurately. There will be few, if any errors of grammar, punctuation and spelling. |       |           |
|          | Middle 13-18 marks The candidate demonstrates a good knowledge of the importance of food packaging and describe adequately the materials used to package food. The explanation will show understanding. The information will be presented clearly and some subject specific terminology will be used. There may be occasional errors of grammar, punctuation and spelling.  |       |           |
|          | Middle 7-12 marks The candidate demonstrates some knowledge of the importance of food packaging and/or describes materials used to package food. The explanation will show a limited understanding and may lack detail. The information will be presented simply and some subject specific terminology will be used, although not always used appropriately. There will be errors of grammar, punctuation and spelling.   |       |           |
|          | Low 0-6 marks The candidate demonstrates superficial knowledge of the importance of food packaging and/or describe materials used to package food. They will show very limited understanding. The information will be poorly expressed with little or no use of subject specific terminology. Errors of grammar, punctuation and spelling may be intrusive.   |       |           |
|          |   |       |           |

| Importance of food packaging Physical protection – The food enclosed in the package may require protection from   |  |
|---|--|
| <u>vibration</u> , compression and <u>temperature</u> . <b>Barrier protection</b> – A barrier from <u>oxygen</u> , <u>water vapor</u> , dust is required this will                          |  |
| reduce food spoilage and contamination.  Controlled atmosphere – Keeps the food, fresh, safe and attractive to the consumer for the intended shelf life. MAP can be used for some products. |  |
| Product Containment – several food cans are shrink wrapped together for convenience.  |  |
| Information about the food product – Packages and labels communicate how to use, transport, recycle, or dispose of the package or product.  |  |
| Marketing the product – The packaging and <u>labels</u> can be used to encourage sales reinforce the brand image.   |  |
| Security of the product – Packaging can ensure the product is safe eg tamper proof jars. Packages also can include anti-theft devices eg electronic article surveillance tags.              |  |
| Convenience – Packages can have features which add convenience for manufacturer, retailer and consumer eg easy stack, display, open, use, and reuse.  |  |
| Portion control – Single serving packaging for single potions. Bulk packaging for purchasing larger quantities eg 3 litres milk carton.   |  |
| Credit will be given if candidates mention the shortcomings of food packaging and the impact on the environment.  |  |

| Question | Expected Answers  | Marks | Rationale |
|----------|---|-------|-----------|
|          | Range of materials used to package food.  |       |           |
|          | Plastics A wide range of rigid, flexible plastics is used to protect food. Polythene terephthalate (PET) is used for bottles to hold liquids they are lightweight and strong. Polystyrene is used for trays and containers. It can be expanded and pressed into a variety of shapes and sizes to hold liquids and solid foods. Polystyrene is a good insulator and can be used to serve hot drinks or takeaway foods. Can also used to keep foods cool. Low-density polythene is used as cling film. It can withstand water vapour, it is strong and resistant to low temperatures. Cannot withstand high temperatures. Laminating the polythene film can improve the resistance to oxygen and extend the shelf life of foods containing fat; retailers can display products for longer periods. High-density polythene for 'boil in the bag' products. Metallised plastic pouches. These have excellent resistance to gases and are very strong. Shelf life of products extended. The disposal of plastics has environmental implications. Biodegradable plastics are expensive. |       |           |
|          | Paper and cardboard  Made from wood pulp or recycled paper is the most common type of material used for food packaging.  Paper is used for paper bags, labels, greaseproof paper, cartons and parchments.  Cardboards are used for boxes, sleeves, lids and many outer food containers. It can be coated or laminated. Wax coatings on polythene may be applied for packaging frozen food.  |       |           |
|          | Paper and cardboard is available in various thicknesses. It can be moulded into a variety of shapes and sizes eg cartons for fruit juice for one person. Paper is easy printed on. It is lightweight and easy for the consumer to carry. 'Ovenable' boards are coated with polypropene and can withstand microwave temperatures eg ready prepared foods. Paper products can be recycled and production costs can be reduced.  |       |           |

| Metals can be used to package food or produce cans eg aluminium and tinplate. Food cans are expensive to produce but thinner walls supported by strengthening ri have reduced the amount of aluminium required. Tinplated cans made from thin low carbon steel are protected from corrosion by a th layer of tin inside the can. These are expensive to produce. Coating the inside of the can with lacquers reduce costs and protects the product from discolouration. Metals can be used for screw tops, bottle tops, trays, foil wrappings and laminates. Metals are strong and retain their shape offering excellent long term protection. Manufacturers can mould metal into specific shapes and sizes. Metals can be recycled. Consumer can be actively involved in the process.  Glass Used to package milk, wines, salad dressings, sauces, fruits, preserves and jams. Glass provides a hard and impermeable barrier to protect food. Glass can be moulded into a wide variety of shapes. Coloured glass can enhance the appearance of food. Glass is a cheap form of packaging to produce. The consumer can see the product. Glass has limitations due to the ease at which it breaks for retailers and manufacture Glass is heavy and gives additional weight for the consumer to carry. Polystyrene sleeves can protect glass bottles from breakages and provide the consumith more printed information about the product. Glass is non-toxic and does not react with food substances. Consumers can easily recycle glass. | ers. |  |
|--|------|--|
|--|------|--|

# **Grade Thresholds**

GCE Home Economics (H511)
Advanced Subsidiary GCE Home Economics (H111)
January 2010 Examination Series

#### **Unit Threshold Marks AS**

| Unit |     | Maximum<br>Mark | Α  | В  | С  | D  | E  | U |
|------|-----|-----------------|----|----|----|----|----|---|
| G001 | Raw | 75              | 51 | 45 | 39 | 33 | 28 | 0 |
|      | UMS | 100             | 80 | 70 | 60 | 50 | 40 | 0 |
| G002 | Raw | 75              | 53 | 47 | 41 | 35 | 30 | 0 |
|      | UMS | 100             | 80 | 70 | 60 | 50 | 40 | 0 |

#### **Unit Threshold Marks A2**

| Unit |     | Maximum<br>Mark | <b>A</b> * | Α  | В  | С  | D  | E  | U |
|------|-----|-----------------|------------|----|----|----|----|----|---|
| G003 | Raw | 100             | 90         | 80 | 70 | 60 | 50 | 40 | 0 |
|      | UMS | 100             |            | 80 | 70 | 60 | 50 | 40 | 0 |
| G004 | Raw | 75              | 56         | 51 | 46 | 41 | 36 | 32 | 0 |
|      | UMS | 100             |            | 80 | 70 | 60 | 50 | 40 | 0 |

### **Specification Aggregation Results AS**

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

|      | Maximum<br>Mark | Α   | В   | С   | D   | E  | U |
|------|-----------------|-----|-----|-----|-----|----|---|
| H111 | 200             | 160 | 140 | 120 | 100 | 80 | 0 |

The cumulative percentage of candidates awarded each grade was as follows:

|      | A    | В     | С     | D     | E     | U   | Total Number of<br>Candidates |
|------|------|-------|-------|-------|-------|-----|-------------------------------|
| H111 | 7.27 | 21.82 | 43.64 | 76.36 | 96.36 | 100 | 55                            |

### 55 candidates aggregated this series at AS

### There is no aggregation for A2 this series

For a description of how UMS marks are calculated see: <a href="http://www.ocr.org.uk/learners/ums/index.html">http://www.ocr.org.uk/learners/ums/index.html</a>

Statistics are correct at the time of publication.

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