SCOTTISH
QUALIFICATIONS
AUTHORITY

2005 Lifestyle and Consumer Technology

Intermediate 2

Finalised Marking Instructions

These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments.

2005 Lifestyle and Consumer Technology
Intermediate 2

Marking Scheme

Question 1

(a) State the function of the following nutrients in the diet.	
Course skills: Recall & use of knowledge	**Marks allocation:** 4 marks
4 x 1 mark for explaining the importance of each nutrient	

Protein
- Growth/repair of body cells/tissues.
- Repair/maintenance of body cells/tissues.
- Extra used as a secondary source of energy.

Iron
- Helps to keep blood healthy.
- Needed to make red blood cells.
- Prevents anaemia.
- Needed to form haemoglobin (which gives blood its red colour).
- Needed to transport oxygen in the blood to the body cells.
- Needed for myoglobin (in our muscles).

Calcium
- Helps to form strong bones and teeth.
- Works with phosphorus & vitamin D to maintain strong bones and teeth.
- Needed for the clotting of blood.
- Needed for muscle function.
- Needed for hormone production.

Vitamin C
- Required to make connective tissue (which binds body cells together).
- Keeps skin, gums bones and blood vessels firm.
- Helps in the absorption of iron.
- Needed for the walls of the blood vessels.
- Assists in the building of strong bones and teeth.
- Helps wounds to heal.
- Helps the body resist infection.
- Acts as an anti-oxidant.
- Helps prevent cancer.
- Helps prevent heart disease.
- Helps slow down the body's ageing process.

Question 1 (Cont'd)

(b) (i) List **two** different food sources of NSP. (ii) State **two** functions of NSP in the body.		
Course skills: Recall & use of knowledge	**Mark allocation:**	3 marks
2 x ½ mark for each source of NSP 2 x 1 mark for each function		

Food sources of NSP
• (Wholegrain) cereals • (Wholegrain) breakfast cereals • (Wholemeal) bread • (Wholemeal) pasta • Wholegrain/brown rice • Bran • Fruits/dried fruits • Vegetables • Potato skins/baked potatoes

Functions of NSP
• Helps to prevent constipation. • Helps to mop up the toxins in the bowel. • Helps to keep the faeces soft (and helps in their elimination from the bowel). • Helps to prevent bowel cancer. • Helps to prevent diverticular disease. • Helps to fill up the stomach. • Helps the digestive system function effectively/stay healthy. • Helps eliminate waste products from the body.

(c) State **two** reasons why people become vegetarians.		
Course skills: Recall & use of knowledge	**Mark allocation:**	2 marks
2 x 1 mark for explanation		

Explanation
• May not eat meat because of religious beliefs • May be against personal beliefs to eat any flesh from an animal. • The killing of animals might be seen as an inhumane/cruel practice. • May believe a vegetarian diet is healthier (as it is low in fat/high in NSP). • May be worried about recent health scares associated with eating meat (eg BSE). • Fashion/peer pressure/peer group influences. • May dislike the flavour/texture/appearance of meat. • May be concerned about environmental factors involved in meat production (eg cost may be greater).

Question 1 (Cont'd)

(d) A student who is a vegetarian buys single portion meals. She has little time for food preparation and cooking. Thinking about lifestyle and health, evaluate the suitability of this product for the student.	
Course skills: Evaluation	**Mark allocation:** 3 marks
3 x 1 mark for each evaluation point linked to the student.	

Evaluation

- Suitable for a (lacto)-vegetarian as it contains no meat/fish products in it.

- This product contains cream but as a (lacto)-vegetarian can eat milk products this would be suitable.
- Contains cream so this would not be a suitable choice if the student was a vegan.
- Contains cream so this would not be a good choice for the student as current dietary guidelines advise reducing fat in the diet.
- Contains vegetables so this would allow the student to follow current dietary guidelines to eat more vegetables.
- Contains rice/total complex carbohydrates so this would allow the student to follow current dietary guidelines to eat more total complex carbohydrates.
- Low in sodium/contains little salt so would help the student to follow current dietary guidelines/to maintain lower blood pressure.
- Low in sodium/contains little salt so would help student to prevent strokes/hypertension in later life.

- This is a single portion size so would be suitable for the needs of this student.
- 200g is a reasonable portion size for one person so would suit someone cooking for themselves.
- Would be a suitable size for the student so there should be no waste.
- Complete meal so student would not have to buy any accompaniments and she may have a limited budget.

- Price £1.50 is reasonable to pay for a single portion so the student should be able to afford it.
- Price £1.50 may be too expensive for a student as she may have a very limited budget.

- Quick to cook which would suit the student as she has limited time for food preparation and cooking.
- Ready to cook which would be suitable for the student if she has limited cooking skills.
- Convenient as this product can be heated up in a microwave and the student may have limited facilities for cooking.

Question 2

(a) State **two** ways in which manufacturers can help to protect the environment during the production process.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for explanations	

Explanations

- Servicing/cleaning equipment regularly to ensure maximum efficiency/less energy used.
- Using correct filters/ensuring filters are maintained to prevent toxic emissions from factories/ chimneys into rivers.
- Using chemicals in the production process which do not harm the environment.

- Using economy light bulbs where possible to save on energy.
- Opening fridges and freezers as little as possible to save on energy.
- Using ovens/lights which are programmed to turn on and off as required to save energy.
- Using microwaves/pressure cookers to speed up the cooking process and save energy.
- Using appliances with low wattage for energy efficiency.

- Using recyclable packaging.
- Creating/using fabrics/packaging which are biodegradable/CFC free.
- Treating fabrics with chemicals which are less harmful to the environment.
- Producing items using unbleached/green cotton/recycled wool.
- Producing/using detergents which are phosphate free.

- Re-using as many resources as possible eg water used in production process/paper.
- Using recycled products in the production process, where possible eg paper.

- Using food produce which has been grown organically.
- Using ‘ozone friendly’ aerosols.
- Using products which have been produced without the use of pesticides/fertilisers.
- Dispose of waste materials in a way which will do the least harm to the environment.
- Eliminating unnecessary packaging.

Question 2 (Cont'd)

(b) Explain the following terms.	
Course skills: Recall & use of knowledge	**Mark allocation:** 4 marks
4 x 1 mark for correct explanation	

Organic food

- Foods which have had no chemical sprays used during their growth.
- Foods which have had no inorganic materials used.
- Foods from animals which have been grazed on land free from chemicals/artificial fertilisers/ pesticides.
- Foods from animals which have been fed a chemical free diet.
- Foods from animals which have not been injected with chemicals eg growth hormones.
- Foods produced in soil which has been passed by the soil association.

White goods

- Large items in the kitchen such as cookers/fridges/freezers/fridge-freezers/washing machines/tumble-dryers/microwave ovens/dishwashers

Fuzzy Logic

- Electronic control system which copies human thought processes.
- Gives an appliance the facility to adapt automatically to circumstances in use (eg a vacuum cleaner will set the motor suction strategy based on dust quantity and floor type).
- Computer programme which controls a process in electrical goods

Chlorofluorocarbons (CFC's)

- CFC's destroy the ozone layer by turning the ozone into oxygen
- A family of inert/relativity non-toxic gases.
- Gases which are used for cooling in fridges/freezers.
- Gases which are used as accelerants in aerosol cans.
- CFC's destroy the ozone layer and allow more ultraviolet light to come through which could lead to an increase in skin cancer.

Question 2 (Cont'd)

(c) A family of two adults and two teenage children wish to buy a dishwasher which is environmentally friendly. Study the information about dishwashers and choose the **most suitable** dishwasher for the family.	
Course skills: Drawing conclusions	**Mark allocation:** 4 marks
1 mark for correct choice 3 x 1 mark for appropriate reasons	

Correct choice of Dishwasher : **C**

Reasons

- Has a wide range of programmes which should be suitable for dealing with the different needs of the family.

- Holds 12 place settings and this would be needed in a family of four.
- This dishwasher would also cope with any visitors who join the family for meals.
- Would be large enough to hold a whole day's dishes for this family.
- Would be able to wash a lot of dishes at once, saving energy and the family wish to be environmentally friendly.

- This model is more efficient to use (as less energy will be required to heat the water) saving the family money in fuel bills.
- As less energy/less of the earth's resources are used this dishwasher will be more environmentally friendly.
- This model will use less energy and the family wish to buy an environmentally friendly dishwasher

- Quick wash facility will mean that less fuel is used so more environmentally friendly which is what the family want.
- Quick wash facility may reduce the fuel bill which would save the family money.
- Quick wash facility makes sure that the family has dishes ready when required.

- The low noise level would be good as it would not disturb any of the family members when they are in the house.
- The low noise level would be suitable as the family wishes to be environmentally friendly and avoid noise pollution.

- The dishwasher can be pre-set to start a wash programme at the most convenient time of day for the family eg when all the family members are out of the house.
- The family would save money if they used the dishwasher at the cheaper times.

- Adjustable dish racks in bottom basket will allow family to wash different shapes/sizes of dishes to suit their needs.

Question 2 (Cont'd)

(d) Explain the usefulness to the consumer of two of the areas of information indicated on the diagram.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for explanation	

Energy rating label

- An appliance's energy efficiency is rated on a seven point scale, from 'A' to 'G' which allows the consumer to make an informed choice.
- This appliance is very efficient as it has an 'A' rating so the consumer will know that it will use less energy

Ecolabel

- Product that does the least damage to the environment, (throughout its life cycle) and this will be useful to the consumer who wishes to buy an environmentally friendly product.
- Product will not harm the environment so consumer can use the appliance with confidence.
- Ensures the highest efficiency possible from the appliance so the consumer will save money/ energy in its use.

Spin drying performance

- An appliance's spin drying performance is rated on a seven point scale, from 'A' which allows the consumer to make an informed choice.
- This appliance has a slightly higher than average performance as it has a 'C' rating so consumer can make informed choice.
- 800 rpm spin speed may require a longer spin than some other models with a higher spin speed to dry items so consumer will have to balance cost of appliance against energy need.
- Appliances with a higher spin speed will dry items faster which will save consumers time.
- Appliances with higher spin speeds will dry items more efficiently so saving consumer energy.

Question 3

(a) The Food Safety Act 1990 regulates all food businesses. State **two** important points of this Act.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for appropriate explanation	

Explanation

- Food must be fit for human consumption.
- Food must meet food safety requirements.
- Food must not be injurious to health.
- Food must not be contaminated.
- Food must be of a nature demanded by customers.
- Food must be of a quality demanded by customers.
- Food handlers must have undergone training in food hygiene practices.
- Businesses dealing in food must be registered with the local authority.
- Labelling of food must be accurate.
- Weights and measures used for food must be accurate.
- Descriptions of food must not be misleading.
- Environmental Health Officers have the power to close down businesses which are not of a satisfactory standard.
- EHO can inspect any business to check food hygiene.
- EHO can inspect any business to check that food is fit for human consumption.
- EHO can remove samples of food for inspection.
- EHO can seize suspect food.
- EHO can ask for food to be condemned.

(b) A fast food restaurant is extending its "healthy eating" range. Choose **two** food items and for **each**: (i) identify a **different** dietary target which the food item helps to meet. (ii) explain a **different** benefit to health of **meeting each target**.	
Course skills: Recall & use of knowledge	**Mark allocation:** 4 marks
2 x 1 mark for a **different** dietary target 2 x 1 mark for each explanation linked to meeting the target specified	

Fresh fruit pieces

Dietary Targets

- Increase intake of fruit and vegetables to be doubled/increased to 400g/eat 5 portions per day.
- Reduce fat intake/eat less fat/reduce to no more than 35% of total energy per day.
- Reduce salt intake/intake to reduce to no more than 100 mmols per day.
- Intake of NME sugars in adults not to increase/intake of NME sugars in children to reduce by half/intake to be less than 10% of food energy.
- Increase intake of total complex carbohydrate/increase intake to 134g/25% of total food energy per day.

Explanation

- Contributes to requirements for NSP to prevent constipation/bowel disorders/bowel cancers.
- Supplies ACE vitamins which can help to prevent cancers/(coronary) heart disease/strokes.
- Supplies vitamin C which is required for healthy connective tissue/fighting infection/healthy skin/the absorption of iron/the prevention of scurvy.
- Supplies vitamin A which is required to maintain healthy mucous membranes/prevent night blindness.
- Low in fat so can help to prevent (coronary) heart disease/weight gain/obesity.
- Reducing fat intake may reduce the risk of obesity which may cause hypertension/diabetes in later life.
- Will add bulk to the diet and make person feel fuller so preventing snacking on high fat/sugar foods.
- Low in salt to reduce the risk of hypertension/high blood pressure/strokes.
- No NME sugars so should not cause excess weight gain/cause (coronary) heart disease/obesity/ dental caries/tooth decay
- Energy in the form of total complex carbohydrate is less likely to increase the risk of diabetes in later life.

Semi-skimmed milk

Dietary Target

- Reduce fat intake/eat less fat/reduce to no more than 35% of total energy per day.
- Intake of NME sugars in adults not to increase/intake of NME sugars in children to reduce by half/ intake to be less than 10% of food energy.

Explanation

- Low in fat/saturated fat so will help to prevent (coronary) heart disease/strokes/weight gain/ obesity.
- Reducing fat intake may reduce the risk of obesity which may cause hypertension in later life.
- No NME sugars so should not cause excess weight gain/cause (coronary) heart disease/obesity/ dental caries/tooth decay.

Question 3 (Cont'd)

Pasta with tuna
Dietary Target • Increase intake of total complex carbohydrate/increase intake to 134g/25% of total food energy per day. • Increase intake of oily fish/double intake to 88g per week.
Explanation • Supplies protein needed for growth and repair and maintenance of body tissues. • Supplies calcium required for development and maintenance of teeth and bones. • Supplies calcium to prevent rickets/osteoporosis. • Supplies vitamin B required for the release of energy from food. • Supplies vitamin D required for the absorption of calcium in the body. • Supplies vitamin D to help prevent rickets/osteoporosis. • Supplies vitamin A required to make visual purple/maintain healthy eyesight/prevent (night) blindness/to keep the mucous membrane of throat, nose and digestive tract moist/for normal growth in children. • Supplies iron which helps formation of haemoglobin/red blood cells/prevents anaemia. • Energy in the form of total complex carbohydrate is less likely to increase the risk of diabetes in later life. • Helps to create a feeling of being full so less likely to snack on high sugar/fat foods. • Pasta contributes to requirements for NSP to prevent constipation/bowel disorders/bowel cancers. • Tuna supplies essential fatty acids (omega 3) which helps to prevent (coronary) heart disease/ strokes/blood clots. • Tuna supplies essential fatty acids (omega 3) which is thought to aid brain/memory development.

Question 3 (Cont'd)

(c) Members of staff at the fast food restaurant are required to wear trousers as part of their uniform. The restaurant insists on the following dress code: • no personal items to be carried • plain, black trousers must be worn • must look clean and smart. Choose the **most suitable** pair of trousers for the staff to wear.	
Course skills: Drawing conclusions	**Mark allocation:** 3 marks
1 mark for correct choice 2 x 1 mark for appropriate reasons	

Correct choice of trousers: **B**

Reasons for choice
• Boot fit style is not too baggy/is cut in a way that would look smart so will meet the specification to look smart. • No pockets so no money or personal effects on their person as required by the restaurant. • With no pockets the style of the trousers will look smart which is required by the restaurant. • Flat front will make the trousers look smart which is required by the restaurant. • Belt will help prevent the trousers from falling down and this will help to create a smart appearance as required by the restaurant. • Will prevent the staff having to supply their own belt which may lead them into extra expense. • Permanent press effect on leg fronts mean the crease in the trousers will look smart which was required by the restaurant. • Will avoid the need for the staff to iron trousers to retain the creases so save staff time. • Easy to keep clean as can be washed at high temperature which will keep the trousers looking smart as required by the restaurant. • Higher temperature is more likely to get a cleaner result which is important when working in a fast food restaurant. • Easier to get the stains out as can be washed at high temperature so this will save the student effort/ time • Trousers will need to be washed frequently as they are required everyday at the fast food restaurant and machine washing will make this easier. • The trousers will need to be washed and dried for the fast food restaurant each day so tumble drying will make this easier. • Easy to dry as can be tumble dried so will suit student if he/she has to wash/dry the trousers regularly. • Black was colour specified by the restaurant and these trousers are available in black. • Working in a fast food restaurant it is likely that stains will occur so black will be less likely to show the stains.

Question 3 (Cont'd)

(d) A student plans to open a bank account. Evaluate **one** of the bank accounts shown below, for use by the student.	
Course skills: Evaluation	**Mark allocation:** 3 marks
3 x 1 mark for each reason	

Bank Account A

Online banking
- Student can go on line at any time so this will save time going into the bank.
- Student can go online at anytime so this makes it more convenient if he/she is busy studying.
- Student may not have access to the Internet so this will not be convenient.

24 hour cash dispenser
- Convenient for the student as money can be accessed at any time if student is busy studying.
- Convenient for the student as money can be accessed from any link cash point and student may have limited money for travelling expenses.

Low cost student loans
- Should the student need a loan it is low cost, so this may save him/her money in the long term.
- This could encourage the student to take out an unnecessary loan and so get into debt.

Switch/Maestro facility available
- Is more convenient/saves time as the student does not have to go to the bank to get the money for a purchase.
- Money stolen is lost but if card is stolen it can be stopped therefore safer.

Easy payment of bills with direct debit
- Direct debit can be set up from the student's account, so this will be more convenient/save him/her time.
- Direct debit will spread the cost of the student's expenses so make it less likely to get into debt.
- The student may not have had to budget before so the direct debit facility will make this easier.

3% interest on balance when account is in credit
- If the student has money in his/her account then this will make money for him/her as students are often short of money.
- Good incentive to stop the student overdrawing and so getting into debt (which may take many years to pay off once student starts work).

Interest free overdraft facilities
- Should the student need to overdraw the account then this will not cost extra so the student will not run up extra debts which is important as students are often short of money.
- Could encourage the student to run up a big overdraft and so get into debt (which may take many years to pay off once student starts work).

Question 3 (Cont'd)

Bank Account B
Telephone banking available • The student can phone at any time account so will save time going into the bank. • This may not be as convenient as online banking where the student would be able to view details of the account personally. • Student can phone at any time so this makes it more convenient if he/she is busy studying. **Student branch on college campus** • Convenient for the student as they will not have far to go to get to the bank so will save time/effort. • Can choose a time during the college day when free to visit the bank so may save time. • May not be as accessible to the student as when the college is on holiday the student will not be at the college. **Student loans available** • This may be an incentive to choose this account as a loan may be available. • May be less suitable as the student's bank may charge more in interest than other banks. **Cheque book with guarantee card** • Can use these to pay for any bills so can be convenient if the student has no cash available. • Can use these to pay for items so can be convenient if student has no time to go to the bank to collect cash. • May not be as convenient as direct debit as the student still needs to make sure the cheque is paid on time. • These are bulky items and the student may not always want to carry these items on their person. **Low cost personal insurance** • This bank account may encourage the student to insure themselves as it provides low cost insurance. • This bank account will save the student money if they take out personal insurance as it is low cost. **10% student discount** • An incentive to take out this bank account as it may save the student money. **Overdraft facilities charged** • This will be unsuitable for the student as they may not be able to afford the extra charges. • This may lead the student into unnecessary debt if they become overdrawn as they will have to find money to pay for the charges. • This may be a good choice for the student as it may encourage the student to keep within their spending limits to avoid extra money being spent on charges.

Question 4

(a) Explain why a pregnant woman should avoid **each** of the following dishes: • Liver paté • Egg mayonnaise • Pasta twists with soft cheese	
Course skills: Recall & use of knowledge	**Mark allocation:** 3marks
3 x 1 mark for explanations	

Explanation
Liver paté • Liver contains Retinol/vitamin A, high levels of which can cause birth defects. • Liver contains Retinol/vitamin A, high levels of which are poisonous to the unborn baby.
Egg mayonnaise • Risk of developing salmonella poisoning from the egg used. • Salmonella can affect the foetus, resulting in miscarriage/stillbirth.
Pasta twists with soft cheese • Risk of developing food poisoning from soft cheeses. • Listeria can affect the foetus, resulting in a miscarriage/stillbirth.

(b) State **two nutritional** advantages to a **baby** of breastfeeding.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for advantages of breastfeeding linked to needs of baby	

Advantages
• Breast milk contains the correct balance of nutrients to meet the needs of the growing baby. • All the nutrients required are present in the correct amounts so baby is unlikely to suffer from malnutrition. • All nutrients required are present in readily absorbed form so the baby is unlikely to suffer from malnutrition.

Question 4 (Cont'd)

(c) Answer either Part (i) or Part (ii) (i) **Other than nutrition**, state **two** advantages to a **baby** of breastfeeding. (ii) **Other than nutrition**, state **two** advantages to a **mother** of breastfeeding.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for advantages	

Part (i)

Advantages to the baby

- Contains antibodies which can help the baby fight infection.
- Baby won't be allergic to breast milk.
- Breast milk is at the correct temperature so the baby is likely to feed well.
- Breast milk is the correct consistency and concentration so little chance of the baby having digestive disorders.
- It is less likely that the baby will become infected with food poisoning bacteria from incorrect sterilisation of bottles.
- Helps the baby and mother form a closer bond.

Part (ii)

Advantages to the mother

- Can help the mother to lose the weight gained during pregnancy.
- Can help the mother to regain her figure quickly.
- Medical evidence suggests that women who breast feed have a lower risk of developing breast cancer.
- Helps the mother and baby form a closer bond.
- It requires no preparation so less time consuming for the mother.
- No sterilisation of bottles and equipment so less time consuming for the mother.
- Does not cost money for the milk which may be important to the mother if on a low income.
- Will not cost money for bottles and equipment which may be important to the mother if on a low income.
- Milk is the correct temperature so will prevent the mother worrying about milk being too hot or too cold.
- Milk is the correct temperature so will save time as the baby can be fed on demand.
- Milk is the correct consistency and concentration so there is little chance of the mother under or over feeding the baby.

Question 4 (Cont'd)

(d) A busy working mother is buying a steriliser. She wishes to avoid using chemicals which may irritate her baby. Choose the **most suitable** steriliser for the mother. Give **three** reasons for your choice.	
Course skills: Drawing conclusions	**Mark allocation:** 4 marks
1 mark for correct choice 3 x 1 mark for appropriate reasons linked to case study	

Correct choice: Steriliser **A**

Reasons
• Large capacity will save the busy mother time as she can sterilise 8 bottles at the same time. • Large capacity will save the busy mother time as she can make up all the feeds for the day. • Largest capacity out of all of the 4 choices so will be more convenient for the mother and will save her time as she is busy. • More convenient for the mother as she may have different sizes of bottles and this steriliser will be able to be used with any of them. • Accessories can also be included in the steriliser so will be more convenient and save the busy mother time. • Quick time for sterilising the bottles and accessories so will save time for the busy mother. • Quick time for sterilising the bottles and accessories so convenient for the mother if she has forgotten to sterilise the bottles. • Quick time for sterilising the bottles and accessories so convenient for the mother if she has run out of feeds for the baby and has to sterilise a bottle quickly. • Mother is unsure about using chemicals for babies so the steam steriliser ensures that there are no chemicals used. • Bacteria are killed with the steam action so no need to worry that the baby will become ill from any food poisoning bacteria. • Dismantles so will make cleaning the steriliser easier and quicker for the busy mother. • Will mean that the steriliser is cleaned thoroughly so preventing any danger of infection to the baby. • Automatic safety switch off will ensure that the steriliser does not burn out if there is no water in the unit so will give the mother confidence. • Steriliser will cut out if there is a problem with it so this is reassuring for the mother that it will be safe to use. • Is an added safety measure to give the mother confidence in using the steriliser.

Question 4 (Cont'd)

(e) Choose **one** of the support services shown below and explain how this service supports a family with a new baby. • Health visitor • Midwife	
Course skills: Recall & use of knowledge	**Mark allocation:** 1 mark
1 mark for explanation	

Explanation
Health Visitor • Trained nurses with some experience in midwifery so will be able to help with most of the issues that arise with the baby. • Has a training in family health and child development so can help out with issues that arise with other members of the family. • Will call to see the mother and baby at home about ten days after the birth. • Advice will be given on how to keep mother and her baby healthy. • Checks the baby's progress. • Carries out development checks on the baby. • Gives advice on feeding. • Explains the work of the baby clinic and advises her to attend. • Discusses a timetable for immunisation. • Gives help and guidance on any emotional problems eg postnatal depression. **Midwife** • Normally will support the mother during pregnancy. • Will quickly recognise problems during pregnancy and refer to doctor. • Cares for mother during childbirth and for 28 days after the baby is born. • Gives advice on how the mother and baby can stay healthy. • Gives advice and support with breast feeding.

Question 5

(a) State **two** reasons why manufacturers may wish to develop a new product.	
Course skills: Recall & use of knowledge	**Mark allocation:** 2 marks
2 x 1 mark for each explanation	

Reasons
• To keep up with food and textile 'fashion' trends. • To keep up with health trends and influences, for example the Scottish Diet Report. • Consumer experience of new ethnic foods when travelling abroad. • Customer complaints about existing products. • To match competitors' products. • To fill a gap in the market/to meet consumer demand. • To alter/improve the nutritional content of an existing product. • To meet special dietary needs. • To alter or improve flavour/texture/appearance/colour of an existing product. • To produce a cost effective product. • To expand market share. • To re-launch a product. • To update a product's image. • To increase a manufacturer's profits.

Question 5 (Cont'd)

(b) A food manufacturer is introducing a new range of barbecue products. Choose the **most suitable** barbecue product for the manufacturer.	
Course skills: Drawing conclusions	**Mark allocation:** 4 marks
1 mark for correct choice 1 x 3 marks for each reason	

Correct choice: **Product A**

Reasons

- Good appearance which would encourage consumer to buy it.
- Good appearance would make the consumer want to buy the product again.

- Best flavour so this will appeal to consumers and make it more likely that they will make repeat sales.
- Flavour is important and this has the best flavour so it will ensure that the consumer will enjoy the product.

- Good rating for texture which will make it appealing to consumers.
- Good texture rating will mean that most people will find it enjoyable to eat and so will make more profit for the manufacturer.
- Good texture rating which is important so that consumers enjoy the product and make repeat sales.

- Suitable for a single serving so meets the specification for this point.

- One of the cheapest products available which may encourage consumers to try the product.
- Good value for money so consumers would be encouraged to make repeat sales.
- One of the cheapest products so manufacturer may make a greater profit.

- Best shape of the four products so would make the product appeal more to consumers.
- Best shape of the four products so would increase the sales for the manufacturer.

- Can be skewered so this meets this part of the specification for the manufacturer.

- Contains beef/meat which is required in the specification for the product.

Question 5 (Cont'd)

(c) A manufacturer has developed a new food probe to be used for checking the internal temperature when cooking meat. Evaluate the usefulness of **three** of the design features shown on the food probe thermometer.	
Course skills: Evaluation	**Mark allocation:** 3 marks
3 marks for reasons linked to the design features	

Evaluation

Heat resistant handle

- Will prevent any injury from burns as the handle does not heat up.
- Means that there will be no damage to the fork if the handle gets heated by accident.

12cm probe

- Long enough to ensure that the food is cooked in the centre so preventing the risk of food contamination/food poisoning.

Stainless steel covered sensor

- Will ensure that the probe will not rust and discolour the food so will prevent any risk of food contamination.
- Will ensure that the probe area is clean when entering food as stainless steel will not chip or crack so will reduce the risk of food contamination.
- As the probe is stainless steel it will pierce the food well making it easier to use.
- Stainless steel may require specialist cleaning which will add to the cost of using this probe.
- This will check that food is cooked to at least 82°C so reducing the risk of food contamination/food poisoning.

Digital read-out of temperature

- Digital display will give an accurate read-out of the temperature of the food so preventing the risk of under-cooked food causing food poisoning.
- This will check that food is cooked to at least 82°C so reducing the risk of food contamination/ food poisoning.
- Easier to read than an analogue read-out so ensures that the food is cooked to the correct temperature in the centre preventing the risk of food contamination/food poisoning.
- Will not be suitable for washing in a dishwasher so making the temperature probe less convenient to use.

Battery operated

- Does not need a mains supply so no trailing cable to trip over so will prevent the risk of accidents in the kitchen.
- Will be able to be used without electricity so very convenient to use.
- Battery may run out making probe inoperable/may give a false reading so could lead to the potential undercooking of meat/food contamination/food poisoning.
- Battery may be expensive to replace so this would increase the cost of using this probe thermometer.

Question 5 (Cont'd)

(d) State **three** ways in which food poisoning can be prevented when **preparing** food.	
Course skills: Recall & use of knowledge	**Mark allocation:** 3 marks
3 x 1 mark for each explanation	

- Hands must be kept clean at all times because they can be the main route for the transferring of food poisoning bacteria.
- Food handlers must wash hands thoroughly and dry them on disposable paper towels, especially, for example:
  - after visiting the toilet
  - between handling raw and cooked foods
  - after handling waste food or refuse
  - after handling cleaning chemicals.
- Short fingernails are essential and must be kept clean so that dirt trapped under the nails is not transferred on to food.
- Jewellery may harbour bacteria so should not be worn.
- Hair must not be brushed or combed in the food preparation area to prevent dirt/dust/germs being transferred to food.
- Keep hair clean, tied back and, in commercial premises, covered.
- Protective clothing must be worn to protect food from the risk of contamination, and should not be worn outside the food preparation area.
- Coughs and sneezes carry droplets of infection so people with bad colds should not handle open food.
- Food handlers suffering from diarrhoea, vomiting, skin infections, heavy colds or food poisoning should not handle food.
- No smoking in food preparation areas.
- Cuts should be covered with a coloured waterproof plaster to prevent contamination of food.

- Food must be tasted hygienically – eg do not replace a tasting spoon into the food.

- Clean work surfaces thoroughly after each food preparation sequence.
- Ensure that all equipment used is cleaned between use for raw and cooked food to avoid cross contamination.
- Dirty pans, cutlery, crockery and other equipment should be cleaned as quickly as possible.
- If use of drying cloths is unavoidable, they must be kept clean.
- Disposable cloths should be used for wiping up.

- Waste must not be allowed to accumulate in the food room - waste bins should contain polythene sacks and bins must be covered.

- Animals are not allowed in food preparation rooms.
- Any infestation of insects or rodents must be reported and dealt with immediately.

Intermediate 2 Level Home Economics

Analysis of Question Paper for the Year 2005

Content

	Health and Food Technology
✓	Lifestyle and Consumer Technology
	Fashion and Textile Technology

Analysis of question content and question choice

Question	Content (Brief outline)	Choice element		Mark
		YES	NO	
1 a)	Function of protein, iron, calcium and vitamin C		✓	**4**
b) (i)	2 food sources of NSP		✓	**1**
(ii)	2 functions of NSP		✓	**2**
c)	2 reasons why people become vegetarians		✓	**2**
d)	Evaluation of a single portion meal for a vegetarian student		✓	**3**
2 a)	2 ways in which a manufacturer can help protect the environment during production		✓	**2**
b)	Explanation of organic foods, white goods, fuzzy logic, chlorofluorocarbons		✓	**4**
c)	Choice of dishwasher for family		✓	**4**
d)	Explanation of information on energy label		✓	**2**
3 a)	2 points from the Food Safety Act 1990		✓	**2**
b)	Food items linked to dietary targets and the benefits to health of meeting the targets		✓	**4**
c)	Choice of trousers for a worker in a fast food restaurant		✓	**3**
d)	Evaluation of bank accounts for a student	✓		**3**
4 a)	Reasons why pregnant women should avoid certain foods		✓	**3**
b)	2 nutritional advantages to the baby of breast feeding		✓	**2**
c)	2 non-nutritional advantages to either a mother or a baby of breast feeding	✓		**2**
d)	Choice of steriliser for a mother returning to work		✓	**4**
e)	Explanation of work of support services	✓		**1**
5 a)	2 reasons why a manufacturer may wish to develop new products		✓	**2**
b)	Choice of barbecue products for a manufacturer		✓	**4**
c)	Evaluation of design features of a food probe	✓		**3**
d)	3 ways food poisoning can be prevented when preparing food		✓	**3**

Intermediate 2 Level Home Economics Analysis of Question Paper for the Year 2005 Context		Health & Food Technology
	✓	Lifestyle & Consumer Technology
Question 1		Fashion & Textile Technology

Component Unit							Skill Assessment	
Question	Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall & Use of Knowledge	Draw Conclusions	Evaluate	Totals
1 a)	**4**				**4**			
b) (i)	**1**				**1**			
(ii)	**2**				**2**			
c)	**2**				**2**			
d)	**3**						**3**	
Totals	**12**				**9**		**3**	**12**

Intermediate 2 Level Home Economics Analysis of Question Paper for the Year 2005 Context		Health & Food Technology
	✓	Lifestyle & Consumer Technology
Question 1 – 5		Fashion & Textile Technology

	Component Unit					Skill Assessment		
Question	Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall & Use of Knowledge	Draw Conclusions	Evaluation	Totals
1	**12**				**9**		**3**	**12**
2 a)			**2**		**2**			
b)			**4**		**4**			
c)			**4**			**4**		
d)			**2**	**2**	**2**			**12**
3 a)			**2**		**2**			
b)	**4**			**4**	**4**			
c)		**3**				**3**		
d)			**3**	**3**			**3**	**12**
4 a)	**3**				**3**			
b)	**2**				**2**			
c)			**2**	**2**	**2**			
d)		**4**				**4**		
e)			**1**	**1**	**1**			**12**
5 a)		**2**			**2**			
b)		**4**				**4**		
c)		**3**					**3**	
d)	**3**				**3**			**12**
Totals	**24**	**16**	**20**	**12**	**36**	**15**	**9**	**60**
Target Range	**15-25 marks**	**15-25 marks**	**15 – 25 marks**	**10-12 marks**	**30-37 marks**	**15 – 20 marks**	**8 – 10 marks**	**60 marks**

[END OF MARKING INSTRUCTIONS]