

2012 HOME ECONOMICS SEC

MARKING SCHEME

PAPER I

1a. *Two other types of fish* (2 x 0.5 marks)
oily fish, shell fish.

b.i. *Type of fish which has tough fibres* (0.5 mark)

oily fish

b.ii. *Type of fish which is easily digested* (0.5 mark)

white fish

c. *Nutritive value of fish* (2 marks)

Fish supplies HBV protein, iodine and fluoride.

Sodium, chlorine, potassium and phosphorus are found in all fish.

Oily fish contains fat and useful amounts of Vitamins A and D.

If fish bone is eaten this supplies a good source of calcium.

Most fish contain small amounts of the B-group vitamins.

Fish are poor sources of iron.

Fish does not supply carbohydrate and vitamin C.

d. *Signs of quality and freshness in fish* (3 x 1 mark)

fish should smell fresh, sea smell with no unpleasant odours

eyes must be bright and prominent, not sunken

gills are red

flesh should be plump and firm

moist skin

plenty of bright scales, firmly attached to skin

(any three)

e. *Healthy Method of cooking fish* (2 x 1 mark)

swordfish steaks - poaching, steaming, baking and grilling (any one)

sea bream - poaching, steaming, baking and grilling (any one)

2a. *Two headings written on a Shopping List* (2 x 0.5 mark)

meat; fish; groceries; fruit and vegetables

(any two)

b. *Suggestions of dishes using listed food commodities* (6 x 0.5 mark)

Beef – stew, casserole, pies, beef burgers, chilli con carne

Fish – fish cakes, casserole, fish and cheese sauce

Pasta – Lasagna, spaghetti Bolognese, baked macaroni

Pulses – Casseroles, soups, croquettes, lentil curry

Rice – Risotto, rice salad, curry, baked arancini

Ricotta cheese – ricotta pie, pasta with ricotta, ricotta in sweet dishes

(any one suggestion for each food - accept any other correct answer)

c. *Reasons why ready packed fruit and vegetables should be avoided* (2 x 1 mark)

- packaging material will increase the amount of waste matter

- sometimes packaging material will make the product more expensive (especially when using jablo trays)
- if packaging is dark and/or printed, consumer cannot see the quality of food
- the consumer who requires less than the amount in package is wasting food and money

(any two)

d. *Advantages of online shopping* (2 x 1 mark)

food is selected and ordered from home at any time of the day

food is delivered at the customer's convenience

saves on time in shopping and queuing

saves car fuel if shopping is usually done by car

(any two)

3a.i. *Reasons why people choose a vegetarian diet* (2 X 1 mark)

To lower intakes of saturated fat and cholesterol

To choose cheaper food products

Due to animal welfare concerns

Due to religious reasons

Because of peer pressure and trends

(any two - any other correct answer)

ii. *One benefit and one detriment to health when following a vegetarian diet.* (2 x 1 mark)

Benefit: fewer intakes of saturated fat and cholesterol

Detriment: diet may be lacking in important nutrients like calcium, zinc, HBV protein, vitamin B₆ and D.

b. i. *Alternative soya product* (2 x 0.5 mark)

Minced Beef: Textured Vegetable Protein, Soya mince.

(any one answer)

Milk: Soya milk

ii. *Planning a meal using soya products* (3 x 1 mark)

Main Meal: lasagne, spaghetti bolognese, *ross il-forn*, *timpana*, *meat loaf*, *meat balls*.

Dessert: trifle, fruit salad/apple pie/apple crumble with custard

Drink: fruit milkshake, fruit smoothies

(any one answer for each course – any other correct answer)

4.a. *Definition of health*. (2 marks)

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

b. *Definition of balanced diet*. (2 marks)

A balanced diet is one which provides each nutrient in its correct amount.

c. *Features of the CINDI Food Guide Pyramid*. (2 X 0.5 mark)

- Fatty foods are found towards the top of the pyramid.
- Plant foods containing low amounts of fat are found towards the bottom.
- Human figures doing exercise are included in the pyramid.
- The background of the pyramid is blue to encourage the consumption of water.
- Carbonated drinks are found at the top of the pyramid.

(any two - any other correct answer)

d. *Planning a meal and drink for a fifteen year old student who leads a sedentary lifestyle* (2 x 1 mark) *Reasons for choice* (2 x 1 mark)

Main dish: Give marks for a suitable dish which is low in energy and fat, high in calcium and protein and which has good amounts of iron and vitamin C such as chicken/ fish with vegetables and boiled potatoes, rabbit stew, vegetable pizza and meat casserole.

Drink: Fresh fruit milkshake, fresh fruit juice, smoothies, water.

(any one – any other correct answer)

Reasons for choice:

As the individual leads a sedentary lifestyle, dishes must be low in energy as otherwise he/she will put on weight which may cause other health situations.

Teenager needs calcium to ensure the healthy development of strong bones.

Protein is required for the healthy growth and maintenance of muscles and tissues.

(any two)

5.a. *Definition of macronutrient* (1 mark)

A macronutrient is a nutrient which is needed in large amounts by the body.

b.i. *Three main groups of carbohydrates* (3 x 1 mark)

- Sugar
- Starch
- Non-starch polysaccharides or fibre

ii. *Sources for each group* (6 X 0.5 mark)

Sugar: cakes, sugary sweets, chocolate, ice-cream

Starch: pasta, rice, bread, cereals, potatoes

Non-starch polysaccharide: wholemeal bread, wholemeal pasta, wholemeal rice, potatoes with skin on, fruit, vegetables and pulses.

(any two answers for each group - any other correct answer)

c. *Function and energy value of carbohydrate* (2 X 0.5 mark)

Function: Carbohydrate provides the body with energy.

Energy Value: 3.75 Kcal per 1 gram *or* 16KJ per 1 gram

d. *How vitamin B helps carbohydrates perform their main function* (1 mark)

Vitamin B aids the metabolism of carbohydrate thus it helps to release energy from carbohydrate foods.

6a. *Definition of high-risk foods* (1 mark)

Food which is quickly contaminated as bacteria multiply easily in them.

b. Preventing contamination when making a turkey salad (4 x 1 mark)

1. Washing vegetables will remove any soil, dirt or chemicals like artificial pesticides or fertilisers which can contaminate the food.
2. Chopping the vegetables on a clean green chopping board using a clean knife which has not been in contact with the raw turkey.
3. Slice the raw turkey on a yellow glass, plastic or acrylic chopping board but avoid wood as raw juice can be absorbed by the chopping board. Ensuring that the raw turkey is kept away from the already prepared vegetables will prevent cross-contamination.
4. Cooking the turkey on a very high heat will ensure that micro-organisms are destroyed and cannot cause food poisoning.

d.i. *Type of food poisoning if turkey is contaminated* (1 mark)

Salmonella food poisoning.

ii. *One population group more at risk of salmonella poisoning.* (1 mark)

- Pregnant woman.
- Young children
- Elderly persons

(any one)

7a. i. *Digestive organ where digestion of food begins* (0.5 mark)

In the mouth

ii. *Digestive organ digestion of food is completed* (0.5 mark)

In the small intestine

iii. *How chewed food is pushed down the oesophagus* (1 mark)

By muscle contractions referred to as peristalsis.

b. *Where saliva is produced and why it is important in digestion* (2 x 1 mark)

Saliva is produced: In the salivary gland

It is important: It starts chemical breakdown of starch

c. *Name the acid found in the stomach and why it is important in digestion* (2 x 1 mark)

Type of acid: HCL - Hydrochloric Acid

It is important: helps to break down food.

lowers the pH and increases acidity which destroys bacteria

d.i. *Two organs where absorption of nutrients takes place* (2 x 0.5 mark)

duodenum

jejunum / upper part of the small intestine

ii. *What happens to undigested food after digestion is complete* (1 mark)

The undigested food enters the large intestine where it absorbs water and is stored until it is removed from the body through the anus.

8a. *Modification of recipe* (4 x 0.5 mark)

use 100g wholemeal flour and 100g self-raising flour

use 50g sugar

use 75g polyunsaturated margarine

use 70ml skimmed milk

b. *Reasons for sieving flour and spice* (2 x 0.5 mark)

to trap air and ensure lightness

remove any lumps or impurities which the flour may contain

c. *Part of the hand used to do the rubbing fat into flour* (0.5 mark)

the fingertips

d. *Reason for using the fingertips in the rubbing of fat* (0.5 mark)

they are the coolest part of the hand and hence will keep the mixture cold

e. *Effects of over-rubbing of fat into flour* (1 mark)

the fat will get warm and the cake will have a close heavy texture

f. *Texture if over-beaten cake mixture* (1 mark)

Uneven texture

g. *Oven temperatures for baking small rubbed in cakes* (1 mark)

190°C/200°C/210°C/220°C

(any one)

h. *Testing a cake for readiness* (1 mark)

By using a skewer

9a. *Making full use of the oven when preparing a two course meal* (2 x 1 mark)

Make a baked starter such as a quiche or a baked pasta/rice dish.

Cook vegetable dishes to accompany your baked course in the oven.

Make a cake, a pudding or another baked dessert.

(any two)

b. *Reason for not opening the oven door during baking* (1 mark)

The heat would be allowed to escape so baking time would be longer and more energy consuming.

c. *Reason for electric hob to be switched off 15 minutes before end of cooking time* (1 mark)

An electric hob will retain the heat well and continue cooking after it is switched off.

d. *Kitchen equipment that can be used to cook a complete meal* (2 x 0.5 marks)

- i. Pressure cooker
- ii. Electric slow cooker
- iii. Electric steamer
- iv. Double or triple steamer pots

(any two)

e. *Energy saving appliances*

Reheat pizza (1 x 0.5 mark)

Microwave oven

Boil water (1 x 0.5 mark)

Electric kettle

f. *Energy Saving Measures* (4 x 0.5 mark)

- i. T
- ii. T
- iii. F

iv. T

10a. *Name of symbol and its meaning* (2 x 1 mark)

Name of symbol: Euro-Leaf

What it means: That the product is made using organically grown ingredients.

b. *Benefit to the consumer* (1 mark)

products do not contain harmful chemicals from pesticides or fertilisers

there is a lower risk of allergies from these products.

(any one - any other correct answer)

c. *Benefits to the environment* (2 x 1 mark)

no insects are killed because of artificial chemicals used,

less soil pollution,

less pollution of underground water reserves,

less air pollution and consequently less allergies,

more efficient use of farm land,

less depletion of nutrients in the soil.

(any two - any other correct answer)

d.i. *What the abbreviation GMO stands for* (1 mark)

Genetically Modified Organism

ii. *How GMO products are made* (2 marks)

GMO's are made by altering the genes of an organism to change certain features in the plant or organism.

11a. *Factors to consider when buying fresh fruit and vegetables* (3 x 1 mark)

Buy fruit and vegetables when they are in season and plentiful

Choose young fruit and vegetables

Leaf vegetables must be crisp, firm and a good colour
Root vegetables should be firm and free of spade marks
Wilted or bruised vegetables or fruit should not be bought
Insect infected vegetables should be avoided

(any two)

b. *Storage of vegetables* (2 x 0.5 mark)

green leafy vegetables - in a cool place such as the salad drawer of the refrigerator

root vegetables - in a cool, dry place

c. *Fill in blanks* (2 x 0.5 mark)

Lemon or orange; banana

d. *Steps for preventing vitamin loss* (3 x 1 mark)

Preparation – wash in water but do not soak

Cooking – place broccoli in least amount of boiling water and cook for the minimum time possible. Leave the lid off the pan for the first minute or two to preserve the bright green colour.

Serving – serve at once, do not keep warm and avoid reheating.

e. *Use of cooking liquid* (2 x 1mark)

make stock, soup or sauce

(any two)

12a. *Definition of convenience food* (1 x 1 mark)

'Convenience food' refer to foods that are partially or completely processed by the food manufacturer.

b. *Reasons why of convenience foods are popular (2 x 1 mark)*

They save time and energy in food preparation

More people have full time jobs, therefore have less time to prepare food

Freezers have become common appliances in the home

Advertising has influenced our food habits

Food processing has ensured that food is available all year round

Since convenience foods have a long shelf life people go shopping less often.

(any two - any other correct answer)

c. *Types of convenience food (6 x 0.5 mark)*

Tinned – vegetables, fish, meats, fruit, soups, sausages, pulses, meat and fruit pie fillings, sauces

Ready to Serve – cakes, biscuits, meat pies, fruit pies, dips, salads, cold meats, puddings

Dehydrated – custard, mashed potatoes, soups, baby foods, pie fillings (lemon meringue), sauces, cake, bread and scone mixes, pancake mixes.

(any two of each type - accept any other correct answer)

di. *Oven temperature and baking time if the pizza is cooked from frozen (2 x 0.5 mark)*

oven temperature – 190°C

time – 18 minutes

ii. *Reason for checking that food is piping hot before serving (1 mark)*

Food should be piping hot to ensure that the centre of the food reaches a high enough temperature to kill any present bacteria in food.

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MARKING SCHEME
PAPER IIA

Section A

1a. *Ways how a house can satisfy the physical needs of the occupant (2 x 1 mark)*

- Ensuring that rooms are spacious enough particularly kitchens and living rooms which are active rooms throughout the day.
- There is good ventilation throughout the whole house- at least one window in every room.
- Each room has a good amount of natural light.
- Space for any hobbies or storage for hobby equipment.

(any two answers - any other correct answer)

bi. *Ways how the location of a home can affect a family's well-being (2 x 1 mark)*

- If it is close to work, adults will have less travelling time and will arrive home faster; they will also save money in transport.
- If it is close to school, older children may be able to walk home and reduce costs for transport and time for travelling is reduced.
- If the home is close to different amenities, shopping for items will be easier.
- If the home is close to family relatives it may be easier to find help and support.
- If the home is located in a rural environment there may be less noise pollution and it may also be safer for young children as there will be less traffic.

(any two - any other correct answer)

ii. Ways how a supermarket close to home reduces stress in a family with two young children (2 x 1 mark)

- A supermarket is more likely to have all the items needed by the family so shopping outings can be limited.
- If something is needed quickly or unexpectedly, the store is close to home so it wouldn't be long before the person obtains what he/she needs .

(any other correct answer)

b. Security features or services which may be used family protection (2 x 1 mark)

- Having intercoms installed
- Having a home alarm system
- Installing safety cameras CCTV
- Installing a hinge on the common entrance door which allows it to close and lock automatically

(any two)

2a.i. *Ways in which older persons can be active in the community* (2 x 1 mark)

they can do voluntary work with NGO's and in Church

they can also take formal employment

they can take up a course

they can offer their for an educational and cultural scope

ii. *Type of support older persons can provide to younger members of the family* (1 x 1 mark)

they can assist in the upbringing of grandchildren like taking care of underage school children

take children out to play

take children to and back from school

(any one – any other correct answer)

b. *Services which help the older persons live in their homes* (2 x 0.5 mark)

Home Care Help

Handy man

Telecare service

Meals on wheels

MMDNA nurse

(any two)

ii. *Description of service -*

Home Care Help – A maid visits the elderly for two hours weekly. He/She offers help in taking care of the house. This could dusting of furniture and washing of floors.

Handyman service – offers a range of repair jobs that vary from electricity repairs to plumbing, carpentry, and transport of items

Telecare – enables the subscriber to call for assistance when required. It also provides peace of mind to the older person and relatives as staff call the elderly regularly to see that everything is all right.

Meals on wheels – A three-course meal which includes both hot and cold dishes is transported to older people's home daily. Older people do not need to worry about shopping and cooking for food. They have a nutritious ready meal everyday.

MMDNA nurse – daily nursing care of the elderly such as personal care, medication and washing.

(any one)

c. *Reasons why a night shelter is useful for people who live alone* (2 x 1 mark)

It offers a secure environment and protects them from any intruders.

The elderly are provided with care and support should something happens to them during the night such as a stroke or a heart attack.

(any other correct answer)

3a. *How these measures help to reduce waste (4 x 1 mark)*

Fresh produce – Preserved foods need plenty of packaging of all types – glass; tins; foil; paper and plastic and thus create a lot of waste.

Cloth bags – Cloth bags save a lot of plastic bags which have a short life span. They can be washed and prevent the accumulation of plastic waste.

Laundry detergents – By purchasing large containers of each product you cut down on the amount thrown away in small plastic containers; buy concentrated detergent as these are in smaller bottles; use refillable bottles/cans as these do not produce any waste at all since they are refills.

Washable cleaning rags and cloth napkins – Disposable paper towels and napkins are used once and create a lot of paper waste.

b. *Kind of household waste suitable to make a compost heap (1 x 0.5 mark)*

Organic waste – fruit and vegetable peelings; egg shell; paper; wood.

ci. *Types of household waste collected in the recycling collection service (2 x 0.5 mark)*

paper, plastic and metal

ii. *How recycling of solid household waste helps the environment (2 x 1 mark)*

i. It reduces consumption of raw materials

ii. It means less habitat destruction

iii. It reduces the energy required to make and transport new packaging

iv. It cuts on fuel consumption

(any two – any other correct answer)

d. *How is bulky refuse disposed of* (1 x 0.5 mark)

calling the local council and a truck will pick it up from your doorstep

taking it to one of the regional centres for bulky refuse e.g. Mriehel

(any one)

4a. *Advantages of saving energy* (2 x 1 mark)

You save money in electricity bills

Reduce the demand for coal, oil or gas

Lower carbon dioxide emissions which contributes to global warming

(any two)

b. *Energy saving measures in a household* (2 x 1 mark)

Windows – replace with argon filled double glazed windows

Doors – installing draught extruder to stop draughts

c. *Ways how appliances could be energy efficient when in use* (4 x 1 mark)

Washing machine – set to warm or cold water setting not hot (30 °C or less); use ½ load cycle or energy saving option

Water heater – turn down the heat or use a timer switch to turn it on and off (the heater is on at programmed time in the morning and in the evening – when it is in use)

Refrigerator – Check the gaskets (rubber seals) around the refrigerator freezer

door regularly to make sure they are clean and seal tightly.

Air conditioner – Clean or replace air filter otherwise it will have to work harder (consume more energy) to draw air through dirty filters.

Adjusting the temperature by 2°C will have an impact on energy consumption so make sure the appliance is not too hot in winter or too cold in summer.

5a. *Primary and secondary function of protein* (2 x 1 mark)

Primary function - for growth and repair of all cells in the body

Secondary function – for energy

b. *The two food groups which supply protein in our diet (2 x 0.5mark)*

Milk and milk products

Meat, Fish, Poultry and Alternatives

c. *Reason why some amino acids are called indispensable or essential. (1 mark)*

This means that they must be obtained from foods as they cannot be made by the body.

d. *How low biological value (LBV) protein foods can be made more valuable to the body. (2 marks)*

By eating a combination of LBV foods together to supply all the essential amino acids.

Examples:

rice and peas; beans on toast; lentil soup with bread

(any one – any other correct answer)

e. *Population groups needing a higher requirement of protein (1 mark) and the reason for this (1 mark)*

Pregnant women – for the developing and growing of foetus inside their body.

Babies – Babies' only food is protein food (milk) which will provide for their rapid growth.

Children – They are growing fast during a short period of time. While growing and developing, protein will provide for a strong and healthy body.

Adolescents – These persons are going through a growth spurt and supplying the required amount of protein will ensure a healthy development into adulthood.

Lactating/Nursing/ Breastfeeding mothers – require a higher amount of protein for the production of milk

(any one)

Section B

6a.i *Risk factors of Coronary Heart Disease that cannot be prevented (2 x 1 mark)*

age; hereditary (family history) and being a male

(any two)

ii. *Risk factors of Coronary Heart Disease that can be prevented* (2 x 1 mark)

High cholesterol; High blood pressure; Diabetes; Obesity; Smoking; Bad eating habits

(any two)

bi. *Substance attached to the inside of the artery* (1 x 1 mark)

cholesterol / plaque made from fat

ii. *Causes for the substance to form* (1 x 1 mark)

This substance is formed when cholesterol which is found in animal fats (saturated fats) is oxidised.

ci. *Role of Omega 3 in the diet* (2 marks)

Omega 3 EFA's may help lower the blood cholesterol and help to prevent blood clots

ii. *Role of Vitamin E in the diet* (2 marks)

Vitamin E is an antioxidant. This helps to stop cholesterol picking up oxygen so that it is deposited less readily in the coronary arteries.

d. *Dietary measures that needs to be adopted by a person suffering from CHD* (4 marks)

Avoid saturated fat and salt

Eat plenty of fruit and vegetables

Choose white meat instead of red meat

Choose low fat diary products

Avoid frying food. Grill or bake instead

Avoid highly processed meats and foods

Avoid pastry and sweets

Avoid junk food and take-away food

(any four)

Non-dietary measures that needs to be adopted by a person suffering from CHD (2 marks)

Exercise regularly
Do not smoke
Do not stress oneself; have regular leisure time
Have regular medical check-ups

(any two)

e. *Planning of a two-course meal for a person suffering from CHD and its reasons for choice*
(2 + 2 marks)

Choice of dishes

- dishes have to be suitable as a meal and rich in colour texture and taste. (0.5 mark)
- dishes have to be nutritious and balanced specifically low in saturated fats, sugar and salt and high in fibre. (0.5 mark)
- Give credit to the use of white meat/ fish/ low-fat milk products and cereals and vegetables (0.5 mark)
- Give credit to suitable cooking methods (0.5mark)

Reasons for choice

Give credit to correct reasons for choice mainly referring to the nutritional needs and choice of ingredients for a person suffering from CHD. Reference to the cooking methods used as well colour, texture and taste of meal should be credited too.

7a. *Definition of the term consumer* (1 mark)

A consumer is a person who buys and uses goods and services.

bi. *Consumer rights* (1 x 1 mark) *and their explanation* (1 x 2 marks)

- To have access to basic needs, goods and services - Consumers have a right to basic goods and services. Consumers should have equal access to food, shelter, health care, education, sanitation and clothing.
- To be ensured safety - Consumers have a right to safe products which will in no way endanger their lives. Manufactures must abide to several strict standards of safety.

- To be informed - Consumers have the right to be informed and have reliable and accurate information on all goods available on the market. Items should be clearly labelled.
- To be heard - Consumers have the right to be heard and form Consumer Associations which are officially recognised. Consumers have the right to voice concerns and opinions.
- To be allowed choice - Consumers have the right to be allowed to choose the best good or service on the market which suits their needs.
- To be allowed redress - Consumers have a right to redress and to have complaints settled fairly. If a product is broken or does not live up to expectations, consumers have a right to complain
- To have access to consumer education - Consumers have a right to consumer education to understand what goods and services are available to them and help them understand their rights and responsibilities.
- To live and work in an environment which is not harmful to health - Consumers have a right to live in an environment which is not harmful. They have a right to breathable air, drinking water and clean streets. They should not work or live in an environment that can cause illness or disease.

(any one)

bii. *Consumer responsibilities* (1 x 1 mark) *and their explanation* (1 x 2 marks)

- To come together as consumers - Consumers have the responsibility to form consumer associations and participate actively to promote their rights.
- To be alert - Consumers must be alert and question the prices and quality of products to ensure they get a fair deal.
- To be aware of the impact of our consumption on other people - Consumers must be aware of the impact of their consumption on others. They must realise that the waste they generate, or not recycling, or not using energy saving appliances may cause harm to other people.
- To be assertive - Consumers must be assertive to make sure that they are not being cheated and to make sure that they get a fair deal.
- To understand what our consumption does to the environment - Consumers must understand the effect of their consumption on the environment. Consumers must realise that certain products can be damaging to the environment and that they must choose eco-friendly products as well as follow the 3 R's to reduce waste.

(any one)

c. Factors which need to be kept in mind when planning a monthly budget (2X 1 marks).
Explain each factor (2 x 1 mark)

- Factor: The amount of money earned in a month
- Explanation: Money earned from full time jobs and part time work. Any form of income from other sources must be calculated to ensure it is a realistic sum of money being earned every month.

- Factor: Whether they are calculating with their gross or net incomes.
- Explanation: If they do not subtract tax which needs to be paid, calculating with their gross income may be misleading and may lead them into thinking they have save more money than they actually have.

- Factor: The amount of money spent
- Explanation: They must try and make a reliable list of how much money is spent every month on food, medicine, repayment of loans/ mortgage, transport, bills and subscriptions. They must try and list down all expenses to make sure their budget is as realistic as possible.

(any two answers)

d. *Ways how to reduce costs from the budget when shopping for food* (2 X 1 mark)

- Buy in bulk
- Buy from supermarkets or wholesale shops as products may be cheaper
- Be alert for any bargains or special offers being offered
- Buy only necessary food items
- Increase the use of seasonal fruit, vegetables and fish in the diet
- Bake at home instead of buying ready made (e.g. pastry and yeast dough)

(any two answers)

e. *Methods of payment which may be used to pay the bill* (3 x 1 mark)

- Cash
- By cheque
- Online transaction/ Internet banking/ Personal banking
- Credit card debit instruction

(any three)

f. *How opening a term deposit account can help to save money* (2 marks)

- When an amount of money is deposited into this type of account, the owners of the account are not permitted to withdraw or use the money until a specific date. This helps them to plan ahead and save money for future needs.
- The bank offers higher amounts of interest to these accounts.

g. *How the couple can invest to help plan for future needs (2 marks)*

- A private pension plan. Every month, they can put a fixed amount of money into a pension plan which at old age will pay a sum of money monthly. This could be used to secure a place in an old people's home which are fairly expensive (if they eventually need one)
- A life assurance plan. This will ensure that if something unexpected happens to one of them, their family will receive financial compensation to be able to cover their unexpected expenses or loss of income.
- Investing in local bonds. These will give higher interest rates than investing in the traditional bank accounts

(any one answer)

8a. How parents can provide for the social, emotional and physical well-being of their children. (6 x 1 mark)

Social

- Sharing experiences or stories of your day with others who will listen.
- Going on family outings and leisure together.
- Showing interest in people's lives and exploring new ideas of dealing with life.
- Supporting individual family members in different situations they might face.

(any two - any other correct answer)

Emotional

- Offering love and support.
- Listening to problems and offering advice.
- Being a shoulder to cry on-offering comfort.

(any two answers - any other correct answer)

Physical

- Providing healthy food in adequate amounts.
- Providing shelter.

- Providing clothing.
- Provide medical help when required.
- Provide an opportunity for exercise (hikes/outdoor games)
- Encouraging participation in sport activities like joining a club or go to lessons

(any two - any other correct answer)

bi. *Definition of specific learning difficulty (2 marks)*

- This is when a person has a difficulty in learning new things. He/She may not learn in the traditional methods. New ways of learning together with giving more time are important for these people to learn and move forward.

ii. *Difficulties faced by Sarah's parents as a result of her difficulty (2 x 1 mark)*

- They may feel at a loss or feel frustrated because of the situation
- They may have extra expenses to get professional services
- They may need to think about hiring people to help Sarah at school or applying for an LSA.
- They may be more concerned about finding help for Sarah during examinations.
- They may worry about her future in getting a job and be able to be independent and support herself.

(any two answers - any other correct answer)

ci. *Emotional difficulties which Sarah may face while at school. (2 x 1 mark)*

- She may feel less self-worth compared to friends who do better at school.
- She may feel looked down upon and undervalued.
- She may be bullied because of her condition.

(any two - any other correct answer)

ii. *How participating in school activities can contribute to Sarah's emotional well-being. (2 x 1 mark)*

- She may feel appreciated.
- She may feel needed and important.
- Her feelings of self-worth may be improved.
- Activities which are not centred around reading and writing will give Sarah a sense of achievement
- She has something to look forward to and feel happy about these activities

(any two - any other correct answer)

iii. *Ways how Sarah's friends at school could help her in class. (2 x 1 mark)*

- Help take notes in class.
- Share their notes with her if she is absent for a lesson.
- Show her how to keep her notes organised.
- Help her to keep focused during the lesson.
- Offer support.

(any two - any other correct answer)

iv. *Ways how Lara can help her younger sister cope with her school work.* (2 x 1 mark)

- Help her with her homework if she cannot understand it.
- Help her with her spelling when writing essays.
- Help her organise her ideas when writing essays.
- Help her organise her school bag.
- Help her plan a time-table to aid her in studying for exams.

(any two - any other correct answer)

d. *Local agencies which offer support to people with special needs.* (2 x 1 mark).

- Inspire
- Kunsill Nazzjonali Persuni b'Dizabilita
- CDAU

(any two answers – any other correct answer)

**2012 HOME ECONOMICS SEC
MARKING SCHEME
PAPER IIB**

Section A

1a. *Reasons why natural lighting is important in a home* (2 x 1 mark)

Allows residents to see well which can avoid accidents.

Allows residents to save on electricity bills as lights do not need to be on throughout the whole day.

Natural light helps people to feel good and happy and can help prevent depression.

(any two)

bi. *Reason why the location of a house is important for the well-being of the family*

(2 x 1 mark)

- If it is close to work, adults will have less travelling time and will arrive home faster.
- If it is close to school, older children may be able to walk home and reduce costs for transport.
- If the home is close to different amenities shopping for items will be easier.
- If the home is close to family relatives it may be easier to find help and support.
- If the home is located in a rural environment there may be less noise pollution and it may also be safer for young children as there will be less traffic.

(any two - any other correct answer)



ii. *Reasons why having a supermarket close to home can help reduce stress in a family with two young children* (2 x 1 mark)

- A supermarket is more likely to have all the items needed by the family so shopping outings can be limited.

- If something is needed quickly or unexpectedly, the store is close to home so it wouldn't be long before the person obtains what he/she needs .

(any other correct answer)

ci. *Security equipment.* (2 x 0.5 mark)

	
<ul style="list-style-type: none"> • Burglar Alarm 	<ul style="list-style-type: none"> • Intercom OR Hall Porter

ii. *How the security equipment can help make the home of a young couple more secure.*
(1 x 1 mark)

Burglar Alarm: If someone tries to enter the house forcefully, the alarm will go on and the police and the owners of the house will be notified. In this way, the intruder's only option is to run away without looking anywhere or else he/she will be caught on site, thus the residents are far safer in a house which is equipped with a burglar alarm.

Intercom: The residents will be able to ask who is at the front door before they open for them. In this way, the intercom stops unwanted or unknown people from entering the building ensuring the safety of the residents.

2a. i. *Ways in which older persons can be active in the community* (2 x 1 mark)

they can do voluntary work with NGO's and in Church

they can also take formal employment

they can take up a course

they can offer their for an educational and cultural scope

ii. *Suggestions how older persons can help their children in the upbringing of grandchildren*

(1 x 1 mark)

they can assist in the upbringing of grandchildren like taking care of underage school children

take children out to play

take children to and back from school

(any one – any other correct answer)

b. *Description of services* (4 x 1 mark)

Meals on wheels - A three-course meal which includes both hot and cold dishes is transported to older people's home daily. Older people do not need to worry about shopping and cooking for food. They have a nutritious ready meal everyday.

Telecare - enables the subscriber to call for assistance when required. It also provides peace of mind to the older person and relatives as staff call the elderly regularly to see that everything is all right.

Home Care Help - A maid visits the elderly for two hours weekly. He/She offers help in taking care of the house. This could dusting of furniture and washing of floors.

Handyman Service - offers a range of repair jobs that vary from electricity repairs to plumbing, carpentry, and transport of items

c. *Reason for an older not wanting to be alone at night* (1 x 1 mark)

Feel insecure, anxious and unprotected.

They may feel helpless should a medical emergency (such as a stroke) arise.

(any one)

3a.i. *Type of shopping bags used to prevent collecting plastic bags* (1 x 1 mark)

Cloth bags

ii. *Suggestion to avoid disposable kitchen towels and paper napkins* (1 x 1 mark)

cotton or linen teatowels

iii. *How can organic waste be of use in the home* (1 x 1 mark)

creating a compost heap

b. *Reasons why recycling helps the environment* (4 x 0.5 mark)

i. T

ii. T

iii. F

iv. F

ci. *Name of symbol* (1 x 1 mark)

Recyclable

ii. *Meaning of the symbol* (1 x 1 mark)

The material/packaging used was of a recycled origin.

The waste produced from material/packaging can be recycled.

(any one)

iii. *Items made of different material where this symbol can be found* (2 x 0.5 marks)

- Cardboard or paper
- Plastic or any item made of plastic
- Aluminium cans or containers
- Glass

(any two)

4a. *Fill in the blanks* (6 x 0.5 mark)

Saving energy by taking action is usually the strongest environmental action you can take. By saving energy you can save money, reduce the demand for gas, oil or coal. It helps to lower emissions of carbon dioxide which contributes to globalwarming.

bi. *Improving windows to insulate the house* (1 x 1 mark)

Replace windows with double glazed ones.

ii. *How can draught passing through doors be eliminated* (1 x 1 mark)

Install draught extruders which are fitted at the top, bottom and sides of the doors.

iii. *How to create shade and absorb CO² from the air* (1 x 1 mark)

Plant trees or creepers

c.i. *Heat setting for the washing machine to save energy* (1 x 1 mark)

Warm; Cold

(any one)

- ii. *What should be done to the water heater to save energy* (1 x 1 mark)
Turn it to a lower temperature e.g. 140F to 120F
-

5a. *Function of protein* (1 mark)
for growth and repair

b. *Energy value provided by 1g of protein* (1 mark)
4 kcal/ 17 kJ

c.i. *Another name for HBV proteins* (1 mark)
Complete protein OR animal protein

ii. *Examples of HBV proteins* (2 x 0.5 mark)
meat, poultry, fish, eggs, milk and cheese

(any two)

d.i. *Another name for LBV proteins* (1 mark)
Incomplete protein OR plant protein

ii. *Examples of LBV proteins* (2 x 0.5 mark)
pulses, nuts, cereals, vegetables

(any two)

e. *Population groups needing a higher requirement of protein* (1 mark) *and the reason for this* (1 mark)

Pregnant women – for the developing and growing of foetus inside their body.

Babies – Babies' only food is protein food (milk) which will provide for their rapid growth.

Children – They are growing fast during a short period of time. While growing and developing, protein will provide for a strong and healthy body.

Adolescents – These persons are going through a growth spurt and supplying the required amount of protein will ensure a healthy development into adulthood.

Lactating/Nursing/ Breastfeeding mothers – require a higher amount of protein for the production of milk

(any one)

Section B

6a. *Correct answers which should be underlined* (4 x 0.5 mark)

i; iii; iv; vi.

Incorrect answers which shouldn't be underlined (2 x 0.5 mark)

ii; iv.

bi. *Substance attached to the inside of the artery* (1 x 1 mark)

cholesterol / plaque made from fat

ii. *Causes for the substance to form* (1 x 1 mark)

This substance is formed when cholesterol which is found in animal fats (saturated fats) is oxidised.

c. *Reason why a person suffering from heart disease should do the following* (4 x 1 mark)

i. stop smoking – smoking narrows the arteries thus makes heart disease worse

ii. do regular exercise – exercise is good for circulation and the heart. It keeps the heart fit.

iii. maintain healthy body weight – a heavy body exerts pressure on the heart and makes heart disease worse

iv. take leisure time – stress increases high blood pressure which increases the risks of a heart attack.

(any other correct answer)

d. *Suggestion of a healthier alternative to the following fatty foods (8 x 0.5mark)*

Fatty Foods	Healthier Alternative
BBQ chicken wings as a starter	Chicken breast salad; vegetable salad; tuna salad
Fresh cream topping on trifle	Fresh fruit; yogurt; ricotta
Luncheon meat in a sandwich	Ricotta; salad; tuna; cold chicken; egg
Butter in a sandwich	Polyunsaturated margarine
Evaporated milk with tea	Skimmed milk
Corned beef in a pie	Rabbit; vegetables; chicken breast; fish
Parmesan cheese in a pasta dish	Ricotta; feta cheese; cheeselets
Grilled Maltese Sausage for dinner	Rabbit; turkey; chicken breast; fish

(any one healthy alternative – any other correct answer)

ei. *Unsuitable cooking method and reason for this (1 mark + 1 mark)*

Unsuitable cooking method: Frying

Reason: Food is cooked in oil which is absorbed by the food during cooking. This will make the food very fattening and high in its energy value thus should be avoided by someone who has CHD.

ii. *Suitable cooking methods (2 x 0.5 mark)*

boiling; steaming; stewing; baking; grilling; microwaving; pressure cooking.

(any two – any other correct answer)

f. *Planning of a two-course meal for a person suffering from CHD and its reasons for choice (2 + 2 marks)*

Choice of dishes

- dishes have to be suitable as a meal and rich in colour texture and taste. (0.5 mark)
- dishes have to be nutritious and balanced specifically low in saturated fats, sugar

and salt and high in fibre. (0.5 mark)

- Give credit to the use of white meat/ fish/ low-fat milk products and cereals and vegetables (0.5 mark)
- Give credit to suitable cooking methods (0.5mark)

Reasons for choice

Give credit to correct reasons for choice mainly referring to the nutritional needs and choice of ingredients for a person suffering from CHD. Reference to the cooking methods used as well colour, texture and taste of meal should be credited too.

7a. *Definition of the term consumer* (1 mark)

A consumer is a person who buys and uses goods and services.

bi. *Consumer rights* (1 x 1 mark) *and their explanation* (1 x 2 marks)

- To have access to basic needs, goods and services - Consumers have a right to basic goods and services. Consumers should have equal access to food, shelter, health care, education, sanitation and clothing.
- To be ensured safety - Consumers have a right to safe products which will in no way endanger their lives. Manufactures must abide to several strict standards of safety.
- To be informed - Consumers have the right to be informed and have reliable and accurate information on all goods available on the market. Items should be clearly labelled.
- To be heard - Consumers have the right to be heard and form Consumer Associations which are officially recognised. Consumers have the right to voice concerns and opinions.
- To be allowed choice - Consumers have the right to be allowed to choose the best good or service on the market which suits their needs.
- To be allowed redress - Consumers have a right to redress and to have complaints settled fairly. If a product is broken or does not live up to expectations, consumers have a right to complain

- To have access to consumer education - Consumers have a right to consumer education to understand what goods and services are available to them and help them understand their rights and responsibilities.
- To live and work in an environment which is not harmful to health - Consumers have a right to live in an environment which is not harmful. They have a right to breathable air, drinking water and clean streets. They should not work or live in an environment that can cause illness or disease.

(any one)

bii. *Consumer responsibilities* (1 x 1 mark) *and their explanation* (1 x 2 marks)

- To come together as consumers - Consumers have the responsibility to form consumer associations and participate actively to promote their rights.
- To be alert - Consumers must be alert and question the prices and quality of products to ensure they get a fair deal.
- To be aware of the impact of our consumption on other people - Consumers must be aware of the impact of their consumption on others. They must realise that the waste they generate, or not recycling, or not using energy saving appliances may cause harm to other people.
- To be assertive - Consumers must be assertive to make sure that they are not being cheated and to make sure that they get a fair deal.
- To understand what our consumption does to the environment - Consumers must understand the effect of their consumption on the environment. Consumers must realise that certain products can be damaging to the environment and that they must choose eco-friendly products as well as follow the 3 R's to reduce waste.

(any one)

c. *Factors which need to be kept in mind when making a budget* (2 x 1 mark).

- The amount of money earned in a month
- Whether they are calculating with their gross or net incomes.
- The amount of money needed for their living

(any two answers)

d. *Ways how Mary and Michael can reduce costs from their budget when shopping for food.*

(2 x 1 mark)

- Buy in bulk
- Buy from supermarkets or wholesale shops as products may be cheaper
- Be alert for any bargains or special offers being offered
- Buy only necessary food items
- Buy fruit; vegetables and fish when they are in season

- Bake at home instead of buying ready made (e.g. pastry and yeast dough)

(any two – any other correct answer)

e. *Other ways for Mary and Michael to save money* (3 x 1 mark)

- Avoid take-away food and eating out
- Avoid going to the cinema often
- Using energy saving bulbs
- Using solar water heaters
- Not leaving lights on when they are not needed

(any three - any other correct answer)

f. *Methods of payment which may be used to pay the bill* (2 x 1 mark)

- Cash
- By cheque
- Online transaction/ Internet banking/ Personal banking
- Credit card debit instruction

(any two)

g. *How opening a term deposit account can help to save money* (2 marks)

- When an amount of money is deposited into this type of account, the owners of the account are not permitted to withdraw or use the money until a specific date. This helps them to plan ahead and save money for future needs.
- The bank offers higher amounts of interest to these accounts.

h. *How the couple can invest to help plan for future needs* (2 marks)

- A private pension plan. Every month, they can put a fixed amount of money into a pension plan which at old age will pay a sum of money monthly. This could be used to secure a place in an old people's home which are fairly expensive (if they eventually need one)
- A life assurance plan. This will ensure that if something unexpected happens to one of them, their family will receive financial compensation to be able to cover their unexpected expenses or loss of income.
- Investing in local bonds. These will give higher interest rates than investing in the traditional bank accounts

(any one answer)

8a.i. *Ways how parents can provide emotional and physical well-being to their children.*
(4 x 1 mark)

Emotional

- Offering love and support.
- Listening to problems and offering advice.
- Being a shoulder to cry on-offering comfort.

(any two - any other correct answer)

Physical

- Providing healthy food in adequate amounts.
- Providing shelter.
- Providing clothing.
- Provide medical help when required.
- Provide an opportunity for exercise (hikes/outdoor games)
- Encouraging participation in sport activities like joining a club or go to lessons

(any two - any other correct answer)

ii. *Reasons why going on a family picnic can help improve the social well-being of family members.* (2 marks)

- Gives siblings a chance to interact and play with each other.
- Gives the family a chance to spend time together and discuss ideas and opinions.
- Parents have a chance to relax and play with young children.
- There are no interruptions to this quality time (no phone, television, computer).

(any two - any other correct answer)

bi. *Definition of specific learning difficulty* (2 marks)

- This is when a person has a difficulty in learning new things. He/She may not learn in the traditional methods. New ways of learning together with giving more time are important for these people to learn and move forward.

ii. *Difficulties faced by Sarah's parents as a result of her difficulty* (2 x 1 mark)

- They may feel at a loss or feel frustrated because of the situation
- They may have extra expenses to get professional services
- They may need to think about hiring people to help Sarah at school or applying for an LSA.

- They may be more concerned about finding help for Sarah during examinations.
- They may worry about her future in getting a job and be able to be independent and support herself.

(any two answers - any other correct answer)

ci. *Feeling and emotions that Sarah may be experiencing as a result of her condition* (4 x 1 mark)

- Sadness
- Anger
- Embarrassment
- Shame
- Hatred
- Confusion
- Loneliness

(any four answers - any other correct answer)

ii. *How participating in school activities can help Sarah overcome emotions.* (2 x 1 mark)

- She may feel appreciated.
- She may feel needed and important.
- Her feelings of self-worth may be improved.
- Activities which are not centred around reading and writing will give Sarah a sense of achievement
- She has something to look forward to and feel happy about these activities

(any two - any other correct answer)

iii. *Ways how Sarah's friends at school could help her in class.* (2 x 1 mark)

- Help take notes in class.
- Share their notes with her if she is absent for a lesson.
- Show her how to keep her notes organised.
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