

**Annual Examinations for Secondary Schools 2014**

**FORM 5**

**HOME ECONOMICS**

**Marking Scheme**

<b>1.</b>	<b>a)</b>	fresh skimmed milk	<b>½ mark</b>
	<b>b)</b>	soya milk	<b>½ mark</b>
	<b>c)</b>	99.1	<b>1 mark</b>
	<b>d)</b>	Fresh skimmed milk comes from an animal source while soya milk comes from a plant source.	<b>1 mark</b>
		Soya milk has not been fortified with calcium.	<b>1 mark</b>
	<b>e)</b>	Vitamin D	<b>½ mark</b>
	<b>f)</b>	<p><i>Any two from:</i></p> <ul style="list-style-type: none"> <li>• Teenagers especially girls</li> <li>• Women who are breastfeeding babies</li> <li>• Pregnant women</li> <li>• Young children</li> <li>• The elderly</li> </ul>	<b>1 x 2 = 2 marks</b>
	<b>g)</b>	<p><i>The following are examples only. Give credit for any other valid reasons.</i></p> <p><i>Any two from:</i></p> <ul style="list-style-type: none"> <li>- Teenagers - quiche lorraine served with fresh green vegetables.</li> <li>- Breastfeeding/pregnant women</li> <li>- Young children - baked rice</li> <li>- The elderly - ravioli with fresh tomato sauce</li> </ul>	<b>1 x 2 marks</b>
<b>2.</b>	<b>a)</b>	<b>Fat-soluble</b> Vitamins A, D, E, K ( <i>Any two</i> ) <b>Water-soluble</b> Vitamins C, B.	<b>½ x 4 = 2 marks</b>
	<b>b)</b>	As margarine is a frequently bought food, it is added to ensure no deficiencies occur especially in children.	<b>1 mark</b>
	<b>c)</b>	<p><i>Any one from:</i></p> <ul style="list-style-type: none"> <li>- night blindness</li> <li>- the skin and mucous membranes become dry and infected</li> <li>- growth of children is retarded</li> </ul>	<b>1 mark</b>
	<b>d)</b>	<p><i>Any two from:</i></p> <p>Animal source - liver, oily fish, whole milk, butter, margarine, cheese, eggs.</p> <p>Plant source - carrots, spinach, apricots, parsley, cabbage, tomatoes, prunes, watercress.</p>	<b>½ x 4 = 2 marks</b>

3.	a)	7 4 8 5 6 2 1 3	$\frac{1}{2} \times 8 = 4$ marks
	b) i.	<ul style="list-style-type: none"> <li>• Being overweight.</li> <li>• Lack of exercise.</li> <li>• A diet rich in fatty foods.</li> <li>• Drinking alcohol over the recommended daily allowance.</li> </ul>	$1 \times 4 = 4$ marks
	b) ii.	<ul style="list-style-type: none"> <li>• Chips - boiled potatoes.</li> <li>• Sponge cake - fresh fruit flan.</li> <li>• Tortellini with cream - pasta with basil and fresh tomato sauce.</li> <li>• White sliced bread - wholemeal bread.</li> <li>• Canned fruit - fruit canned in its own juice or fresh fruit.</li> <li>• Jelly - reduced - sugar or artificially sweetened jelly.</li> </ul> <p><i>(Do not accept different foods to the ones mentioned above as answers)</i></p>	$\frac{1}{2} \times 6 = 3$ marks
4.	a)	<p><b>Organic foods</b></p> <p><b>Advantages</b> - Any two from:</p> <ul style="list-style-type: none"> <li>- uses no artificial fertilizers, pesticides</li> <li>- no intense growing systems involved</li> <li>- more friendly on the environment</li> <li>- no growth hormones used</li> </ul> <p><b>Disadvantages</b> - Any two from:</p> <ul style="list-style-type: none"> <li>- more expensive</li> <li>- there is still a limited range of products available on the market</li> <li>- are not available in all shopping outlets</li> </ul>	$1 \times 4 = 4$ marks
	b) i.	Genetic Modification	$\frac{1}{2}$ mark
	ii.	Any two from: corn, rice, tomatoes, potatoes, soya beans, some types of vegetarian cheese.	$1 \times 2 = 2$ marks

	iii.	<b>Benefits:</b> <i>Any two from:</i> - reduces losses in food supply as diseases can be controlled - the nutritional value of certain foods is improved - fruit will keep better and last longer - involves modifying micro-organisms and adapting their use		2 x 2 = 4 marks
	c)	GM technology involves acquiring <b>genes</b> from the <b>cells</b> of plants and animals and <b>introducing</b> into another cell of a particular food. Although scientists promote the use of GM products yet there are <b>concerns</b> about the <b>health</b> impact of consuming these foods and we are being encouraged to <b>avoid</b> their use. This is because the process is quite new and does not guarantee that we will not <b>meet</b> with health problems in the <b>future</b> .		½ x 8 = 4 marks
<b>Section B</b>				
5.	a)	<i>Any three from:</i> Canned Bottles and jars Carton Dehydrated Frozen Ready-to-eat Cook-chill Ready prepared	<i>Any two examples for each food chosen:</i> soup, beans, fruit, cold meats sauces, jams, baby foods soup, sauces, drinks cake mixes, mashed potatoes, custard, biscuit mix, baby foods fish, burgers, cheesecake cakes, biscuits, pies, salads fresh pasta, lasagne, soups lasagne, rice dishes	½ x 3 = 1½ marks ½ x 6 = 3 marks
	b)	<i>Any three from:</i> <ul style="list-style-type: none"> <li>• People living on their own</li> <li>• The elderly</li> <li>• Take-away, canteens and fast food outlets</li> <li>• Parents with young children</li> <li>• People who lead very busy lives</li> </ul>		½ x 3 = 1½ marks
	c)	<i>The following are examples only. Give credit for other valid reasons.</i> <b>People living on their own</b> May not bother to prepare elaborate meals. <b>The elderly</b> May find convenience foods useful as they save on a lot of energy in food preparation. <b>Take-away, canteens, fast-food outlets</b> Makes food preparation faster and more cost-efficient. <b>Parents with young children</b> Convenience foods can help them meet the demands		

		of a family with young family members. <b>People who lead very busy lives</b> Convenience foods will help them save a lot of time which can be more efficiently used elsewhere.	<b>3 marks</b>
	<b>d)</b>	<i>Any two additives from:</i> <ul style="list-style-type: none"> <li>• Emulsifiers and stabilizers</li> <li>• Thickeners</li> <li>• Anti-caking agents</li> <li>• Humectants</li> <li>• Gelling agents</li> <li>• Raising agents</li> <li>• Flour improvers</li> <li>• Colour</li> <li>• Caramel</li> <li>• Preservatives</li> <li>• Anti-oxidants</li> <li>• Ascorbic acid</li> </ul>	$\frac{1}{2} \times 2 = 1 \text{ mark}$
		<i>Any two reasons, according to additive chosen, from:</i> <ul style="list-style-type: none"> <li>- Emulsifiers and stabilizers - help fats and oils mix with water</li> <li>- Thickeners - to thicken soups</li> <li>- Anti-caking agents - stops dried powders from sticking in the packet</li> <li>- Humectants - keeps food soft and prevents it from going dry</li> <li>- Gelling agents - help set ingredients</li> <li>- Raising agents - help foods such as cakes to rise</li> <li>- Flour improvers-helps make bread dough stronger and more elastic</li> <li>- Colour - helps food look more attractive</li> <li>- Caramel - food colouring used for sauces, soft drinks</li> <li>- Preservatives - prevents food from being spoiled by bacteria</li> <li>- Anti-oxidants - prevents fats and oils from going rancid</li> <li>- Ascorbic acid - helps prevent fruit from going brown</li> </ul>	<b>1 x 2 = 2 marks</b>
<b>6.</b>	<b>a)</b>	<i>Any two symptoms from:</i> nausea, vomiting, diarrhoea, stomach pain, abdominal pain, dehydration.	$\frac{1}{2} \times 2 = 1 \text{ mark}$
	<b>b)</b>	warmth, food, liquid, time.	$\frac{1}{2} \times 4 = 2 \text{ marks}$

	c)	<p><b>Storing food.</b> <i>Any two from:</i></p> <p><i>Vegetables</i></p> <ul style="list-style-type: none"> <li>- These should be stored in a cool, dry place with plenty of air circulating around them.</li> <li>- They should be used as soon as possible.</li> <li>- Potatoes which have turned green must be thrown away.</li> </ul> <p><i>Chicken and meat</i></p> <ul style="list-style-type: none"> <li>- Store in the coolest part of the refrigerator.</li> <li>- Raw meat - Should be stored separately from any cooked foods.</li> <li>- Store at 5° C or less.</li> <li>- Meat must be covered when stored.</li> </ul> <p><i>Other ingredients</i></p> <ul style="list-style-type: none"> <li>- Refrigerate as soon as possible and keep covered and cool.</li> </ul> <p><b>Handling food.</b> <i>Any two from:</i></p> <ul style="list-style-type: none"> <li>- Keep all ingredients refrigerated until ready for use.</li> <li>- Handle as little as possible.</li> <li>- All vegetables and salad ingredients must be washed well and there should be no traces of soil on the food.</li> <li>- It is safer to peel vegetables which have not been bought as organic.</li> <li>- Use colour-coded chopping boards.</li> <li>- Surfaces and equipment used to prepare chicken, fish or meat must be thoroughly cleaned with hot water.</li> <li>- All food must be prepared separately.</li> </ul> <p><b>Cooking food.</b></p> <ul style="list-style-type: none"> <li>- Discard any mussels which do not open when boiled.</li> <li>- Cook chicken and meat only if thoroughly defrosted first and cook well on temperatures which exceed 60°C.</li> </ul>	<b>1 x 6 = 6 marks</b>
	d) i.	To prevent dehydration and to help push the virus through the digestive tract.	<b>2 marks</b>
	ii.	These take time to digest and will help the virus to stay longer in the digestive tract.	<b>2 marks</b>
	iii	<i>Any two from:</i> rice, toasted bread, chicken soup, banana, apple.	<b>½ x 2 = 1 mark</b>

7.		<i>The following are examples only. Give credit for other valid reasons.</i>		
		Peter	Breakfast	Toast with tomatoes and lettuce.
		Jennifer	Breakfast	High fibre cereal and skimmed milk.
		Peter	Mid-morning snack	Fresh tuna and vegetable salad.
		Jennifer	Mid - morning snack	Wholemeal bread roll with bread roll with edam cheese or ricotta and tomatoes.
		Peter	Lunch	Yoghurt and fresh fruit.
		Jennifer	Lunch	Vegetable wrap and fresh fruit.
		Peter	Evening meal	Chicken casserole and roasted potatoes.
		Jennifer	Evening meal	Pasta with fresh tomato sauce and basil.
		Peter and Jennifer	Dessert	Fresh fruit salad. <b>1 x 5 = 5 marks</b>
	<b>b)</b>	They will become overweight. They can start suffering from diseases such as constipation, high blood pressure, diabetes.		<b>½ x 2 = 1 mark</b>
	<b>c)</b>	<i>Any two from:</i> <ul style="list-style-type: none"> <li>• They can take up a sports or go for a walk together.</li> <li>• They can go to cookery lessons which teach healthy cooking together.</li> <li>• They can take up a hobby.</li> <li>• They can do things together so as to lessen the work load and have more time to plan meals.</li> </ul>		<b>1 x 2 = 2 marks</b>
<b>8.</b>	<b>a) i.</b> <b>ii.</b> <b>iii.</b> <b>iv.</b>	third floor apartment villa in sought after area ground floor maisonette town house near the square		<b>½ x 4 = 2 marks</b>
	<b>b)</b>	<b>Third floor apartment for the young couple.</b> - Not very expensive - Not very large and so easy to clean and maintain <b>Villa in sought after area for middle-aged couple.</b> - Villa is the ideal size for a family of five. - It is within the budget as the father is an entrepreneur.		

		<b>Ground floor maisonette for the elderly couple.</b> - There are no stairs and so it is convenient for them especially for the husband who has arthritis and perhaps mobility problems. - It is not very large. It is the right size for them as it requires less cleaning and looking after.	
		<b>Town house near the square for the middle - aged couple with two children.</b> - Close to all amenities. - They can carry out their voluntary work as the church is at a walking distance from the house.	<b>1 x 4 = 4 marks</b>
	c)	<i>Any one advantage from:</i> <ul style="list-style-type: none"> <li>You can design the interior according to your needs and likes.</li> <li>You can supervise every stage reached during the building process.</li> </ul> <i>Any one disadvantage from:</i> <ul style="list-style-type: none"> <li>Very expensive.</li> <li>Takes time to build and finish.</li> </ul>	<b>2 x 2 = 4 marks</b>
9.	a) i.	a. Minced meat, milk b. Ricotta, cheese	<b>½ x 4 = 2 marks</b>
	ii.	<i>Any two from:</i> <b>minced meat</b> - T.V.P, quorn <b>milk</b> - eggs, soya milk <b>ricotta</b> - spinach, marrow <b>cheese</b> - vegetarian cheese, peas	<b>½ x 4 = 2 marks</b>
	b)	vegeterians or ovo-lacto vegetarians.	<b>½ mark</b>
		<b>Reason</b> This is the largest group of non-meat eaters and so the product will sell better.	<b>2 marks</b>
	c) i.	Blend all ingredients together.	
	ii.	Make into fish cakes and incorporate the vegetables in the mixture.	<b>½ x 2 = 1 mark</b>
			<b>Reason</b>
	d)	<b>Fat-reduced milk</b>	She needs a good supply of calcium for strong bones and teeth.
		<b>Snacks between meals</b>	This may lead to a poor appetite which can cause her to skip meals.
		<b>Biscuits and chocolates after meals</b>	This can become a habit which can lead to obesity.

		<b>Too many fibre-rich foods</b>	This can be very filling so that children would be unable to eat enough food to supply all the energy and nutrients required for growth.	<b>1 x 4 = 4 marks</b>
<b>10.</b>	<b>a)</b>	On batteries, electrical equipment and electronic items.		<b>½ mark</b>
	<b>b)</b>	Do not re-cycle but use a Civic Amenity Site.		<b>½ mark</b>
	<b>c) i.</b>	It has been purchased from a country outside the European Union.		<b>½ mark</b>
	<b>ii.</b>	He can write to the supplier and ask for a refund or replacement but the appliance has been bought outside Europe (which allows for free movement and sale of goods) and so his rights as a consumer may differ.		<b>1 mark</b>
	<b>iii.</b>	He should have asked about his rights as a consumer. He should have played safe and bought the item from a country within the E.U.		<b>1 x 2 = 2 marks</b>