FORM 5  HOME ECONOMICS  TIME: 1h 45min

Name ____________________  Class __________

Answer all the questions.

Section A

1. Study carefully the table below and answer the questions that follow:

<table>
<thead>
<tr>
<th>Food</th>
<th>Protein (g)</th>
<th>Fat (saturated) (g)</th>
<th>Calcium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Full Fat Milk</td>
<td>2.9</td>
<td>1.3</td>
<td>115</td>
</tr>
<tr>
<td>Fresh Skimmed Milk</td>
<td>3.2</td>
<td>0.1</td>
<td>120</td>
</tr>
<tr>
<td>Soya Milk</td>
<td>3.4</td>
<td>1.5</td>
<td>20.9</td>
</tr>
</tbody>
</table>

a) Which food has the highest calcium content? ____________________________

b) Which food has the lowest calcium content? ____________________________

(½ x 2 = 1 mark)

c) What is the difference between the calcium content of soya milk and fresh skimmed milk? ____________________________

(1 mark)

d) How would you account for such a difference?

• ____________________________________________________________________

• ____________________________________________________________________

(1 x 2 = 2 marks)

e) Name the nutrient which helps the absorption of calcium. ____________________________

(½ mark)

f) Identify two persons who require a higher intake of calcium in their diet.

• ____________________________________________________________________

• ____________________________________________________________________

(1 x 2 = 2 marks)
g) Plan one appetising main meal which would be suitable for each of the persons identified in the previous question.

**Main Meal:**
- Person 1 ____________________________
- Person 2 ____________________________  \( (1 \times 2 = 2 \text{ marks}) \)

2. a) Name two vitamins which are fat-soluble and two vitamins which are water-soluble.

Fat-soluble ________ ________  Water-soluble ________ ________  \( (\frac{1}{2} \times 4 = 2 \text{ marks}) \)

b) Why is Vitamin A added to margarine by law?

- ________________________________________________________________  \( (1 \text{ mark}) \)

c) Identify one deficiency disease caused by a lack of Vitamin A.

______________________________________________________________  \( (1 \text{ mark}) \)

d) Name two sources of Vitamin A from animal foods and two sources from plant foods.

**Animal Foods:** ____________________________  ____________________________  

**Plant Foods:** ____________________________  ____________________________  \( (\frac{1}{2} \times 4 = 2 \text{ marks}) \)

3. a) Match column A with column B.

<table>
<thead>
<tr>
<th>Column A – Term</th>
<th>Column B – Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anorexia Nervosa</td>
<td>an inflammation in the colon due to a persistent lack of N.S.P.</td>
</tr>
<tr>
<td>2. Bulimia</td>
<td>an adverse (strong) reaction to a particular food</td>
</tr>
<tr>
<td>3. Coeliac Disease</td>
<td>a bone weakness due to a lack of calcium</td>
</tr>
<tr>
<td>4. Allergy</td>
<td>the body’s inability to utilise (digest) a particular food</td>
</tr>
<tr>
<td>5. Intolerance</td>
<td>a condition where food input does not match energy output</td>
</tr>
<tr>
<td>6. Obesity</td>
<td>a disorder where a large amount of food is eaten and then removed through vomiting</td>
</tr>
<tr>
<td>7. Diverticular Disease</td>
<td>an illness which causes people to avoid food</td>
</tr>
<tr>
<td>8. Osteoporosis</td>
<td>an intolerance to gluten, the protein found in wheat</td>
</tr>
</tbody>
</table>

\( (4 \text{ marks}) \)
b) i. Your grandparent has just been diagnosed with Type 2 diabetes. Identify four risk factors that could have led to this condition.

● ___________________________________________________________________

● ___________________________________________________________________

● ___________________________________________________________________

● ___________________________________________________________________

(1 x 4 = 4 marks)

ii. Choose healthier alternatives of the same source to the following foods which are your grandparent’s favourite.

<table>
<thead>
<tr>
<th>Favourite Foods</th>
<th>Healthier Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chips</td>
<td>● ____________________</td>
</tr>
<tr>
<td>Sponge Cake</td>
<td>● ____________________</td>
</tr>
<tr>
<td>Tortellini with cream</td>
<td>● ____________________</td>
</tr>
<tr>
<td>White sliced bread</td>
<td>● ____________________</td>
</tr>
<tr>
<td>Canned fruit</td>
<td>● ____________________</td>
</tr>
<tr>
<td>Jelly</td>
<td>● ____________________</td>
</tr>
</tbody>
</table>

(½ x 6 = 3 marks)

4. a) Fill in the grid below.

Organic Farming

Advantages

● ____________________
● ____________________

Disadvantages

● ____________________
● ____________________

(4 marks)

b) i. What do the letters GM found on certain food products stand for?

___________________________________________________________

(½ mark)
ii. Name two foods that are grown using GM technology.
   • ____________________________________
   • ____________________________________  (1 x 2 = 2 marks)

iii. Why is GM technology being carried out?
   • ____________________________________
   • ____________________________________
   • ____________________________________
   • ____________________________________  (2 x 2 = 4 marks)

c) Fill in the blanks with the correct words from the given list.

<table>
<thead>
<tr>
<th>health</th>
<th>cells</th>
<th>future</th>
<th>avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>concerns</td>
<td>introducing</td>
<td>meet</td>
<td>genes</td>
</tr>
</tbody>
</table>

GM technology involves acquiring _______________ from the _______________ of plants and animals and _______________ into another cell of a particular food. Although scientists promote the use of GM products, yet there are _______________ about the _______________ impact of consuming these foods and we are being encouraged to _______________ their use. This is because the process is quite new and does not guarantee that we will not _______________ with health problems in the _______________.

(½ x 8 = 4 marks)

Section B

5. a) Fill in the table below with three different types of convenience foods. Give two examples for each type given.

<table>
<thead>
<tr>
<th>Convenience Foods</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• __________________</td>
<td>• __________________</td>
</tr>
<tr>
<td>• __________________</td>
<td>• __________________</td>
</tr>
<tr>
<td>• __________________</td>
<td>• __________________</td>
</tr>
</tbody>
</table>

(½ x 3 = 1½ marks) (½ x 6 = 3 marks)
b) Why have convenience foods become so popular?

● ____________________________________________________________________
● ____________________________________________________________________
● ____________________________________________________________________

(1 x 3 = 3 marks)

c) Why would the following persons find convenience foods useful?

Persons living on their own: ______________________

Persons with a physical disability: ______________________

Persons who lead very busy lives: ______________________

(1 x 3 = 3 marks)

d) Give examples how you can combine convenience foods with fresh foods to make healthy dishes.

Example 1: _____________________________________________

Example 2: _____________________________________________

(1 x 2 = 2 marks)

6. a) Food poisoning is still a common health problem. Why does it tend to occur more frequently during the summer?

● ____________________________________________________________________
● ____________________________________________________________________

(1 x 2 = 2 marks)

b) Explain ways of preventing food poisoning when:

Buying Food: _____________________________________________

_______________________________________________________________________

Cooking Food: _____________________________________________

_______________________________________________________________________

Storing Food: _____________________________________________

_______________________________________________________________________

Serving Food: _____________________________________________

_______________________________________________________________________

(2 x 4 = 8 marks)
c) Match Column A with Column B.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Micro-organisms</td>
<td>are foods that do not keep well</td>
</tr>
<tr>
<td>2</td>
<td>Perishable foods</td>
<td>can occur in the stomach and intestines</td>
</tr>
<tr>
<td>3</td>
<td>Toxins</td>
<td>can take from a few hours to a few days to appear</td>
</tr>
<tr>
<td>4</td>
<td>Bacteria</td>
<td>are usually bacteria or viruses</td>
</tr>
<tr>
<td>5</td>
<td>Symptoms</td>
<td>make food inedible</td>
</tr>
<tr>
<td>6</td>
<td>Irritation</td>
<td>can only be seen under a microscope</td>
</tr>
</tbody>
</table>

(½ x 6 = 3 marks)

d) Jane had food poisoning. She has been told to keep away from certain foods. Name four foods she should avoid.

_____________________         ____________________
_____________________         ____________________

(½ x 4 = 2 marks)

7. Peter and Jennifer are a newly married couple. They lead very busy lives. The following are typical foods they eat during the day:

- **Breakfast** – toast with butter and ham
- **Mid-morning break** – 2 chocolate-coated biscuits
- **Lunchtime** – take-away chicken/chicken/tuna/steak pie
- **Teatime** – tea and a cup cake
- **Evening meal** – pasta with cream or fried chicken wings or meat casserole and boiled vegetables

a) List changes the couple need to make to their daily diet.

<table>
<thead>
<tr>
<th>Daily Diet</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>•</td>
</tr>
<tr>
<td>Mid-morning break</td>
<td>•</td>
</tr>
<tr>
<td>Lunchtime</td>
<td>•</td>
</tr>
<tr>
<td>Tea-time</td>
<td>•</td>
</tr>
<tr>
<td>Meal</td>
<td>•</td>
</tr>
</tbody>
</table>

(½ x 5 = 2½ marks)
b) Besides changing their eating habits, suggest two other things they can do to improve their lifestyle.

-
- (1 x 2 = 2 marks)

c) Write down rules they should follow when:

**Cooking vegetables:**

- 
- (1 x 4 = 4 marks)

**Storing vegetables:**

- 
- (1 x 2 = 2 marks)

d) Choose two of the rules given and state why it is important to follow each of these rules.

- 
- (1 x 3 = 3 marks)

8. a) A middle-aged couple takes care of their two-year-old grandson while his parents go to work. The child is a fussy eater but the grandparents still try to instill healthy eating habits.

Suggest points the grandparents could follow to promote healthy eating habits.

- 
- 
- (1 x 3 = 3 marks)

b) i. List healthier options for the foods preferred by the young child.

<table>
<thead>
<tr>
<th>Preferred Foods</th>
<th>Healthier Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberry ice-cream</td>
<td></td>
</tr>
<tr>
<td>Crisps</td>
<td></td>
</tr>
<tr>
<td>Fried chicken nuggets</td>
<td></td>
</tr>
<tr>
<td>Chocolate bars</td>
<td></td>
</tr>
</tbody>
</table>

(1/2 x 4 = 2 marks)
ii. Use some of the healthier foods you have suggested in the previous question (b.i.) to plan a healthy midday meal which would be acceptable to the grandson. Give reasons for your choice of dishes.

<table>
<thead>
<tr>
<th>Midday Meal</th>
<th>Reasons for Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Dish</td>
<td></td>
</tr>
<tr>
<td>Dessert</td>
<td></td>
</tr>
</tbody>
</table>

(1, 2, 1, 2 = 6 marks)

9. A young couple has just moved into their new third floor apartment in the heart of the town.

a) Why are the following important to the young couple?

A lift:

• ________________________________

A terrace:

• ________________________________

An intercom:

• ________________________________

Garage space:

• ________________________________ (1 x 4 = 4 marks)

b) Write down three benefits of living in an apartment.

• ________________________________

• ________________________________

• ________________________________ (1 x 3 = 3 marks)

c) Identify two advantages of living in the centre of the town.

• ________________________________

• ________________________________ (2 x 2 = 4 marks)