FORM 4 HOME ECONOMICS

Name: _______________________________ Class: ___________

Answer all the questions.

Section A.

1. Meat is an important food item in many households. Carefully study the chart below which shows the nutritional values of 100 grams of mince meat and then answer the questions that follow.

<table>
<thead>
<tr>
<th>Type of Mince meat</th>
<th>Energy (kcal)</th>
<th>Fat (g)</th>
<th>Protein (g)</th>
<th>Iron (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef mince (raw)</td>
<td>225</td>
<td>16.2</td>
<td>19.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Beef mince (extra lean-raw)</td>
<td>174</td>
<td>9.6</td>
<td>21.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Pork mince (raw)</td>
<td>164</td>
<td>9.7</td>
<td>19.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Lamb mince (raw)</td>
<td>196</td>
<td>13.3</td>
<td>19.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Chicken mince (raw)</td>
<td>106</td>
<td>1.1</td>
<td>24</td>
<td>0.5</td>
</tr>
<tr>
<td>Turkey mince (raw)</td>
<td>105</td>
<td>1.6</td>
<td>22.6</td>
<td>0.6</td>
</tr>
</tbody>
</table>

(a) i) Which meat has the highest energy value? _______________ (½ mark)

ii) Which meat has the lowest energy value? _______________ (½ mark)

iii) Give a reason for the difference in energy value between the meat you have chosen in i) and ii).

Reason: ________________________________________________________________

iv) Why is energy needed by the body?

• ________________________________________________________________

• ________________________________________________________________

(b) i) Why is protein needed by the body?

• ________________________________________________________________

• ________________________________________________________________

ii) Which mince has the highest protein content? _______________ (½ mark)
iii) Suggest a person for whom this type of mince would be suitable?

___________________________________________________________________________________________

(1 mark)

(c) i) Give the names of three dishes you could prepare with the mince chosen in the previous answer.

__________________________________ ______________  __________________________

(1½ marks)

ii) Name the two types of mince which have the highest iron content.

__________________________________ ________________________________

(1 mark)

iii) Why is iron important in the diet?

_____________________________________________________________________________________

_____________________________________________________________________________________

(2 marks)

iv) Suggest a person who needs a high intake of iron.

Give a reason for your answer.

Suggested person: __________________________________________

(1 mark)

Reason: __________________________________________________________

_____________________________________________________________________________________

(2 marks)

2. Match column A with column B. 
(An example has been given)

<table>
<thead>
<tr>
<th>FOOD RELATED DISORDER</th>
<th>POSSIBLE CAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Coeliac Disease</td>
<td>Low calcium intake in childhood.</td>
</tr>
<tr>
<td>b Obesity</td>
<td>Eating too many sugary foods/drinks.</td>
</tr>
<tr>
<td>c Coronary heart disease</td>
<td>Restricted intake of food.</td>
</tr>
<tr>
<td>d Osteoporosis</td>
<td>Iron deficiency.</td>
</tr>
<tr>
<td>e Constipation</td>
<td>High blood cholesterol.</td>
</tr>
<tr>
<td>f Anorexia Nervosa</td>
<td>Eating too little fruit and vegetables.</td>
</tr>
<tr>
<td>g Diabetes a</td>
<td>Intolerance to gluten in protein.</td>
</tr>
<tr>
<td>h Hypertension</td>
<td>Too many sugary/fatty foods in the diet.</td>
</tr>
<tr>
<td>i Anaemia</td>
<td>Too little NSP (dietary fibre) in the diet.</td>
</tr>
<tr>
<td>j Dental Caries</td>
<td>Too much glucose in the blood.</td>
</tr>
<tr>
<td>k Cancer</td>
<td>High sodium intake.</td>
</tr>
</tbody>
</table>

(5 marks)
3. Fill-in the blanks with the correct word/s from the given list.

<table>
<thead>
<tr>
<th>large intestine</th>
<th>oesophagus</th>
<th>time</th>
<th>breakdown</th>
<th>nutrients</th>
<th>saliva</th>
</tr>
</thead>
<tbody>
<tr>
<td>intestinal walls</td>
<td>small intestines</td>
<td>anus</td>
<td>mouth</td>
<td>stomach</td>
<td>chime</td>
</tr>
<tr>
<td>gastric juices</td>
<td>absorption</td>
<td>water</td>
<td>carbohydrate</td>
<td>bacteria</td>
<td>chewed</td>
</tr>
</tbody>
</table>

The digestion process starts in the ________________, the food is cut into small pieces and ________________. ________________ moistens the food and softens it. The digestion of ________________ foods starts here. Next, the food moves into the ________________ which pushes it into the ________________. ________________ present further break down the food until it becomes a thick liquid called ________________. Different foods stay in the stomach for different lengths of ________________. Fatty foods take much longer to ________________. The food now passes into the ________________. Most of the digestion and ________________ takes place as the food travels along this organ, ________________ enter the blood through the ________________. The final stages of digestion take place in the ________________ where unwanted materials such as fibre, ________________ and ________________ are processed. These are eliminated from the ________________. (9 marks)

4. A number of students in your class do not enjoy eating fruit and vegetables.
   (a) List four advantages of eating fresh fruit and vegetables daily.

   • ________________________________________________________________________
   • ________________________________________________________________________
   • ________________________________________________________________________
   • ________________________________________________________________________
   (4 marks)

   (b) Suggest interesting ways of introducing fresh fruit/vegetables in daily meals.

   • ________________________________________________________________________
   • ________________________________________________________________________
   • ________________________________________________________________________
   • ________________________________________________________________________
   (4 marks)
(c) Today on the local market we find fruit/vegetables labeled: 

**ORGANICALLY GROWN**

What do you understand by organically grown fruit/vegetables?

__________________________________________________________

(2 marks)

Section B.

5. A couple of friends will be coming to your house for an evening meal after a session at the gym.

(a) Write down points that you would need to keep in mind when planning the evening meal.

• ______________________________________________________

• ______________________________________________________

• ______________________________________________________

• ______________________________________________________

• ______________________________________________________

(4 marks)

(b) i) Plan the meal using fresh local produce and keep in mind the CINDI Dietary Guidelines.

**Chosen Dishes:**

• __________________________________________

• __________________________________________

• __________________________________________

• __________________________________________

(3 marks)

ii) Give reasons for your choice of dishes.

**Reasons:**

• __________________________________________________________

• __________________________________________________________

• __________________________________________________________

(3 marks)
6. The electric cooker you have at home is not functioning well and your family has decided to purchase a new one.

(a) Identify a type of cooker you would suggest, giving reasons for your suggestion.

Type of cooker chosen: ________________________________ (1 mark)

Reasons:

• ______________________________________________________
  ______________________________________________________

• ______________________________________________________
  ______________________________________________________

  (4 marks)

(b) Identify a special feature you would consider when choosing the:

  Hob: ______________________________
  Oven: _____________________________
  Grill: _____________________________

  (3 marks)

(c) Give three rules you would follow to use the new cooker safely.

• ______________________________________________________
  ______________________________________________________

• ______________________________________________________
  ______________________________________________________

• ______________________________________________________
  ______________________________________________________

  (6 marks)

(d) How would you dispose of the old cooker wisely?

______________________________
______________________________

  (2 marks)
(e) After using the new cooker for a couple of weeks it develops a fault. Write down the course of action you would take to have the fault seen to.

____________________________________________ ___________________________
____________________________________________ ___________________________
____________________________________________ ___________________________
____________________________________________ ___________________________

(4 marks)

7. 

Some elderly persons find it difficult to keep on living in their own homes.

(a) Suggest reasons for the above statement.

_________________________________________________ _____________________
________________________________________________ _________________________
_________________________________________________ _____________________
________________________________________________ _________________________

(4 marks)

(b) i) List four advantages of an elderly person living in residential accommodation.

Advantages:

• _________________________________________________________________

• _________________________________________________________________

• _________________________________________________________________

• _________________________________________________________________

(4 marks)
ii) Identify **four** difficulties an elderly person might encounter in a residential home.

**Difficulties:**

- _____________________________________________________
- _____________________________________________________
- _____________________________________________________
- _____________________________________________________

(4 marks)

8. A young couple will be getting married in a few months’ time. They are asking for advice on how they could reduce their consumption of water and electricity in their new home.

(a) Help the couple by suggesting practical measures they could take to:

**Save Water:**

- _____________________________________________________
- _____________________________________________________
- _____________________________________________________
- _____________________________________________________

(4 marks)
ii) **Save Electricity:**

- ____________________________________________________________________________
- ____________________________________________________________________________
- ____________________________________________________________________________
- ____________________________________________________________________________

(4 marks)

(b) Identify an alternative source of energy they could install in their new home to help them reduce their energy consumption. Explain how this will save energy/water.

**Alternative Source of Energy:** ____________________________

(1 mark)

This alternative source of energy will help by:

- ____________________________________________________________________________
- ____________________________________________________________________________

(4 marks)

(c) Suggest a provision they can take to reduce their water consumption. Explain how this provision can benefit the family.

**Water Saving Provision:** ____________________________

(1 mark)

Benefits:

- ____________________________________________________________________________
- ____________________________________________________________________________

(4 marks)