TONGA GOVERNMENT
MINISTRY OF EDUCATION AND TRAINING

TONGA SCHOOL CERTIFICATE
2014

HOME ECONOMICS

QUESTION AND ANSWER BOOKLET

Time Allowed: 3 Hours plus 10 minutes reading time.

INSTRUCTIONS
1. This paper has THREE Sections. ANSWER ALL QUESTIONS.

   SECTION 1          Food and Nutrition          50 Marks
   SECTION 2          Home and Management        50 Marks
   SECTION 3          Clothing and Textiles       50 Marks

2. Write your Student Personal Identification Number (SPIN) on the top right hand corner of this page and on the last page.

3. Write ALL your answers in the spaces provided in this booklet. If you need more space, ask the supervisor for extra paper.

4. Check that this booklet contains pages 2-27 in the correct order and that pages 24-26 is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

TOTAL MARKS 150
SECTION 1    FOOD & NUTRITION       (50 MARKS)

QUESTION 1:  MULTIPLE CHOICE                                   (10 marks)

Write the LETTER of the Best Answer in the box provided.

1. Removal of water from food is the preservation principle of _______________.
   A. dehydration
   B. canning
   C. bottling
   D. freezing

2. The major function of Protein in the body is to _________________.
   A. provide energy
   B. regulates chemical processes
   C. build and repair body cells
   D. protect against diseases

3. Which of the following is the best source of iron?
   A. livers
   B. legumes
   C. Sea foods
   D. dried fruits

4. To prevent constipation, it is advisable to consume/eat food that are rich in __________.
   A. vitamin
   B. fiber
   C. fat
   D. mineral

5. Why do we still need fat in our diet if it is considered unhealthy?
   A. It helps to normalize rhythm in the heart beat.
   B. It is used primarily for the formation of new body cells.
   C. It contributes to regulation of body fluids.
   D. It act as a support for vital organs like the kidneys.
6. Which of the following food do not support the growth of food-poisoning bacteria?

A. Meat pies and sausage rolls.
B. Biscuits and jams.
C. Soup and custard.
D. Beef and chicken.

7. Maintaining a healthy weight is important to your health. Which of the following is the best way to do it?

A. Always do exercise and eat a lot of food.
B. Do exercise regularly and eat vegetables only.
C. Eat protein rich food and do exercise.
D. Eat healthy food and do exercise regularly.

8. Which of the following food product contain the highest amount of protein?

A. Cheese (Cheddar)
B. Pork
C. Chicken
D. Fish

9. It is important to consider the following factors before planning a meal.

A. Time, people, appearance and texture.
B. Money, time, skills, season and equipment.
C. Equipment, people, texture and appearance.
D. Money, time, texture and people.

10. School age kids are very active and need to increase the amount of energy they eat. Which of the following meal is best for them?

A. Bread, butter with tea.
B. Breakfast cracker, butter with tea.
C. Yam, pele leaves with juice.
D. Yam, pasta beef with juice.
QUESTION 2: SHORT ANSWERS (10 MARKS)

Part A: Matching (5 marks)

Match the following terms with correct definition. Write the LETTER of the correct term beside the correct definition in the space provided.

<table>
<thead>
<tr>
<th>TERMS</th>
<th>DEFINITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pasteurization</td>
<td>A cooking method best used with tender meat cuts like grilling, roasting etc</td>
</tr>
<tr>
<td>B. Skim milk</td>
<td>That is how food feels in your mouth</td>
</tr>
<tr>
<td>C. Dry heat cookery</td>
<td>A very low energy milk with fat being removed.</td>
</tr>
<tr>
<td>D. Texture</td>
<td>Pre-heating of milk with a very high temperature kill bacteria.</td>
</tr>
<tr>
<td>E. Salmonella</td>
<td>A vegetative bacteria that does not produce toxin readily destroyed by heat.</td>
</tr>
<tr>
<td>F. Anchor Milk</td>
<td></td>
</tr>
</tbody>
</table>

(5 marks)

Part B: Definition (5 marks)

Choose ANY FIVE (5) from the following terms and define them using your own words.

1. Digestion
2. Metabolism
3. Recommended Daily Intake
4. Food Spoilage
5. Freezing
6. Meal Planning
7. Vegetarians
8. Pathogens
9. High risk foods
10. Garnish
QUESTION 3: LONG ANSWERS (30 MARKS)

Part A: Nutrition in Action (10 marks)

1. List any FOUR (4) factors and explain how they contribute to Poor Health.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

(4 marks)

2. Name the factor that influenced food choice in each of the following situations

a. “I would have had red papaya, but they are so expensive here”.
   __________________________________________________________________________

b. “Oh!! I am so late. I’ll just have a toast and banana for breakfast”.
   __________________________________________________________________________

c. “I love eating chocolate or any sweet food when I’m stress out”.
   __________________________________________________________________________

d. “Eating pele leaves is good for me and that’s why I love eating it”.
   __________________________________________________________________________

(2 Marks)
3. Explain TWO (2) reasons why it is important to have personal ‘Food Diary’.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
(2 marks)

4. Use the table below to answer the following questions

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Oranges</th>
<th>Cabbage</th>
<th>Fish</th>
<th>Rice</th>
<th>Bread</th>
<th>Celery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>0.8</td>
<td>1.1</td>
<td>18.6</td>
<td>2.2</td>
<td>9.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Fat</td>
<td>0.0</td>
<td>0.0</td>
<td>0.9</td>
<td>0.3</td>
<td>2.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>8.5</td>
<td>0.8</td>
<td>0.0</td>
<td>29.6</td>
<td>45.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Fibre</td>
<td>2.0</td>
<td>2.2</td>
<td>0.0</td>
<td>0.0</td>
<td>5.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Water</td>
<td>86.1</td>
<td>96.6</td>
<td>79.2</td>
<td>69.9</td>
<td>39.0</td>
<td>94.0</td>
</tr>
<tr>
<td>Ascorbic Acid</td>
<td>50.0</td>
<td>25.0</td>
<td>.....</td>
<td>0.0</td>
<td>0.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Calcium</td>
<td>41.0</td>
<td>30.0</td>
<td>15.0</td>
<td>1.0</td>
<td>40.0</td>
<td>50.0</td>
</tr>
</tbody>
</table>

a. Which food has the highest nutrients density?

____________________________________________________________________________

b. Which food provides the most energy?

____________________________________________________________________________

c. Which food contains the most water?

____________________________________________________________________________

d. Which food contains the most Vitamin C?

____________________________________________________________________________

(2 Marks)
Part B: Food Studies and Caring (10 marks)

1. Seini is cooking dinner for her family. She prepared a beef stew with vegetables. During dinner, her daughter complains that beef is so tough and she can’t chew it.

   a. What could Seini did wrong while cooking the beef?

   ________________________________________________________________________
   (1 mark)

   b. Why beef becomes tough while cooking?

   ________________________________________________________________________
   ________________________________________________________________________
   (2 marks)

2. Ingredients listed below are usually used when baking cakes. Explain the function of each ingredient.

   a. Sugar

   ________________________________________________________________________
   ________________________________________________________________________

   b. Oil

   ________________________________________________________________________
   ________________________________________________________________________

   c. Eggs

   ________________________________________________________________________
   ________________________________________________________________________

   d. Raising agents

   ________________________________________________________________________
   ________________________________________________________________________
   (4 marks)
3. List any THREE (3) methods/ways of preserving food and explain how it is done with ONE (1) advantage of each method.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

(3 marks)

Part C: Family Meals (10 marks)

1. Virginia is a 13 years of age girl and active both outside and inside the class-room. She is growing rapidly and really enjoyed sports activities of all kinds. Explain why it is important for her to eat the following food types at her current stage of life.

a. Pele leaves or any kind of green leaves that are rich in iron.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

(2 marks)

b. Vegetables, fruits, bread and cereals.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

(2 marks)

P.9 7
c. Food low in sugar, fat and salt.

(2 marks)

2. Tame’s family eat a lot of take-away food during the week as shown in the table below.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken &amp; chips</td>
<td>Kentucky</td>
<td>Pizza</td>
<td>Fish &amp; chips</td>
<td>Chicken &amp; chips</td>
<td>Hamburgers</td>
<td>Pizza Fish &amp; chips</td>
</tr>
</tbody>
</table>

On the table below, suggest TWO (2) ways that will help Tame’s family to make healthy choices when buying take-away meals and give a reason for your answer.

<table>
<thead>
<tr>
<th>Suggestions</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
</tr>
</tbody>
</table>

(4 marks)
QUESTION 1: MULTIPLE CHOICE

Write the letter of the Best Answer in the box provided.

1. A chemical mixture that removes stains and whitens or brightens fabrics best is _____________.
   A. Detergent
   B. Starch
   C. Bleach
   D. Omo

2. Bed covers, pillow cases and bed sheets need to change every _____________.
   A. month
   B. week
   C. two months
   D. two weeks

3. Best method to use when removing water from a knitted woolen jacket is to _________________.
   A. roll in a towel and wring by machine
   B. roll in a towel and wring by hand
   C. squeeze by hand
   D. use fast spin

4. If you go shopping, it is better to buy in cash because _________________.
   A. there is no interest charge
   B. you can use the goods and pay later
   C. payments per week are usually low
   D. you can do your shopping from home

5. Which of the following are ALL fixed expenses in a household budget?
   A. Electricity, medical expenses, clothing
   B. Club fees, appliances repairs, transport
   C. Rent, insurance premiums, telephone rental
   D. Mortgage payments, food, car registration
6. A piece of land is usually accepted by Banks in Tonga as security for loans because it is _____________.
   A. a valuable resources  
   B. easy to sell  
   C. the only resources available  
   D. very scarce

7. If you go shopping, it is wise to ______________ to avoid impulse buying.
   A. make a list of the cheapest goods  
   B. just buy goods that needed at home  
   C. make a shopping list and follow it  
   D. buy goods that are advertised on television

8. A quiet zone in the house is most convenient in the _______________.
   A. bedroom  
   B. family room  
   C. kitchen  
   D. living room

9. Two factors to consider when buying or building a house are _____________.
   A. quiet and traffic flow  
   B. privacy and traffic flow  
   C. living and rest zone  
   D. house plan and money

10. An example of a Psychological need provided by housing is _______________.
    A. friendship  
    B. warmth  
    C. security  
    D. knowledge
**QUESTION 2: SHORT ANSWERS (10 MARKS)**

**Part A: Matching (5 marks)**

Match the following terms with their correct definition. Write the **LETTER** of the correct term beside the correct definition in the space provided.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Expenses that vary in amount and frequency occurrence.</td>
<td>A. Loan</td>
</tr>
<tr>
<td>2. A budget that is used to control the use of money.</td>
<td>B. Financial records</td>
</tr>
<tr>
<td>3. Money being borrowed from the bank to finance building a house.</td>
<td>C. Fixed expenses</td>
</tr>
<tr>
<td>4. Expenses that have to be paid to keep basic facilities.</td>
<td>D. Spending plan</td>
</tr>
<tr>
<td>5. Records that show how you spend your money.</td>
<td>E. Flexible expenses</td>
</tr>
<tr>
<td></td>
<td>F. Impulse Buying</td>
</tr>
</tbody>
</table>

**Part B: Definition (5 marks)**

Define the following terms in your own words. Give an example to support your answer.

1. Impulse buying:____________________________________________________________
   ________________________________________________________________________

2. Bleaches:___________________________________________________________________
   ________________________________________________________________________

3. Human resources:__________________________________________________________
   ________________________________________________________________________

4. House elevation:____________________________________________________________
   ________________________________________________________________________

5. Ventilation:_________________________________________________________________
   ________________________________________________________________________

(5 Marks)
1. Your family has different values in life. Fill in the table below to show what goal your family would have for each given value and identify TWO (2) resources they can use to achieve those goals.

<table>
<thead>
<tr>
<th>Values</th>
<th>Goal</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Education</td>
<td>a.</td>
<td>i.</td>
</tr>
<tr>
<td>b. Family</td>
<td>a.</td>
<td>i.</td>
</tr>
</tbody>
</table>

(4 marks)

2. Your family’s income fortnightly is TOP$550.00 which is earned from your father and big sister’s salaries.

a. Help your father to write a budget plan for this income.

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

(5 marks)

b. Why it is important to have a budget plan?

______________________________________________________________________
______________________________________________________________________

(1 mark)
Part B: House Planning (10 marks)

1. Siua and Mele lived in Ha’apai and have 4 school children. When Siua’s parents passed away, they decided to move to Tongatapu for better life. Explain why it is important for them to consider the following when they migrate to Tongatapu.

   a. Space:
      ___________________________________________________________________
      ___________________________________________________________________
      ___________________________________________________________________

   b. School:
      ___________________________________________________________________
      ___________________________________________________________________
      ___________________________________________________________________

   c. Money:
      ___________________________________________________________________
      ___________________________________________________________________
      ___________________________________________________________________

   (6 marks)

2. Home should be a place where everyone in the family satisfies with what they need and want to do. Complete the table below by naming TWO (2) areas in the home and explain ONE (1) activity that is usually done in each area.

<table>
<thead>
<tr>
<th>Home Area</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4 marks)
Part C: Family Equipments & Furnishing (10 marks)

1. Stove, refrigerator, washing machine, micro wave, cooking utensils and iron are some of our basic equipment needed at home.
   a. Explain TWO (2) reasons why it is important to look after the equipment listed above.

   Reason (i): ___________________________________________________________
   Reason (ii): _________________________________________________________

   (2 marks)

   b. Choose THREE (3) equipment from those listed above and explain how to look after them properly at home.

   Equipment (i): __________________________________________________________________

   Equipment (ii): __________________________________________________________________

   Equipment (iii): __________________________________________________________________

   (3 marks)

2. During Christmas holiday, your mother asks you to help her buy new furnishings for your house. Fill in the table below with TWO (2) criteria you would consider and why?

<table>
<thead>
<tr>
<th>Furnishing</th>
<th>Criteria to consider</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofa</td>
<td>i.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii.</td>
<td></td>
</tr>
<tr>
<td>Bed</td>
<td>iii.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iv.</td>
<td></td>
</tr>
<tr>
<td>Carpet</td>
<td>v.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vi.</td>
<td></td>
</tr>
</tbody>
</table>

   (5 marks)
SECTION 3 CLOTHING & TEXTILES (50 MARKS)

QUESTION 1: MULTIPLE CHOICE (10 marks)

Write the LETTER of the Best Answer in the box provided.

1. A style of clothing that is popular in a certain time is call ____________.
   A. fad
   B. classic
   C. fashion
   D. high fashion

2. The ability of a fabric to retain its original shape after stretching is ________.
   A. elasticity
   B. durability
   C. luster
   D. absorbency

3. The following fibers have a very good absorbency except ____________.
   A. Linen
   B. Rayon
   C. Cotton
   D. Polyester

4. Threads that run across the Selvedge are ____________.
   A. warps
   B. true cross weft
   C. bias
   D. weft

5. The main purpose of using interfacing in sewing clothes is to ____________.
   A. add crispness or body to garments
   B. provide warmth
   C. make the garment fit the wearer
   D. act as lining to the lace material
6. Clothing needs for children vary according to their___________ and ____________.
   A. appearance, health stage
   B. stages of growth, development
   C. development, height
   D. health stage, age group

7. We usually use _____________ to temporarily join layers of fabric until they are permanently stitched on the machine.
   A. basting
   B. backstitching
   C. clipping
   D. trimming

8. Before trying to remove a stain, it is important to know the ________________.
   A. nature and labeling
   B. age and operation
   C. nature and fiber content
   D. fiber content and care

9. When the upper thread breaks during sewing, it may be caused by ________________.
   A. the thread is too tight
   B. poor quality needle
   C. the bottom thread is too tight
   D. the bobbin is crushed

10. Which of the following measurements determine your figure type?
    A. Height and back waist.
    B. Waist and bust.
    C. Hip and waist.
    D. Back waist and bust.
QUESTION 2: SHORT ANSWERS (10 MARKS)

Part A: Matching (5 marks)

Match the following terms with their correct definition. Write the LETTER of the correct term beside the correct definition in the space provided.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. _____ Help prevent stretching in the seam Line and a decorative touch to the finished garment.</td>
<td>A. Clipping</td>
</tr>
<tr>
<td>2. _____ Use to transfer marks from pattern to fabric.</td>
<td>B. Under stitching</td>
</tr>
<tr>
<td>3. _____ Cut off part of the seam allowance to reduce bulk.</td>
<td>C. Clean finishing</td>
</tr>
<tr>
<td>4. _____ A row of stitching that holds the facing from rolling to the outside of the garment.</td>
<td>D. Zigzagged</td>
</tr>
<tr>
<td>5. _____ A finishing use for fabrics that are easily ravel.</td>
<td>E. Tailor tacking</td>
</tr>
<tr>
<td></td>
<td>F. Threading</td>
</tr>
</tbody>
</table>

Part B: Definition (5 marks)

Explain the following sewing techniques and how it affects the garment or the final product.

1. Tacking:________________________________________________________________________
______________________________________________________________________________

2. Clipping curves:________________________________________________________________
______________________________________________________________________________

3. Trimming corners:________________________________________________________________
______________________________________________________________________________

4. Grading seams:__________________________________________________________________
______________________________________________________________________________

5. Stay stitching:__________________________________________________________________
______________________________________________________________________________

(5 marks)
QUESTION 3: LONG ANSWERS (30 MARKS)

Part A: Fabric Studies (10 marks)

1. Name TWO (2) processes that used to produce cloth or fabric from yarns.

____________________________________________________________________________
____________________________________________________________________________
(1 mark)

2. Cotton fabric is one of the best types of material for sewing school uniforms because of its characteristics. Explain the characteristics listed below and explain why it is best for school uniforms.

<table>
<thead>
<tr>
<th>Characteristics of Cotton</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Strong</td>
<td></td>
</tr>
<tr>
<td>b. Good moisture absorbency</td>
<td></td>
</tr>
<tr>
<td>c. Durable to laundering</td>
<td></td>
</tr>
</tbody>
</table>
(6 marks)

3. Define fiber blending and explain why manufacturers used it. Give ONE (1) example of a fiber blend.

____________________________________________________________________________
____________________________________________________________________________
(3 marks)
Part B: Garment Patterns & Constructions (10 marks)

1. Name the pattern symbols on the patterns below.

A. 

G. 

H. 

I. 

J. 

SLEEVE

B. 

C. 

D. 

E. 

F. 

FRONT JACKET

(5 marks)
2. Pressing and Ironing are TWO (2) important techniques in garment construction.

   a. Explain the difference between these TWO (2) sewing techniques.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   b. Identify which technique is best use after each processing step and explain why.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   (2 marks)

3. Lesieli is travelling to New Zealand next week to attend an important meeting. She asked you to sew her ‘pule tahā’. List down in sequence the processes you will follow.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   (3 marks)
Part C: Clothing Selection and Care (10 marks)

1. Explain why it is important to look after your clothes properly? (Give THREE (3) reasons)

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
(3 marks)

2. “A stitch in time saves nine” is a popular saying in taking good care of your clothes. Explain what this means in relation to clothing.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
(2 marks)

3. Stain is a discoloration that is not remove by normal washing but needs special treatment. In the table below, explain the method of treating each stain given.

<table>
<thead>
<tr>
<th>Types of stains</th>
<th>Methods of treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paint</td>
<td></td>
</tr>
<tr>
<td>Chewing gum</td>
<td></td>
</tr>
<tr>
<td>Writing ink</td>
<td></td>
</tr>
<tr>
<td>Blood</td>
<td></td>
</tr>
<tr>
<td>Iron rust</td>
<td></td>
</tr>
</tbody>
</table>

(5 marks)
THIS PAGE HAS BEEN DELIBERATELY LEFT BLANK.
# TONGA SCHOOL CERTIFICATE
## HOME ECONOMICS
### 2014
(Marker’s Use Only)

<table>
<thead>
<tr>
<th>SECTIONS</th>
<th>MARK</th>
<th>CHECK MARKER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION 1</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>SECTION 2</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>SECTION 3</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>