

GAUTENG DEPARTMENT OF EDUCATION  
SENIOR CERTIFICATE EXAMINATIONOCTOBER / NOVEMBER 2005  
OKTOBER / NOVEMBER 2005

HOME ECONOMICS SG

TIME: 3 hours

MARKS: 200

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**INSTRUCTIONS:**

- ALL the questions are **COMPULSORY**.
  - Begin **each question** on a **new page**.
  - Number your answers exactly as the questions are numbered.
  - Answer **Question 1A (1.1 – 1.13)** (multiple-choice questions) of **Section A** on the **answer sheet** on the **inside cover** of your **answer book**.
  - Answer **Question 1B (1.14 – 1.19)** of **Section A** as well as **Sections B, C and D** in your **answer book**.
  - Use the suggested time guide below.
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**SUGGESTED TIME GUIDE**

| QUESTION NUMBER  | MARKS        | TIME       |                    |
|------------------|--------------|------------|--------------------|
| <b>Section A</b> | Question 1   | 50         | 45 minutes         |
| <b>Section B</b> | Question 2   | 30         | 27 minutes         |
|                  | Question 3   | 30         | 27 minutes         |
| <b>Section C</b> | Question 4   | 30         | 27 minutes         |
| <b>Section D</b> | Question 5   | 30         | 27 minutes         |
|                  | Question 6   | 30         | 27 minutes         |
|                  | <b>TOTAL</b> | <b>200</b> | <b>180 minutes</b> |

## SECTION A

**QUESTION 1A**  
**MULTIPLE-CHOICE QUESTIONS**

Indicate the correct answer by drawing a cross (X) over the corresponding letter on the **answer sheet** on the **inside cover** of your **answer book**. Where more than one cross appears in any question, NO MARKS will be awarded for that question.

**EXAMPLE:** Microwaves are \_\_\_\_\_ waves.

- A. light
- B. radio
- C. infra red
- D. electro-magnetic

**ANSWER:**

|   |   |   |                                     |
|---|---|---|-------------------------------------|
| A | B | C | <input checked="" type="checkbox"/> |
|---|---|---|-------------------------------------|

1.1 The number of **servings** of milk and milk products AND meat and meat alternatives which should be eaten **daily** are \_\_\_\_\_ .

- A. one and two
- B. two and two
- C. two and three
- D. three and four

1.2 Which **TWO factors** were **not** taken into consideration when planning the following meal?

Steamed hake, boiled potatoes, steamed cauliflower and baked rice pudding

- 1. Form
- 2. Colour
- 3. Texture
- 4. Cooking method

- A. 1 and 2
- B. 2 and 3
- C. 3 and 4
- D. 1 and 4

1.3 Which one of the following groups of food can be **poached**?

- A. Steak and peas
- B. Liver and marrow
- C. Fish and eggs
- D. Lentils and beans

- 1.4 When **nutrients**, for example Vitamin A and Vitamin D are **added** to low fat milk powder, the process is known as \_\_\_\_\_ .
- A. standardisation
  - B. homogenisation
  - C. purification
  - D. fortification
- 1.5 Examples of **shellfish** are \_\_\_\_\_ .
- A. snoek and mussels
  - B. crayfish and cob
  - C. lobsters and hake
  - D. crabs and oysters
- 1.6 When **proteins** shrink and lose their water-binding capacity \_\_\_\_\_ takes place.
- A. coagulation
  - B. denaturation
  - C. syneresis
  - D. retrogradation
- 1.7 Lamb stew is cooked in sufficient liquid **below** boiling point. The best **cooking utensil** for this dish is a \_\_\_\_\_ .
- A. slow cooker
  - B. double boiler
  - C. pressure cooker
  - D. waterless saucepan
- 1.8 Identify which **unit** does NOT belong in the **work triangle** in a **corridor** kitchen.
- A. Fridge
  - B. Sink
  - C. Stove
  - D. Serving area
- 1.9 The **condition** where the muscles are contracted and the blood circulation is poor is known as \_\_\_\_\_ muscle contraction.
- A. dynamic
  - B. rhythmic
  - C. static
  - D. restricted

- 1.10 **Affective** human resources include \_\_\_\_\_ .
- A. hearing and seeing
  - B. money and time
  - C. feelings and emotions
  - D. space and equipment
- 1.11 Identify a combination of possible **deductions** from a family's monthly salary:
- A. Housing subsidy, club membership, water and electricity
  - B. P.A.Y.E, medical aid contributions and pension fund contributions
  - C. Housing loan instalments, dividends, overtime payments
  - D. Insurance policy premium, interest on investments, banking fees
- 1.12 One characteristic of a **retirement annuity** is that \_\_\_\_\_ .
- A. it offers considerable tax advantages
  - B. contributions may be temporarily stopped if necessary
  - C. it is a public pension scheme open to anyone
  - D. it is an important part of a pensioner's financial planning
- 1.13 Which of the following are examples of a **family's involvement** in the political system of the country?
- 1. They abide by the country's laws and regulations.
  - 2. They belong to the Wildlife Society.
  - 3. When they are old enough, they can exercise their right to vote.
  - 4. The father is a member of the neighbourhood watch.
- A. 1 and 3
  - B. 2 and 3
  - C. 2 and 4
  - D. 3 and 4

13x2= (26)

## QUESTION 1B

Answer the rest of the questions in your **answer book**.

- 1.14 Match the **explanation** in **Column B** to the **process** that occurs in milk tarts in **Column A**. Write only the question numbers (1.14.1 – 1.14.5) **below one another** in your **answer book** and then the **letter** (A – G) of your choice next to the question number e.g. 1.14.6 – H.

| COLUMN A |                     | COLUMN B    |                                                                                                        |
|----------|---------------------|-------------|--------------------------------------------------------------------------------------------------------|
| PROCESS  |                     | EXPLANATION |                                                                                                        |
| 1.14.1   | Reversible swelling | A.          | As the milk tart cools, a three-dimensional network forms in which water is trapped.                   |
| 1.14.2   | Dextrinisation      | B.          | Liquid surrounds each starch granule as a paste is made to prevent lump formation.                     |
| 1.14.3   | Gelatinisation      | C.          | The starch molecules pull together in an organised, crystalline manner as the milk tart cools.         |
| 1.14.4   | Retrogradation      | D.          | After two days the gel network of the milk tart shrinks and pushes water out of the gel.               |
| 1.14.5   | Syneresis           | E.          | Starch granules in the paste absorb water and swell, but can return to their previous dried out state. |
|          |                     | F.          | Cornflour starch granules in the paste tend to revert to an insoluble state.                           |
|          |                     | G.          | The base of the milk tart develops a golden brown colour after baking.                                 |

(5)

- 1.15 **Maslow's Hierarchy of Needs**. Select from **Column B**, one **example** to match a **need** in **Column A**. Write the **question numbers** (1.15.1 – 1.15.4) **below one another** in your **answer book** and then the **letter** (A – F) of your choice next to the question number, e.g. 1.15.5 – G.

| COLUMN A       |                   | COLUMN B |                                                                             |
|----------------|-------------------|----------|-----------------------------------------------------------------------------|
| MASLOW'S NEEDS |                   | EXAMPLE  |                                                                             |
| 1.15.1         | Social need       | A.       | Peter's going to sail around the world next summer                          |
| 1.15.2         | Physical need     | B.       | Mpho appreciates the acknowledgement of her top achievement.                |
| 1.15.3         | Esteem (Ego) need | C.       | Thabo organises the after-party for the matric dance.                       |
| 1.15.4         | Safety need       | D.       | Emily eats healthy to remain slim.                                          |
|                |                   | E.       | Siada wears a medic-disc around her wrist as she is allergic to bees.       |
|                |                   | F.       | Janet is training to be a top ballerina and wants to dance internationally. |

(4)

- 1.16 Select from the list below FIVE statements that are true concerning the **pasteurisation of milk**. Write down the question number (1.16) and the FIVE letters (A – J) of your choice **below one another** in your answer book.

| PASTEURISATION OF MILK |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| A.                     | Some of the milk salts become less soluble.                                     |
| B.                     | There is no loss of riboflavin.                                                 |
| C.                     | The milk becomes rancid easily as a result of large surface exposure to oxygen. |
| D.                     | The milk is heated to 72,5°C for 15 seconds.                                    |
| E.                     | It is easier to digest than homogenised milk.                                   |
| F.                     | After heating it is rapidly cooled to 4°C.                                      |
| G.                     | This treatment allows the milk to be kept for long periods if unopened.         |
| H.                     | Pathogenic organisms such as tuberculosis are destroyed.                        |
| I.                     | The milk is heated to 104°C and cooled gradually.                               |
| J.                     | Pasteurisation will toughen the milk proteins if incorrectly applied.           |

(5)

- 1.17 Select from the list below FOUR **properties of frozen fish**. Write down the question number (1.17) and the FOUR letters (A – H) of your choice **below one another** in your answer book.

| PROPERTIES OF FROZEN FISH |                                                        |
|---------------------------|--------------------------------------------------------|
| A.                        | Fish should be frozen solid when bought.               |
| B.                        | The tissue should be firm and elastic to the touch.    |
| C.                        | Only a faint smell or no smell should be detected.     |
| D.                        | There should be air spaces between the pieces of fish. |
| E.                        | There should be no discolouration of the fish.         |
| F.                        | The fish should have a fresh “fish” smell.             |
| G.                        | Packaging material should be air and moisture proof.   |
| H.                        | The gills should be a clear pink colour.               |

(4)

- 1.18 Select from the list below THREE **dishes/foods that use egg foam**. Write down the question number (1.18) and the THREE letters (A – F) of your choice **below one another** in your answer book.

| DISHES/FOODS THAT USE EGG FOAM |                        |
|--------------------------------|------------------------|
| A.                             | Mayonnaise             |
| B.                             | Salmon Mousse          |
| C.                             | Meringues              |
| D.                             | Rich shortcrust pastry |
| E.                             | Milk bread             |
| F.                             | Tuna soufflé           |

(3)

- 1.19 Choose from the list below **THREE factors** that **influence decision-making**. Write down the question number (1.19) and the **THREE** letters (A – F) of your choice **below one another** in your answer book.

| FACTORS THAT INFLUENCE DECISION-MAKING |                              |
|----------------------------------------|------------------------------|
| A.                                     | Roles and aspirations        |
| B.                                     | Family resources             |
| C.                                     | Integrated management skills |
| D.                                     | Family characteristics       |
| E.                                     | Viable alternatives          |
| F.                                     | Personal values              |

(3)

**TOTAL FOR SECTION A: [50]**

SECTION B

**QUESTION 2**

**Start Question 2 on a new page in your answer book.**

Simon and Maybel are celebrating their third wedding anniversary with a special dinner for their friends. Study the menu below and answer the questions that follow.

|                                         |
|-----------------------------------------|
| <b>MENU</b>                             |
| <b>DINNER</b>                           |
| HAKE MAYONNAISE                         |
| TOMATO SOUP<br>CROUTONS                 |
| BEEF STEW<br>RICE                       |
| TOMATO AND ONION SALAD<br>AVOCADO MOULD |
| CREAMPUFFS                              |
| 15 JULY 2005                            |

- 2.1 Redraw the table below in your **answer book** and use it to answer questions 2.1.1 – 2.1.4.

| 2.1.1                   | 2.1.2                 | 2.1.3                 | 2.1.4              |
|-------------------------|-----------------------|-----------------------|--------------------|
| <b>Five food groups</b> | <b>Food from menu</b> | <b>Cooking method</b> | <b>Medium used</b> |
|                         |                       |                       |                    |

- 2.1.1 Name the **FIVE food groups** represented in the menu. (5)
- 2.1.2 Using **ONLY** foods **from** the menu, give an example of each food group. (5)
- 2.1.3 Suggest a method of cooking appropriate for each food in Question 2.1.2. (5)
- 2.1.4 Identify the cooking **medium** used in the suggested cooking method. (5)
- 2.2 While making white sauce, care is taken **NOT** to brown the roux. While making gravy, the roux **IS** browned and although the same amount of flour is used, the gravy is thinner. Explain the **difference** in the results. (3)
- 2.3 The fresh tomato soup **curdled** while Maybel was making it, and she had to replace it with tinned tomato soup.
- 2.3.1 Explain **why** the soup curdled. (2)
- 2.3.2 Suggest how this could have been **prevented**. (2)
- 2.3.3 Would the **fresh** tomato soup have the same **Vitamin C** content as the **tinned** tomato soup? Give reasons for your answer. (3)

**[30]**

### QUESTION 3

**Start Question 3 on a new page in your answer book.**

- 3.1 Explain the **changes** that would take place in **connective tissue** in the meat that has been simmering for 60 minutes. (4)
- 3.2 **Rigor mortis** took place in the meat before it was cut up. What happens when rigor mortis takes place **and** how does it affect meat? (4)
- 3.3 The difference between a salad dressing and a mayonnaise is that **mayonnaise** does **not separate** when left to stand. Identify the **substance** responsible for this and explain its function. (4)
- 3.4 Describe the effect of the following additives on **beaten egg-white foam**:
- 3.4.1 Egg-yolk
- 3.4.2 Lemon juice
- 3.4.3 Salt
- 3.4.4 Sugar added at the beginning of the beating time (4)



- 3.5 The avocado mould was **not a success**. Suggest reasons for each of the following problems:
- 3.5.1 The cubes of avocado were brown in colour.
  - 3.5.2 The mould tasted of curry, although NO curry was used.
  - 3.5.3 The mould shrank and had a watery appearance.
  - 3.5.4 The mould would not come out of the container. (4)
- 3.6 The tomatoes were left to ripen on the vine in full sunshine. Consider this ripening process and give reasons for the following **changes** that take place when **fruit ripens**.
- 3.6.1 The colour changes.
  - 3.6.2 The texture softens.
  - 3.6.3 The fruit becomes sweeter. (3)
- 3.7 **Vitamin C** is easily lost during the preparation of vegetables. Suggest how the following steps could **prevent the loss** of this vitamin.
- 3.7.1 Vegetables are bought in small quantities.
  - 3.7.2 Vegetables are stored in a cool place.
  - 3.7.3 Vegetables are not soaked for prolonged periods. (3)
- 3.8 List FOUR **characteristics** of perfectly baked cream puffs (choux pastry). (4)
- [30]**

**TOTAL FOR SECTION B: [60]**

## SECTION C

### QUESTION 4

**Start Question 4 on a new page in your answer book.**

- 4.1 Explain what could cause the **quality** of the following foods to deteriorate during **storage**:
- 4.1.1 Potatoes
  - 4.1.2 Milk powder
  - 4.1.3 Rice
  - 4.1.4 Eggs
  - 4.1.5 Fish (5)
- 4.2 Simon is often away on business. When he is not at home, Maybel often **eats out** or has **take-aways**. She also eats a lot of **snacks** while watching T.V.
- 4.2.1 Explain the problems associated with this choice of food. (4)
  - 4.2.2 Name THREE groups of people who will benefit from snacking. (3)

- 4.3 André, (Maybel's brother) passed Grade 12 at a private school last year. He wants to go to university but does not have the money. He looks everywhere in the labour market but does not find a suitable job. His neighbours and friends all help him to look. Finally, he answers an advertisement placed by an international firm and he gets a job in America picking fruit for the summer.

Study the underlined words in the paragraph above and decide whether each one belongs in the **micro** or **macro environment**. Copy the table in your answer book and answer the question.

| MICRO ENVIRONMENT | MACRO ENVIRONMENT |
|-------------------|-------------------|
|                   |                   |

(8)

- 4.4 Explain each of the following **characteristics of resources**.

4.4.1 Usefulness

4.4.2 Accessibility

4.4.3 Interchangeability

(3)

- 4.5 Name the following **types of decisions**:

4.5.1 A decision to choose a good neighbourhood to live in

4.5.2 A decision that everyone in the family will keep their room clean

4.5.3 A decision to travel by bus to work as it is cheaper than taking the car

(3)

- 4.6 Maybel approaches the **care and cleaning** of her home in a totally different way to that of her great-grandmother. Expand on that statement with reference to:

4.6.1 Time available

4.6.2 Standards for cleaning the house

(4)

**[30]****TOTAL FOR SECTION C: [30]**

## SECTION D

## QUESTION 5

Start Question 5 on a new page in your answer book.

- 5.1 Read the case study below and answer the questions that follow.

Simon and Maybel budget carefully every month. Simon earns a gross salary of R7 000 per month. He has R2 480 deducted for income tax, R800 for pension and R500 for medical aid. Maybel earns R4 690 after her deductions have been taken off. She farms with chickens to supplement their food and sells the eggs for extra income. Simon purchases a lottery ticket twice a week.

- 5.1.1 Explain the difference between **gross** and **net income**. (2)
- 5.1.2 List FOUR pitfalls that Simon needs to be aware of to ensure his **pension** will be **adequate** when he **retires**. (4)
- 5.1.3 Classify **money income** into THREE classes and give ONE example of each class of income. (6)
- 5.2 Read the passage below and answer the questions that follow.

As they both go out to work and their present house is big, they share the housework. Maybel spends energy cleaning the bathroom and thoroughly vacuums the carpet over the weekends. Simon draws up a shopping list for the week's groceries and often brings home a small gift to show Maybel he appreciates her. Simon studies in the evening while Maybel sometimes looks for recipes on the internet. They each have the same amount of money to spend on their hobbies.

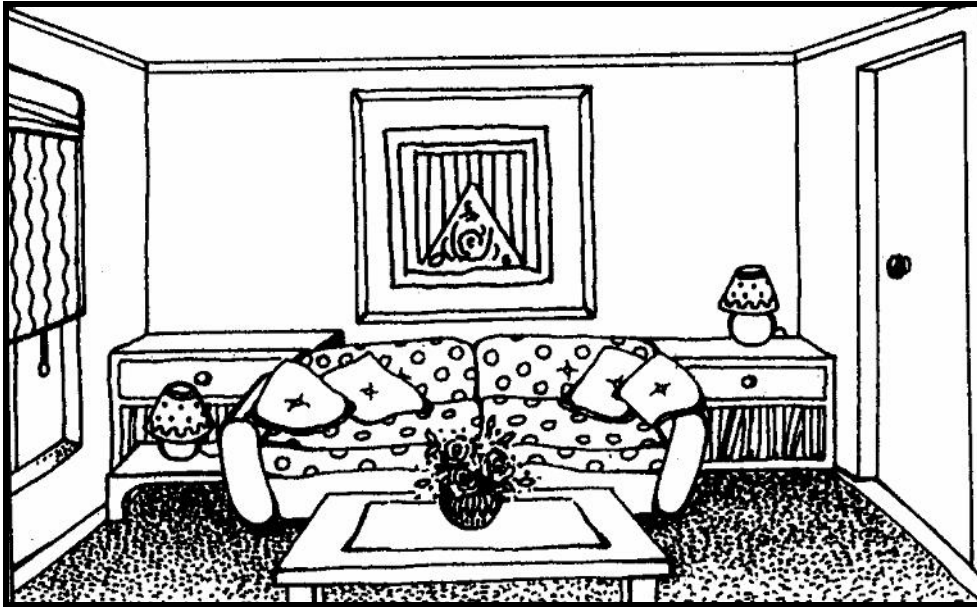
- 5.2.1 Identify FOUR **non-human resources** from the case study. (4)
- 5.2.2 Identify FOUR **human resources** from the case study. (4)
- 5.3 Name THREE factors that should be considered when **planning a functional room**. (3)
- 5.4 Explain how **static** muscle action can contribute towards **muscle fatigue**. (3)
- 5.5 Suggest FOUR basic **storage principles** for the storage of clothing. (4)

[30]

## QUESTION 6

Start Question 6 on a new page in your answer book.

Study the sketch of a lounge and answer the question that follows:

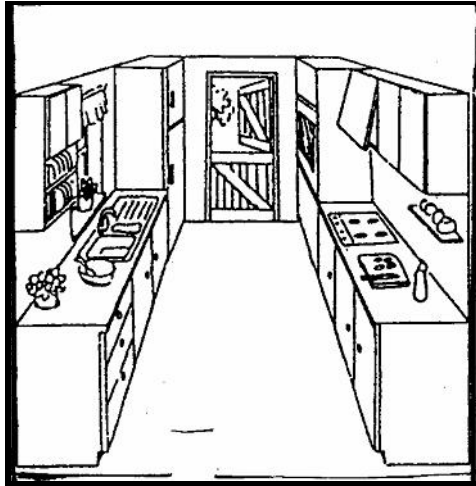


6.1 Identify the design element or principle that is described below.

- 6.1.1 The use of a **fluffy** carpet
- 6.1.2 The type of **lines** in the painting on the wall
- 6.1.3 **Repetition** of the spots on the couch
- 6.1.4 The big **picture** on the wall
- 6.1.5 The type of **balance** found on the couch
- 6.1.6 Everything in the room looks good together.

(6)

6.2



- 6.2.1 Identify the **kitchen layout** in the floor plan above. (1)
- 6.2.2 Name **THREE other** types of **kitchen layout**, (not the one mentioned in Question 6.2.1). (3)
- 6.3 **Apart** from leaving the windows and doors open, name **FOUR** ways to keep this house **cool** in the hot summer months. (4)
- 6.4 Simon is concerned with **safety** in the home, particularly the **swing door** between the kitchen and the lounge, the **glass** patio door as well as the **low-level** windows. Suggest some **precautions** he can take. (4)
- 6.5 Maybel often runs short of time to do all the things she needs to do in a day. Suggest **FIVE** guidelines that she could follow to use her **time more effectively**. (5)
- 6.6 Name **FOUR** advantages of **shared responsibility** in a household. (4)
- 6.7 A young couple have a three-year-old toddler. Explain how this young family can achieve **solidarity** within their family unit. (3)

[30]

TOTAL FOR SECTION D: [60]

TOTAL: 200

END