

**GAUTENG DEPARTMENT OF EDUCATION
SENIOR CERTIFICATE EXAMINATION**

HOME ECONOMICS HG

FEB / MAR 2006

TIME: 3 hours

MARKS: 300

INSTRUCTIONS:

- ALL the questions are **COMPULSORY**.
- Number your answers exactly as the questions are numbered.
- Commence (start) each question on a **new page**.
- Answer **Question 1A (1.1 – 1.21)** (multiple-choice questions) of Section A on the **answer sheet** on the **inside cover** of your **answer book**.
- Answer **Question 1B (1.22 – 1.30)** of **Section A** as well as **Sections B, C** and **D** in your **answer book**.
- Use the suggested time guide below.

SUGGESTED TIME GUIDE

QUESTION NUMBER		MARKS	TIME
Section A	Question 1	100	60 minutes
Section B	Question 2	40	24 minutes
	Question 3	40	24 minutes
Section C	Question 4	40	24 minutes
Section D	Question 5	40	24 minutes
	Question 6	40	24 minutes
TOTAL		300	180 minutes

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**.

NB. Where more than one cross appears in any answer, **no marks** will be awarded for that question.

EXAMPLE: Microwaves are _____ waves.

- A. light
- B. radio
- C. infra-red
- D. electromagnetic

ANSWER:

A	B	C	<input checked="" type="checkbox"/>
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1.1 An intake of _____ will normally prevent **constipation**.

- A. wholewheat bread and spinach
- B. feta cheese and potatoes
- C. milk and refined grain
- D. fish and chips

1.2 The addition of **excess sugar** when making a milk-tart filling will _____.

- A. increase lumping of the starch granules
- B. result in a thicker filling
- C. hydrolyse the starch into dextrin
- D. retard gelatinisation

1.3 Meat that is **roasted in the oven** should be salted _____.

- A. before it is cut to help browning of the surface
- B. after the surface has been browned or browning will be prevented
- C. before the meat is put in the oven to prevent the loss of meat juices
- D. just before the meat has finished cooking otherwise it will be too dry

1.4 When **hake** is battered and deep fried _____.

- A. the nutrient value is increased and the fish is more attractive
- B. the energy value is increased but the fish falls apart
- C. the appearance is more attractive and it is more easily digested
- D. the nutrient value is lowered and the fish is harder to digest

- 1.5 Which of the dishes below are suitable for a person on a **high-protein diet**?
- A. Fruit salad and ice cream
 - B. Egg and cheese sandwich
 - C. Potato and green pepper salad
 - D. Cauliflower and white sauce
- 1.6 **Frozen meat** should first be defrosted before cooking it in a microwave because _____.
- A. the meat may explode as a result of the water changing to steam too rapidly
 - B. the corners and sides will defrost first, liquid will form and it will overcook
 - C. the higher the water content of the meat, the slower it will cook
 - D. ice heats up ten times faster than water that has been boiled
- 1.7 Properties of fresh **salt-water fish** are _____.
- A. pale white gills and a fresh smell
 - B. shiny, protruding eyes and bright pink gills
 - C. a sharp ammonia smell and a shiny moist skin
 - D. a soft, limp body with a dry, dull skin
- 1.8 The **browning** of the surface of **sliced banana** is caused by _____.
- A. caramelising of sugars and enzyme action
 - B. amino acid and sugar interaction
 - C. exposure to air and enzyme action
 - D. micro-organisms in the fruit being exposed to air
- 1.9 Cheese is relatively indigestible, therefore it should _____.
- A. be grated and served at the beginning of a meal
 - B. be grated and served at the end of a meal
 - C. never be served with starch in the middle of a meal
 - D. be served in large amounts after a meal that was low in proteins
- 1.10 The baking temperature of choux pastry should be lowered after 35 minutes to ensure that _____.
- A. the cavities in the puffs are dry and the walls are rigid
 - B. it is properly risen, light brown and has a crisp texture
 - C. the protein structure coagulates and a light golden colour develops
 - D. sufficient steam forms and a good cavity develops in the middle

- 1.11 Select the combination of **reasons** why water should be **boiling** before food is placed into it.
1. The cooking period is shortened.
 2. The heat is transmitted throughout the food.
 3. Micro-organisms are destroyed.
 4. Nutrients are retained better.
- A. 1 and 2
B. 2 and 3
C. 3 and 4
D. 1 and 4
- 1.12 Perfringen poisoning occurs in _____.
- A. bean soup and lamb stew
B. rump steak and milk powder
C. egg custard and buttermilk
D. curried eggs and tinned sardines
- 1.13 Cardy is on a **slimming diet** and includes only **white fish** in her diet. Select from the list below the combination that fulfils her requirements.
- A. Haddock and herring
B. Trout and sardines
C. Hake and kingklip
D. Kabeljou and salmon
- 1.14 The decision **not to cheat** in the exams _____.
- A. is based on how other social decisions are made
B. has to do with multiple goals and scarce resources
C. is based on the intrinsic values of a person
D. is done on the spur of the moment without thinking
- 1.15 Choose the body movements or positions that are known as **static muscle tension**.
1. Beat eggs with a hand beater at an even speed.
 2. Hang curtains at a high window with arms stretched out.
 3. Wash dishes at a sink that is 75 mm below elbow height.
 4. Sit and work at a surface that is at elbow height.
- A. 1 and 2
B. 2 and 3
C. 2 and 4
D. 3 and 4

- 1.16 Besides a pension, the following can also be sources of retirement income.
- A. Endowment insurance and annuities
 - B. Interest on savings and income tax
 - C. Rent and life insurance
 - D. Lottery tickets and income from wheat harvests
- 1.17 A **high ceiling** will appear **lower** when _____.
- A. horizontally striped curtains are used
 - B. vertical lines are painted on the walls
 - C. the ceiling is painted a lighter shade than the walls
 - D. small dark green pelmets are used
- 1.18 Identify the correct example of the design principle **informal balance**.
- A. An intricate fireplace against a white wall with a mirror above the fireplace
 - B. Two easy chairs on one side are in harmony with a mirror above the fireplace
 - C. A symmetrical arrangement of identical chairs with a fireplace as the focal point
 - D. Identical tables and lamp stands on each side of the sofa with a picture placed centrally above the sofa
- 1.19 Which of the following statements are important for a **corridor-type kitchen**?
- A. The space between the cupboards should be one metre.
 - B. This layout is often used in a large, spacious kitchen.
 - C. There is an automatic thoroughfare in the kitchen.
 - D. This kitchen is used in a flat where space is limited.
- 1.20 A **non-contact** person _____.
- A. easily shares workspace and feels comfortable with people near to him/her
 - B. shies away from contact with other people and chooses to work alone
 - C. does not enjoy working alone and easily shares a workspace
 - D. enjoys having people near to him/her and chooses to work in a small area
- 1.21 A family interacts with the **political system** when its members _____.
- A. get support from the community and stand for election
 - B. exchange goods for labour and buy goods and services
 - C. are registered on the voters' role and obey the laws
 - D. take part in community activities and support their functions
- 21x2=(42)

QUESTION 1B

Answer the rest of this section in your answer book.

- 1.22 Choose the reason for failure in **Column B** for each of the **failed dishes** in **Column A**. Write only the question numbers (1.22.1 – 1.22.6) **below one another** in your answer book and then the letter (A – H) of your choice next to each question number, e.g. 1.24.6 - J.
NOTE: Use each reason only **once**.

COLUMN A FAILED DISH		COLUMN B REASON FOR FAILURE	
1.22.1	A raspberry jelly is very firm with a layer of water surrounding it.	A	Excess fruit acid present
1.22.2	Mixture has fruit pieces at the bottom	B	Proteolytic enzyme present
1.22.3	Lemon mousse with a soft texture	C	Too little sugar added.
1.22.4	Bavarian cream that did not hold its shape	D	Mixture was allowed to gelate for too long a period
1.22.5	Pineapple jelly with fresh pineapple chunks in it did not set.	E	Temperature changes during cooling
1.22.6	Spanish cream that curdled	F	Mixture too set when poured into container
		G	Insufficient gelatine added
		H	Mixture was poured into mould before gelatine had started to set

(6)

- 1.23 Match the **food system** in **Column B** to the **food/dish** in **Column A**. Write the question numbers (1.23.1 – 1.23.6) **below one another** in your answer book and then the letter (A – H) of your choice next to each question number, e.g. 1.23.7 – J.

COLUMN A FOOD/DISH		COLUMN B FOOD SYSTEM	
1.23.1	Fruit salad	A	Suspension
1.23.2	Butter	B	Gel
1.23.3	Curdled egg custard	C	Air in liquid foam
1.23.4	Soft meringue	D	Water in oil emulsion
1.23.5	Mayonnaise	E	Mixture
1.23.6	Poached egg	F	Air in solid foam
		G	Oil in water emulsion
		H	Compound

(6)

- 1.24 Choose the **rule** in **Column B** that applies to the **cooking method** in **Column A**. Write only the question numbers (1.24.1 – 1.24.6) **below one another** in your answer book and then the letter (A – H) of your choice next to each question number, e.g. 1.24 – J.

COLUMN A COOKING METHOD		COLUMN B RULE	
1.24.1	Steamed chocolate pudding	A	The water must just cover the food.
1.24.2	Stew prepared in pressure cooker	B	Lots of liquid should be used.
1.24.3	Stewed apricots	C	Cover food with wax paper to prevent it from becoming soggy.
1.24.4	Deep-fried potato chips	D	Follow instructions carefully and do not fill more than three quarters full.
1.24.5	Roasted lamb chops	E	Do not use metal containers.
1.24.6	Microwaved beef stew	F	Food should never be pierced with a fork.
		G	Food must be dry before being cooked.
		H	Do not fill the pan more than half way with water.

(6)

- 1.25 Match the **description** in **Column B** with the correct **egg-foam stage** in **Column A**. Write only the question numbers (1.25.1 – 1.25.4) **below one another** in your answer book and the letter (A – D) of your choice next to the corresponding question number, e.g. 1.25.5 – E.

Choose an **example** in **Column C** that uses the **stage** in **Column A**. Write only the Roman numeral (i-vi) next to the corresponding question number e.g. 1.25.5 – E – vii.

COLUMN A EGG-FOAM STAGE		COLUMN B DESCRIPTION OF STAGE		COLUMN C EXAMPLE OF USE	
1.25.1	Foaming stage	A	The mixture is glossy and smooth.	i	Soft meringue
1.25.2	Dry-foam stage	B	The egg white becomes whiter and less foamy.	ii	Mayonnaise
1.25.3	Soft peak stage	C	The foam separates.	iii	Cheese soufflé
1.25.4	Stiff peak stage	D	The egg white is runny and flows easily.	iv	Unusable
				v	Clear soup
				vi	Egg custard

(8)

- 1.26 Choose an **example in connection with the Comrades Marathon** in **Column B** that best suits the **management term** in **Column A**. Write the question numbers (1.26.1 – 1.26.7) **below one another** in your answer book and then the letters (A–I) of your choice next to each question number, e.g. 1.26.8 – J.

COLUMN A MANAGEMENT TERM		COLUMN B EXAMPLE IN CONNECTION WITH THE COMRADES MARATHON	
1.26.1	Values	A	Lincoln wants to finish the 2006 marathon.
1.26.2	Human Resources	B	Lincoln must exercise more for the next marathon.
1.26.3	Goals	C	Lincoln chooses pure cotton running clothes over acrylic.
1.26.4	Standards	D	Lincoln is very enthusiastic about his exercise programme.
1.26.5	Evaluation	E	Lincoln found a wallet in the change room and handed it in to the organisers.
1.26.6	Planning	F	Lincoln often communicates with his trainer.
1.26.7	Alternatives	G	Lincoln can get to the marathon by travelling by bus or train.
		H	Lincoln sets up a schedule that suits his training programme for the marathon.
		I	Lincoln registered for this Comrades Marathon last year.

(7)

1.27

A young student moved into a **LARGE BEDSITTER** on the **SOUTH SIDE** of a building.

With reference to the above situation, choose **TWO reasons** from **Column B** that **best suit** the **colour and texture** used in **Column A**. Write only the question numbers (1.27.1 – 1.27.4) **below one another** in your answer book and then the letter (A – D) of your choice next to the corresponding question number, e.g. 1.27.5 – E.

COLUMN A		COLUMN B	
COLOUR AND TEXTURE		REASON	
1.27.1	Walls: Light pink	A B C D	Light colours let a room appear more spacious. Warm colours give a sunny effect. Light colours make a room appear smaller. Light colours let a room appear colder. (2)
1.27.2	Curtains: Rough texture, same colour as the walls	A B C D	Does not break the surface and gives a spacious effect Will make the room appear smaller Coarse texture too overwhelming for a small room Course texture makes a room appear bigger (2)
1.27.3	Carpet: Wall-to-wall – Maroon in colour	A B C D	Makes a room appear spacious Allows the room to appear warmer Gives the room smaller appearance Room appears colder (2)
1.27.4	Accessories: Large copper ornaments Green scatter cushions	A B C D	Gives a cold and shiny appearance Warm and sunny Provides emphasis and variety Room appears smaller (2)

1.28 Select from the list below **FIVE factors that will make meat more tender**. In your answer book write down the question number (1.28) and the **FIVE** letters (A – J) of your choice **below one another**.

FACTORS THAT MAKE MEAT MORE TENDER	
A	A large amount of connective tissue
B	Addition of the enzyme papain
C	Ripening or ageing of the meat
D	Stewed at a moderate temperature
E	Meat has a coarse grain
F	Carcass is cut before rigor mortis is complete
G	The meat is minced
H	Marinate meat in a tomato-based marinade
I	It has a low glycogen content
J	Amount of marbling present

(5)

- 1.29 Select from the list below **FOUR INPUT components** that form part of the management process. Write down the question number (1.29) and the **FOUR** letters (A – H) of your choice **below one another** in your answer book.

INPUT COMPONENTS THAT FORM PART OF THE MANAGEMENT PROCESS	
A	The basic needs necessary to sustain life
B	The yardstick or model by which comparisons are made
C	The standard that determines a person's choice between alternatives
D	A choice between different available alternatives
E	Resources available to an individual or group
F	The planning of a schedule that, when implemented, would result in a goal being achieved
G	The goals an individual sets and for which he strives
H	The range of activities in a plan

(4)

- 1.30 Select from the list below **FOUR statements applicable to the room** below. In your answer book write the question number (1.30) and the **FOUR** letters (A – H) of your choice **below one another**.



STATEMENTS MOST APPLICABLE TO THE ROOM	
A	The horizontal lines of the blinds give the illusion of space.
B	The diagonal lines in the picture give an illusion of increased space.
C	Rhythm is achieved by the progressive change in size of the pot plants on the desk.
D	The type of lamp in the room is a poor choice for a study desk.
E	The chair is very functional because it supports the shoulders.
F	The emphasis in the room is the desk pad in front of the chair.
G	The blinds can also be used as part of the cooling component of the room.
H	The space under the bed is well-utilised.

4x2=(8)

TOTAL FOR SECTION A: [100]

P.T.O.

SECTION B

QUESTION 2

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

- 2.1 Explain how some micro-organisms can be used **advantageously** in the preparation, preservation and processing of food. (4)
- 2.2 Name FOUR **general rules** a restaurant can apply to prevent **food poisoning**. (4)
- 2.3 Explain the **changes** that take place when a loaf of bread is baked in an oven, with reference to:
- 2.3.1 Size (2)
- 2.3.2 Brown colour (2)
- 2.3.3 Taste (4)
- 2.4 Explain the following statements:
- 2.4.1 Chicken breasts on a grill will take **longer** to cook than rump steak. (2)
- 2.4.2 A **moderate heat** should be used to cook meat dishes. (2)
- 2.4.3 A tart filling thickened with starch becomes **thinner** if stirred too **fast for a long time**. (4)
- 2.5 Sara wants to prepare a dinner for her mother's 60th birthday. She does **not have much money available**.

Redraw the table below in your answer book and answer the questions that follow in table format.

2.5.1 MANAGEMENT STEPS	2.5.2 APPLICATION

- 2.5.1 List FOUR **management steps** in **MEAL PLANNING** that are necessary to ensure Sara achieves her goal. (4)
- 2.5.2 Explain by giving relevant examples how Sara can achieve her goal by using the steps in Question 2.5.1. (4)
- 2.6 Analyse the **effect of heat** on **cabbage** during cooking AND evaluate the effect heat will have on **nutritional value, taste and colour**. (8)
- [40]

QUESTION 3

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

3.1 Study the recipe below and answer the questions that follow:

CHOUX PASTRY	
INGREDIENTS	METHOD
250 ml water 125 ml shortening 250 ml flour 5 ml salt 3-4 eggs, beaten	Step 1 Bring the water and the shortening to the boil. Remove immediately from the heat.
	Step 2 Add the sifted flour and salt all at once. Heat, stirring vigorously, until the mixture comes away from the sides of the pan.
	Step 3 Remove from heat and leave to cool. Gradually add beaten eggs, stirring vigorously.
	Step 4 Drop spoonfuls of dough or pipe onto a greased baking tray.
	Step 5 Bake at 200°C for ten minutes. Reduce temperature to 180°C and bake for a further 15 – 20 minutes.

- 3.1.1 Name the **gas** used in the recipe as a raising agent. (1)
- 3.1.2 Explain why the water and shortening are **boiled together** in step 1. (2)
- 3.1.3 If water and shortening are not removed **immediately** from the heat, it can contribute to **failed** choux pastry. Explain what the consequences could be. (2)
- 3.1.4 Explain the importance of the **two different temperature** settings in step 5. (2)
- 3.1.5 Identify the **ingredient** that makes gelatinisation possible. (1)
- 3.1.6 Explain the following changes that take place during the **gelatinisation process** of choux paste. (8)
- The granules swell
 - Viscosity increases
 - Becomes translucent
 - Develops a cooked taste

- 3.2 Name and describe **TWO methods** of **milk coagulation**. (4)
- 3.3 List **FOUR** processes that will **maintain or improve** the **quality** of milk. (4)
- 3.4 Explain why lettuce goes **limp** when stored uncovered in the fridge. (2)
- 3.5 Copy the table below in your answer book and answer the question that follows.

COAGULATION	RAISING AGENT	EMULSIFIER

Select **TWO** dishes from the list below where eggs are used to illustrate each of the functions in the table.

Egg custard, fried fish, boiled eggs, mayonnaise, consommé, butter cake, scones, lemon soufflé, meringues, meatloaf, croquette, wholewheat rolls.

- 3.6 Plan a **balanced packed lunch** for a Grade 12 girl to take to school. She will be playing a soccer match at 4 p.m. The lunch will be needed straight after school closes at 2 p.m. (8)
- [40]

TOTAL FOR SECTION B: [80]

SECTION C

QUESTION 4

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

- 4.1 The following ingredients were used to prepare a casserole:

stewing steak, stock cubes, textured plant protein (TPP), potatoes, onions, peas and carrots

- 4.1.1 Define **textured plant protein**. (2)
- 4.1.2 Identify **THREE** ingredients from the list that will **expand** the dish. (3)
- 4.1.3 Explain why meat analogues are **in demand** these days. (3)

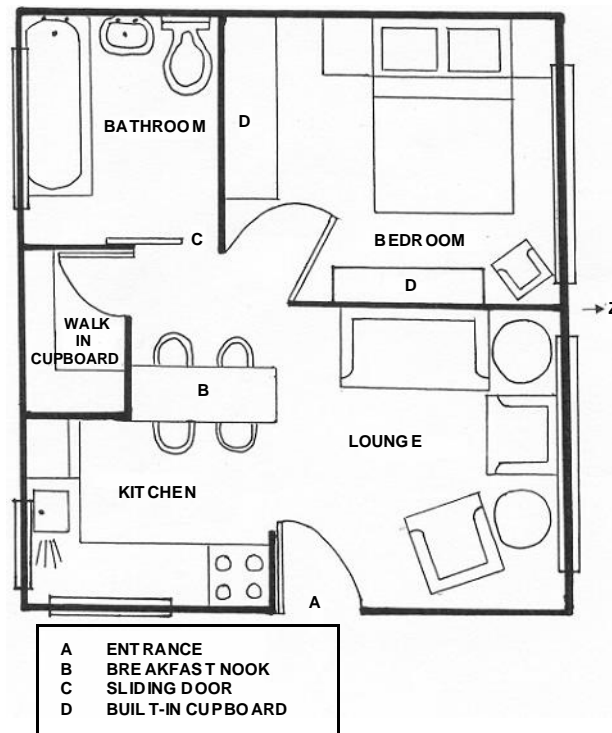
4.2 Explain the following statement:

Cheese is added to a white sauce at the **end** of the cooking process (5)

4.3 Explain why **baked fish** is usually served with a **sauce**. (3)

4.4 Name **THREE** guidelines to remember when buying **fresh fruit**. (3)

4.5 Thabang and Beverly, a young newly-wed couple, want to change a garage into a small flat. Thabang is still studying and Beverly's favourite hobby is to prepare unusual meals. The plan below was drawn up by an architect.



4.5.1 Evaluate whether the plan is **functional** for this couple. (8)

4.5.2 Suggest two reasons for using fluorescent lights in the flat. (2)

4.5.3 Name **THREE** ways in which **good ventilation** can be introduced into the kitchen. (3)

4.5.4 Explain, using relevant examples, why **traffic lanes** in this plan would be considered good. (4)

4.5.5 Explain the benefit of Thabang and Beverly **sharing** the **responsibility** of **managing** their home. (4)
[40]

TOTAL FOR SECTION C: [40]

SECTION D

QUESTION 5

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

5.1 Copy the table below in your answer book and give an **example** of each of Maslow's Hierarchy of Human Needs.

MASLOW HIERARCHY OF HUMAN NEEDS	EXAMPLE
5.1.1 Physical	
5.1.2 Safety	
5.1.3 Social	
5.1.4 Esteem/ego	
5.1.5 Self-actualisation	

(5)

5.2 Identify the type of **human resource** in each of the following statements:

5.2.1 Jack has two weeks in which to hand in a portfolio assignment.

5.2.2 Jack is enthusiastic and motivated to hand in his portfolio assignment.

5.2.3 Jack should plan according to the management process to achieve good results.

5.2.4 Jack rides his bicycle to attend extra science lessons. (4)

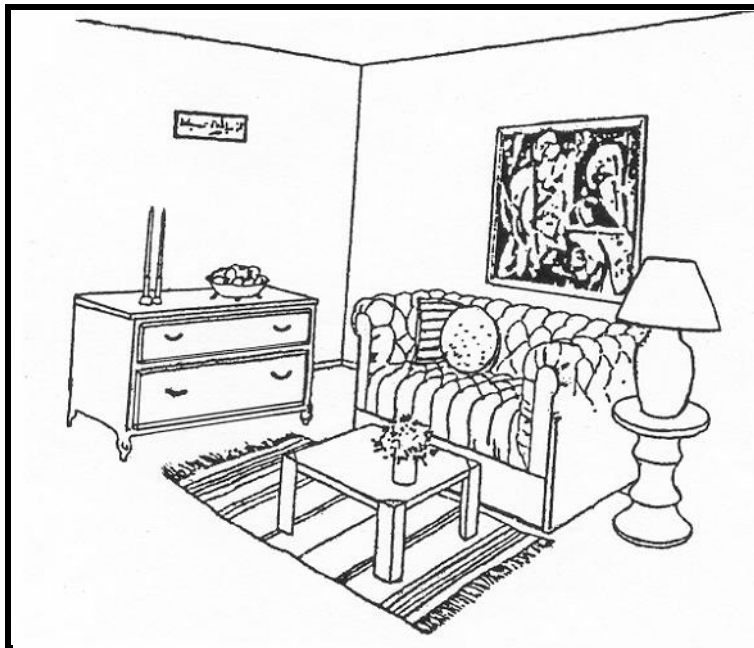
5.3 Explain how a family can **evaluate** if their budget will be successful. (3)

5.4 Explain why it is **important** for a family to set goals when doing **financial planning**. (4)

5.5

Sarah, Jim and their two school-going children live in a flat. Both parents work and the family cannot afford the services of a helper. It is essential that all family members contribute to the household tasks.

- 5.5.1 Name FOUR **guidelines** that should be taken into consideration when **household tasks** are **divided** between family members. (4)
- 5.5.2 Sara's **positive attitude** helps her to be more effective in the performance of household tasks. Suggest FIVE other **human resources** that will assist her. (5)
- 5.6 Differentiate between **extensive** and **routine** decisions. (2)
- 5.7 Explain why **values** determine **goals** AND **standards**. (4)
- 5.8 Study the sketch below and answer the questions that follow.



- 5.8.1 Identify THREE examples of **poor** proportion. (3)
- 5.8.2 Identify TWO examples where **repetition** is used to illustrate **rhythm**. (2)
- 5.8.3 Identify and give a characteristic of the **type of balance** achieved by the furniture arrangement in the sketch. Determine how the balance is achieved in the room. (4)

[40]

QUESTION 6

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

6.1 Read the case study and answer the questions that follow.

Linda and Petrus Joubert have been married for four years and have a six-month-old baby. Linda is looking for a suitable day mother. When she finds one, she wants to return to her career as an engineer. Petrus feels strongly that she should stay at home as he, as the breadwinner, earns enough. He grew up in a home where his mother was a fulltime homemaker. Linda's mom was a fulltime career woman and all her friends are working mothers. She wants to resume her career.

- 6.1.1 There is definitely a conflict situation in this family. The cause of the conflict situation is a **difference** in **values** of both parties.
Identify how the **socialising process** influenced the values of Petrus and Linda. (4)
- 6.1.2 Linda uses her **time** effectively. Explain FIVE **guidelines** that contribute to this efficiency. (5)
- 6.2 It is very important to maintain a balance in **family solidarity**. Explain how too strong a relationship could be detrimental to the family. (4)
- 6.3 An inability to communicate is a basic cause of conflict. Name AND discuss the **parts** of the communication process / cycle. (8)
- 6.4 Electrical points (sockets) are potentially dangerous. Name FOUR **safety measures** that could be taken to ensure electrical safety. (4)
- 6.5
- Neo a Grade 12 learner wants to study after she leaves matric, but has no money. She can study part-time and work to earn enough money OR she can take a study loan from the bank and study full-time. (7)

Using the steps below A – E of the decision-making process and the information in the case study, help Neo to solve her problem.

STEPS IN DECISION-MAKING PROCESS		
A	Identify the problem	(1)
B	Identify the alternatives	(2)
C	Consider the consequences of ONE of the alternatives	(2)
D	Make a decision	(1)
E	Evaluate the decision	(1)

6.6

Different **ways** in which the **muscles** are used affect the degree of fatigue that is experienced when work is carried out.

Analyse the above statement AND evaluate the **impact** on the human body. (8)
[40]

TOTAL FOR SECTION D: [80]

TOTAL: 300

END