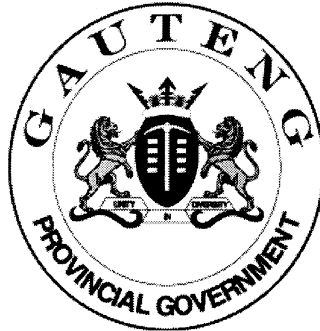


SENIOR CERTIFICATE EXAMINATION



FEBRUARY / MARCH

2007

HOME ECONOMICS

HG

HOME ECONOMICS HG

721-1/0 E



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18 pages

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**GAUTENG DEPARTMENT OF EDUCATION
SENIOR CERTIFICATE EXAMINATION**

HOME ECONOMICS HG

TIME: 3 hours

MARKS: 300

INSTRUCTIONS:

- ALL the questions are **COMPULSORY**.
- Number your answers exactly as the questions are numbered.
- Please write neatly and clearly.
- Begin **EACH QUESTION** on a **new page**.
- Answer **Question 1A** (multiple-choice questions) (1.1 – 1.20) on the **answer sheet** on the **inside cover** of your **answer book**.
- Answer **Question 1B** 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 clearly 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	D
---	---	---	--------------

- 1.1 Identify the methods of **heat transference** that take place when a potato is cooked on a **braai**.
- A. Radiation and conduction
 - B. Conduction and convection
 - C. Conduction and evaporation
 - D. Evaporation and conduction (2)
- 1.2 Identify the group of dishes that will **complement** a **lentil lasagne**.
- A. Potato salad and trifle
 - B. Rice salad and chocolate soufflé
 - C. Mixed green salad and slices of fruit
 - D. Three bean salad and steamed pudding (2)
- 1.3 The **Maillard reaction** takes place between _____ in the presence of **heat**.
- A. proteins and fats
 - B. proteins and minerals
 - C. carbohydrates and proteins
 - D. carbohydrates and minerals (2)
- 1.4 Foods most likely to cause **food poisoning** are _____.
- A. undercooked kebabs, garlic bread, carrot mould
 - B. bread rolls, lettuce and half-cooked tomatoes
 - C. grated cheese, grape juice, cabbage salad
 - D. ham roll, stuffed eggs, thick milkshake (2)

- 1.5 The brown discolouration of an avocado pear can be **prevented** by _____.
- A. inactivating the enzyme
 - B. adding salt or smoking it
 - C. freezing to control the mould growth
 - D. peeling to remove any micro-organisms
- (2)
- 1.6 When **cornflour** is used **to thicken** gravy, a **translucent sol** forms as a result of _____ in the cornflour.
- A. the high protein content
 - B. concentric starch molecules
 - C. straight amylose chain-type molecules
 - D. branched chains of amylopectin molecules
- (2)
- 1.7 Identify the food most likely to cause **milk to curdle** if used in a cream soup.
- A. Peas
 - B. Carrots
 - C. Potatoes
 - D. Tomatoes
- (2)
- 1.8 A **baked custard** is cooked in a **bain-marie** to _____.
- A. gelatinise the milk proteins
 - B. prevent the cream from curdling
 - C. ensure the sugar does not caramelize
 - D. allow the even coagulation of egg protein
- (2)
- 1.9 The making of a **fish soufflé** is based on the ability of _____.
- A. egg to form a soft-peak foam
 - B. milk to emulsify oil and water
 - C. fish to combine a variety of ingredients
 - D. starch to absorb large quantities of water
- (2)
- 1.10 **Sarcoplasm** consists of _____.
- A. blood and emulsified fats
 - B. meat juices and glycogen
 - C. flavour substances and actomyosin
 - D. a variety of nutrients in a watery medium
- (2)
- 1.11 When baking sweet potatoes in the oven, the **starch** will _____.
- A. swell and gelatinise
 - B. coagulate and caramelize
 - C. dextrinise and denature
 - D. deaminise and shrink
- (2)

- 1.12 Which of the following **wall finishes** will make a **small south** facing room appear larger and the ceiling higher?
- A. Large, bright floral wallpaper and an off-white ceiling
 - B. Light coloured walls and a dark ceiling
 - C. Dark orange walls and a light ceiling
 - D. Pale yellow walls and a light ceiling
- (2)
- 1.13 Which of the following will make a **large** room look **smaller**?
- A. Several mirrors placed on the wall
 - B. A limited amount of furniture and accessories
 - C. Having a sofa and chairs supported off the floor on slender legs
 - D. Heavy furniture placed in a formal arrangement away from the walls
- (2)
- 1.14 **Creativity** is a desirable **human resource** which enables one to _____.
- A. develop a positive attitude to work
 - B. apply effective and time-saving methods
 - C. tackle a task with enthusiasm and interest
 - D. be innovative and change existing work habits
- (2)
- 1.15 **Deciding** which recipe would be easiest to use for a child's birthday cake, is a / an _____ decision.
- A. economical
 - B. technical
 - C. routine
 - D. social
- (2)
- 1.16 A family interacts with the **economic system** when they _____.
- A. provide labour in exchange for money and make good consumer choices
 - B. participate in community activities and keep the environment clean
 - C. read the newspaper to keep up to date with current affairs
 - D. vote in the elections and report suspicious activities
- (2)
- 1.17 Which combination of answers is correct with reference to **SOYA**?
1. It is per gram, more expensive than meat.
 2. It has a high concentration of saturated fats.
 3. It expands considerably and absorbs flavour when cooking.
 4. It contains no waste that should be removed before cooking.
 5. It can be stored out of the fridge for a long time before cooking.
- A. 1, 2 and 4
 - B. 1, 3 and 4
 - C. 2, 3 and 5
 - D. 3, 4 and 5
- (3)

1.18 Excess **nutrient loss** occurs during food preparation as a result of _____.

1. grilling food under an infra-red element
2. oxidation of a cube of apple exposed to the air
3. soaking limp lettuce in salt water to make it crisp
4. exposing meat to a high temperature when cooking it
5. cooking food in the microwave and allowing standing time

- A. 1, 2 and 4
- B. 2, 3 and 5
- C. 2, 3 and 4
- D. 3, 4 and 5

(3)

1.19 Identify the correct combination of factors that influence **rational decision-making** by an American family with two teenage daughters.

1. Evaluating the goal
2. Family characteristics
3. Roles and aspirations
4. Identification of the problem
5. Family-related socio-economic factors

- A. 1, 3 and 5
- B. 1, 3 and 4
- C. 2, 3 and 5
- D. 3, 4 and 5

(3)

1.20 Which explanations of the characteristics of **resources** are correct?

1. All resources are interchangeable.
2. Resources are linked to psychomotor values.
3. Standards must be maintained at a high level.
4. The value of each resource should be assessed.
5. Resources can be managed to suit different purposes.

- A. 1, 3 and 5
- B. 2, 3 and 4
- C. 2, 4 and 5
- D. 1, 4 and 5

(3)

(44)

QUESTION 1B

Answer this section in your answer book.

- 1.21 Match the **correct process** in **Column B** to the **method** of processing milk in **Column A**. Write only the question numbers (1.21.1 – 1.21.4) **below one another** in your answer book and then the letter (A – G) of your choice next to the relevant number, e.g. 1.21.5 – H.

COLUMN A METHOD		COLUMN B PROCESS	
1.21.1	Homogenised milk	A	Milk is heated to 104°C – 113°C for 15 – 20 minutes.
1.21.2	UHT milk	B	Milk is heated in evaporating pans to increase the concentration.
1.21.3	Sterilisation	C	Full-cream milk is heated until 50% of the water has evaporated and sugar is added.
1.21.4	Evaporation	D	Milk is forced through fine openings under pressure.
		E	Milk is heated to 140°C for 2 – 4 seconds.
		F	Milk is passed between heated rollers and most of the water is evaporated.
		G	One third of the cream has been removed to make butter.

(4)

- 1.22 Match TWO **examples** in **Column B** with the **term** in **Column A**. Write only the question numbers (1.22.1 – 1.22.3) **below one another** in your answer book and then the TWO letters (A – H) of your choice next to the relevant number, e.g. 1.22.4 – I, J.

COLUMN A TERM		COLUMN B TWO EXAMPLES	
1.22.1	Meat alternative	A	Eggs
1.22.2	Meat analogue	B	Lentils
1.22.3	Meat extender	C	Apple cubes
		D	Thick beef gravy
		E	Soya bean mince
		F	Textured vegetable protein
		G	Bread crumbs in meat balls
		H	Mushrooms with pepper sauce

(6)

- 1.23 Match an **example** in **Column B** with a **colour scheme** 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 – I) of your choice next to the relevant number, e.g. 1.23.7 – J.

COLUMN A COLOUR SCHEME		COLUMN B EXAMPLE	
1.23.1	Triad	A	Red and green
1.23.2	Neutral	B	Red, yellow, blue
1.23.3	Analogous	C	White, grey, black
1.23.4	Complementary	D	Red, pink, maroon
1.23.5	Monochromatic	E	Orange, green, yellow
1.23.6	Split complementary	F	Blue, blue-green, green
		G	Orange, red, green
		H	Yellow, yellow-purple, white
		I	Blue-green, orange, blue-purple

(6)

- 1.24 Match the **example of a family situation** in **Column B** with the **term** 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 relevant number, e.g. 1.24. 7 – I.

COLUMN A TERM		COLUMN B FAMILY SITUATION	
1.24.1	Biological factors	A	Mary packs the ironing away while 2-year-old Sara puts her toys away.
1.24.2	Standard of living	B	Mary's mom and dad gave them money to go on holiday.
1.24.3	Distribution of tasks	C	Mary's house is always very clean and tidy despite frequent visitors.
1.24.4	Income and social skills	D	William changed the oil in Mary's car and Mary sewed him a fancy shirt.
1.24.5	Gender role stereotype	E	William chopped wood and Mary washed dishes.
1.24.6	Human resource of time	F	Mary and William and their friends eat out every Friday evening, but his younger sister cannot afford to join them.
		G	Even though they often disagree, Mary and William plan their budget together.
		H	William comes home from work too late to make supper – Mary does not work and has the afternoon free to cook.

(6)

- 1.25 Match the **explanation** in **Column B** with the **food system** in **Column A**. Write only the question numbers (1.25.1 – 1.25.5) **below one another** in your answer book and then the letter (A – G) of your choice next to the relevant number, e.g. 1.25.6 – H.

THEN

Match the **food example** in **Column C** to the **food system** in **Column A**. Write only the Roman letter (i to vii) next to the relevant question number, e.g. 1.25.6 – H – viii.

COLUMN A FOOD SYSTEM		COLUMN B EXPLANATION		COLUMN C EXAMPLE	
1.25.1	Gel	A	An emulsifier is added to two immiscible liquids	i	Set milk tart filling
1.25.2	Foam	B	A uniform mixture of molecules	ii	Coffee and sugar granules
1.25.3	Solution	C	A gas-in-liquid colloid	iii	Mayonnaise
1.25.4	Permanent emulsion	D	A water-in-oil suspension	iv	Marshmallows
1.25.5	Suspension	E	Solid particles combine to form a network which traps liquid	v	Home-made salad dressing
		F	Particles will precipitate if left to stand	vi	Custard powder and milk mixed together
		G	Oil and water are shaken together until they are mixed	vii	Apple juice

(10)

- 1.26 From the list below, select FIVE factors to consider when **choosing food** for the family described below. Write down the question number (1.26) and the FIVE letters (A – J) of your choice **below one another** in your answer book.

Mr Mpho is a bricklayer. His wife, Eliza, is trying to lose weight. Their two-year-old daughter and his grandmother live with them in a very big house. His in-laws often eat supper with them. Eliza is working long hours but is well organised.

CHOICE OF FOOD FOR THE MPHO FAMILY	
A	Size of family
B	Family income
C	Size of kitchen
D	Type of family
E	Season and climate
F	Activities / occupations
G	Nutritional requirements
H	TV schedule they watch
I	Age and health of family
J	Kitchen equipment available

(5)

- 1.27 Identify from the list below **FOUR advantages of using a pressure cooker**. Write down the question number (1.27) and the **FOUR** letters (A – H) of your choice **below one another** in your answer book.

ADVANTAGES OF USING A PRESSURE COOKER	
A	Food keeps its shape, e.g. potatoes.
B	Cooking time is considerably reduced.
C	Different foods can be cooked together.
D	Food will not burn if stirred occasionally.
E	Fewer nutrients are lost during the cooking process.
F	Tough cuts of meat can be cooked to a tender dish.
G	The food has an appetising flavour and a crisp texture.
H	By filling the pot to the top, large amounts can be cooked at one time.

(4)

- 1.28 Select from the list below **THREE** dishes / foods that use the **ability** of **eggs** to **coagulate**. Write down the question number (1.28) and the **THREE** letters (A – F) of your choice **below one another** in your answer book.

DISHERS / FOODS THAT USE EGG TO COAGULATE	
A	Meatballs
B	Meringues
C	Mayonnaise
D	Crumbed fish
E	Baked custard
F	Milk-loaf

(3)

- 1.29 Select from the list below **FOUR** points that are **good budgeting practice**. Write down the question number (1.29) and the **FOUR** letters (A – H) of your choice **below one another** in your answer book.

GOOD BUDGETING PRACTICES	
A	Calculate all expected expenses.
B	Expenditure must not exceed income.
C	Record actual income and expenditure.
D	Take on extra work to earn more money.
E	Keep money in savings for emergencies.
F	Do not waste money on unnecessary luxuries.
G	Ensure you can give your children the things they want.
H	Be careful until the last week of the month, then see what is left.

(4)

- 1.30 Select from the list below **FOUR human resources**. Write down the question number (1.30) and the **FOUR** letters (A – H) of your choice **below one another** in your answer book.

HUMAN RESOURCES	
A	Ben is highly motivated to do well.
B	Ben has poor time management skills.
C	Ben's parents have inherited a lot of money.
D	The bedrooms in the new house are very big.
E	Ben has adapted well to his new high school.
F	Ben can walk to the library from his new house.
G	Ben has a wonderful gift of learning new languages.
H	Ben's parents have bought a house in an upmarket area.

(4)

Questions 1.31 – 1.34 are related to the following **families and their values**. Write down the question numbers (1.31 – 1.34) **below one another** in your answer book and the letter (A – D) of your choice next to the relevant number.

VALUES

Family A – safety, comfort and economy

Family B – social prestige, beauty and appearance

Family C – outdoor leisure, friends, family and relationships

Family D – education, wholeness and individual development

- 1.31 Which family would want each child to have a room of his / her own and a place to study?
- 1.32 Which family would choose a house in the same neighbourhood as the community doctors and lawyers?
- 1.33 Which family would want a large house with a lot of room and facilities to make visitors welcome?
- 1.34 Which family would want a low bond repayment on a house, an alarm system and efficient air-conditioning?

(4)

(56)

TOTAL FOR SECTION A: [100]

SECTION B**QUESTION 2**

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

Amanda plans to make Thai stir-fry and rice for her husband's birthday supper. As a surprise she has decided to have Avocado Ritz (avocado filled with shrimps in a mayonnaise base) as a starter and Fruit Mousse and custard for dessert.

- 2.1 Explain why the **cut** avocado would turn **brown** if she made it early and left it to stand for a few hours before serving. (2)
- 2.2 Amanda found that the shrimps were too expensive and she substituted them with a **firm white fish**.
- 2.2.1 Recommend a fish she could use. (1)
- 2.2.2 Describe FOUR characteristics that Amanda would look for to ensure the fish she bought was **fresh**. (4)
- 2.2.3 Amanda does not know how to cook fish. Copy the table below in your answer book and give the reason for each of the rules given.

RULES	REASON
A. Cook fish at a low temperature. (2)	
B. Fish shrinks slightly when cooked. (1)	
C. Flesh changes colour when cooked. (1)	
D. Do not over-cook fish. (2)	

- 2.3 The starter needs mayonnaise, but Amanda did not buy any. She used a home-made salad dressing. Compare mayonnaise with salad dressing and conclude whether this substitution would work or not. (8)
- 2.4 Amanda served bread rolls with the starter and made them using the recipe on the side of the flour packet.
- 2.4.1 List THREE **functions** of **yeast**. (3)
- 2.4.2 Describe the **fermentation process** that takes place when the dough is left to prove. (8)
- 2.5 While the oven was hot from the bread rolls, Amanda made **cream puffs** for the next day. They were a failure. Explain why
- 2.5.1 the paste was **too stiff**. (2)
- 2.5.2 **fat oozed out** of the paste during cooking in the oven. (2)
- 2.5.3 the puffs **collapsed** when they were removed from the oven. (2)

- 2.6 Identify TWO **characteristics** of the outside of a perfect **choux paste** product. (2)
[40]

QUESTION 3

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

- 3.1 Explain the **changes** that take place in **yeast dough** while it is in the **oven**. (8)
- 3.2 The **beef** for the stir-fry was not **very tender**.
- 3.2.1 List THREE **pre-mortal** factors that may affect the tenderness of meat. (3)
- 3.2.2 List THREE **post-mortal** factors that may affect the tenderness of meat. (3)
- 3.2.3 Suggest TWO ways in which beef could be **tenderised** at home, before cooking it, if no commercial tenderizer was available. (2)
- 3.2.4 Which TWO methods of **heat transference** take place during the stir-fry method of cooking? (2)
- 3.2.5 Identify FOUR **cuts of meat** from the hindquarter that would be suitable for stir-frying. (4)
- 3.3 **Vitamin C** is easily **destroyed** during the preparation and cooking of vegetables. Explain the reasons why each of the following precautionary measures should be applied to conserve the **Vitamin C** in vegetables.
- 3.3.1 **Store** vegetables in a **cool place** or **in the fridge**.
- 3.3.2 Never add **bicarbonate of soda** to green vegetables.
- 3.3.3 **Lemon juice** can be used on a prepared salad.
- 3.3.4 Use **unpeeled** vegetables where possible. (4)
- 3.4 Vegetables **spoil easily** if not looked after properly. List FOUR **causes** AND explain how to **prevent** the deterioration of vegetables during storage. (8)
- 3.5 The custard was made using commercial **custard powder**.
- 3.5.1 Describe the changes that take place when **moist heat** is applied to **starch**. (4)
- 3.5.2 Identify TWO factors that may **affect** the **gelatinisation** of the custard. (2)
[40]

TOTAL FOR SECTION B: [80]

SECTION C**QUESTION 4**

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

FRUIT MOUSSE

5 ml gelatine
550 ml water
2 egg whites

250 ml sugar
250 ml sliced fresh pineapple
150 ml vinegar

Method

1. Bring the gelatine to the boil in a small pot. Boil for two minutes.
2. Mix in the water, sugar and vinegar.
3. Add the prepared fruit.
4. Beat the egg-white to the foamy stage and add to the gelatine mixture.
5. Mix well.
6. Spoon into a wet or greased mould.
7. Leave in a warm place to set.

- 4.1 Analyse the recipe and indicate why this **pudding would be a failure**. (8)
- 4.2 Comment on the **effect** the following may have on the quality of **egg-white foam**:
- 4.2.1 Part of the **egg-yolk** falls into the bowl with the egg-whites.
- 4.2.2 **Excess** sugar is added at the beginning of beating.
- 4.2.3 50 ml **full-cream** milk is added.
- 4.2.4 25 ml **vinegar** is added. (4)
- 4.3 Amanda applied the **principles of management** to the choice of **food**. Identify the **GOALS** she would have wanted to achieve when **selecting dishes**. (4)
- 4.4 Explain **FOUR guidelines** that Amanda should keep in mind when **setting goals**. (4)
- 4.5 When Amanda moved into a new house, she had to decide **WHERE** to store all her kitchen equipment. List **FIVE storage principles** AND **apply** the information to the kitchen (give examples). (10)
- 4.6 The **bathroom** has many potential **safety hazards**. Recommend **FOUR precautions** that could prevent accidents in the bathroom. (4)
- 4.7 Explain **THREE** important aspects to bear in mind when **lighting** is planned in a house excluding the aspects of colour and texture. (3)
- 4.8 Identify **THREE** methods that could be used to **cool** a **thatched** house during the hot summer months. (3)

TOTAL FOR SECTION C: [40]

SECTION D**QUESTION 5**

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

5.1 An important part of the new Grade 10 syllabus is the instilling of values, attitudes and beliefs, as well as the teaching of skills.

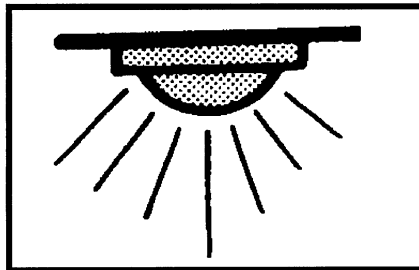
5.1.1 List FOUR characteristics of values. (4)

5.1.2 Name FOUR skills a Grade 10 learner can develop in order to prevent **mental fatigue**. (4)

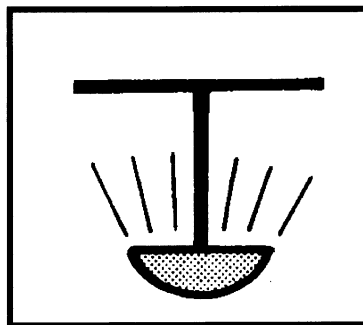
5.2 Norma asked Lesley to fetch her glasses from the bedroom upstairs. Lesley said she could not go at that moment as she had dropped a bottle of beads into her lap, but as soon as she had picked up all the beads she would go.

The case study uses the **communication cycle** to transfer information. List FOUR parts of the cycle **with** examples from the case study. (8)

5.3 Identify the **types of electric light** (A – B) in the pictures below.



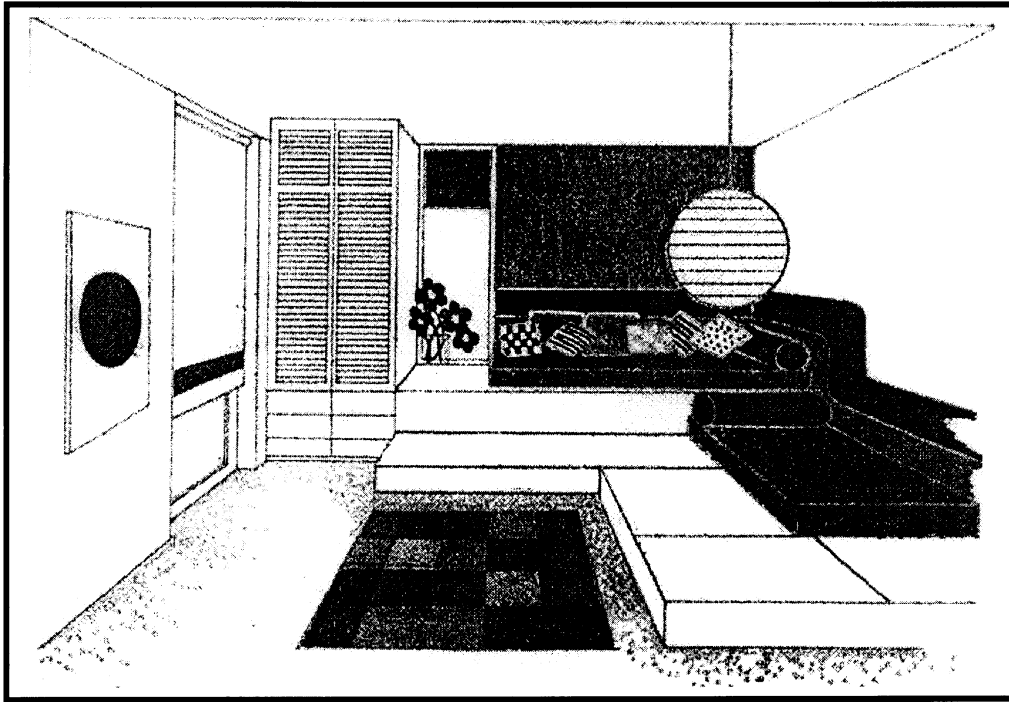
A



B

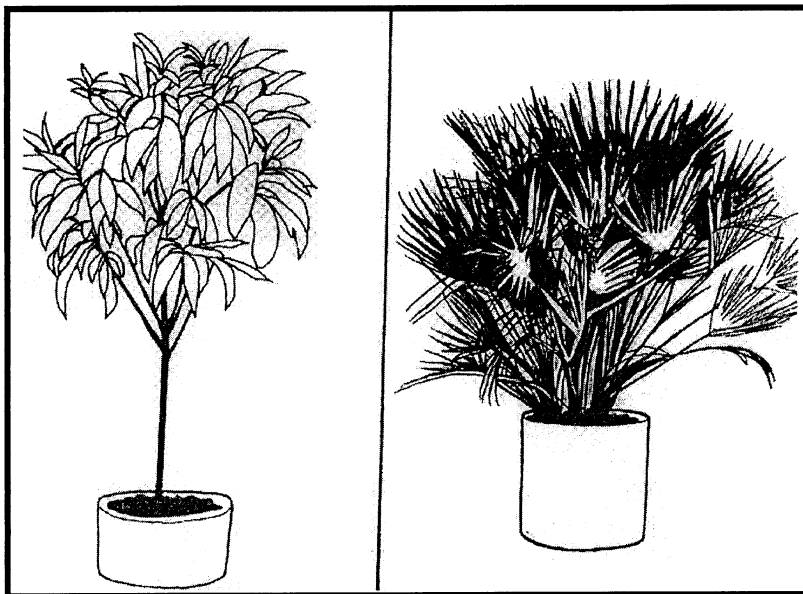
(2)

- 5.4 Carefully study the room below and choose FIVE design elements or principles present in it. Clearly state how each one is obtained.



(10)

- 5.5 The **proportion** is **POOR** in sketch A and **GOOD** in sketch B. Explain this statement.

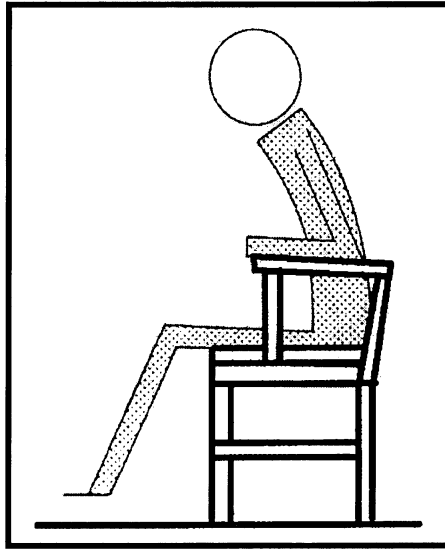


A

B

(4)

5.6 Study the chair in the picture below. Discuss if it is **functional for a secretary**.



(8)
[40]

QUESTION 6

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

6.1 6.1.1 Identify the **insurance policy** described in the statements below:

- A. The policy provides protection for the dependents of the insured for a specific period.
- B. The policy is only paid out on the death of the policy holder.
- C. The insured is protected for the duration of the policy. When it matures, the policy holder is paid out.

(3)

6.1.2 Identify the **insurance term** used for

- A. the payment made at regular intervals to the insurance company.
- B. the person who will receive the benefits of the policy.

(2)

6.2 List **FOUR characteristics** of **retirement annuities**.

(4)

6.3 Name **THREE** different **types of income**.

(3)

6.4 Kim is a talented and creative fashion designer who also earns an income (money) by teaching teenagers how to sew. She has a large, airy, well-equipped studio with industrial sewing machines. She enjoys spending time designing outfits and often enters fashion shows that attract a large audience at the community centre.

Divide resources into sub groups of **THREE human** resources and **TWO non-human** resources **AND** give an **example** of each from the case study.

(10)

6.5 From the list below select

6.5.1 THREE **fringe benefits** that may be offered to employees. (3)

6.5.2 THREE **compulsory deductions** made from monthly salaries. (3)

Unemployment insurance
Recreational facilities
Paid holidays
Car allowance
Investments
Medical Aid
Income Tax
Bursaries
Royalties
Interest
Tips

6.6 Working, running a home and looking after children places a huge demand on a woman's time. Suggest FIVE **guidelines** that will help her to organise her **time** in the best way possible. (5)

6.7 The **family and the political system** are continually interacting with each other. Write down the numbers 6.7.1 – 6.7.4 and give the interchanges between them.

	6.7.1	-----	
	6.7.2	-----	
FAMILY	6.7.3	-----	POLITICAL SYSTEM
	6.7.4	-----	

(4)

6.8 **Unlimited expression of family solidarity** may have a detrimental (negative) effect on a family. Give THREE points to support this statement. (3)
[40]

TOTAL FOR SECTION D: [80]

TOTAL: 300

END