

GAUTENG DEPARTMENT OF EDUCATION

SENIOR CERTIFICATE EXAMINATION

HOME ECONOMICS HG

POSSIBLE ANSWERS / MOONTLIKE ANTWOORDE SUPP 2007

SECTION A

QUESTION 1A

| | | | | |
|------|--------------|--------------|--------------|--------------|
| 1.1 | X | B | C | D |
| 1.2 | A | B | C | D |
| 1.3 | A | B | C | D |
| 1.4 | A | B | C | D |
| 1.5 | X | B | C | D |
| 1.6 | A | B | C | D |
| 1.7 | A | B | C | D |
| 1.8 | A | B | C | D |
| 1.9 | X | B | C | D |
| 1.10 | A | B | C | D |
| 1.11 | X | B | C | D |
| 1.12 | A | B | C | D |
| 1.13 | A | B | C | D |
| 1.14 | A | B | C | D |
| 1.15 | A | B | C | D |
| 1.16 | X | B | C | D |
| 1.17 | A | B | C | D |
| 1.18 | A | B | C | D |
| 1.19 | A | B | C | D |
| 1.20 | A | B | C | D |

16x2=(32)

4x3=(12)
(44)

QUESTION 1B

| | | | |
|------------------------------|---------|----------------------------|---------|
| 1.21 <u>Milk</u> | | 1.22 <u>Meat</u> | |
| 1.21.1 D | | 1.22.1 A,B | |
| 1.21.2 E | | 1.22.2 E,F | |
| 1.21.3 A | | 1.22.3 G,D | (6) |
| 1.21.4 B | (4) | | (Appl) |
| | (Compr) | | |
| 1.23 <u>Colour</u> | | 1.24 <u>Family</u> | |
| 1.23.1 B | | 1.24.1 E | |
| 1.23.2 C | | 1.24.2 C | |
| 1.23.3 F | | 1.24.3 A | |
| 1.23.4 A | | 1.24.4 F | |
| 1.23.5 D | | 1.24.5 D | |
| 1.23.6 H | (6) | 1.24.6 H | (6) |
| | (Know) | | (H Cog) |
| ANY ORDER 1.26 – 1.30 | | | |
| 1.25 <u>Systems</u> | | 1.26 <u>Choice of food</u> | |
| 1.25.1 E – i | | A | |
| 1.25.2 C – iv | | B | |
| 1.25.3 B – vii | | F | |
| 1.25.4 D – iii | | G | |
| 1.25.5 F – vi | (10) | I | (5) |
| | (H.Cog) | | (Appl) |

ANY ORDER

| | | | | | | | |
|------|------------------------|--------|-------------|------|------------------|-----------|------------------------|
| 1.27 | <u>Pressure Cooker</u> | 1.28 | <u>Eggs</u> | 1.29 | <u>Budgeting</u> | 1.30 | <u>Human Resources</u> |
| | B | | A | | A | | A |
| | C | | D | | B | | B |
| | E | | E | | C | | E |
| | F | (4) | (3) | | E | (4) | G |
| | | (Know) | (Explain) | | | (Explain) | (Appl.) |

IN ORDER 1.31 – 1.34

| | |
|-------------|----------------------|
| 1.31 – 1.34 | <u>Family Values</u> |
| 1.31 | D |
| 1.32 | B |
| 1.33 | C |
| 1.34 | A |
| | (4) |
| | (Appl.) |

TOTAL FOR SECTION A: [100]

SECTION B

QUESTION 2

2.1 AVOCADO BROWNING

- Oxidation – exposure to airP
- Enzyme action - oxidationP

Expl (Syll. 2.1) (Meal Planning) (2)

2.2

2.2.1 TYPE OF WHITE FISH

Hake, halibut, sea trout or sole. (Not Haddock)
Monk fish, kabeljou (cod), kingklipP

Know (Syll. 2.11) (Fish) (Any 1) (1)

2.2.2 CHARACTERISTICS OF FRESH FISH

- Eyes: Full round, protruding, clear and shining
- Gills: Bright pink-red and moist P P P P
- Smell: Typical of fresh fish
- Muscle tissue: Firm and elastic. Does not leave a dent when pressed
- Skin: Moist and shiny. Scales must not be coming off
- Fins: Same colour as skin

Know (Syll. 2.11) (Fish) (Any 4) (4)

2.2.3 COOKING FISH

| | RULE GIVEN | | REASON |
|---|------------------------------------|-----|--|
| A | Cook fish at a low temperature. | (2) | Fish coagulates at 60° C. P Collagen changes to gelatine. P |
| B | Fish shrinks slightly when cooked. | (1) | Separates from bone, flakes easily P |
| C | Flesh changes colour. | (1) | Becomes opaque when cooked P |
| D | Do not over-cook fish. | (2) | Fish becomes dry and toughP, loses its delicate flavour P |

Appl. (Syll. 2.11) (Fish) (6)

2.3 MAYONNAISE / SALAD DRESSING

- Both contain oil, vinegar – immiscible liquids
- Mayonnaise P – permanent P emulsion; salad P dressing – temp. P emulsion.
- Mayonnaise contains egg-yolk P
- Egg-yolk contains lecithin – emulsifier P
- P Yes / No Plus motivation P

H. Cog (Syll. 2.10) (Eggs) (8)

2.4

2.4.1 **FUNCTIONS OF YEAST**

- Raising agent P as a result of production of carbon dioxide
- Contributes towards flavour P
- Participates in dough development P

Know (Syll. 2.17) (Baked products) (3)

2.4.2 **FERMENTATION PROCESS**

- Added sugar used as food
- Yeast then uses sugar obtained from the starch PPPP
- Starch broken down to maltose by enzyme diastase PPPP
- Maltose broken down to glucose by enzyme maltase
- Glucose broken down to CO₂ and alcohol by enzyme zymase

Expl. (Syll. 2.17) (Baked products) (Any four with an explanation.) (8)

2.5 **REASONS FOR:**

2.5.1 **Paste too stiff:** Evaporation of water
Over-cooking of paste on stove PP
Incorrect measuring

2.5.2 **Fat oozes:** Insufficient egg, emulsion can't take place P
Incorrect measuring P

2.5.3 **Puffs collapsing:** Too much fat, paste too soft
Insufficient baking time PP
Incorrect measuring of ingredients

Expl. (Syll. 2.17)(Baked products) 2x3=(6)

2.6 **PERFECT OUTSIDE CHARACTERISTICS OF CHOUX PASTE PRODUCT**

- Top surface usually irregular
- Surface smooth and hard
- Walls rigid and firm
- Crust golden brown in colour

Appl. (Syll. 2.17) (Baked products) (Any 2) (2)
[40]

QUESTION 3**3.1 YEAST DOUGH IN THE OVEN**

- Carbon dioxide expands
- Gluten stretches
- As baking continues gluten sets
- Yeast cells destroyed at high temperature – no more CO₂
- Alcohol escapes PPPP
- Brown crust forms PPPP
- Starch changes to dextrin in the presence of dry heat
- Sugar caramelises
- Starch absorbs water and gelatines

| |
|--------------------------------------|
| H. Cog (Syll. 2.17) (Baked products) |
|--------------------------------------|

(Any 8) (8)

3.2**3.2.1 PRE-MORTAL FACTORS**

- Nutrition
- Age
- Muscle activity and anatomical position
- Relation of muscle fibre to connective tissue PPP
- Premortal treatment
- Marbling

| |
|---------------------------|
| Knowl (Syll. 2.12) (Meat) |
|---------------------------|

(Any 3) (3)

3.2.2 POSTMORTAL FACTORS

- Slaughtering process
- Cool shrinkage PPP
- Electrical stimulation
- Rigor mortis process
- Ripening
- Cooking process

| |
|---------------------------|
| Knowl (Syll. 2.12) (Meat) |
|---------------------------|

(Any 3) (3)

3.2.3 TENDERISING MEAT

- Marinate the meat in acid foods e.g. a marinade with tomato or other acids.
- Expose it to proteolytic enzymes.
- Pound the meat fibres with meat mallet.
- (NOT ripening or cooking) PP

| |
|--------------------------|
| Comp (Syll. 2.12) (Meat) |
|--------------------------|

(Any 2) (2)

3.2.4 **HEAT TRANSFERENCE**

- ConductionP and convectionP

Knowl (Syll. 2.4) (Methods of cooking) (2)

3.2.5 **CUTS FROM HINDQUARTER**

SirloinP, Wing ribP, rumpP, filletP

Appl (Syll. 2.12) (Meat) (4)

3.3 **VEGETABLES**

3.3.1 Chilling reduces Vit C-loss. P

3.3.2 Vit C is destroyed by alkali. P

3.3.3 Vit C is stable to acids. P

3.3.4 Vit C is lost by peeling (Oxidation, or Vit C is in the peel). P

Expl (Syll. 2.14) (Fruit and vegetables) (4)

3.4 **FOOD SPOILAGE**

| | |
|---------------------|---------|
| FOUR CAUSES | |
| Mould, yeast | |
| Oxidation | |
| Enzyme action | |
| Withering | PPPP |
| Insects and rodents | |
| Mechanical bruising | |
| Poor storage | |
| Unhygienic handling | (Any 4) |

| | |
|---|---------|
| PREVENTION | |
| Store in the fridge, freezer, cool place. | |
| Sealed container | |
| Handle carefully | PPPP |
| Do not cut / peel and leave exposed | |
| Hygienic care | (Any 4) |

Expl (4) Appl (4) Syll. 2.7 (Food hygiene) 4+4=(8)

3.5.1 **CUSTARD – STARCH – GELATINISATION (ANY ORDER)**

- Starch granules absorb water and swell P
- Viscosity increases (Mixture thickens) P
- Change in colour – shiny and translucent P
- Gets a cooked taste P

Compr (Syll. 2.8) (Cereals) (4)

3.5.2 **TWO FACTORS AFFECTING GELATINISATION**

- Temperature of heating
- Stirring or agitation PP
- Addition of sugar or acid
- Type of starch
- General proportions

Compr (Syll. 2.8) (Cereals) (Any 2) (2)
[40]

TOTAL FOR SECTION B: [80]

QUESTION 44.1 **PUDDING FAILURE**

- Gelatine not soaked
- Too little gelatine
- Excess sugar
- High acid (vinegar) PPPP
- Gelatine was boiled PPPP
- Fresh pineapple bromelin will hydrolyse the gelatine
- Gel not given time to start gelling before fruit added
- Fruit slices too large, will drop to bottom of pudding
- Eggs beaten to wrong stage – should be soft peak stage
- Egg-white should be folded in – stirring breaks down foam
- Will not set in a warm place

H. Cog (Syll. 2.4) (Gelatine) (Any 8) (8)

4.2 **EGG-WHITE FOAM**4.2.1 **Egg-yolk** – contains fat and will retard or prevent foaming P4.2.2 **Excess sugar** – retards the denaturation of egg protein P
Increases beating time4.2.3 **Full cream milk** – prevents foam formation P4.2.4 **Vinegar** – alkaline medium decreases, acidic medium increases – aids
coagulation
Increased beating time P
Stiffer, larger volume

| | | | |
|-------|--------------|--------|-----|
| Knowl | (Syll. 2.10) | (Eggs) | (4) |
|-------|--------------|--------|-----|

4.3 **GOALS IN MEAL MANAGEMENT**

- Appetite appeal
- Good nutrition
- Low energy value PPPP
- Variety
- Economical
- NOT – Time saving

| | | | | |
|--------|-------------|-----------------|---------|-----|
| Compr. | (Syll. 2.1) | (Meal planning) | (Any 4) | (4) |
|--------|-------------|-----------------|---------|-----|

4.4 **GUIDELINES FOR SETTING GOALS**

- They must be her own.
- She should write them down.
- They should be realistic and she should be able to reach them. PPPP
- Her goal must have a target date.
- The goals she sets should be compatible with one another.

| | | | | |
|------|---------------|--------------|---------|-----|
| Appl | (Syll. 1.1.1) | (Management) | (Any 4) | (4) |
|------|---------------|--------------|---------|-----|

4.5 **PRINCIPLES OF STORAGE WITH KITCHEN EXAMPLE**

(1 mark for principle, 1 mark for example)

- Items stored where they will be used first – dishwashing liquid at the sink
- Items used together, stored together – pots and pans stored together, cutlery together
- Stored items should be easy to locate at a glance – should be able to see the baking powder at a glance
- Frequently used items stored within easy reach – salt etc., easy to reach, knife sharpener, less easy to get
- All items should be easy to reach – baking dishes, cooling racks etc. placed in deep drawers to make taking out easy
- Items should be easy to take out without taking other items out first – you should not have to unpack the whole drawer or cupboard to get something out
- Heavy equipment should be stored at or near floor level, a large mixer should be stored on or under the counter top, not in a cupboard above your head
- Space should be used optimally – get rid of unused items that are taking up space

PPPPPPPPPP

| | | |
|---|---------------------------|------|
| Know 5 & Appl 5 (Syll. 3.1.1) (Functional Design) | (Any 5 + Correct example) | (10) |
|---|---------------------------|------|

4.6 **BATHROOM SAFETY**

- Bottom of baths should be textured or have a non-slip mat
- Baths should have secure handholds
- Carpets and rugs should be non-slip or attached to the floor
- Floor must not be slippery when wet
- Flooring must be electrically non-conductive
- No electrical points in bathroom – except for proper shaving point
- Special heater should be permanently fixed
- Only heaters designed for bathrooms may be used
- Medicine chest should be out of the reach of children

PPPP

| | | |
|------------------------------|---------|-----|
| Compr (Syll. 3.1.1) (Safety) | (Any 4) | (4) |
|------------------------------|---------|-----|

4.7 **LIGHTING IN A HOME EXCLUDING COLOUR AND TEXTURE**

- Location and natural lighting
- Shape and transparency of lamp shades
- Low level in entrance and dining room
- High level of light in kitchen
- Adequate level for doing things e.g. reading etc.
- Well-planned lighting is needed to prevent accidents – e.g. stairs and pathways

PPP

| | | |
|--|---------|-----|
| Expl (Syll. 3.1.1) (Functional design) | (Any 3) | (3) |
|--|---------|-----|

4.8 **COOLING A THATCHED HOUSE**

- Thatch is an insulator
- Wide eaves created by thatch overhang
- Blinds in the window PPPP
- Curtains
- Tinted glass
- Fans
- Air-conditioners
- Not ceiling

| | | | | |
|------|---------------|---------------------|---------|-----|
| Appl | (Syll. 3.1.1) | (Functional design) | (Any 3) | (3) |
|------|---------------|---------------------|---------|-----|

[40]

SECTION D

QUESTION 55.1.1 **CHARACTERISTICS OF VALUES**

- Values give meaning and sense to life, they change slowly with maturity.
- Values express a person's attitude to nature, people and God.
- Values determine quality of life and behavioural patterns.
- Values influence actions and decisions. PPPP
- Values are more general and permanent than desires or wishes.
- Values are abstract, complex and involve emotions and feelings.
- Intrinsic values are absolute, extrinsic values are relative

| | | | | |
|------|---------------|----------------------|---------|-----|
| Comp | (Syll. 1.1.1) | (Management process) | (Any 4) | (4) |
|------|---------------|----------------------|---------|-----|

5.1.2 **PREVENTING MENTAL FATIGUE**

A Grade 10 learner needs to:

- increase their knowledge
- Have the ability to identify and think through problems, be able to plan
- Have the skill to judge, to evaluate or interpret the meaning of a situation PPPP

Note: Skills that are mastered, simplify work and reduce mental fatigue.

| | | | | |
|------|---------------|------------|---------|-----|
| Expl | (Syll. 1.1.4) | Work study | (Any 4) | (4) |
|------|---------------|------------|---------|-----|

5.2 **COMMUNICATION CYCLE**

Sender P - Norma P
 Receiver P – Lesley P
 Message P- fetch glasses P
 Feedback P – as soon as she had picked up the beads P

Know 4 Appl 4 (Syll. 4.3) (Family studies) (8)

5.3 **TYPES OF LIGHTING**

A. Direct lighting P
 B. Indirect lighting P

Comp (Syll. 3.1.1) (Functional design) (2)

5.4 **DESIGN ELEMENTS AND PRINCIPLES**

Lines: Horizontal lines – on cupboard
NOT vertical or diagonal
Rhythm: Repetition of lines on cupboard and lamp shade
 Repetition blocks on the floor, cushions on couch
 Repetition of flowers / petals
Emphasis: Picture on left wall
Balance: Informal balance, couch on right visually balances
 flowers, cupboard and picture
Proportion: All parts of the room are in proportion to one another
Harmony: Good harmony is found in all parts of this room

Know (5) Appl (5) (Syll. 3.1.1) (Interior) (Any 5 and correct example) 5x2=(10)

5.5 **PROPORTION**

A. Poor The plant is out of proportion in relation to the container.
 The plant is too big for the pot. PP
 B. Good The plant is in proportion to the container.
 The pot is the correct size for the plant. PP

Expl (Syll. 3.1.1) (Interior) (4)

5.6 **FUNCTIONAL CHAIR FOR A SECRETARY**

P This is a very poor choice of a chair for a secretary: (not functional)

- No support for the back P
- No support for shoulders and neck P
- Arm rests are too high P
- Body not at a comfortable 90° angle at waist P
- Seat too high – feet not touching the floor P
- Seat too short, no support for thighs P
- Hard edge on front of chair, pressure on back of thighs P

H. Cog (Syll. 3.1.1) (Functional design) (8)

[40]

QUESTION 6**6.1 INSURANCE**

- 6.1.1 A. Term insurance P
B. Life insurance policy P
C. Endowment P (3)

- 6.1.2 A. Premium P
B. Beneficiary P

Appl (3) Exp. (2) (Syll. 1.2.2) (Financial Planning) (2)

6.2 RETIREMENT ANNUITY

- Tax advantage – is tax deductible
- Private pension, therefore not affected by job changes
- Supplements an inadequate pension scheme
- Contributions accumulate until day of retirement PPPP
- Contributions can be skipped for a period of time
- Contributions can be stopped – annuity becomes payable.
- Once made, contributions cannot be withdrawn, or used as collateral security.
- Matures between 55 and 70, unless one is disabled / chronically ill
- Three different options.

Knowl (Syll. 1.2.2) (Financial Planning) (Any 4) (4)

6.3 TYPES OF INCOME

- Assured income P
- Possible income P
- Uncertain income P

Knowl. (Syll. 1.2.2) (Financial Planning) (3)

6.4 RESOURCES

| HUMAN RESOURCES | NON-HUMAN RESOURCES |
|---|---|
| Cognitive*: Talent, intelligence, teaching, organisational skill – planning. | Money* Income |
| Affective*: Creativity, enjoyment, interest, enthusiasm, tolerance, motivation. | Material * resources Studio, industrial sewing machines |
| Psychomotor*: Sewing, designing, efficiency, communication. | Space * Large studio |
| Time*: Designing outfits | Environmental * Community centre |
| * 3 + 3 examples | Natural * Resources: airy (studio) * 2 + 2 examples |

H.Cog (Syll. 1.1.1) (Management) 3+3+2+2=(10)

6.5

6.5.1

FRINGE BENEFITS

- Recreational facilities P
- Paid holidays P
- Car allowance P

Appl. (Syll. 1.2.2) (Financial Planning) (3)

6.5.2

COMPULSORY DEDUCTIONS

- Unemployment insurance P
- Medical aid P
- Income tax P

Appl. (Syll. 1.2.2) (Financial Planning) (3)

6.6

GUIDELINES TO ORGANISING TIME

- make lists and plan each day.
- use her best time for important tasks and take her productivity curve into consideration when planning tasks.
- not procrastinate.
- learn to consolidate some tasks and simplify others. P P P P P
- learn to utilise short periods of time efficiently.
- also say no when she feels she cannot handle everything.

Expl. (Syll. 1.1.3) (Home and enviro. Care) (5)

6.7

THE FAMILY AND POLITICAL SYSTEM

6.7.1

Leadership P

6.7.2

Loyalty P

6.7.3

Decisions P

6.7.4

Compliance P ANY ORDER

Comp. (Syll. 4.6) (Family studies) (4)

6.8

UNLIMITED SOLIDARITY

- Will interfere with effective performance of family tasks
- Will interfere with effective leadership in the family P P P
- May interfere with or hamper personality development
- May inhibit the young adult and prevent him from breaking away from home

Comp (Syll. 1.2.2) (Family studies) (Any 3) (3)
[40]

TOTAL FOR SECTION D: [80]

TOTAL: 300