



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate 2019

Marking Scheme

Home Economics

Higher Level

Note to teachers and students on the use of published marking schemes

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates' work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates' work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

Future Marking Schemes

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates' work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.

SECTION A

80 marks

80

Answer 20 (twenty) of the following questions. All questions carry equal marks.

1. List **four** sources of calcium rich foods. (4x1)

4

- (i) *milk, cheese, yoghurt, cream* (ii) *green vegetables, quorn*
 (iii) *sesame seeds, tinned fish, almonds* (iv) *hard water, fortified foods*

2. Explain **each** of the following culinary terms: (2,2)

4

- (i) **bouquet garni** *a small bunch of herbs, tied together, used to add flavour to soups, casseroles and stews, allow tea bags with herbs/flavour.*
 (ii) **dice** *cut food into small cubes of equal sizes, allow reference to shape.*

3. List **four** different ways to decorate a cake in order to improve the presentation. (4X1)

4

- (i) *dust with icing sugar, cocoa powder*
 (ii) *use a piping nozzle to pipe cream, butter icing, glacé icing*
 (iii) *use fruit, chocolate, (whole, sliced, grated)*
 (iv) *use sugar based decorations, sweets, almond/fondant icing, shapes and figures.*

4. Name **two** food poisoning bacteria and state a possible source of each. (4X1)

4

FOOD POISONING BACTERIA	SOURCE
(i) <i>Salmonella, Staphylococcus, E. coli</i>	(i) <i>humans, raw/undercooked eggs, meat, poultry, poor hygiene</i>
(ii) <i>Listeria, Campylobacter, Clostridium botulinum</i>	(ii) <i>unpasteurised milk, cheese, home canned foods, poor hygiene</i>

5. List **four** different ways of using cheese in cooking. (4X1)

4

- (i) *savoury dishes: pizza, quiche, lasagne* (ii) *baking: scones, bread, biscuits*
 (iii) *desserts: cheesecake, garnish* (iv) *cheeseboard, sauces, dressings, au gratin.*

6. Name **two** different types of sauces and give **one** example of each type named. (4X1)

4

TYPES OF SAUCES	EXAMPLE
(i) <i>roux-based, egg-based, fruit</i>	(i) <i>white, cheese, custard, mayonnaise, apple</i>
(ii) <i>cold, sweet, savoury, convenience</i>	(ii) <i>mint, chocolate, tomato, custard</i>

7. List **four** deductions that can be taken from gross income. (4X1)

4

- (i) *health insurance, pension contributions, savings schemes*
- (ii) *universal social charge (USC), income tax (PAYE), social insurance (PRSI)*
- (iii) *overpayment of wages, expenses, court order expenses*
- (iv) *union subscriptions, loans etc.*

8. Give **one** advantage and **one** disadvantage of using the Small Claims Court. (2,2)

4

- (i) **advantage** *inexpensive (€25), informal system, no solicitor needed, claimant may get money back*
- (ii) **disadvantage** *claim cannot exceed €2,000, respondent must reply within 15 days otherwise they are held to have admitted the claim.*

9. Give **two** advantages to the consumer of using bar codes. (2,2)

4

- (i) *consumer gets an itemised receipt if they want to compare prices of products, or if the consumer wishes to return goods, proof of purchase*



- (ii) *scanning of product is fast for self-service check out.*

10. Explain **each** of the following consumer terms: (2,2)

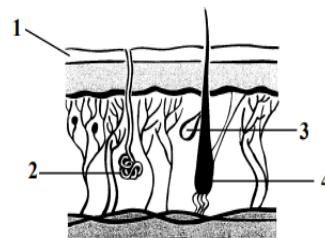
4

- (i) **receipt** *it is a piece of paper or electronic document confirming that the seller received money from the purchaser*
- (ii) **wage** *this refers to a fixed regular payment paid on hourly, daily or weekly basis.*

11. List **four** guidelines to follow in order to promote good health during pregnancy. _____
One lifestyle and one nutrition guideline and any 2 others (4X1) **4**
- (i) *eat a well-balanced healthy diet that provides essential nutrients*
 - (ii) *include protein, calcium, phosphorus, Vit. A and D for the growth of the foetus and development of bones and teeth*
 - (iii) *take folic acid, iron and calcium to prevent neural tube defects, anaemia and infections*
 - (iv) *avoid alcohol, smoking and all drugs except prescribed medicines, visit doctor for pre-natal checks, avoid raw eggs, soft cheese, shellfish etc*

12. Give **one** function of **each** of the following: (2,2) _____
4
- (i) **epiglottis** *it covers the opening of the trachea, prevents food from going into the trachea and the lungs*
 - (ii) **alveoli** *exchange of gases, exchange of O₂ and CO₂*

13. Name the parts of the skin labelled 1, 2, 3, 4. (4X1) _____
4
- 1 *epidermis/dead skin layer*
 - 2 *sweat gland*
 - 3 *oil gland*
 - 4 *hair follicle/hair*



14. Give **one** example of positive peer pressure and **one** example of negative peer pressure. _____
 (2,2) **4**
- (i) **positive peer pressure** *encouragement to study/play sports, become involved in voluntary work/community work, help to prevent bullying*
 - (ii) **negative peer pressure** *behaving in an anti-social manner, becoming involved in bullying, submitting to taking harmful substances.*

15. Name **two** different types of pollution and give **one** cause of each type named. (4X1)

4

TYPE OF POLLUTION	CAUSE
(i) <i>water</i> <i>air</i>	(i) <i>sewage, slurry, oil spill, smoke, carbon monoxide, carbon dioxide</i>
(ii) <i>noise</i> <i>litter</i>	(ii) <i>cars, planes, loud music, plastics, chewing gum, waste disposal</i>

16. What is the advantage of the Waste Electrical and Electronic Equipment (WEEE) initiative to the consumer?

4

electrical, electronic, battery or lighting waste (e-waste) can be recycled free of charge, it benefits the environment. allow- good for the environment 4/4m.

17. Explain the following terms: (2,2)

4

- (i) **ergonomics** *the study of the efficiency of people in their workplace, design of equipment and room layout is planned to suit people so that time and energy is not wasted, time and motion study to be more efficient*
- (ii) **floor plan** *a sketch/plan of a room drawn to scale on graph paper, showing the position of fixtures, fittings and furniture.*

18. What information does this symbol convey to the consumer? 2,2

4

it is a hazard label indicating acute toxicity, it alerts the consumer to the presence of a hazardous chemical, the chemical may cause harm to people or to the environment. dangerous = 2m, toxic = 2m



Name **one** product on which this symbol is found
cleaning agents, pesticides.

19. Explain the textile term:

4

colour fast fabric *fabric with colour/dye that does not run in the wash. Allow fabric that is colour fast = 2/4*

20. Name **two** types of man-made fibre and give **one** example of each type. (4x1)

4

MAN-MADE FIBRE	EXAMPLE
(i) <i>synthetic</i>	(i) <i>nylon, polyester, acrylic, pvc</i>
(ii) <i>regenerated</i>	(ii) <i>viscose, acetate, triacetate</i>

21. What information does this symbol convey to the consumer?

4

linen symbol 4m

indicates that the material is made from 100% linen 4m

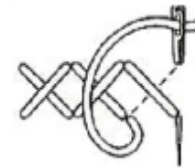


22. Name the stitch shown in the diagram and suggest **one** use for it. (2,2)

4

stitch *cross stitch*

use *can be a decorative embroidery stitch
used to make cross-stitch/tapestry patterns for craft
items*



23. List **four** functions of clothing. (4x1)

4

- (i) *protection from weather, safety*
- (ii) *identification, flattery*
- (iii) *modesty*
- (iv) *expression of personality, comfort, hygiene, culture, religion, confidence.*

24. Give **two** examples of wool fabric. (2,2)

4

- (i) *tweed, flannel, felt, velour*
- (ii) *jersey, gabardine, serge, crêpe.*

SECTION B

220 MARKS

55

1. The following is the nutritional content of wholemeal bread and of white bread.

 Wholemeal bread	 White bread
Typical values per 100 g	Typical values per 100 g
Energy 246 kcal	Energy 240 kcal
Protein 13.0 g	Protein 9.0 g
Carbohydrates 41.0 g	Carbohydrates 49.0 g
of which sugars 6.0 g	of which sugars 5.0 g
Fibre 7.0 g	Fibre 2.7 g
Fat 3.4 g	Fat 3.2 g
Sodium 400 mg	Sodium 491 mg
<i>Allergen advice</i> <i>contains gluten</i>	<i>Allergen advice</i> <i>contains gluten</i>

- (a) Using the nutritional information above, compare and evaluate the nutritional value of wholemeal bread and the nutritional value of white bread.
name of nutrient = 1m quantity = 1m comment = 1m (6x3) 18
- (b) (i) Name **three** cereals included in the diet. (3x2) 6
wheat, oats, barley, rye, maize / corn, rice
- (ii) Suggest a different food product made from **each** cereal. (3x3) 9
- | Cereals | Food products |
|--------------|--|
| wheat | <i>flour, bread, pasta, couscous, breakfast cereals, semolina</i> |
| oats | <i>porridge, oatmeal, muesli, oatcakes</i> |
| barley | <i>pearl barley, beer, whiskey</i> |
| rye | <i>rye flour, bread, crispbread, whiskey</i> |
| maize / corn | <i>cornflakes, popcorn, sweetcorn, corn oil, tacos</i> |
| rice | <i>rice flour, rice grains, ground rice, rice crispies, rice paper</i> |
- (c) Outline the effects of cooking on cereals. (3x4) 12
*The starch grains swell and burst, grains absorb liquid and thicken,
 Texture changes - cellulose become more digestible, colour changes, flavour changes,
 protein coagulates, loss of vitamin B. etc*
- (d) (i) Explain why pastry needs to be put into a pre-heated hot oven when baking. (1x5) 5
*starch grains burst on heating, absorb the fat, makes the pastry lighter more crisp
 texture and prevents a soggy texture, allow -pastry rise/light texture.*
- (ii) What is the role of gluten in bread making? (1x5) 5
*gives dough an elastic texture, it can stretch when cooking, allows dough to rise,
 helps bread to maintain its shape as it is baked. Allow -to be fluffy as reference to
 elasticity.*

2. (a) Describe **two** different types of diabetes.
(name = 2x2 description = 2x3)

10

Type 1 diabetes/insulin-dependent diabetes/early onset/childhood

occurs when insulin is not produced in the body (pancreas), insulin must be taken by injection to regulate blood sugar levels.

Type 2 diabetes/non-insulin dependent diabetes/late onset diabetes /adult

occurs when the body cannot use the insulin it produces, can be controlled by a strict diet/medication.

- (b) (i) List **three** factors that increase the risk of developing diabetes. (3x3) 9

weight gain, obesity, family history/heredity, lack of exercise, pregnancy, poor lifestyle, high sugar diet, high fat diet, high alcohol consumption.

- (ii) Outline the dietary and lifestyle changes a person with diabetes should follow. (4x3) 12
(expect one point related to diet and one point related to lifestyle)

follow a healthy balanced diet, eat regular meals, avoid foods high in sugar, lower blood glucose level, include high fibre CHO foods, maintain a healthy weight, exercise regularly.

- (c) What are the health problems associated with diabetes? (3x3) 9

heart attack, stroke, poor blood circulation, high blood cholesterol levels, damage to kidneys, damage to eyesight/blindness, loss of limbs, high blood pressure, teeth and gum problems, nerve damage, foot problems, dizziness, excessive thirst, frequent urination. etc

- (d) Explain the terms: (i) empty kilocalories (ii) peristalsis (iii) refined foods. (3x5) 15

(i) **empty kilocalories:** *foods that do not contain any other nutrients except sugar e.g. table sugar example only 2/5*

(ii) **peristalsis:** *muscular movement of food through the digestive system*

(iii) **refined foods:** *foods that have been processed and lack many nutrients as a result e.g. packet soup, white flour example only 2/5*

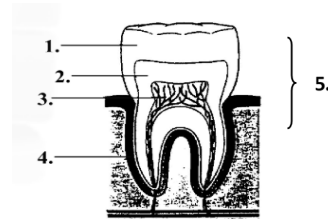
3. (a) Outline the functions of advertising goods and services. (4x4) 16
introduces new products into the market, provides information, promotes brands, increases sales, allow - creates employment.
- (b) (i) Name **four** different advertising techniques used by companies to market luxury goods. (4x4) 16
attractive displays, discount offers, free sample, easy pay system, shopper loyalty scheme, use of social media influencers, celebrity endorsement, sponsorship, product placement, sponsorship, allow types of advertising- TV/radio adverts, use of colour, humour, music.
- (ii) Choose **one** technique named and explain why you think it is effective. (1x5) 5
 Technique = 1mark effectiveness = 4m
accept any one technique named above and expect a clear explanation of why it is effective
- (c) Describe how the Consumer Protection Act 2007 (Consumer Information Act 1978) provides protection to the consumer. (2x3) 6
ensures compliance with consumer legislation, protects consumers from misleading, aggressive or prohibited practices, protects consumers from false and misleading claims about goods, services and prices, allows a 14 day cooling off period.
- (d) Suggest a different advantage to the consumer for **each** of the following: (3x4) 12
- (i) loss-leader pricing (ii) bulk buying (iii) credit buying.
- (i) **loss leader pricing:** *consumer can avail of goods at a discount price, get good value.*
- (ii) **bulk buying:** *consumer can save money by buying goods in large quantities.*
- (iii) **credit buying:** *consumer has the use of a product before it is fully paid for, for large purchases e.g. car, washing machine, buy now pay later.*

4. (a) Identify the parts of the tooth labelled 1,2,3,4 and 5

(5x3)

15

- 1 = enamel
2 = dentine
3 = pulp cavity
4 = cementum
5 = crown



- (b) Name **four** types of permanent teeth and give a function of each type named.
(types = 4x2) (functions = 4x2)

16

Types

incisors
canines
pre-molars
molars/wisdom

Functions

bite and cut food
tear food
chew and grind food
chew and grind food

- (c) Suggest the guidelines that teenagers should follow in order to maintain healthy teeth.

(4x3)

12

(expect one point related to diet and one point related to dental hygiene)

avoid foods and drinks that contain sugar, eat a healthy diet that contains calcium, eat foods rich in vitamin D, brush properly at least twice a day, use dental floss, replace toothbrush regularly, visit dentist regularly.

- (d) Describe how plaque can cause dental decay.

(2x6)

12

plaque consists of saliva, food particles and bacteria which build up on the surface of teeth. If plaque is not removed, acids are produced by bacteria which attack the enamel wearing it away causing tooth decay, plaque can build up to form tartar, bacteria present act on sugar to produce acid.

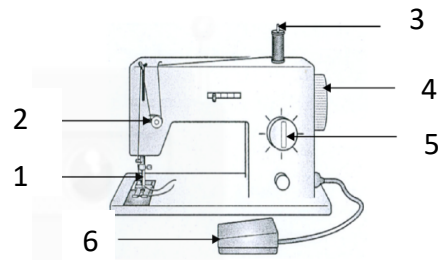
5. (a) Describe how technology used in the home can benefit the family. **(4x4)** **16**
Benefit = 2m description =2m
less time and energy is spent on household tasks, preparation of food is made easier, greater access to the outside world, access to internet/online shopping/banking, home security - alarms, electronic gates, improved methods of communication, more time available to spend with family and friends, better standards of hygiene
- (b) Write a note on microwave cookers under **each** of the following headings:
 (i) choice (ii) use (iii) cleaning.
- (i) **choice:** *power level (700W-1200W), size of cooker (space and position in room), capacity (17litre-32litre), type (combi, convection, drawer), brand, cost, features, needs of the family, colour, guarantee* **(2x3)**
- (ii) **use:** *defrosting, reheating, cooking, melting, allow- a point on using the microwave also* **(2x3)**
- 18**
- (iii) **cleaning:** *follow manufacturers' instructions, avoid abrasive cleaning agents, use warm soapy water for removable parts and inside and outside of microwave, rinse and dry thoroughly.* **(2x3)**
- (c) List **three** modern features of a microwave cooker and give the function of **each** modern feature listed.
- | <i>(features = 3x1)</i> | <i>(function = 3x2)</i> | |
|---------------------------|--|--|
| Features | Function | |
| <i>pre-set programmes</i> | <i>reheating and defrosting (allow both)</i> | |
| <i>browning dish</i> | <i>browns foods that are normally grilled, fried, roasted</i> | |
| <i>removable racks</i> | <i>allows to cook several items at once</i> | |
| <i>sensor cooking</i> | <i>measures humidity of oven and moisture of food and adjusts power level and time</i> | |
| <i>oven lining</i> | <i>smooth interior that wipes clean</i> | |
| <i>timers / digital</i> | <i>indicates when the time is complete</i> | |
| <i>turntable</i> | <i>to cook food evenly</i> | |
| <i>child lock</i> | <i>safety device</i> | |
| <i>modern finish</i> | <i>black or stainless steel finish etc</i> | |
| <i>turntable</i> | <i>the turn table allows the food to turn in a circular motion.</i> | |
- 9**
- (d) Name **three** methods of heat transfer and describe how **each** method is used in cooking.
- | <i>(methods = 3x2)</i> | <i>(use = 3x2)</i> | |
|------------------------|--|--|
| Methods | Use | |
| <i>conduction</i> | <i>frying, sautéing (hob)</i> | |
| <i>convection</i> | <i>boiling, stewing, poaching, baking, roasting</i> | |
| <i>radiation</i> | <i>grilling, toasting, barbecuing allow -correct description without a name.</i> | |
- 12**

6. (a) Name the parts of the sewing machine labelled 1,2,3,4, 5 and 6.

(6x3)

18

- 1 = presser foot/needle
 2 = tension disc /dial
 3 = spool pin/ holder
 4 = hand wheel
 5 = stitch selector/ buttonhole
 6 = foot pedal



- (b) State the rules to follow when (i) using and (ii) caring for a sewing machine.
 (using = 4x3) (caring = 3x3)

12

9

(i) **using:** thread properly, adjust length and tension of stitch to suit fabric, test the stitch, press lightly on foot pedal, raise needle and lift presser foot to remove fabric.

(ii) **caring:** follow instructions, do not run threaded machine without fabric, cover when not in use, oil moving parts occasionally, service machine regularly.

- (c) Name **two** different seam finishes.
 zig-zag machining, edge machining/stitching, overlocking,
 machine over edging, binding,
 blanket stitching, using a pinking shears.

(2x4)

8

- (d) Explain the following textile terms: (i) dart (ii) warp threads. (2x4)

8

(i) **dart:** this is a fold of fabric used to give shape to a garment.

(ii) **warp threads:** these are strong threads running down the length of the fabric/ parallel to the selvage edge.

