



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2024

Marking Scheme

Home Economics – Scientific and Social

Ordinary 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.

Instructions to candidates

- Section A** 60 marks
Answer **ten** questions in this section.
Each question carries 6 marks.
- Section B** 180 marks
Answer **Question 1** and any other **two** questions from this section.
Question 1 is worth 80 marks.
Questions 2, 3, 4, and 5 are worth 50 marks each.
- Section C** 40 or 80 marks
Answer **one** elective question or Question 4 (core) to include **part (a)** and either **part (b) or (c)**.
If you submitted *Textiles, Fashion and Design* coursework for examination, you may only attempt Question 2 from this section.

In developing the marking schemes the following should be noted:

- In many cases only key phrases are given which contain information and ideas that must appear in the candidate's answer in order to merit the assigned marks*
- The descriptions, methods and definitions in the scheme are not exhaustive and alternative valid answers are acceptable*
- The detail required in any answer is determined by the context and the manner in which the question is asked, and by the number of marks assigned to the answer in the examination paper. Requirements and mark allocations may, therefore, vary from year to year*
- Words, expressions or phrases must be correctly used in context and not contradicted, and where there is evidence of incorrect use or contradiction, the marks may not be awarded*

Grading Table

Grade	Elective 1, 3 and C4	Elective 2
1	288-320	252-280
2	256-287	224-251
3	224-255	196-223
4	192-223	168-195
5	160-191	140-167
6	128-159	112-139
7	96-127	84-111
8	< 95	< 83

Annotations - Home Economics 2024

Annotated marks should be placed near the correct/partial correct response. Colours of annotations may vary.

Annotation	Explanation
0	Zero marks awarded
✓ 1	One mark awarded
✓ 2	Two marks awarded
✓ 3	Three marks awarded
✓ 4	Four marks awarded
✓ 5	Five marks awarded
✓ 6	Six marks awarded
✓ 7	Seven marks awarded
✓ 8	Eight marks awarded
}	Blank page
F	Excess point awarded full marks
P	Excess point awarded partial marks
<	Point/work not attempted
A	Deduct mark
P1	Deduct 1 mark

P2	Deduct 2 marks
P3	Deduct 3 marks
P4	Deduct 4 marks
P5	Deduct 5 marks
P6	Deduct 6 marks
P7	Deduct 7 marks
P8	Deduct 8 marks
P9	Deduct 9 marks
P10	Deduct 10 marks
MMS	Modified marking scheme

In Section C, candidates are required to answer one question in this section. Question C2 relates to the Textile, Fashion and Design elective. Where a candidate answers C2 and another question from C1, C3, or C4, the examiner applies a discount mark so that only the greatest mark is counted towards the paper total. The annotation A is used to indicate that a discount mark is being applied. For example, to apply a discount mark of -23 an examiner would place the A, P10, P10, P3, to apply -10 -10, -3 = total -23.

Section A

Answer any **ten** questions from this section.
Each question carries 6 marks.

1. Indicate with a tick (✓) whether **each** of the following statements is true or false.

3 @ 2 marks (graded 2:0)

	True	False
Meat contains fibres and connective tissue	✓	
1 g of protein provides 4 kilocalories of energy to the body	✓	
Eggs are a low biological value food		✓

2. State **two** functions of Vitamin C in the body.

2 @ 2 marks (graded 2:1:0)

prevents scurvy; converts non-haem iron to haem iron; builds up the immune system; helps form connective tissue; builds up collagen for wound healing; works with Vitamin E to prevent coronary heart disease; is an antioxidant; thought to have a role in cancer prevention; formation of blood vessels; maintains elasticity in skin; manufacture of thyroxine; etc.

Name **one** dietary source of Vitamin C.

1 @ 2 marks (graded 2:0)

citrus fruits, oranges, lemons, grapefruit; blackcurrants; rosehips; strawberries; apples; pears; kiwi; peppers; green leafy vegetables; tomatoes; potatoes; peas; beansprouts; red cabbage; etc.

3. Using the terms listed below, complete the following statements in relation to energy.

3 @ 2 marks (graded 2:0)

empty kilocalories **energy balance** **obesity**

Over indulgence in sugar-based foods can cause **obesity**.

empty kilocalories are calories that have little nutritional value.

Energy input equals energy output is known as **energy balance**.

4. Outline **two** factors that affect the tenderness of meat.

2 @ 2 marks (graded 2:1:0)

age; older animals have longer, thicker muscle fibres, more connective tissue; active parts of the animal are tougher, e.g. neck/legs; animal treatment before and after slaughter; cooking method; etc.

List **two** ways of tenderising meat.

2 ways @ 1 marks (graded 1:0)

before slaughter inject with proteolytic enzymes; mincing; marinating; pounding with a steak hammer; piercing with needles; before cooking sprinkle with meat tenderiser; slow moist methods of cooking, e.g. stewing; etc.

5. Indicate with a tick (✓) whether **each** of the following statements is true or false.

3 @ 2 marks (graded 2:0)

	True	False
The bran layer of cereals is high in fibre	✓	
Heat causes starch grains to swell and burst	✓	
A roux sauce contains different amounts of fat and flour		✓

6. Outline **three** lifestyle changes recommended for an obese person trying to lose weight.

3 @ 2 marks (graded 2:1:0)

follow a low-fat diet; follow a reduced sugar diet; remove visible fat from meat; avoid cream-based sauces; consider low fat cooking methods; increase fibre intake; increase water intake; choose lean protein foods; reduced processed foods; exercise; avoid alcohol; avoid eating in front of TV; avoid eating late at night; avoid empty kilocalorie foods; set weight loss targets; etc.

7. Name **two** types of pastry and name a different dish that can be made from each type.

Type of pastry 2 @ 2 marks (graded 2:0)

Dish 2 @ 1 mark (graded 1:0)

Type of pastry	Dish
choux; shortcrust; rough puff; puff;	eclairs; profiteroles; apple tart; quiche; sausage rolls; steak and kidney pie; croissants; vol au vents; etc.
flaky; filo; suet; rich shortcrust; etc.	mince pies; spring rolls; steamed puddings; samosas; etc.

8. Outline **three** guidelines to follow when freezing fresh food.

3 @ 2 marks (graded 2:1:0)

turn on fast freeze button 3 to 4 hours in advance of freezing food; only freeze 1/10 of the capacity of freezer in any 24-hour period; choose best quality fresh food for freezing; freeze in usable quantities; cool all foods before freezing; open freeze foods such as strawberries; blanch vegetables before freezing; use appropriate packaging; remove air from packaging before freezing; leave room for expansion when freezing liquids; label products with name and date; maintain temperature of freezer at -18°C; store similar foods together; etc.

9. Match the following methods of heat transfer with the correct definition.

3 @ 2 marks (graded 2:0)

Conduction	Convection	Radiation
Definition	Method of heat transfer	
Heat travels in straight lines and heats/cooks the first solid object it touches	Radiation	
Heat travels through a liquid or gas, causing it to rise, cold liquid or gas moves in to take its place	Convection	
Heat travels through the molecules of a solid object until it is fully heated	Conduction	

10. Outline **three** consumer rights when buying goods.

3 @ 2 marks (graded 2:1:0)

value for money; right to honest and truthful information; right to choice of goods and services; right to quality; right to safety; services completed to high standard by qualified person; using good quality materials; right to redress; etc.

11. State **three** advantages of teenagers becoming regular savers.

3 @ 2 marks (graded 2:1:0)

reduce financial worries; give a feeling of security and independence; emergencies can be catered for; sets a good example for family members; avoids the necessity for loans/credit agreements; builds a sound financial reputation; useful if planning for future event; etc.

12. Explain how the following criteria influence the consumer when selecting textiles for the household.

3 @ 2 marks (graded 2:1:0)

Suitability for purpose properties should make fabric fit for purpose intended e.g. washable; aesthetic properties, e.g. appearance, rough, smooth, drape, weight, colour, pattern and texture; etc.

Personal choice personal likes and dislikes; individuals' favourite colour; preferred style; desired comfort level; durability of fabric; people have preference for natural fabrics' e.g. like linen creased look; synthetic fabrics have easy care properties and elasticity; etc.

Cost natural fibres, e.g. wool and silk are more expensive than synthetic fabrics; amount of money available will influence type and quality of fabric bought; etc.

13. In relation to insurance, state **two** benefits of life assurance.

2 @ 3 marks (graded 3:2:0)

the persons family receive money on the death of the insured person; provides security and peace of mind; can be used as a means of saving; can cash in the policy at any time; etc.

14. Describe three guidelines to follow when using a microwave oven.

3 @ 2 marks (graded 2:1:0)

arrange foods in a circle, thickest part outwards; turn and rotate food during cooking; pierce foods e.g. skin of sausages, potatoes; time accurately; use recipes adapted for the microwave; cover food to maintain moisture, speeds up the cooking time, prevent splatters; never place metal or metal trim containers/dishes in the microwave; use appropriate cookware, e.g. paper, glass, plastic, ceramic, earthenware; stir food; allow standing time; use defrost power setting when thawing foods; etc.

Section B

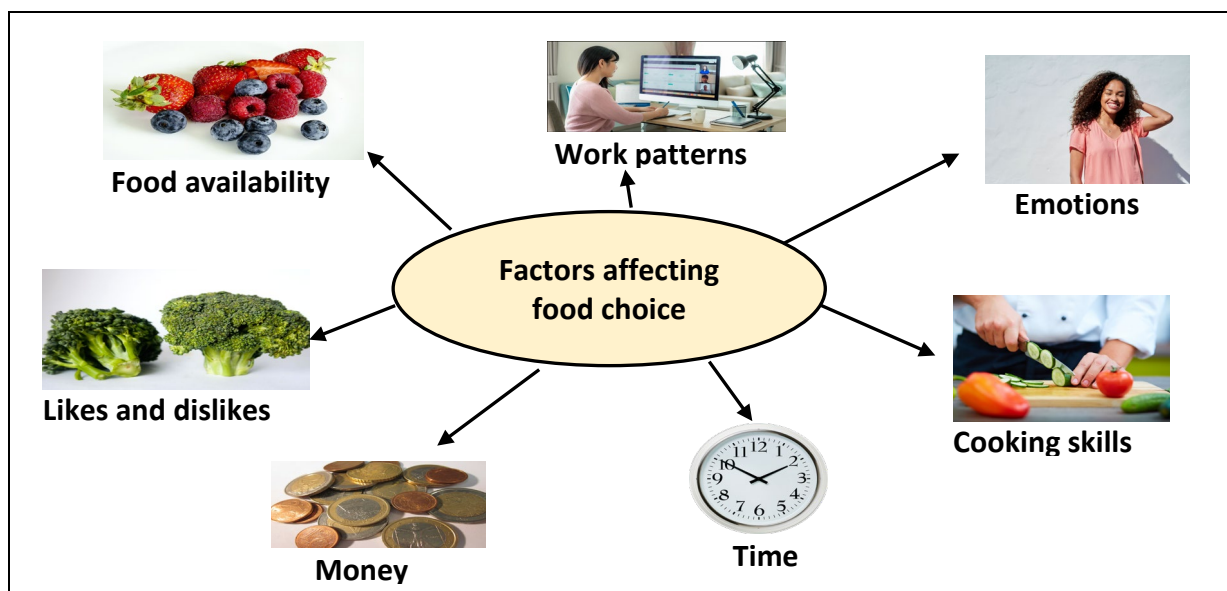
Answer **Question 1** and any other **two** questions from this section.

Question 1 is worth 80 marks. Questions 2, 3, 4 and 5 are worth 50 marks each.

Question 1

‘All around the world, people choose to eat different food for many different reasons.’

(www.foodfactoflife.org.uk)



- (a) Using the information presented in the table, discuss **five** factors that affect a person's food choices. (20 marks)

5 @ 4 marks (graded 4:2:0)

Emotions buy more food when in an unhappy mood; buy food to celebrate happy times; will comfort eat; etc.

Cooking skills people with greater cooking skills are more likely to make a meal from scratch; unskilled cooks will use more convenience foods; many buy quick to cook foods; etc.

Time: busy lifestyle; use of convenience foods; take away foods; type of work; hours worked; etc.

Money price wars; increased competition; recession; discount stores; disposable income; seasonality; many cheaper foods are highly processed, and may contain high levels of salt, sugar, and fat; etc.

Likes and dislikes may have a preference for foods high in sugar; may take a dislike to food due to allergies; appeals to senses; etc.

Food availability foods in season are cheaper and fresher; foods can be imported leading to year-round availability; carbon footprint; location; special diets; diverse cultural requirements; etc.

Work patterns busy lifestyle can lead to greater reliance on takeaways and convenience foods; etc.

(b) Give an account of carbohydrates under **each** of the following headings: (28 marks)

- classification

3 classes @ 2 marks (graded 2:0)

monosaccharides; disaccharides; polysaccharides; sugar; starch; fibre/cellulose; etc.

- functions in the body

2 functions @ 5 marks (graded 5:3:0)

heat; energy; stimulate peristalsis; prevents constipation; prevents bowel disorders; acts as a protein sparer; insulation, excess carbohydrate stored as adipose tissue; glycogen reserve; fibre gives a feeling of fullness; etc.

- dietary sources.

3 sources @ 4 marks (graded 4:2:0)

breakfast cereals; rice; pasta; potatoes; bread; fruit; vegetables; nuts; seeds; honey; cakes; biscuits; sweets; popcorn; milk; sugar; etc.

(c) Outline **three** different ways a person can increase the amount of fibre in their diet.

(12 marks)

3 points @ 4 marks (graded 4:2:0)

add bran/fruit to breakfast cereals; increase intake of fruit/vegetables; eat skins of fruit and vegetables; eat brown bread/pasta/rice; add seeds/nuts to food; use brown flour instead of white flour; etc.

(d) Describe **four** ways consumers can reduce food waste when planning meals and purchasing foods.

(20 marks)

4 ways @ 5 marks (graded 5:4:3:0)

(1 reference to planning, 1 reference to purchasing, & 2 other points)

planning check stocks in the kitchen before going shopping; move more perishable items or with upcoming expiry dates to the front of the fridge/cupboard to use them first; make a meal plan for the week; shop using list; buy online; use leftovers for next day's lunch or freeze them; use leftover fruits/vegetables to make preserves; use planning apps; etc.

purchasing buy in useable/small quantities; check expiry dates; buy only what you need; examine foods before buying to ensure freshness; extend meals with meat alternatives; consider using pulses as a protein source; etc.

Question 2

'Approximately 8% of Irish people are following a vegetarian based diet.' (*Bord Bia, 2021*)

- (a) Give an account of (i) the nutritive value **and** (ii) dietetic value of fruit and vegetables.

(20 marks)

4 points @ 5 marks (graded 5:4:3:2:0)

(1 reference to nutritive value, 1 reference to dietetic value, & 2 other points)

nutritive LBV protein, soya beans provide HBV protein; low in fat, polyunsaturated fat in olives and avocados; starch in pulse, root and tuber vegetables; starch present in under-ripe fruit, e.g. bananas; fibre in pulse, root, tuber vegetables and fruit; sugar in onions, carrots and in all fruit; Vitamin C in citrus fruit, berries, kiwis; Vitamin A in brightly coloured fruit and vegetables; calcium in dark green vegetables; non-haem iron in dark green vegetables; bananas source of potassium; high water content in all fresh fruit and vegetables; etc.

dietetic used in vegetarian diets; good source of dietary fibre, help in the prevention of bowel disorders; useful in low-cholesterol/low-calorie diets due to low fat content, high water content and fibre present in skins; provides antioxidants Vitamins A and C, lowering risk of CHD, stroke and some cancers; diabetics need to be aware of fruits high in sugar; readily available all year around; versatile; economical when in-season; can be eaten raw or cooked; many culinary uses; requires little preparation; lack Vitamin D and B₁₂; etc.

- (b) Having regard to current healthy eating guidelines, set out a menu (3 meals)

for one day for a vegetarian to ensure their nutritional needs are met.

(18 marks)

3 meals @ 6 marks

(Menu: 2 courses @ 2 marks (graded 2:1:0) + beverage @ 2 marks (graded 2:0)) X 3

Sample menus

Breakfast	Lunch	Dinner
<i>Orange juice</i> ***	<i>Vegetable soup with wholemeal bread</i> ***	<i>Carrot and lentil soup with brown bread</i> ***
<i>Porridge with milk</i> ***	<i>Strawberry yoghurt</i> ***	<i>Vegetarian Lasagne with green salad</i> ***
<i>Tea/coffee/water/milk</i>	<i>Glass of milk/water</i>	<i>Glass of milk/water</i>

- (c) Describe **three** guidelines to follow when storing fruit and vegetables in order to maintain their quality.

(12 marks)

3 ways @ 4 marks (graded 4:2:0)

remove from wrapping; store in vegetable drawer of refrigerator; allow air to circulate; remove damaged fruit/vegetables; store away from bananas as they produce ethylene gas which speeds up the ripening process; store in a cool, dark, dry place with low humidity; store fruit at room temperature; etc.

Question 3

Ireland's food industry is globally recognised for producing high quality processed foods.

- (a) Describe **four** food additives used in the manufacture of processed foods. (20 marks)

4 points @ 5 marks (graded 5:3:0)

colourings used to improve colour; natural, e.g. carotene; synthetic, e.g. tartrazine; etc.

flavourings used to improve flavour; natural flavourings, e.g. sugar, salt, spices, herbs; artificial flavourings, e.g. esters; flavour enhancers, e.g. monosodium glutamate; etc.

sweeteners natural, e.g. fructose, table sugar, glucose syrup; artificial, intense sweeteners, e.g. aspartame, saccharin; bulk sweeteners, e.g. sorbitol, mannitol; etc.

preservatives increase the shelf life of food; natural, e.g. sugar, salt, vinegar, alcohol, smoke; artificial, e.g. sulphur dioxide, sorbic acid; etc.

antioxidants prevent reaction with oxygen; natural, e.g. Vitamin C, Vitamin E; artificial, e.g. butylated hydroxyanisole, butylated hydroxytoluene; etc.

physical conditioning agents improve the texture of food; emulsifiers, e.g. lecithin, alginates, stabilisers; polyphosphates; humectants; etc.

nutritive additives improve the nutritional value; fortified foods; etc.

- (b) Identify **three** major sectors of the Irish food industry **and** give **one** example of a food product produced in **each** sector named. (15 marks)

3 sectors @ 3 marks (graded 3:2:0)

(1 food @ 2 marks (graded 2:1:0)) **X3**

dairy and ingredients milk; butter; cream; cheese; yoghurt; milk powder; dairy spreads; infant formula; etc.

meat and livestock beef; sheep meat; pig meat; poultry; etc.

beverages alcoholic, whiskey, gins, beer; non-alcoholic, fruit juices; water; etc.

seafood fresh fish; processed fish; etc.

edible horticulture and cereals flour; malt; oats; potatoes; mushrooms; berry fruits; etc.

prepared consumer foods fruit juices; smoothies; confectionary; jams; chutneys; relishes; prepared meals; baked goods; cooked sliced meats; etc.

- (c) Evaluate the role of packaging in relation to **each** of the following:

- suitability for purpose **1 role @ 5 marks** (graded 5:3:0)
- environmental impact **1 role @ 5 marks** (graded 5:3:0)
- as a source of consumer information. **1 role @ 5 marks** (graded 5:3:0) (15 marks)

suitability for purpose safe/non-toxic; strong; hygienic; easy to open and reseal; economical; protects the food; impervious to moisture, gases, micro-organisms; tins lacquered to prevent reaction with the food; easy to stack/store; suitable for heat treatment; may be printed on; easily moulded into variety of shapes and sizes; etc.

environmental impact metal is a limited and non-renewable resource, non-biodegradable; recyclable; glass is reusable, recyclable; paper is biodegradable and recyclable; plastic is non-biodegradable, made from a non-renewable resource; Re-Turn scheme; etc.

as a source of consumer information displays legal requirements such as ingredients; weight; nutritional information; allergy information; identify product; cooking instructions; etc.

Question 4

‘From time-to-time problems will arise with goods and services.’ (www.ccpc.ie)

- (a) Describe **four** factors that influence consumers when purchasing goods and services. (20 marks)

4 factors @ 5 marks (graded 5:3:0)

amount of disposable income; personal preferences; merchandising of goods; advertising; word of mouth; salespeople in shops; packaging; labelling; environmental impact of the product/service; current trends; peer pressure; after sales service; facility to order online; etc.

- (b) Give an account of the Small Claims Court procedure used to resolve a consumer dispute over goods or services. (20 marks)

4 points @ 5 marks (graded 5:3:0)

part of the district court office; consumer completes the application form; pays €25.00 to have form processed; the complaint is registered; a notice of the claim is sent to the respondent; the respondent can admit, dispute or ignore the claim or can counter claim; they have 15 days to reply; the small claims registrar will try to resolve the issue; if the issue cannot be resolved it may be referred to a court hearing; if the respondent does not reply or challenge the claim within 15 days, it is taken that they admitted the claim and the claim is settled in favour of the consumer; the respondent has 28 days to comply with the judgment; claims up to €2,000 may be resolved; etc.

- (c) Explain how the Sale of Goods and Supply of Services Act 1980, protects the consumer. (10 marks)

2 points @ 5 marks (graded 5:3:0)

goods should be of merchantable quality; fit for purpose intended; be as described; correspond to sample; services should be provided by a skilled person; consumer is entitled to redress; entitled to a repair, refund or replacement; sets out the conditions for a guarantee; materials used must be of good quality; etc.

Question 5

‘Caring for our family members, has always been a fundamental part of ethical living.’

(www.familycarers.ie)

(a) Describe each of the following functions of the family:

- physical **1 point @ 5 marks** (graded 5:3:0)
- emotional **1 point @ 5 marks** (graded 5:3:0)
- social **1 point @ 5 marks** (graded 5:3:0)
- economic. **1 point @ 5 marks** (graded 5:3:0) (20 marks)

physical provides basic needs, e.g. food, clothes, shelter; protects vulnerable members by providing a safe environment; procreation/reproduction; etc.

emotional safe and secure home, a place for children to discuss feelings and express emotions; helps children develop self-esteem resulting in well-adjusted personalities; capable of forming healthy relationships; children loved and cared for; parents support each other, role models for children; etc.

social teaches what is acceptable in society; respect; teaching right from wrong; children learn how to behave in a socially acceptable way through imitation and observation; children need consistent discipline to help them develop a set of values; etc.

economic support children until they reach the age of 18 or 23 if in fulltime education; both parents may work; large families may work together as an economic unit; working families pay taxes and spend money in the economy; etc.

(b) Explain how the state assists the family in carrying out their physical, social and economic functions. (15 marks)

3 points @ 5 marks (graded 5:3:0)

physical social welfare allowances; HSE, e.g. public health nurse; Community Mothers and Family Support Programmes; Parent Plus Programmes; Parent & Toddler Groups; Tusla; etc.

social Early Childhood Care and Education Scheme (ECCE); pre-school, primary and post primary schools; SNA's; special schools; special classes; HEAR; DARE; Garda liaison/probation services/detention centres; etc.

economic social welfare allowances; Disability & Carers Allowance; Back to School Clothing and Footwear Allowance; Child Benefit; Working Family Payment (WFP); School Meals Programme; Junior Cycle Schoolbooks Scheme; etc.

(c) Discuss **three** advantages of a positive parent-child relationship within the family. (15 marks)

3 points @ 5 marks (graded 5:3:0)

children feel valued as they can express their feelings in a safe environment; secure and healthy attachment to their parents; develop happy and content relationships with others in life; child learns to regulate emotions under stress and in difficult situations; establish secure bonds and friendships with peers; promote a child's cognitive, emotional, and social development; etc.

Section C

Elective 1 – Home Design and Management – 80 marks

Candidates selecting this elective must answer **1(a)** and either **1(b)** or **1(c)**.

1.(a) ‘The quality of drinking water is a powerful environmental determinant of health.’
(www.hse.ie)

- (i) Describe **four** stages involved in the treatment of public water supply to make it safe for human consumption. (20 marks)

4 stages @ 5 marks (graded 5:3:0)

screening impurities in water such as floating debris are removed; etc.

sedimentation chemicals added to the water which attach to the dirt which sinks to the base of the tank, water is allowed settle so that soil and other solid matter can be removed; etc.

filtration water passes through filter beds of sand, gravel, and stones to remove any excess matter/dirt; etc. **chlorination** chlorine is added to kill bacteria; etc. **fluoridation** fluoride added to protect teeth; etc. **softening** softener added in hard water areas to soften water and protect fittings; etc. **testing** water is tested for quality and pureness and stored in high storage reservoir; etc.

- (ii) Explain what precautions should be taken to prevent the cold-water supply freezing in the home during cold weather. (15 marks)

3 points @ 5 marks (graded 5:3:0)

storage tank in the attic should be insulated; water pipes should be lagged to prevent burst pipes during frost; heat should be set to come on periodically at a lower temperature if away during winter; circulate warm air around pipes; service heating system regularly; install heat bulbs in attic; allow cold water tap to drip; etc.

- (iii) Describe the function of the following in relation to the cold-water supply of a house:

- service pipe **1 point @ 5 marks** (graded 5:3:0)
- ball valve **1 point @ 5 marks** (graded 5:3:0)
- storage tank. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

service pipe connects the mains pipe with the house; the service pipe enters the house just underneath the kitchen sink, carries fresh water to the cold water tap in the kitchen; etc.

ball valve controls the level of water in the water tank in the attic; it floats on the top of a full tank keeping the valve closed; it closes off the pipe and stops the inward flow of water when a certain level is reached; when water is used the ball drops opening the valve until the water fills again to the correct level, closing the valve; prevents an overflow of water into the house; etc.

storage tank located in the attic as high level improves pressure to supply the system; a ball valve controls the level of water in the tank; stores the cold water which supplies the cold-water taps, toilets and hot press tank in the home; etc.

and

1.(b) 'Over the past ten years the way we design our homes has changed a lot.' (www.houzz.ie)

(i) Describe the procedure to follow when applying for full planning permission to build a house. (15 marks)

3 points @ 5 marks (graded 5:3:0)

must be got from local planning authority before any building work starts on the site; must submit detailed application to local planning authority including site maps with proposed location of building, house plans and interior plans, details of materials to be used; application form; planning fee; copies of planning application notices published in local newspapers; notice must be placed at the site of the proposed development; local planning authority may agree that site is suitable for building, may request further information; may refuse planning permission; etc.

(ii) Discuss the role of the following professional services when designing and building a house:

- architect **1 point @ 5 marks** (graded 5:3:0)
- engineer **1 point @ 5 marks** (graded 5:3:0)
- solicitor. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

architect advises on choice of site; designs and draws up house plans; advises on contractors; makes planning application; house design suitability for the needs of the family; may oversee construction of the house; etc.

engineer provides advice on the structure of the house; oversees project; advises on building problems; etc.

solicitor deals with the legal aspect e.g. advises on building and planning regulations; ensures that title deeds are in order; checks rights of way with land registry; must engage a solicitor if applying for a mortgage; etc.

or

1.(c) All homes in Ireland should have good ventilation.

(i) Discuss **three** advantages of having good ventilation in the home. (15 marks)

3 points @ 5 marks (graded 5:3:0)

provides fresh air; removes stale/impure air; controls humidity levels; controls room temperature; reduces condensation; reduces odours and smells; prevents mould; reduces damage to home; reduces risk of illnesses and infections; assists combustion; more comfortable atmosphere; etc.

(ii) Name **one** method of ventilation suitable for a kitchen and explain the underlying principle of the method named. (15 marks)

Name 5 marks (graded 5:3:0), **underlying principles 2 points @ 5 marks** (graded 5:3:0)

extractor fan powered by electricity; switch operated; when fan is turned on, the shutters open; electric motor rotates blades at high speed; causes suction, drawing stale air from the room; replaced by fresh air entering underneath doors or through open windows/vents; etc.

cooker hood powered by electricity; when ducted cooker hood turned on, electric motor rotates blades of fan at high speed; causes suction, drawing air containing heat, steam, fumes, smoke, odours out of room; air passes through grease filter, trapping grease; air is expelled outside; naturally replaced by fresh air; etc. **Accept** open doors; open windows, trickle vents in windows

air vents warm moisture filled stale air moves upwards by means of convection; removed through open natural ventilation method located high up on the wall; fresh clean air enters house through openings lower down; etc.

Elective 2 – Textiles, Fashion and Design – 40 marks

Candidates selecting this elective must answer **2(a)** and either **2(b)** or **2(c)**.

2.(a) Sportswear needs to be practical but can also be stylish.



(www.pinterest.com)

(i) Comment on the suitability of the sportswear shown above.

Refer to:

- comfort **2 points @ 3 marks** (graded 3:2:0)
- function **2 points @ 3 marks** (graded 3:2:0)
- aesthetic appeal. **2 points @ 3 marks** (graded 3:2:0) (18 marks)

comfort allows for ease of movement during exercise; easy to remove jacket/hoodie; woman's jacket is water resistant; round neck t-shirt for women is comfortable; suitable footwear for exercise; tracksuit bottoms are fitted, less like to slip/move down during exercise/movement; etc
function suitable for different exercise activities; durable; reduced risk of creasing; suited to warm and cold weather; improved visibility due to strips of bright colours; can hold personal items; suitable footwear for exercise; etc.

aesthetic appeal stripes of colour on tracksuit bottoms; narrowed cuff on man's hoodie; fitted leggings style bottoms; zip on both hoodie/jacket; pockets in hoodie/jacket; colour blocking; draw string feature on man's hoodie; brand crest less obvious due to small size; etc.

(ii) Describe how emphasis as a design principle is applied to the outfits pictured above.

(7 marks)

1 point @ 4 marks (graded 4:2:0), **2nd point @ 3 marks** (graded 3:2:0)

bright yellow t-shirt; bright yellow/white runners; yellow stripe on side and back of tracksuit bottom; green stripe on shoulder and top of tracksuit bottom; brand logos; contrasting zip; etc.

and

2.(b) 'Textiles have such an important bearing on our daily lives.' (www.coats.com)

Write a profile of a natural fibre under **each** of the following headings:

- fibre production **1 point @ 5 marks** (graded 5:3:0)
- properties **1 point @ 5 marks** (graded 5:3:0)
- test to identify a natural fibre. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

fibre production **linen** made from the stem of the flax plant; flax stems are pulled and retted, soaked until the outer stem rots; stems are crushed and combed; fibres are spun into yarn; yarn is bleached and dyed; woven into a textured fabric; etc. **cotton** comes from the boll or seed head of the cotton plant, fibres are 2-3cm long; fibres are white and fluffy; the bolls are picked; the fibres are separated from the seeds; then pressed into bales; the cotton is graded according to the length of the fibres; these fibres are spun into yarn; etc. **wool** fleece of sheep, goats, llamas grown; sheared; sorted/graded; cleaned; combed/carded; dyed; spun into yarn; etc. **silk** silkworms eat leaves of mulberry tree; spin cocoon of silk; cocoons soaked in water; thread extraction; dyed; spun into yarn; etc.

properties **linen** absorbent; strong; conducts heat well; resists mildew; good lustre; shrinks; poor resistance to fire; little elasticity; soils easily; dyes well; creases easily; etc. **cotton** absorbent; cool; strong; easy to wash and dry; dyes well; creases easily; shrinks; etc. **wool** warm; soft; absorbent; resilient; irritates sensitive skin; pills; shrinks; etc. **silk** absorbent; crease resistant; drapes well; flammable; easily damaged; etc.

test to identify a natural fibre hold fabric over a flame proof dish; ignite; etc. **linen** takes longer to ignite; easily extinguished by blowing on it; etc. **cotton** flares up when lit; no melting beads are left and after burning it continues to glow; smoke is grey to white and ash is fine and soft; etc. **wool** burns slowly; sizzles and curls away from the flame; leaves beads that are brittle, dark and easily crushed; is self-extinguishing; leaves harsh ash from the crushed bead; strong odour of burning feathers/hair; etc. **silk** burns slowly; sizzles and curls away from the flame; leaves a dark bead which can be crushed; is self-extinguishing; leaves ash that is a dark, gritty, fine powder; smells like burned hair/charred meat; gives out little or no smoke; etc.

or

2.(c) 'Fashion has two purposes comfort and love.' (Coco Chanel)

(i) Describe **two** fashion trends currently popular in summer clothing. (6 marks)

2 points @ 3 marks (graded 3:2:0)

light weight leggings; loose t-shirts; crochet knits; denim jackets; knee high splits; oversized jackets; mini dresses; cut out clothing; sheer white; metallics; cargo trousers; etc.

(ii) Discuss **three** factors that influence a person's choice when choosing work wear clothing. (9 marks)

3 points @ 3 marks (graded 3:2:0)

comfortable; suitable for function; washable; allow for ease of movement; high visibility; easy to remove; well fitted footwear; waterproof; stylish; sustainable; cost; fashion trends; easy care; etc.

Elective 3 – Social Studies – 80 marks

Candidates selecting this elective must answer **3(a)** and either **3(b)** or **3(c)**.

3.(a) 'Of women over 15 years of age in Ireland, more than 50% of them are in the workforce.'
(www.cso.ie)

(i) Explain the following types of work:

- paid work **1 point @ 5 marks** (graded 5:3:0)
- unpaid work **1 point @ 5 marks** (graded 5:3:0)
- voluntary work. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

paid work done for financial gain; may be permanent, temporary, full-time, part-time or contract based; self-employed or employed by another person; can be completed from home setting or designated work setting; a wide range of skills required from manual to managerial positions; provides security in the form of pension, PRSI, holiday and sick pay; etc.

unpaid work no financial reward for work; domestic housework i.e. child rearing, caring for elderly/disabled; general household tasks; DIY home related activities; work experience/placement; etc.

voluntary work involves working for community or for a charity; no financial reward; helping other people and making a difference in other peoples' lives; etc.

(ii) Discuss **three** reasons for the increased participation of women in the work force. (15 marks)

3 reasons @ 5 marks (graded 5:3:0)

better educated; equality in workplace; social contact; improved self-esteem; equal pay; part-time work available; better working conditions, e.g. job share, flexitime, career breaks; etc. high standard of living; more stay at home partners; greater variety of childcare options available; two incomes needed to meet high cost of living; independence; role models for children; personal desire; etc.

(iii) Evaluate the impact of dual earner families on family life. (20 marks)

4 points @ 5 marks (graded 5:3:0)

increase in disposable income; higher standard of living; both parents involved in child rearing; both parents involved in household tasks; children have better attitude towards work; less financial worry; role overload; role conflict; older children have more responsibilities; children feel lonely, neglected; etc.

and

3.(b) Leisure time is time that a person is free from work or other duties.

(i) Discuss how family leisure activities are influenced by each of the following:

- gender **1 point @ 5 marks** (graded 5:3:0)
- age **1 point @ 5 marks** (graded 5:3:0)
- cultural influences. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

gender some activities are male/female dominated; the amount of time; women/men working outside the home have less time for leisure; etc.

age young people have fewer commitments and more time for leisure; couples with young children have the least amount of time and disposable income; retired couples have more time and money to spend on leisure; older people have less money, may have physical constraints and do more sedentary pursuits; leisure activities change with age; some leisure activities are regarded as too dangerous for children e.g. under 10's may not scuba dive; etc.

cultural influences in a particular area of a county, e.g. surfing, hurling; etc. traditional to a country, e.g. Irish music; children's choice of leisure activities often influenced by parent's activities; etc.

(ii) Evaluate the benefits of participating in leisure activities for family members.

(15 marks)

3 benefits @ 5 marks (graded 5:3:0)

helps relax and unwind from stresses of daily life; assists mental well-being; improves physical health; furthers social interaction; encourages positive relationships; assist the development of new skills; develops creative skills; improves self-esteem; encourages family bonding; improves communication and teamwork; reduces boredom; good example for children; etc.

or

3.(c) Social and economic changes have impacted on family life in Ireland today.

(i) Evaluate the impact of the following on family life.

- improvements in the provision of education **1 point @ 5 marks** (graded 5:3:0)
- parenting roles within the family **1 point @ 5 marks** (graded 5:3:0)
- improved conditions at work. **1 point @ 5 marks** (graded 5:3:0) (15 marks)

improvements in the provision of education pre-schools; after school/homework clubs; special classes for pupils with additional needs; SNA's at primary and secondary level; multi-sensory rooms; autism hubs; abolition of fees, SUSI grants, HEAR, DARE have made third level education more accessible; adult and second-chance education; PLC courses and SOLAS training programmes; VTOS for long term unemployed; distance learning; etc.

parenting roles within the family parents are role models; parents discipline their children so that they learn to behave in an acceptable manner within society; cultural values or religious beliefs are passed onto children; both parents involved in childrearing; both parents work outside the home

and children go to creche; many one parent families; women as breadwinners; men staying at home to mind children; children have greater say in family matters; egalitarian approach to childcare and household tasks; role conflict; role overload; increased need for childcare; etc. **improved conditions at work** shorter working week/day; better hourly pay rates; more disposable income and a higher standard of living; people are happier at work which can have a positive effect on family life; health and safety regulations ensure a safer work environment; etc.

- (ii) Describe how second-level education prepares students for participation in the workplace. (15 marks)

3 points @ 5 marks (graded 5:3:0)

literacy skills; numeracy skills; computer skills; develop qualities, e.g. respect for authority; punctuality; trustworthiness; responsibility; self-discipline; socialisation skills; work experience; etc.

Question 4 – Core – 80 marks

Candidates selecting this question must answer **4(a)** and either **4(b)** or **4(c)**.

4.(a) ‘Your body needs lots of different nutrients to stay healthy.’ (www.safefood.net)

(i) Give an account of **(i)** the nutritive value **and** **(ii)** the dietetic value of milk. (20 marks)

4 points @ 5 marks (graded 5:4:3:2:0)

(1 reference to nutritive value, 1 reference to dietetic value, & 2 other points)

nutritive value HBV protein; saturated fat; carbohydrates in the form of lactose; contains Vitamins A, B, D; excellent source of calcium; good source of phosphorus; traces of magnesium, potassium and sodium; contains 87% water; deficient in Vitamin C and iron; etc.

dietetic value HBV protein for growth and repair; saturated fat, provides heat and energy; carbohydrate in form of lactose for energy; calcium and phosphorus for bones and teeth; important for children, adolescents, pregnant women and elderly; versatile; used in both sweet and savoury dishes; easy to digest; can be fortified with vitamins and minerals; should be combined with foods rich in starch, fibre, iron to have balance in the diet; inexpensive; wide range of different types available to suit different diets, tastes and requirements; etc.

(ii) Describe **one** heat treatment used by manufacturers to extend the shelf life of milk.

Refer to:

- name of process **Name 1 @ 2 marks** (graded 2:1:0)
- how the process is carried out **4 points @ 3 marks** (graded 3:2:0)
- labelling. **2 points @ 2 marks** (graded 2:1:0) (18 marks)

pasteurisation milk heated to 72°C; for 15-25 seconds; cooled quickly to 10°C; packaged into glass bottles, plastic cartons, waxed cardboard; etc.

sterilisation milk homogenised; sealed in glass bottles; heated to 110°C; for 30 minutes; cooled; etc.

ultra-heat treatment (UHT) milk heated to 132°C; for 1-3 seconds; cooled quickly; packaged into sterile containers; etc.

condensed milk milk homogenised; heated to 80°C; for 15 minutes; 15% sugar added; sealed in sterile cans; etc.

evaporated milk milk homogenised; heated to 115°C; for 20 minutes; sealed in sterile cans; etc.

labelling type of milk; brand; quantity of milk; nutritional information; date-stamp; storage instructions; etc. **Accept** Spray Drying and Roller Drying

(iii) Outline **three** different ways that dairy foods can be included as part of a healthy diet.

(12 marks)

3 ways @ 4 marks (graded 4:2:0)

Milk, milk with cereal; part of milkshake/smoothie, glass of milk with a meal; added to scrambled eggs; in white sauce for cauliflower, over bacon, in pasta bakes, lasagnes; added to mashed potatoes; part of custard, rice pudding, semolina pudding; panna cotta; etc.

Cheese, grilled cheese sandwich; crackers and cheese; part of salads; added to scrambled eggs; garnish for soups; added to pasta dishes; topping for pizza, lasagne, shepherd's pie; cheesecake; cheeseboard; etc.

Yoghurt, instead of milk with cereals; part of smoothies; a snack; added to curries; part of a dip; muffins; used instead of cream for desserts; added to cheesecakes; frozen yoghurt; etc.

Cream, garnish for soups; added to mashed potatoes; used in white sauces; accompaniment to desserts; served with scones; part of ice-creams; etc.

and

4.(b) 'Choosing an electrical appliance, less is usually best.' (www.electricireland.com)

- (i) Discuss **three** factors that should be considered when choosing a kitchen appliance. (15 marks)

3 factors @ 5 marks (graded 5:3:0)

cost; energy efficiency; safety; colour, size and shape; size of family; cleaning/maintenance; guarantee and after sales service; design; function; ease of use; special features; brand; consumer websites; leaflets; word of mouth; trends; etc.

- (ii) Describe **three** guidelines to follow for the safe use of electrical kitchen appliances. (15 marks)

3 guidelines @ 5 marks (graded 5:3:0)

follow manufacturer's instructions; assemble correctly; use correct speed/temperature; use correct attachments; buy appliances with a safety approval mark; ensure plugs are correctly wired and replace if defective; examine flexes for wear and tear; do not handle sockets, plugs or electrical appliances with wet hands; do not have flexes trailing over hob or sink; do not use adapters/extension leads to overload sockets; unplug all appliances before cleaning; etc.

or

4.(c) 'There was a total of 23,173 marriages celebrated in Ireland in 2022.' (www.cso.ie)

- (i) Outline conditions necessary for a marriage to be legally valid in Ireland. (15 marks)

3 points @ 5 marks (graded 5:3:0)

three months' notice required by registrar; partners must be over 18 years of age; marriage must be voluntary; both people must be free to marry, cannot be married already; partners must not be too closely related; two witnesses must be present; the register must be signed by the couple and witnesses; all marriages must be registered after the ceremony; must take place in a registered building, e.g. registry office, church, or approved venue; etc.

- (ii) Discuss **three** responsibilities of a couple within a marriage relationship. (15 marks)

3 points @ 5 marks (graded 5:3:0)

provide financial support for partner and children; joint guardianship of children; legal duty to provide for the physical, emotional, social, moral and educational needs of the children; work on the relationship to ensure it is functioning; show commitment to the marriage; etc.



Coimisiún na Scrúduithe Stáit

Marcanna Breise as ucht freagairt trí Ghaeilge

Léiríonn an tábla thíos an méid marcanna breise ba chóir a bhronnadh ar iarrthóirí a ghnóthaíonn níos mó ná 75% d'iomlán na marcanna.

N.B. Ba chóir marcanna de réir an ghnáthrata a bhronnadh ar iarrthóirí nach ghnóthaíonn níos mó ná 75% d'iomlán na marcanna don scrúdú. Ba chóir freisin an marc bónaís sin **a shlánú síos**.

Tábla 320 @ 10%

Bain úsáid as an tábla seo i gcás na n-ábhar a bhfuil 320 marc san iomlán ag gabháil leo agus inarb é 10% gnáthrata an bhónais.

Bain úsáid as an ngnáthrata i gcás 240 marc agus faoina bhun sin. Os cionn an mharc sin, féach an tábla thíos.

Bunmharc	Marc Bónais
241 - 243	23
244 - 246	22
247 - 250	21
251 - 253	20
254 - 256	19
257 - 260	18
261 - 263	17
264 - 266	16
267 - 270	15
271 - 273	14
274 - 276	13
277 - 280	12

Bunmharc	Marc Bónais
281 - 283	11
284 - 286	10
287 - 290	9
291 - 293	8
294 - 296	7
297 - 300	6
301 - 303	5
304 - 306	4
307 - 310	3
311 - 313	2
314 - 316	1
317 - 320	0



Coimisiún na Scrúduithe Stáit

Marcanna Breise as ucht freagairt trí Ghaeilge

Léiríonn an tábla thíos an méid marcanna breise ba chóir a bhronnadh ar iarrthóirí a ghnóthaíonn níos mó ná 75% d'iomlán na marcanna.

N.B. Ba chóir marcanna de réir an ghnáthrata a bhronnadh ar iarrthóirí nach ghnóthaíonn níos mó ná 75% d'iomlán na marcanna don scrúdú. Ba chóir freisin an marc bónais sin **a shlánú síos**.

Tábla 280 @ 10%

Bain úsáid as an tábla seo i gcás na n-ábhar a bhfuil 280 marc san iomlán ag gabháil leo agus inarb é 10% gnáthrata an bhónais.

Bain úsáid as an ngnáthrata i gcás 210 marc agus faoina bhun sin. Os cionn an mharc sin, féach an tábla thíos.

Bunmharc	Marc Bónais
211 - 213	20
214 - 216	19
217 - 220	18
221 - 223	17
224 - 226	16
227 - 230	15
231 - 233	14
234 - 236	13
237 - 240	12
241 - 243	11
244 - 246	10

Bunmharc	Marc Bónais
247 - 250	9
251 - 253	8
254 - 256	7
257 - 260	6
261 - 263	5
264 - 266	4
267 - 270	3
271 - 273	2
274 - 276	1
277 - 280	0



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Home Economics – Scientific and Social

Food Studies Coursework

Marking Scheme

In developing the marking schemes the following should be noted:

- In many cases only key phrases are given which contain information and ideas that must appear in the candidate's answer in order to merit the assigned marks*
- The descriptions, methods and definitions in the scheme are not exhaustive and alternative valid answers are acceptable*
- The detail required in any answer is determined by the context and the manner in which the question is asked, and by the number of marks assigned to the answer in the examination paper. Requirements and mark allocations may, therefore, vary from year to year.*
- Words, expressions or phrases must be correctly used in context and not contradicted, and where there is evidence of incorrect use or contradiction, the marks may not be awarded. Information must be presented under the appropriate headings.*

Grading Table

Grade	Mark bands
1	144-160
2	128-143
3	112-127
4	96-111
5	80-95
6	64-79
7	48-63
8	Less than 47

Food Studies Practical Coursework General Marking Criteria

Investigation: Analysis/Research

32 marks

Research and Analysis

(24 marks)

Band A 19 – 24 marks (very good - excellent)

Investigation

- shows evidence of a **thorough exploration** and **comprehensive analysis** of **all** the issues and factors directly relevant to the key requirements of the assignment
- is accurate, derived from a range of sources and presented coherently
- uses evidence from research as basis for making relevant choices in relation to selection of menus/dishes/products.

Band B 13 – 18 marks (very competent - good)

Investigation

- shows evidence of **exploration** and some **analysis** of the issues and factors which are generally relevant to the key requirements of the assignment
- is accurate, derived from a range of sources and presented coherently
- uses evidence from research as basis for making relevant choices in relation to selection of menus/dishes/products.

Band C 7 - 12 marks (basic - competent)

Investigation

- shows evidence of **exploration** of the issues and factors which are generally relevant to the key requirements of the assignment
- is **reasonably accurate**, derived from a range of sources and presented coherently
- uses evidence from research as basis for making choices in relation to selection of menus/dishes/products.

Band D 0 - 6 marks (very basic - limited)

Investigation

- shows evidence of **a very basic and limited understanding of** the key requirements of the assignment
- some or all of the information is **vague and accurate only in parts**, presentation lacks coherence
- uses evidence from research as basis for making choices in relation to selection of menus/dishes/products.

All Assignments: menu for day/2 two course meals/1 dish/2 dishes/2 products.

(4 marks)

If dish prepared is not investigated - 1/- 2/- 4 marks in Investigation.

(menu: – starter/dessert = 1 mark, main course = 1 mark)

suitable meals/dishes/products having regard to factors identified and analysed in the investigation

Menus/main course/dishes must be balanced – accept 3 out of 4 food groups.

Sources: 2 sources @ 2 marks (graded 2:1:0)

(4 marks)

Resources:

- ingredients (2 marks), quantities (2 marks), costing (2 marks), equipment (2 marks)
- AOP E – product/s (2 marks), equipment (6 marks)

Implementation**28 marks**

Outline of the procedure followed to include food preparation processes, cooking time, temperature (accept boiling/simmering here), serving/presentation, tasting/evaluation. **(16 marks)**
(information/account should be in candidate's own words)

Band A 13 - 16 marks (very good - excellent)

All essential stages in preparation of dish identified, summarised and presented in candidate's own words, in correct sequence with due reference to relevant food preparation process/es used.

Band B 9 - 12 marks (very competent - good)

Most essential stages in preparation of dish identified, summarised and presented in correct sequence with due reference to relevant food preparation process/es used.

Band C 5 - 8 marks (basic - competent)

Some essential stages in preparation of dish identified, summarised and presented in correct sequence with due reference to relevant food preparation process/es used.

Band D 1 - 4 marks (very basic - limited)

Few or any essential stages in preparation of dish identified, summarised and presented in sequence with due reference to relevant food preparation process/es used.

• **Key factors considered** **2 points @ 4 marks** (graded 4:2:0) **(8 marks)**

(must relate to specific dish/test)

Identification (2 marks) and **clear explanation of importance** (2 marks) of **two factors** considered which were **critical to the success of the dish/test**.

• **Safety/Hygiene** **2 points @ 2 marks** (graded 2:1:0) **(4 marks)**

(must relate to specific ingredients being used/dish being cooked)

Identification (1mark) and **explanation** (1 mark) of **one** key safety issue **and one** key hygiene issue considered when preparing and cooking dish/conducting test.

Safety = safety in the workplace **Hygiene** = food safety / hygiene (must give reason for 2/2)

Evaluation**3 points @ 4 marks** (graded 4:3:2:0)**12 marks**

Evaluate the assignment in terms of:

Implementation

Band A - 4 marks - identified and analysed specific strengths/challenges in carrying out the task, modifications, where suggested, were clearly justified, critical analysis of use of resources/planning.

Band B - 3 marks - identified strengths/challenges in carrying out task, some justification of proposed modifications, limited analysis of use of resources/planning.

Band C - 2 marks - some attempt made at identifying strengths/challenges in completion of task, modifications where suggested not justified, reference made to use of resources/planning.

Specific requirements of the assignment

Band A - 4 marks - draws informed conclusions in relation to the key requirements of the assignment.

Band B - 3 marks - draws limited conclusions in relation to the key requirements of the assignment.

Band C - 2 marks - summarises outcomes in relation to the assignment.

Assignment 1

Good nutritional choices during pregnancy can positively affect the current and future health of the mother and baby. (Institute of Obstetricians & Gynaecologists, HSE)

Research and elaborate on the nutritional needs and the meal planning guidelines that should be considered when planning meals for women during pregnancy.

Having regard to the factors identified in your research, suggest a range of two-course menus suitable for the main meal of the day for this group of people.

Prepare, cook and serve one of the main courses from your research.

Evaluate the assignment in terms of **(a)** implementation and **(b)** the specific requirements of the assignment

2024

Key requirements of the assignment:

- dietary/nutritional needs for **women during pregnancy**
- relevant meal planning guidelines with specific reference to **women during pregnancy**

➤ range of two-course menus suitable for the main meal of the day

Investigation

Dietary/nutritional needs: *nutritional balance; current nutritional guidelines re nutrient and food intake; daily requirements of macro/micro nutrients including protein/carbohydrate/fat/iron/calcium as appropriate for women during pregnancy; recommended daily allowance/reference intake; interrelationship of minerals and vitamins e.g. Vitamin C/iron absorption; Vitamin D/calcium absorption; correct intake of Vitamin A; Vitamin K; Vitamin E; Vitamin B12; Folate/Folic Acid; Iodine; Omega 3 fatty acids; increase fibre; energy intake vis a vis activity levels & stage of pregnancy; etc.*

Meal planning guidelines: *use of food pyramid to ensure balance; personal likes and dislikes; alterations in tastes and cravings; small portion sizes; avoid excess caffeine consumption; sensitive to smell – fatty, highly seasoned, high sugar and spicy foods can trigger release of stomach acid causing nausea/morning sickness; cold milk and yoghurt for heartburn; include ginger in foods/drinks; avoid foods/beverages high in saturated fat, salt and sugar; include fresh fruit and vegetables; wash fruits, vegetables and salads; include high fibre foods; keep salt consumption to minimum; include plain/bland foods e.g. dry crackers/toast; smaller meals towards end of pregnancy; fortified foods; avoid empty kilocalorie foods i.e. high in sugar, can lead to diabetes; avoid homemade mayonnaise, homemade ice-creams, unpasteurised milks and cheeses, pâté; etc. avoid soft boiled/runny eggs; avoid pre-prepared salads; avoid eating sushi; avoid eating pre-cooked & smoked fish; avoid skipping meals; regular eating patterns; variety of foods; healthy food choices; healthy cooking methods; adequate fluid intake; consider food hygiene; consider allergies; consider special diets; etc.*

Dishes selected

- range of two course menus for the main meal of the day (graded 4:3:2:1:0)
- must meet the nutritional requirements for women during pregnancy
- must be a main course

Evaluation (a) implementation and **(b)** the specific requirements of the assignment

Analysis of findings from research regarding the dietary/nutritional needs for women during pregnancy. Meal planning guidelines – range of foods/dishes suitable when planning meals for women during pregnancy, how the selected dish meets the requirements as identified in the investigation; etc.

Assignment 2

Globally, heart disease and stroke are the leading causes of death; but 80% are preventable when lifelong healthy lifestyle choices are made and followed. (The Irish Heart Foundation)

With reference to this statement, research **(i)** the risk factors associated with developing cardiovascular disease and **(ii)** the lifestyle considerations required to promote a healthy heart and cardiovascular system.

Investigate and elaborate on the nutritional needs and the factors that should be considered when planning and preparing meals for people concerned about their cardiovascular health.

Having regard to the factors identified in your research, suggest a range of two-course menus suitable for the main meal of the day for this group of people.

Prepare, cook and serve one of the main courses from your research.

Evaluate the assignment in terms of **(a)** implementation and **(b)** the specific requirements of the assignment.

2024

Key requirements of the assignment:

- *risk factors associated with developing **cardiovascular disease***
- *lifestyle considerations required to **promote a healthy heart & cardiovascular system***
- *dietary/nutritional needs for **people concerned about their cardiovascular health***
- *factors to be considered when planning & preparing meals for people **concerned about their cardiovascular health***

➤ *range of two-course menus suitable for the main meal of the day*

Investigation

Risk factors: *family history; age – increases in over 50's; gender; hypertension; diabetes; high LDL cholesterol; smoking/chewing tobacco; excessive alcohol consumption; physical inactivity; liver/kidney disease; unhealthy diet – high in saturated fat, trans fat, sugar, salt; overweight, obesity; stress; etc.*

Lifestyle considerations to promote a healthy heart & cardiovascular system: *quit smoking; lower stress; increase physical activity: 150 + minutes moderate activity per week; maintain healthy weight; reduce alcohol consumption; lower intake of saturated and trans-fatty acids; increase omega 3 intake; lower LDL cholesterol intake; increase HDL cholesterol intake; lower salt, sugar intake; fibre intake; etc.*

Dietary/nutritional needs: *nutritional balance; current nutritional guidelines re nutrient and food intake; daily requirements of macro/micro nutrients including protein/carbohydrate/fat/iron/calcium as appropriate for people concerned about their cardiovascular health; interrelationship of minerals and vitamins e.g. vitamin C/iron absorption; vitamin D/calcium absorption; increase fibre; polyunsaturated fats; omega 3 fatty acids; reduce sodium intake; energy balance vis a vis activity levels; etc.*

Factors to be considered when planning & preparing meals: *use food pyramid to ensure balance; balance food intake with physical activity; avoid skipping meals; reduce salt intake; choose low salt/no salt options; avoid foods soaked in brine; avoid convenience foods; examine food labels; reduce saturated & trans fats; lean protein sources; choose chicken and fish over red meat; reduce use of hydrogenated/partially hydrogenated foods; increase polyunsaturated fat; increase fibre; reduce refined carbohydrates; increase fresh fruit and vegetables; avoid LDL cholesterol foods; healthy low fat cooking methods; avoid foods high in sugar; consider portion sizes; replace salt with herbs, spices; include functional foods; avoid cream based sauces; opt for low fat/reduced fat products; avoid premade sauces, mixes; avoid salted nuts; etc.*

Dishes selected

- **range of two course menus for the main meal of the day** (graded 4:3:2:1:0)
- **must meet the nutritional requirements for people concerned about their cardiovascular health**
- **must be a main course**

Evaluation **(a)** implementation and **(b)** the specific requirements of the assignment

Analysis of findings from research regarding the nutritional needs of people concerned with their cardiovascular health. Meal planning guidelines – range of foods/dishes suitable when planning meals for people concerned about their cardiovascular health, how the selected dish meets the requirements as identified in the investigation; etc.

Assignment 3

Food processors assist in the preparation of many foodstuffs reducing the physical demands of food preparation.

Carry out research on food processors having regard to:

- types, brands and attachments
- different uses of the food processor
- dishes (sweet and savoury) that can be prepared using a food processor
- key points to follow when using a food processor, to include safety considerations.

Using a food processor, prepare, cook and serve one dish that you have researched.

Evaluate the assignment in terms of **(a)** implementation and **(b)** the advantages and/or the disadvantages of using a food processor.

2024

Key requirements of the assignment:

- *research on food processors to include types, brands and attachments*
- *different uses of the food processor*
- *dishes (sweet and savoury) that can be prepared using a food processor*
- *key points to follow when using a food processor, to include safety considerations*

➤ *chosen dish*

Investigation

Types: food processors with jug blender/smoothie maker/liquidiser/fruit juicer; compact or mini choppers/processors; large food processors; etc. **Brands:** Bosch, Braun; Cuisinart; Logik; Philips; Kitchen aid; Kenwood; Russell Hobbs; Ninja; Magimix; Sage; VonShef; Morphy Richards; Nutri bullet; Gordon Ramsay; James Martin; etc. **Attachments:** chopping/mixing blade; coarse/fine grating/shredding discs; coarse/fine slicing discs; julienne disc; chipping disc; granulating/rasping disc; geared whisk; dough tool; folding tool; mill; citrus press; centrifugal juicer; peeling attachment; emulsifying disc; liquidiser; maxi-blend canopy; grinder; etc.

Uses: grating; shredding; slicing; chopping/dicing; julienning/chipping; kneading dough; creaming/whisking; mixing; juicing; blending/pureeing; mashing; etc.

Dishes: breads; scones; biscuits; cakes; tarts; meringues; pancakes; fruit crumbles; pizzas; meat/vegetable patties; curries; shepherd's pie; fish cakes; chicken/fish goujons; falafels; quiches; omelettes; ratatouille; stir-fries; soups; etc.

Key points to follow when using a food processor, to include safety considerations: correctly assemble food processor; select correct attachment for task; handle blades/discs with care; lock lid into place before operating; use low speed when beginning and when adding dry ingredients; have fats at room temperature or softened before adding; use splashguard when mixing flour, icing sugar; remove splashguard before whisking eggs, batters, cream; do not exceed maximum capacity of bowl/jug; do not over mix ingredients; chop solid foods into smaller even sized chunks before adding; ingredients mix best if put in with liquid; scrape down sides of bowl/jug at regular intervals; avoid over running motor; cool foods/liquids before adding; use funnel/chute for adding foods; use plastic pusher to press foods down; ensure food covers blades; if food stuck, turn off food processor before trying to remove; use with dry hands; do not leave unattended; never immerse motor in water; clean after use; etc.

Dish selected – must show the use of food processor 1 dish @ 4marks (graded 4:2:0)

Evaluation (a) implementation and **(b)** the advantages and/or the disadvantages of using a food processor.

Assignment 4

Freezing extends the shelf life of food, thereby reducing waste and increasing food sustainability.
(stopfoodwaste.ie)

Carry out research on the range of frozen foods and products currently available to consumers.

With reference to home freezing:

- identify a range of main course dishes, desserts and baked products suitable for home freezing
- discuss the guidelines to follow when freezing
- explain the underlying principles involved in freezing foods
- describe a range of packaging materials suitable for freezing foods and the information necessary to be included on the label.

Prepare, cook, package and label for freezing a main course dish or dessert or baked product that you have investigated.

Evaluate the assignment in terms of **(a)** implementation and **(b)** the practicability of freezing homemade dishes and products.

2024

Key requirements of the assignment:

- *research the range of frozen foods and products currently available to consumers*
 - *identify main course dishes, desserts and baked products suitable for home freezing*
 - *guidelines to follow when freezing*
 - *underlying principles involved in freezing foods*
 - *range of packaging materials & information necessary to be included on the label when freezing*
- *chosen dish*

Investigation: Range of frozen foods and products currently available: *meat; poultry; fish; meat & poultry products; fish products; fruit; vegetables; potato chips/wedges/bites; pies; ready meals; party foods; pizzas; garlic bread; vegetarian alternatives; pastries; desserts; ice-creams; smoothie mix; etc.*

Range of main course dishes, desserts and baked goods: *stew; lasagne; shepherd's pie; casseroles; curries; meatballs; ratatouille; stir-fries; pies; pizza; pasta bakes; stewed fruit; fruit puddings; tarts; cheesecake; parfait; breads; scones; cinnamon rolls; brownies; cakes; muffins; cupcakes; biscuits; etc.*

Guidelines to follow when freezing: *blanch vegetables before freezing; ensure freezer is at correct temperature; wrap & seal foods tightly; choose suitable packaging materials; remove air; allow headspace in containers; use sealable containers; label containers correctly; wash & pat dry fruits/vegetables; open freeze berries; remove tomato skins before freezing; cool baked products before freezing; slice bread before freezing; avoid freezing dishes with lots of dairy; freeze food in individual portions; line containers with parchment paper; freeze foods quickly using fast freeze; avoid freezing soups with starch (rice/pasta/potatoes); do not put hot foods into freezer; do not refreeze raw foods; etc.*

Underlying principles of freezing: *low temperatures of -25°C or lower inactivates micro-organisms' growth; water changed to ice, micro-organisms inactivated; high temperatures used in blanching vegetables inactivates micro-organisms and enzymes; wrapping food correctly before freezing prevents re-entry of micro-organisms; fast freezing helps maintain colour, flavour, texture and nutritive value; etc.*

Range of packaging materials suitable for freezing food: *strong plastic shrink wrap; strong plastic sealable freezer bags; strong plastic sealable containers; aluminum foil; aluminum containers; waxed cartons; glass containers/mason jars; stainless steel containers; etc.*

Labelling: *name of food/dish, date frozen; etc. if no packaging/labelling in investigation -3 marks*

Dishes selected – chosen dish from research 1 dish @ 4marks (graded 4:2:0)

Evaluation (a) implementation and **(b)** the practicability of freezing homemade dishes and products - resource issues i.e. time, skills, equipment, packaging, storage space, etc.

Assignment 5

Carbohydrates have many culinary properties that allow for an array of different dishes to be created.

Define Gelatinisation.

Identify a range of sweet and savoury dishes that illustrate gelatinisation and explain the underlying principle involved.

Investigate and describe the application of gelatinisation in the making of a range of sweet and savoury dishes.

Prepare, cook and serve one dish (either sweet or savoury) you have investigated.

Evaluate the assignment in terms of **(a)** implementation and **(b)** success in applying the property of gelatinisation to the chosen dish.

2024

Key requirements of the assignment:

- *definition of gelatinisation*
 - *identify a range of dishes (sweet and savoury) that illustrate gelatinisation and explain the underlying principle involved*
 - *investigate and describe the application of gelatinisation in the making of a range of sweet and savoury dishes*
- *chosen dish*

Investigation

Definition of gelatinisation: *the process where starch grains form a suspension in cold water; when mixed with a liquid and heated, starch grains swell and burst and absorb moisture; resulting in thickening of the liquid; a gel forms; etc.*

Range of sweet and savoury dishes that illustrate gelatinisation: **Sweet dishes:** *lemon meringue pie; éclairs; fruit tarts; rice pudding; custard tarts (made with a custard powder); pancakes; baked souffles; sweet pastry dishes; etc.* **Savoury dishes:** *soups; stews; curries; lasagne; pasta bakes; fisherman's pie; sweet & sour chicken; vol-au-vents; sausage rolls; savoury rice; etc.*

Underlying principle of gelatinisation and application of gelatinisation in the making of a range of sweet and savoury dishes:

Moist heat: *starch, a polysaccharide has powerful thickening properties; three stages of gelatinisation using starch – heating the starch; starch absorbing the liquid; starch thickening the liquid; starch grains are mixed with a cold liquid which helps separate the starch grains to reduce lumps forming; the starch and liquid are heated to an initial temperature of between 55-70°C; when the liquid is heated, the hydrogen bonds holding the starch together are broken down allowing water to penetrate starch molecules; the starch grains swell and burst causing the liquid to thicken; viscosity increases, creating a paste like solution; the mixture becomes more viscous as the temperature increases; on cooling, hydrogen bonds are formed causing the mixture to thicken, set and become firm; turning into a gel at approx. 38°C; temperatures in excess of 85°C will create a sol, a sol is a solution that contains particles that do not dissolve but are evenly dispersed throughout the liquid; some starches have greater thickening powers e.g. cornflour; too much sugar decreases starch's ability to gelatinise; acids affect starch's ability to gelatinise; add acid after gelatinisation occurs; salt promotes gelatinisation; amount of fat affects thickening properties of starch; etc.*

Dry heat: *starch grains when heated will swell, burst and absorb any moisture (liquid fat) present; used in making of pastry and popcorn; etc.*

Dishes selected – sweet or savoury dish illustrating gelatinization 1 dish @ 4marks (graded 4:2:0)

Evaluation (a) implementation and **(b)** success in applying the property of gelatinisation to the chosen dish.

Appendix 1 - General Instructions for examiners in relation to the awarding of marks.

1. Examination requirements:
Candidates are required to complete and present a record of any **four** assignments for examination.
2 assignments for 2024 as a result of adjustments.
2. Each Food Studies assignment must include different practical activities.
Where **a candidate repeats a practical activity for a second assignment**, the examiner will mark the repeated practical as presented and disallow the marks awarded for the repeated practical activity with the lowest mark.
3. Where a **candidate completes the investigation and/or the preparation and planning and/or the evaluation aspects of an assignment and does not complete the implementation**, the examiner will mark the completed aspects of the assignment as presented. However, marks for **evaluation of implementation**, where attempted, will be disallowed.
In relation to Assignments 3, 4, and 5 **evaluation of specific requirements** will also be disallowed.
4. Where a **candidate completes the preparation and planning and/or the implementation and/or the evaluation aspects of an assignment, and does not complete the investigation**, the examiner will mark the completed aspects of the assignment as presented. However, marks for **evaluation of specific requirements of assignment**, where attempted, will be disallowed.
5. Where the **dish/product prepared has not been identified in the investigation**, but fulfils the requirements of the assignment, deduct the relevant marks awarded (-1/-2/-4) under meals/dishes/products in investigation.
6. Dish selected shows **few process skills** - mark pro-rata
7. **Dish selected not fully compliant** with requirements e.g.
 - an **uncooked dish** selected where a cooked dish specified – Assignment 1,2,3,4,5
 - dish **not suitable for assignment requirements** – Assignment 1,2,4
 - the **investigated method not used in making the chosen dish** – Assignment 3,5
 - dish selected includes **over use of convenience foods**.

Deduct 8 marks from total mark awarded for assignment and insert explanation as highlighted above.
8. **A dish that does not meet the requirements of the assignment** e.g. a dessert dish prepared instead of a main course dish; no marks to be awarded for the dish.

N.B. Examiners must consult advising examiners when applying a scenario.

