



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2024

Marking Scheme

Home Economics – Scientific and Social

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.

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
	Zero marks awarded
	One mark awarded
	Two marks awarded
	Three marks awarded
	Four marks awarded
	Five marks awarded
	Six marks awarded
	Seven marks awarded
	Eight marks awarded
	Blank page
	Excess point awarded full marks
	Excess point awarded partial marks
	Point/work not attempted
	Deduct mark
	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. In relation to protein, explain deamination.

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

the process by which **excess** protein/amino acids are used for energy, broken down in the liver; the amino group (**NH₂**) is converted to ammonia, then to urea and excreted by the kidneys as a waste product in urine; the carboxyl group (**COOH**) is oxidised to produce heat and energy; etc.

2. State **two** biological functions of Vitamin A.

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

manufacture of rhodopsin; maintain healthy skin; aids growth; antioxidant; aids immunity; healthy mucus membranes; etc.

Identify **two** dietary sources of Vitamin A.

2 sources @ 1 mark (graded 1:0)

carrots; leafy green vegetables; tomatoes; apricots; red peppers; sweet potatoes; oily fish; fish liver oils; meat; offal; eggs; margarine; butter; milk; cheese; nuts; etc.

3. Describe the following forms of iron and give **one** food source of each.

Description 2 points @ 2 marks (graded 2:0), **food source 1 point @ 1 mark** (graded 1:0)

Form of iron	Description	Food source
Haem iron	ferrous iron; soluble; easily absorbed; etc.	offal; red meat; meat products; chicken; etc.
Non-haem iron	ferric iron; cannot be absorbed by the body; must be changed into ferrous to be absorbed; etc.	eggs; wholegrain flour; dark green vegetables; fish; legumes; nuts; seeds; etc.

4. Outline **two** meal planning guidelines that should be considered when planning meals for a person with osteoporosis.

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

increase intake of calcium; increase intake of Vitamin D; increase intake of Vitamin C; increase intake of phosphorus; avoid phytates; avoid oxalates; avoid excess fibre; avoid excess saturated fat; avoid tannins; avoid caffeine; avoid excess alcohol consumption; etc.

5. Complete the table below in relation to alternative (novel) protein foods.

Source @ 2 marks (graded 2:0) x 2, **Product @ 1 mark** (graded 1:0) x 2

	Source	Product
Plant	soya beans; peas; wheat; nuts; seeds; etc.	TVP; tofu; soya milk/cheese; /yoghurt/flour/sauce/oil; tempeh; miso; pea protein; seitan; nut butter; pumpkin; sesame; etc.
Micro-organisms	bacteria; fungi; yeast; algae; etc.	quorn/mycoprotein; nutritional yeast; etc.

6. Explain the role of **each** of the following in the production of cheese.

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

Lactic acid bacteria changes lactose (milk sugar) into lactic acid; acts as a preservative; adds flavour; etc.

Rennet changes caseinogen (milk protein) into casein; coagulates milk proteins, forming curds; etc.

7. Identify **two** contaminants that can enter the food chain. State **one** possible source and **one** possible effect on the body of each contaminant named.

Contaminant 1 @ 1 mark (graded 1:0) x 2

Source 1 @ 1 mark (graded 1:0) x 2

Effect on the body 1 @ 1 mark (graded 1:0) x 2

Contaminant	Source	Effect on the body
Chemical		
pesticides	insecticides/pesticides sprayed on crops/fruit/vegetables; run off water; etc.	respiratory problems; heart/circulatory problems; damages nervous system; cancer; birth defects; etc.
antibiotics	consuming meat containing animal antibiotics; consuming milk containing animal antibiotics; etc.	build up resistance to antibiotics; allergic reactions; etc.
growth promoters/hormones	consuming meat containing them; consuming milk containing them; etc.	allergic reactions; etc.
dioxins	burning of hydrocarbons; dioxins transferred to soil/water; etc.	immune system damage; cancer; etc.
urea formaldehyde	coating on paper-based packaging material; etc.	cancer; etc.
metal residues, e.g. lead, copper, cadmium	transferred to food from water/soil/food containers; paint; lead pipes; burning batteries/fuel; etc.	liver damage; kidney damage; nervous system damage; stomach cramps; etc.
Biological		
micro-organisms	undercooked meat; undercooked eggs; unwashed hands; soil; water; etc.	food poisoning; etc.
Physical		
foreign bodies	food containing them due to poor storage; preparation; cooking; etc.	choking hazard; food poisoning; etc.

8. Differentiate between **each** of the following types of food poisoning:

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

Infectious food poisoning caused by eating foods containing large number of pathogenic bacteria that produce endotoxins; endotoxins are produced inside the bacterial cells as they grow; released when bacteria die; endotoxins are easy to destroy; proper cooking and reheating will destroy both toxins and bacteria; incubation period of over 12 hours; Salmonella, Listeria, E. coli, Campylobacter; etc.

Toxic food poisoning caused by eating foods containing pathogenic bacteria that produce exotoxins; exotoxins are produced outside the bacterial cell as they grow; produced before and after food is eaten; exotoxins are hard to destroy; boiling for 30 minutes is required; incubation period of 2 hours; Staphylococcus aureus, Clostridium botulinum; Clostridium perfringens/welchii; etc.

9. Explain **two** underlying principles of jam making.

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

heat/temperature boiling at 100°C destroys micro-organisms; boiling at 100°C inactivates enzymes; sterile jars; etc.

sugar draws water from microbial cells by osmosis; etc.

pectin involved in setting jam into a gel like substance; ripe fruit contains pectin which sets the jam; etc.

acid helps release pectin from cell walls of fruit; etc.

sealing jar prevents re-entry of micro-organisms; etc.

10. Explain the following social welfare payments and give **one** example of each.

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

2 examples @ 1 mark (graded 1:0)

Social insurance payments payments to individuals who have paid the minimum 39 PRSI contributions; not means tested; etc.

examples jobseeker's benefit; illness benefit; maternity benefit; paternity benefit; invalidity pension; widow/widower or surviving civil partner (contributory) pension; carer's benefit; contributory old age pension; etc.

Social assistance payments payments to individuals who have paid insufficient PRSI contributions; is means tested; etc.

examples: jobseeker's allowance; working family payment; supplementary welfare allowance; disability allowance; carer's allowance; one parent family payment; non-contributory old age pension; etc.

11. Identify **one** voluntary consumer protection agency.

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

Outline the role of the voluntary consumer protection agency named.

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

Consumer Association of Ireland (CAI) carries out research and surveys on goods and services which are published in the online Consumer Choice magazine; provides objective information on consumer goods and services; lobbies government on consumer issues; offers advice through its 'Consumer Personal Service'; represents consumers on range of bodies; etc.

Advertising Standards Authority of Ireland (ASAI) promotes high standards in advertising and marketing communications; ensures commercial advertisements are legal, truthful, honest, decent; investigates complaints made by public regarding advertisements; can instruct companies to modify or remove an advertisement; etc.

12. Outline the function of **each** of the following parts of a refrigerator:

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

the condenser cools/changes the gaseous refrigerant (liquid ammonia, freon 12, isobutane) into a liquid; sends liquid refrigerant to evaporator; etc.

the evaporator uses heat from the fridge cabinet to convert the liquid refrigerant into a gas; cooling the fridge cabinet; etc.

13. Outline **two** features of the current Irish National Housing Policy (Housing for All).

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

sustainable communities supported with amenities and infrastructure; retention of listed buildings; protection of natural environment; provision of social and affordable housing; sheltered accommodation; promotion of energy efficient homes; BER ratings on houses for sale/rent; supporting home ownership and increasing affordability through a range of schemes; increasing new housing supply; rent supplement; registration of rented accommodation; home equity scheme; help to buy scheme; Croí Cónaithe; improving accessibility for housing; etc.

14. Describe **two** different ways that consumers can be more environmentally conscious when choosing electrical goods.

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

electrical goods with A energy efficiency rating; eco-cycles on washing machines/dishwashers; half load cycles; option to reduce temperature; pay WEEE charge when purchasing new appliances; ensure safe disposal of old appliances; appliances with little packaging/no excess packaging; etc.

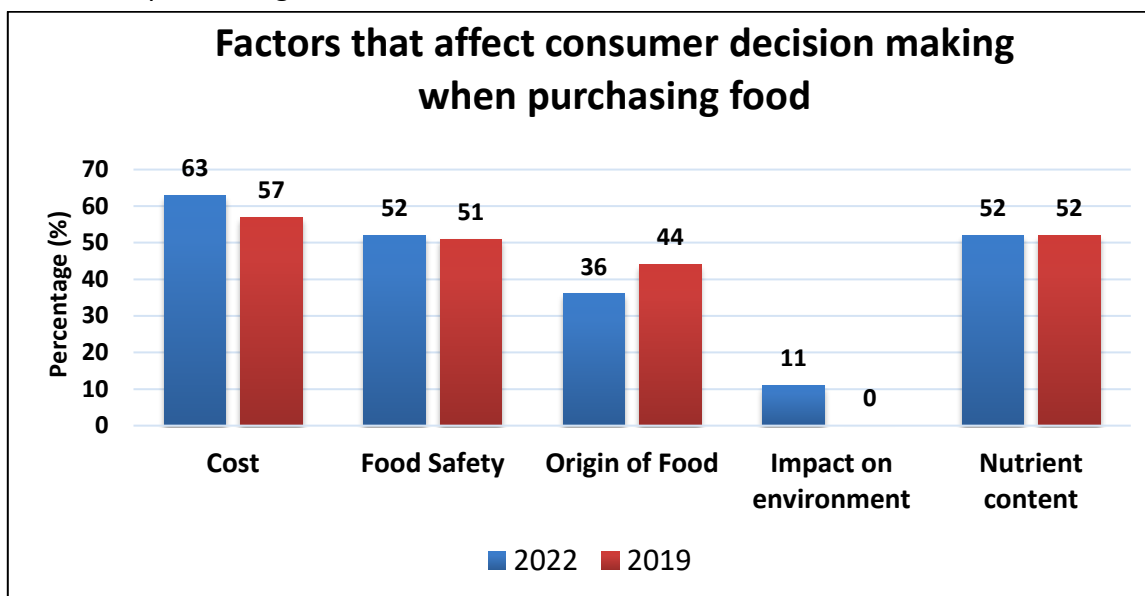
Section B

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

The Eurobarometer survey 2022 and 2019 questioned consumers on factors that affect their decisions when purchasing foods.



(adapted from www.efsa.europa.eu)

- (a) Using the information provided in the chart, comment and elaborate on **four** factors that affect consumer decisions when purchasing food. (20 marks)

4 factors @ 5 marks each (graded 5:4:3:2:1:0)

Cost increased since 2019; increase in cost of living; inflation; increase in food transport costs; increased tariffs on imported food products; current conflicts in the world; increasing raw ingredients/materials cost; increase in energy costs; food shortages; sugar tax; etc.

Food safety slight increase since 2019; food poisoning bacteria; additives; pesticide residue; antibiotic; hormone; steroid residue; genetically modified foods; foods containing animal diseases; microplastics; antibiotic resistant bacteria in foods; etc.

Origin of food decrease since 2019; food traceability; rules governing food production in different countries; food miles; geographical location; cultural background; marketing strategies used by food establishments; food safety agencies; etc.

Impact on environment huge increase since 2019; food miles; amount of water used; amount and type of energy used during production; amount of CO₂ produced; methane gas produced; pollution of water; air; soil; depletion of nutrients from soil; organic foods; pesticides used; food waste; transport; seasonal foods; type of packaging used; etc.

Nutrient content no change since 2019; meeting RDA for different nutrients; age of person; health status of person; hobbies and activities; dietary advice; advertising; social media; influencers; etc.

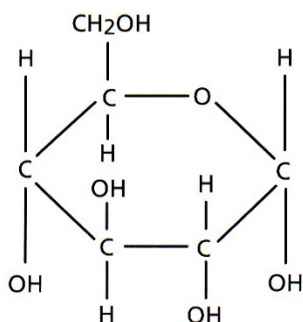
(b) Give a detailed account of carbohydrates and refer to:

(22 marks)

- basic structure of a monosaccharide

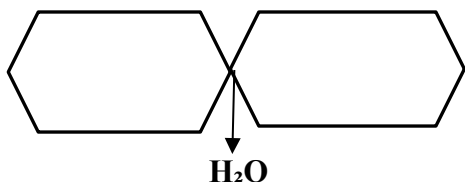
1 points @ 8 marks (graded 8:7:6:5:4:3:2:1:0)

chemical formula of glucose $C_6H_{12}O_6$; ring structure; one single sugar unit; example; etc.



- formation of disaccharides **4 points @ 2 marks** (graded 2:1:0)

chemical formula $C_{12}H_{22}O_{11}$; 2 monosaccharides (sugars) join together; with the lost/elimination of one water molecule, condensation reaction; example; etc.



- biological functions.

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

heat; energy; spares protein for primary function of growth; excess sugar/starch converted into adipose tissue; fibre allows for regular bowel movements; reduces constipation; reduces haemorrhoids; reduces diverticular disease; lowers LDL cholesterol; slow release of glucose into bloodstream; controls blood sugar levels; adds bulk to diet; absorbs water and swells, delaying feeling of hungry; etc.

(c) Describe **three** properties of sugar and give **one** culinary example of each property.

(18 marks)

3 properties @ 6 marks (graded 6:5:4:3:2:1:0)

[Name 2 marks (graded 2:0), Description 2 marks (graded 2:1:0),

Culinary application 2 marks (graded 2:1:0)] x3

solubility sugars are white crystalline compounds, soluble in water; solubility is increased by heating water; a syrup is formed when sugar and water are heated; etc.

culinary application icing; syrup; canned/bottled fruit; beverages; etc.

sweetness sugar has varying degrees of sweetness based on a point scale using the tasting method; sucrose has a relative sweetness of 100; glucose has a relative sweetness of 75; fructose has a relative sweetness of 170; lactose has a relative sweetness of 15; etc.

culinary application cakes; sweets; shortbread; beverages; etc.

assists aeration sugar denatures egg protein, enabling aeration to occur; egg when whisked with sugar becomes aerated; etc.

culinary application sponge cake; meringues; etc.

Maillard reaction non enzymic reaction between sugar (carbohydrates) and amino acids (proteins) in dry heat, causing brown colour to develop; etc.

culinary application roast potatoes; roast meat; shortbread; buns; cakes; etc.

caramelisation when sugar is heated, it melts and produces caramel; there are 10 gradual changes in sugar between melting and caramelisation; these stages occur between 104°C and 177°C; eventually the heat will cause carbonisation (burning) of the sugar; etc.

culinary application crème caramel; crème brûlée; caramel; etc.

crystallisation occurs when too much sugar is added to a mixture/liquid; mixture/liquid absorbs as much sugar as it can; crystal particles form when mixture cools; etc.

culinary application hard sweets; confectionery; etc.

hydrolysis and inversion disaccharide sugars react with water and enzymes breaking down into monosaccharides; inversion is caused by heating sugar with an acid or by adding an enzyme; sucrose breaks down into glucose and fructose, known as invert sugar; etc.

culinary application sweets; jam; etc.

- (d) Devise a set of strategies to follow when purchasing and preparing food/drink to reduce a person's sugar consumption. (20 marks)

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

(1 point relating to purchasing, 1 point relating to preparing & 2 other points)

purchasing check food labels for sugar content; examine ingredient list for names of different sugars; choose reduced sugar/zero sugar alternatives; choose dark chocolate instead of milk or white chocolate; choose reduced sugar jam; etc.

avoid the following foods

saucers ketchup; sweet chilli sauce, pre-made pasta sauces; etc.

dips honey dips; etc.

confectionery iced confectionery, ice-creams, 'low fat' snack foods, sugar coated cereals, granola bars, protein bars, sweets; etc.

glazes glazed meats; etc.

chocolate coated chocolate coated fruit, nuts, rice cakes; etc.

drinks, fizzy drinks/energy drinks; etc.

other foods fruit canned in syrup, choose fruit canned in natural juices/spring water; etc.

preparing use spices to give flavour and sweetness; choose ripe fruit; choose water, sparkling water, herbal teas; include fresh fruit, baked fruit; use natural yoghurt; reduce sugar/flavoured syrups; flavour water using fresh fruit and vegetables rather than using cordials; use extracts instead of sugar when baking; use artificial sweeteners; combine sweet fruit with lesser sweet fruits instead of adding sugar; use unsweetened apple sauce, mashed bananas, blended dates, prunes, cooked sweet potatoes instead of sugar in recipes; avoid adding sugar to snack foods; avoid adding jams to bread/toast; etc.

Question 2

'A foetus is dependent on its mother for nutrition; so pregnant women must eat healthily and safely.'
(www.bordbia.ie)

- (a) Discuss the dietary guidelines to follow when planning and preparing meals for a woman during pregnancy. (20 marks)

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

use of food pyramid for nutritional balance; include HBV protein; low GI starchy foods; fibre especially in 3rd trimester; omega 3 fatty acids; Vitamin C; iron; Vitamin D; calcium; Vitamin A; Vitamin K; Folic Acid/Folate; iodine; energy balance vis a vis activity levels and stage of pregnancy; consider alternations in taste and cravings; avoid excess caffeine intake; avoid shellfish; avoid undercooked meats; avoid pâté; avoid soft ripened cheeses and unpasteurised dairy products; avoid pre-prepared salads; salt intake to be below RDA; reduce sugar and spicy foods; cold foods can reduce smell experience; cold milk and yoghurt for heartburn; include ginger in meals and drinks; include fresh fruits and vegetables; wash fruits and vegetables thoroughly; cook eggs fully; consider allergies; consider special diets; correct fluid intake; avoid alcohol; etc.

- (b) Give an account of Folic Acid/Folate under **each** of the following headings: (18 marks)

- sources **3 sources @ 2 marks (graded 2:0)**

wheat germ; wheat bran; wholegrain cereals; broccoli; brussels sprouts; spinach; cabbage and kale; asparagus; avocado; peas; beans; lentils; beetroot; citrus fruits; papaya; bananas; eggs; offal; walnuts; flaxseeds; white rice; fortified breakfast cereals/breads; dietary supplements; etc.

- biological functions **3 functions @ 2 marks (graded 2:1:0)**

red blood cell formation; essential for synthesis and repair of DNA and RNA; protein metabolism; development of brain, spinal cord and skeleton in foetus; reduces risk of neural tube defects; may prevent heart attacks; strokes; cancer; etc. involved in preventing anaemia; role in treating depression; helps immune system; etc.

- properties. **3 properties @ 2 marks (graded 2:0)**

water soluble/insoluble in alcohol; odourless; tasteless; orange/yellow crystalline solid; heat stable but some loss during cooking; unaffected by acids; destroyed by alkalis; destroyed by UV light; destroyed by oxygen; etc.

- (c) Evaluate food labelling as a source of consumer information when purchasing foods for individuals with specific dietary requirements. (12 marks)

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

name of food; list of ingredients; ingredients in descending order of weight; declaration of allergens; allergens printed in bold; nutritional value; portions; cooking instructions; sugar quantity; salt quantity; saturated fat quantity; fibre quantity; symbols; fortified food; functional foods; etc.

Question 3

‘Artisan producers have altered Irish food culture to enrich our culinary heritage.’

(Irish Examiner Jan. 2023)

- (a) Discuss the changes that have evolved in Irish food and eating patterns in recent years. (20 marks)

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

increased consumption of convenience foods; increase in additives; increase in salt; increase in saturated fat; increase in sugar; low fibre intake; irregular mealtimes; traditional foods replaced; increase in special diets; wide range of foods available; different cooking methods; cooking skills; influence of other cultures; more nutritional knowledge; availability of raw foods; focus on gut health; focus on food for good mental health; etc.

- (b) Outline the stages involved in the manufacture of yogurt. In your answer refer to production, packaging and labelling. (20 marks)

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

milk is homogenised; milk pasteurised at 80°C - 90°C; cooled to 37°C; starter **culture** of lactic acid bacteria/lactobacillus bulgaricus; mixture incubated for 6-8 hours; cooled to 5°C; addition of sweeteners/nuts/fruit; etc. addition of additives/colourings/flavourings/stabilizers; etc. weighed; packaging; labelling; etc.

- (c) Describe the protection provided to the consumer by the Food Hygiene Regulations 1950-1989. (10 marks)

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

prohibits sale of food that is diseased, contaminated or unfit for human consumption; precautions must be taken at each stage of production to prevent contamination of food; food premises must be registered and maintain hygienic conditions with regard to equipment, food waste, water supply; all food handlers must observe high standards of hygiene and follow Hazard Analysis Critical Control Point (HACCP) system; mobile food stalls where food is prepared and/or cooked/heated must apply for annual licence; if regulations are not followed, closure orders can be issued and unfit food be seized and destroyed; etc.

Question 4

‘Helpful, knowledgeable staff are the driving force behind in-store shopping being popular amongst Irish consumers.’
(www.pwc.ie)

- (a) Analyse the changes in consumer shopping patterns over the last decade. (20 marks)

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

payment options; store loyalty cards/apps; technological developments and innovations; self-service checkouts; scan-as-you-go; frequency of shopping; large shopping centres/outlets; late night shopping; 24-hour shopping; TV, online and social media shopping; charity/vintage shops; shopping platforms/marketplaces to sell/swap items; budget; time available; values; family; special diets; sustainability; culture; nutritionally aware; etc.

- (b) Name and evaluate **two** different methods of payment used by consumers to pay for in-store purchases. (18 marks)

[Name 3 marks (graded 3:2:0), 2 points @ 3 marks (graded 3:2:0)] x2

name cash; cheque; debit card; credit card; Revolut; phone tap; vouchers; direct debit; hire purchase; etc.

evaluate availability; ease of use; cost to consumer; safety; etc.

- (c) Describe the protection provided to the consumer by the Consumer Protection Act 2007. (12 marks)

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

false or misleading claims about goods; false or misleading claims about services; false or misleading claims about price; previous price; recommended retail price; etc.

Question 5

'The family is a dynamic, fluid, resilient and ever changing fundamental institution of society.'

(Kristy Hawthorn)

- (a) Discuss the role of the family in meeting the physical and psychological needs of young children so that they will become well-adjusted adults in society. (20 marks)

4 points @ 5 marks (graded 5:3:1:0)

(1 point relating to physical, 1 point relating to psychological & 2 other points)

physical

food parents to provide children with a healthy balanced diet; pay attention to nutritional requirements of the child; take responsibility for limiting the child's intake of unhealthy food; etc.

clothing parents provide sufficient clothing for modesty and protection of the child; etc. **shelter** children need shelter, a warm home in which to live, rest and play; etc.

psychological

love affection that is experienced by the child in a relationship will allow the child to transfer this to his/her own relationships; etc.

security and trust the presence of a dependable, constant caregiver in a nurturing role will provide children with security and trust; etc.

praise and encouragement help to provide a stable and happy home life for children; promote self-esteem in the child; etc.

protection from physical, emotional and sexual abuse; etc.

- (b) Analyse the impact of social, economic and technological changes on contemporary family structures. (18 marks)

3 points @ 6 marks (graded 6:4:2:0)

(1 point relating to social, economic & technological changes)

social decline in extended family structure; increase in cohabitation; urbanisation; gender equality; dual career families; fewer children; women having children later in life; marital breakdown; separation and divorce; same sex marriage; adoption; surrogacy; family planning options; multi-cultural society; value of education; shared roles in home; stay at home fathers; increased leisure time; antisocial behaviour; etc.

economic increased cost of living/inflation; state benefits; both partners/parents working; higher standard of living; hybrid working; childcare availability and cost; cost of education and accommodation; demand for housing; moving from urban areas due to cost of housing; one parent working abroad; etc.

technological automated appliances; smart technology; social media; communication technology; education entertainment facilities; security technology; working from home; etc.

- (c) Describe **two** supports available to older family members and state how these supports help them to maintain their independence. (12 marks)

2 points @ 6 marks (graded 6:4:2:0)

family; neighbours; sheltered housing schemes; voluntary services e.g. Meals on Wheels, Age Action; social welfare payments; community care services e.g. public health nurses, Home Support Services; medical cards; free travel; etc.

Section C

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.

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) 'A well-planned, well-designed home looks elegant, and improves a person's quality of life.'
(www.homesandgardens.com)

(i) Discuss the factors that influence the interior design of a home:

Refer to:

- cost
- family stage and circumstances
- ergonomics.

(20 marks)

5 points @ 4 marks (graded 4:2:0), 1 point on each factor & 2 other points

cost budget constraints; good quality, attractive items that are not overly expensive; etc.

family stage and circumstances number and age of family members; areas for play; areas for study; family members' likes and dislikes; family income; number of members working; family members with additional needs; easy to clean surfaces; current and future needs of family members; etc.

ergonomics design of room should allow for ease of movement; accommodate natural traffic flow; spaces and surfaces easy to clean; free access to all areas e.g. sockets, windows; room design should facilitate maximum efficiency e.g. work sequence, work triangle; work surface suit height of user; etc.

(ii) Identify **three** design principles and describe how each design principle identified could be applied in an interior design space. (18 marks)

3 principles @ 6 marks (graded 6:4:2:0)

[Name 2 marks (graded 2:0), description 4 marks (graded 4:2:0)] x3

proportion objects must be of a size/height that is relative to all other items in the room; should be applied to colour, pattern and textures; etc.

emphasis achieved by creating a focal point in a room; drawing the eye to a specific feature e.g. fireplace in living room; feature wall; etc.

balance applied using an equal amount of colour, pattern and texture that work well together; no one room feature or element should dominate; etc.

rhythm can be achieved by linking various objects in a room; can be done by repeating a different colour in different places or using items of similar style, shape or pattern throughout the room; etc.

- (iii) Evaluate how the design and construction of a house can help lower the energy use of its occupants. (12 marks)

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

renewable energy sources; large south facing windows; double or triple glazing; low emissivity windows; cavity wall insulation; attic insulation; air sealing; zoned heating system; low BER; timber framed housing; sensor lighting; mechanical ventilation with heat recovery system (MVHR); etc.

and

- 1.(b)** 'Electricity is a powerful and versatile energy often taken for granted, but safe use is vital.'
(www.esbnetworks.com)

- (i) Describe how each of the following contribute to the safe use of electrical appliances in the home.
- miniature circuit breaker
 - earth wire.
- (12 marks)

2 points @ 6 marks (graded 6:4:2:0)

miniature circuit breaker will trip when a fault is detected on a circuit; flicks down into the off position; breaks the circuit; stopping the flow of electricity; once the fault is found and rectified the MCB can be switched back to the on position; etc.

earth wire is (green/yellow) found in plugs and electrical appliances; if electrical fault occurs, the damaged live wire could come in contact with the metal casing of the appliance and the appliance would become live; if live appliance is touched, person could be electrocuted; earth wire carries electrical current from damaged live wire down to a metal plate in the ground away from appliance; prevents electrocution; etc. **Accept** labelled diagrams

- (ii) Identify **three** inefficient uses of energy in the home and assess a strategy you would recommend to improve energy efficiency in each case identified. (18 marks)

3 inefficiencies @ 2 marks (graded 2:0), **3 strategies @ 4 marks** (graded 4:2:0)

heat loss insulate walls; double/triple glazed low emissivity windows; use floor underlays; etc.

heating system install condensing boiler; have boiler serviced regularly; zoned heating so heat is available in rooms where needed; install thermostats on radiators; install timer on heating system; etc.

open fires install stove; add back boiler; change to smokeless coal/timber; etc.

water heating install timer on immersion heaters; install solar panels to heat water; insulate hot water cylinder; take shower instead of bath; etc.

appliances choose A rated appliances; only put on with full load; cold washes; appliances with thermostats; energy efficient appliances; avoid leaving appliances on standby; etc.

water use repair leaking taps; have dual flush toilets; don't wash under running tap; etc.

lighting chose LED lights; timers; etc.

or

1.(c) 'If your home is well insulated; you also need good ventilation.'

(www.seai.com)

- (i)** Explain the underlying principle of insulation used in the home.
Identify and describe **three** different methods of home insulation. (18 marks)

underlying principle 3 points @ 2 marks (graded 2:1:0)

air, polystyrene, fibreglass; etc. used to prevent/reduce the amount of heat loss; poor conductors retain heat; prevent heat from passing through; etc.

methods of home insulation 3 points @ 4 marks (graded 4:3:2:1:0)

attic/roof fibre blanket insulation; loose fill insulation; foam insulation; blown cellulose insulation; water tank and pipes insulated; etc.

walls cavity walls air; polystyrene sheets; polystyrene foam; bonded beads; etc. solid walls blanket insulation (fibreglass/rockwool) insulation sheets; external insulation (polystyrene with reinforced mesh); etc.

floor fill gaps in around floorboards; fitted carpets with thick underlay; fibreglass first floor insulation; etc.

draught excluders brush excluders; fabric excluders; etc.

windows/doors well-fitting windows and doors; double/triple glazing; draught proofing; heavy lined curtains; etc. **Accept** labelled diagram

- (ii)** Discuss the importance of having adequate ventilation in a house. (12 marks)

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

provides oxygen rich fresh air; removes stale air; allows combustion; prevents condensation; controls room temperature; controls humidity levels; poor ventilation can lead to medical conditions; poor ventilation can lead to structural damage to house; 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) Being stylish, yet comfortable is key for many family gatherings and parties.



(www.bohoo.com)



(www.pinterest.com)

(i) Evaluate the design of the outfits shown above for a summer family gathering.

Refer to:

- | | | |
|---------------------------|---|-------------------|
| • comfort | 1 point @ 5 marks (graded 5:3:0) | |
| • aesthetic appeal | 1 point @ 5 marks (graded 5:3:0) | |
| • current fashion trends. | 1 point @ 5 marks (graded 5:3:0) | (15 marks) |

comfort loose fitting dress; flowy dress; soft string straps; cool light weight fabric; casual jacket; round neck t-shirt; absorbent material; loose fitting trousers; flat shoes; easy to wear; jacket buttoned/unbuttoned can adjust comfort levels; etc.

aesthetic appeal relaxed look; use of detail on neckline of dress creates emphasis; loose fitting outfits; asymmetrical hem line on dress; easily pair with jacket/cardigan/throw; pockets and rolled up jacket sleeves add emphasis; rhythm due to repeated design in dress, repeating colour in T-shirt and runners; etc.

current fashion trends fashionable clothing trends; denim jacket and white t-shirt don't date; runners very popular for casual or smart casual looks; light summer dresses with asymmetrical hemlines very popular; texturing using sequins and beads; etc.

(ii) Discuss how social and economic factors influence the design and construction of clothing. **(10 marks)**

2 points @ 5 marks (graded 5:3:0), **1 point on each heading**

social factors media; famous people; influencers; social events; acceptance; cultural background; occasions; status in society; location; profession; etc.

economic factors amount of disposable money available; recession; inflation; booming economy; world events; availability of raw materials; cost of raw materials; level of infrastructure; production costs; cost of labour; technological developments; new talented designers emerging; etc.

and

2.(b) 'Natural fabrics are renewable; a good choice for sustainable living.' (www.studioheijne.com)

Write a profile of a fabric manufactured from natural fibres.

Refer to:

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

- fibre production **3 points @ 2 marks** (graded 2:1:0)
- fabric properties **3 points @ 1 mark** (graded 1:0)
- identification test. **2 points @ 2 marks** (graded 2:1:0) (15 marks)

fibre production 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. **cotton** comes from the boll or seed head of the cotton plant, fibres are 2-3cm long; fibres are white and fluffy; bolls are picked; fibres are separated from the seeds; then pressed into bales; the cotton is graded according to the length of the fibres; these fibres can be combined or spun into yarn; etc. **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.

fabric properties wool durable; warm; soft; absorbent; resilient; weak when wet; shrinks at high temperatures; scorches easily; piles and felts; can irritate sensitive skin; damaged by careless washing; damage by moths; damage by sunshine; damage by chemicals; resistant to mould and mildew; etc. **silk** strong; smooth; lightweight; breathable; absorbent; drapes well; dries quickly; moderate resistance to creasing; does not attract dirt; good affinity to dyes; damaged by careless washing; moth; sunshine; chemicals; etc. **cotton** strong; absorbent; cool; washes and dries easily; dyes easily; shrinks; creases; affected by mildew; weakened by sun; etc. **linen** strong; absorbent; cool; washes well; creases easily; shrinks easily; difficult to dye; damaged by mildew; etc.

identification test wool doesn't ignite easily; curls away from flame before catching fire; burns very slowly; orange flame; dark smoke; smell of burning hair/feathers; when removed from flame immediately stops burning; hard dark ash/bead like residue; crushed to powder easily between fingers; etc. **silk** doesn't burn well; curl away from flame; difficulty igniting; smoulders rather than producing visible flame; when removed from flame quickly stops burning; smell of burning hair/feathers; small dark ash beads; crushed to powder easily between fingers; etc. **cotton** burns quickly with yellow flame; smells like charred paper; produces a grey ash; etc. **linen** burns quickly with yellow flame; produces grey ash; etc.

or

2.(c) 'The fashion and textile industry continue to play its part in Ireland's social, cultural and economic development.' (www.ndcg.ie)

- (i) Discuss the emergence of leisure wear as a current fashion trend. (6 marks)

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

comfort; versatility; durability; ease of movement; affordable; adaptability to function; healthier lifestyle; casual style; encourages exercise; influencers; etc.

(ii) Name **one** Irish fashion designer. Outline their work in the Irish fashion industry.

(9 marks)

Name of designer 1 point @ 3 marks (graded 3:2:0), **work 2 points @ 3 marks** (graded 3:2:0)

name of designer John Rocha; Simone Rocha; Philip Tracey; Lainey Keogh; Paul Costelloe; Louise Kennedy; Carolyn Donnelly; Orla Kiely; etc.

work designing clothes and accessories for royalty; celebrities; world leaders; designing clothes and accessories for major world events; Riverdance costumes; etc.

Elective 3 – Social Studies – 80 mark

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

3.(a) ‘Education gives people the opportunity and ability to improve their own lives.’

(www.legalstudymaterial.com)

(i) Discuss the role of education in society.

Refer to education:

- as a method of socialisation
- as preparation for work.

(20 marks)

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

(2 points on method of socialisation, 2 points on preparation for work + 1 other point)

as a method of socialisation formal in the classroom; informal through hidden curriculum; reinforces social skills taught at home; acceptable behaviour; cultural values; religious beliefs; responsibility; spirituality; punctuality; respect for authority; sharing and teamwork; etc.

as preparation for work develops personal qualities including responsibility; trustworthy; self-discipline; teamwork; values; punctuality; good attendance; gain basic literacy and numeracy skills; gain formal qualifications; develop specialised skills and knowledge; develops socialisation; educational programmes including TY, LCA, and LCVP have work experience component; career guidance; college work placements; etc.

(ii) Evaluate a range of educational supports available in second level schools for students with special educational needs.

(15 marks)

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

learning support/resource teachers; special need assistants; educational psychologist; IEPs; visiting teacher for students with visual or hearing impairments; assistive technology; reasonable accommodations for state exams; ASD classes with low pupil/teacher ratios; reduced timetables; cúntóirí teanga; immersive reader; team teaching; sensory room; canine support; etc.

(iii) Analyse how socio-economic status impacts equality of opportunity in education.

(15 marks)

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

cost of school books; equipment; uniform can be prohibitive for lower-income families; back to school clothing and footwear allowance; book rental schemes; student grant scheme; family background; children from higher socio-economic status offered more opportunities to progress in education; tend to continue to third level; DEIS schools; culture; geographical location; family background; etc.

and

3.(b) While Ireland's unemployment figures are at a record low, some people may be excluded from the labour market.

- (i) Identify **three** groups of people who have difficulty in securing employment and discuss the reason why each group identified have high unemployment rates.

(18 marks)

3 points @ 6 marks (graded 6:4:2:0)

migrants; ethnic groups level of fluency in language; recognition of qualifications; lack of qualifications; etc.

early school leavers lack of formal qualifications; poor literacy and numeracy levels; etc.

people with criminal records lack of trust; etc.

people with illnesses; disabilities; special educational needs unable to physically, mentally or emotionally complete the work; experience discrimination; transport issues; etc.

homeless people lacking access to communication facilities; experience discrimination; lack of suitable clothes, showering facilities;

long term unemployed outdated skills; etc.

- (ii) Name and give details of **one** community-based initiative that helps to create employment.

(12 marks)

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

Name 1 @ 4 marks (graded 4:2:0), **explain 2 points @ 4 marks** (graded 4:2:0)

co-operatives formed by group of people who pool their resources, skills and knowledge to provide goods and services to meet their members' needs; can be established in agriculture sector, fishing sector, horticulture sector, housing and credit unions; all profits after bills are paid and money is set for operations is returned to members; etc.

cottage industries seen an increase in recent years; small scale industries that create home-based goods rather than factory-based goods; products produced are unique and produced to a superior quality compared to mass-produced equivalents; artisan food producers, jewellery makers, craft work, art work; etc. **Accept** farmers markets; artisan producers; local schools; community café; etc.

or

3.(c) 'Leisure is not wasteful or an unproductive use of time; its benefits are far reaching.'

(www.physiologytoday.com)

- (i) Evaluate how individual and family leisure activities contribute to the physical, social and emotional development of family members. (18 marks)

3 points @ 6 marks (graded 6:4:2:0)

(1 reference to physical development, 1 reference to social development, 1 reference to emotional development)

physical development help with physical fitness; develop muscle strength and tone; increase energy levels; control weight; maintain bone density; reduce stress levels; maintain general good health; hand eye co-ordination; transferrable skills; etc.

social development social outlets for meeting people; develop stronger relationships; meet new people with similar interests; develop new friendships; develop transferable communication skills; teamwork and leadership skills; prevent loneliness, boredom, isolation, depression; etc.

emotional development relax and unwind; inner peace; improve decision making; improve emotional wellbeing; cope with success and failure; boost self-esteem; sense of belonging; develop teamwork and leadership skills; etc.

- (ii) Analyse the social and cultural factors that influence an individual's choice of leisure activities. (12 marks)

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

1 reference to social factors, 1 reference to cultural factors & 1 other point

social factors leisure activities of socio-economic group you belong to; status; local amenities in area; money/income; leisure trends; influence of famous people/influencers; etc.

cultural factors certain activities linked to certain areas/counties/countries; family environment or culture; sporting culture of community; dance culture of community; multicultural Ireland has led to a broader range of leisure activities available; etc.

Question 4 – Core – 80 marks

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

4.(a) 'Fats are essential for health; but choosing the correct types and amount is vital.'

(www.fsai.ie)

(i) Evaluate the nutritional significance of fats and oils in the diet. (20 marks)

5 points @ 4 marks (graded 4:3:2:1:0)

protein trace amounts of HBV protein in butter and margarine; oils are lacking in protein; necessary for growth and repair of cells; production of hormones and antibodies; etc.

fat 82% fat in butter to 99.9% fat in oils; butter and animal-based fats contain saturated fat; olive oil contains monounsaturated fat; vegetable and nut oils contain polyunsaturated fat; animal-based fats contain LDL cholesterol; vegetable and nut-based oils contain HDL cholesterol; heat and energy; excess stored as adipose tissue and provides insulation; protection of delicate organs; source of Vitamins A, D, E, K; etc.

carbohydrates (trace amount in suet) deficient in carbohydrates, serve with carbohydrate rich food; etc.

Vitamin A (retinol) needed for production of rhodopsin; healthy skin; etc. **Vitamin D** needed for development of strong bones and teeth; etc. **Vitamin E** trace amounts; antioxidant; prevents eye diseases in premature babies; etc.

calcium trace amounts in butter and margarine; needed for development of strong bones and teeth; muscle contractions; blood clotting; nerve impulses; etc. **sodium** can be added to butter and margarine for preservation and to add flavour; needed for muscle contractions; fluid balance; nerve impulses; etc.

water content is in proportion to fat content; hydration; etc.

(ii) Outline the stages involved in the production of margarine to include details of packaging and labelling. (15 marks)

5 points @ 2 marks (graded 2:1:0) (**hydrogenation** is an essential point)

Packaging and labelling 5 points @ 1 mark (graded 1:0)

oil extraction oil is extracted from various sources (soya, sunflower, rapeseed, olives, beef fat, whale oil); refined to remove impurities; etc.

hydrogenation hydrogen gas is forced into the unsaturated oil at the double bonds in the presence of a nickel catalyst; changes unsaturated liquid oil into semi solid saturated fat; different oils are blended based on desirable properties; etc.

other ingredients added skimmed milk, water, salt, colourings, flavourings, Vitamin A, Vitamin D; etc.

emulsification lecithin, an emulsifying agent is added to prevent the fat and liquids separating; etc.

churning votator churns the oil and water-based ingredients; form an emulsion; etc.

weighed retail portions/catering; etc.

packaging foil wrap, plastic tubs; etc.

labelling brand name; type of margarine; ingredients; allergy information; expiry date; storage instructions; weight; nutritional information; etc.

- (iii) Assess the health implications for a person consuming a diet high in saturated fat. (15 marks)

3 health implications @ 5 marks (graded 5:4:3:2:1:0)

obesity regular consumption of foods high in fat can cause weight gain; energy input exceeds energy output; foods containing large amounts of fat are energy dense and if excess calories are not burnt off, they change to adipose tissue; etc. **coronary heart disease** LDL cholesterol builds up in arteries putting pressure on heart; arteries can become blocked leading to heart attack or stroke; etc. **high blood pressure** too much saturated fat will increase blood LDL cholesterol levels which build up in arteries narrowing them, increasing a person's blood pressure; etc. **type 2 diabetes** extra weight causes insulin to become less effective at breaking down sugar into glucose; blood sugar levels remain high; etc. **gall stones** small stones made of cholesterol, bile pigments and calcium salts form in the gall bladder; etc. **varicose veins** pressure from extra body fat damages the veins in legs and feet; etc. **infertility** if overweight or obese, women produce higher amounts of leptin, which can affect hormonal balance that control the menstrual cycle; in men, DNA damage in sperm; etc.

and

4.(b) The use of household resources play a valuable role in everyday living.

- (i) Assess the selection criteria that should be considered when choosing household textiles. (12 marks)

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

cost; suitability for purpose/properties; aesthetic appeal/personal choice; ease of cleaning; safety; current trends; durability; finishes; sustainability; etc.

- (ii) Set out details of a study you have carried out on **one** type of electrical appliance with a motor. (18 marks)
Refer to:

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

Accept all household appliances with motor, labelled diagrams for working principle

- working principle **3 points @ 2 marks** (graded 2:1:0)

electricity causes the motor to operate; causes the belt in the base to turn; belt causes the parts to rotate at high speed; parts carry out specific function; some appliances have safety locking system; thermostat keeps temperature constant; etc.

- guidelines for use **3 points @ 2 marks** (graded 2:1:0)

use correct attachments for function required; do not overfill; turn off at intervals to avoid overheating; use safety features; etc.

- energy efficiency **2 points @ 2 marks** (graded 2:1:0)

do not overfill; choose A rated large appliances; do not run for prolonged periods of time; consider size of appliance; wash at lower temperatures; etc.

or

4.(c) 'Sensory analysis testing provides food developers and companies with valuable, insightful information.'
(www.intertek.com)

- (i)** Describe the conditions necessary to follow for sensory analysis testing in the classroom to ensure accurate results. (15 marks)

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

silence in testing area; timing; location; lighting; palate cleanser; ventilation; test organisers; special dietary conditions; hygiene; food safety; containers; food samples; temperature; coding of samples; number of samples; setting of trays; etc.

- (ii)** Evaluate the role of artisan producers/small businesses in the Irish food industry. (15 marks)

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

speciality foods are produced in limited quantities; use of non-industrial traditional skills; many are family run; based in rural areas; provide employment for local people; bring skilled workforce to the market; produce good quality speciality foods; implement high standards of hygiene; promote local area; enhance Irelands reputation as a producer of high-quality food and drink; natural flavours; cater for special diets; promote sustainability; 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 bónais 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

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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.

