



NATIONAL SENIOR CERTIFICATE EXAMINATION  
NOVEMBER 2019

**CONSUMER STUDIES  
MARKING GUIDELINES**

Time: 3 hours

200 marks

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**These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.**

**The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.**

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**SECTION A            FOOD AND NUTRITION AND THE CONSUMER****QUESTION 1**

*Write only the correct capital letter (A–D) next to the question number.*

1.1	B
1.2	D
1.3	A
1.4	C
1.5	D

**QUESTION 2**

*Match a function in Column B to a food additive in Column A.  
Write only the capital letter (A–J) next to the question number.*

2.1	E
2.2	H
2.3	A
2.4	I
2.5	C
2.6	J
2.7	B

**QUESTION 3**

3.1 *Name an ingredient from the food label that should be avoided by a person who is gluten intolerant.*

Wheat

3.2 Complete the table below with regard to gluten allergy and gluten intolerance.

3.2.1 definition

3.2.2 visible symptoms

3.2.3 management

	<b>Gluten allergy</b>	<b>Gluten intolerance</b>
<b>Definition</b>	<p>Gluten allergy refers specifically to: Adverse reaction involving antibodies' response to one or more proteins in wheat. The immune system overreacts with strong and unusual antibodies causing an inflammatory interaction. Can be life threatening</p>	<p>Gluten intolerance is: A hereditary disorder in which eating gluten leads to damage of the lining in the small intestine resulting in mal-absorption of minerals, vitamins and other nutrients. Seldom life threatening</p>
<b>Symptoms</b>	<p>Hives Eczema Itchiness/Rash Swelling of lips Swelling of mouth Swelling of tongue Swelling of face Swelling of throat Asthma Runny nose and nasal congestion Sneezing Coughing Wheezing Breathing difficulties</p>	<p>Skin lesions Swelling of the ankles Skin problems psoriasis Skin rash</p>
<b>Management</b>	<p>Read labels carefully. Be aware of hidden wheat protein in food. Enquire about the menu when you eat out. Remove all gluten from your diet. Exclude all foods that contain wheat, barley, rye or oats from the diet. Be on the lookout for wheat in packets of soup, sausages, processed meats, frozen meat and fish products that contain wheat flour as a binder or coating. Vitamin and mineral supplementation must be taken to correct any deficiency Substitute wheat-containing products with appropriate alternatives</p>	

**QUESTION 4**4.1 *Define osteoporosis.*

- A condition characterised by a decrease in the density of bone mass. This decreases bone strength and results in fragile/weak/brittle bones.
- Leads to abnormally porous bones that are compressible like a sponge.
- This health condition of the skeleton weakens the bone, resulting in frequent fractures due to the loss of calcium, phosphorous, Vit D and other minerals in the body over a long period of time.

4.2 *State four biological factors that increase the risk of osteoporosis.*

- Genetic factors / family history
- Gender – female low oestrogen levels
- Age
- Body weight
- Body shape / form (small, short people have less bone to lose than taller, large-boned people)
- Low oestrogen levels (menopause) results in loss of bone mass
- Hyperactive thyroid excess of the hormone extracts calcium from bone

4.3 *Name three calcium substitutes for individuals with lactose intolerance to prevent osteoporosis.*

- Milk substitutes (soya / coconut / quinoa / almonds / rice / cheese / yoghurt / lactose free milk)
- Tofu
- Fortified fruit juices/cereals/breads
- Green vegetables (any example)
- Fish with soft, edible bones such as salmon / sardines
- Soybeans/Soy products
- Nuts

**QUESTION 5**

5.1 *Identify the diet-related health condition evident in the above-mentioned patient profile.*

Anaemia or  
Iron deficiency anaemia

5.2 *Compile a list of food to be included or excluded from this patient's diet to manage this health condition. Motivate your choices.*

<b>Include:</b>	<b>Motivation:</b>
Red and organ meats.	Contain high amounts of haem iron, which is easily absorbed.
Vit C sources such as dark leafy vegetables and citrus fruits.	Promotes the absorption of iron.
Folic acid, citrus fruit, bananas, broccoli, legumes and enriched bread, cereal and pasta.	Cannot be produced by the body, which will lead to enlarged red blood cells, thus is necessary for red blood cell formation.
Vit B12 in meat, dairy products and soya milk or food products enriched with B vitamins Foods fortified/ enriched with B-vitamins	Cannot be produced by the body, which will lead to enlarged red blood cells, thus is necessary for red blood cell formation.
<b>Exclude:</b>	
Avoid large amounts of tea and coffee. Oxalates, carbonates, phosphates and phytates.	Reduce the absorption of iron. Tannins form an insoluble compound that causes less iron to be available for absorption.

**QUESTION 6**

6.1 *Select from the tuckshop the food items that should be avoided by a diabetic individual and give a reason for your answer.*

Brownies  
High sugar level (54 g) that will cause a rapid/quick increase/spike in blood glucose levels.

6.2 Evaluate the food items sold at the school tuckshop with regard to their suitability for children.

High kilojoule content that might lead to childhood obesity	Brownies Sausage roll Cheese burger Toasted chicken mayo Macaroni & cheese
Foods are loaded with fat and sugar	All the foods
High sodium content, risk of high blood pressure	Most food, but especially sausage roll
Very little to no fibre, risk of constipation	Very little fibre in all the foods
Low iron levels, risk of developing anaemia Iron strengthens the immune system	Chicken mayo 0% Iron
Low Vit C levels, necessary for the absorption of iron to prevent risk of developing anaemia Antioxidant that prevents damage to cells and decreases the risk of infections	Most food contain 0% Vit C, except Greek salad
Calcium levels very low – children need calcium to develop strong bones and teeth and prevent rickets and osteoporosis	Only macaroni and cheese contain 80% of RDA

**Conclusion:**

Thus none of the food items sold at this tuckshop are suitable for children as they will increase their risk for developing anaemia, obesity, coronary heart disease as well as high blood pressure (hypertension). The lack of vital micro nutrients will influence the children's growth and development. ✓

Or

The following foods are good because, ... (reason)

The following foods are not suitable, ... (reason)

6.3 *Parents and caregivers of children should be educated with regard to healthy eating habits. Formulate reasons for healthy eating habits of school-going children.*

- Healthy eating aids in growth and development.
- Ensures stable energy levels throughout the day.
- Aids in the ability to learn, concentrate and perform.
- Prevents childhood obesity and other diet-related health conditions.
- Decreases hyperactive behaviour.
- Enables children to make healthier food choices as adults.
- Prevents malnutrition.
- Children should include more fruit and vegetables in their diet to supply the necessary fibre and prevent constipation.
- Healthy eating habits will build a strong and healthy immune system that will prevent infections, thus preventing the overuse of antibiotics that lead to poor gut health and ultimately cancer.

6.4 *Eating foods high in fat and sodium, like the food items on this tuckshop menu, might lead to coronary heart disease and high blood pressure (hypertension).*

*State four dietary guidelines for each of the above-mentioned health conditions.*

<b>Coronary heart disease</b>	<b>High blood pressure</b>
<ul style="list-style-type: none"> <li>• Decrease the intake of saturated (animal) fats and trans-fatty acids and replace them with mono-unsaturated and poly-unsaturated fats.</li> <li>• Be aware of hidden fats.</li> <li>• Limit the intake of high cholesterol foods and replace them with foods of plant origin.</li> <li>• Limit the intake of red meats.</li> <li>• Eat oily fish rich in unsaturated fats. (Omega-3 &amp; Vit D)</li> <li>• Eat foods rich in soluble fibre.</li> <li>• Use healthy cooking methods.</li> <li>• Always read food labels.</li> <li>• Include at least 5 portions of fruit and vegetables per day – contains no cholesterol.</li> </ul>	<ul style="list-style-type: none"> <li>• Eat less sodium.</li> <li>• Limit sodium intake to 1,5–2,3 g per day.</li> <li>• Avoid processed foods such as biltong, potato crisps and flavourings.</li> <li>• Eat less saturated fats.</li> <li>• Eat low-fat dairy products.</li> <li>• Eat foods that are rich in potassium, calcium and magnesium – lowers blood pressure.</li> <li>• Eat wholegrain products high in fibre.</li> <li>• Do not add extra salt during the cooking process or substitute salt with other herbs</li> <li>• Maintain a healthy body weight.</li> <li>• Increase water consumption</li> </ul>

**QUESTION 7**

7.1 *Briefly explain what is meant by the term organic food.*

Organic food is the product of a farming system that avoids the use of man-made fertilisers; pesticides; growth regulators and livestock feed additives **OR** a system that uses natural pesticides.

Irradiation and the use of Genetically Modified Organisms (GMOs) or products produced from or by GMOs are generally prohibited by organic legislation.

7.2 *To what extent do you agree or disagree with this statement? Justify your point of view and come to a clear conclusion.*

Agree – worth the money

Safer, as:

- These products are cultivated and reared without the use of chemical pesticides, herbicides, fertilisers and GMOs, thus the food is natural, reducing health risks.
- Foods do not contain chemical preservatives or artificial additives, such as colouring or waxy substances, e.g. to repel insects.
- No antibiotics or growth hormones are used and animals are fed organic products.
- Toxic metal. Cadmium is a toxic chemical naturally found in soils and absorbed by plants. Studies have shown significantly lower cadmium levels in organic grains, but not fruits and vegetables, when compared to conventionally grown crops. The lower cadmium levels in organic grains may be related to the ban on synthetic fertilizers in organic farming.
- Pesticide residue. Compared with conventionally grown produce, organically grown produce has lower detectable levels of pesticide residue. Organic produce may have residue because of pesticides approved for organic farming or because of airborne pesticides from conventional farms. The difference in health outcomes is unclear because of safety regulations for maximum levels of residue allowed on conventional produce.
- Bacteria. Meats produced conventionally may have a higher occurrence of bacteria resistant to antibiotic treatment. The overall risk of bacterial contamination of organic foods is the same as conventional foods.
- Food is natural, which will reduce health risks such as cancer and infertility that are linked to chemicals.

**More nutritious / healthier as:**

- The vitamin and mineral content are probably higher as the chemical used to ripen crops more quickly remove nutrients that would normally be synthesised in food products during the natural ripening process.
- Nutrients. Studies have shown small to moderate increases in some nutrients in organic produce. The best evidence of a significant increase is in certain types of flavonoids, which have antioxidant properties.
- Omega-3 fatty acids. The feeding requirements for organic livestock farming, such as the primary use of grass and alfalfa for cattle, result in generally higher levels of omega-3 fatty acids, a kind of fat that is more heart healthy than other fats. These higher omega-3 fatty acids are found in organic meats, dairy and eggs.

**Clear conclusion**

Even though there is only a minimal increase in the nutritional value of organic food, it is important to note that organic food is definitely safer for human consumption due to the fact that the food does not contain herbicides, pesticides and genetically modified organisms.

**Disagree – not worth the money,****Not safer, as:**

- Moulds are more likely to grow on organic fruits and vegetables as a result of insect damage, which can lead to food poisoning as toxins are produced.
- There is a shortage of locally produced organic food products that leads to more imports and contributes to pollution and global warming.
- Negative influence on ecosystem as some organic pesticides are toxic to earthworms and fish.

**Not more nutritious / healthier as:**

- Labels should be read very carefully as organic does not always mean that it is healthy. Excessive amounts of salt and sugar can still be added. 95% of the ingredients must be organic before it can be labelled as organic.

**Clear conclusion**

According to the Food Advisory Consumers Service there is no credible evidence to show that organic food is safer or more nutritious than conventionally grown products. The only difference is the way it is grown and processed.

**SECTION B CLOTHING****QUESTION 8**

*Write only the correct capital letter(s) next to the question number.*

- 8.1 B
- 8.2 A, C, D, E (any order, but only the first four)
- 8.3 B, C (any order)
- 8.4 D

**QUESTION 9**

- 9.1 *Identify the different types of fashion in Outfit A and C.*

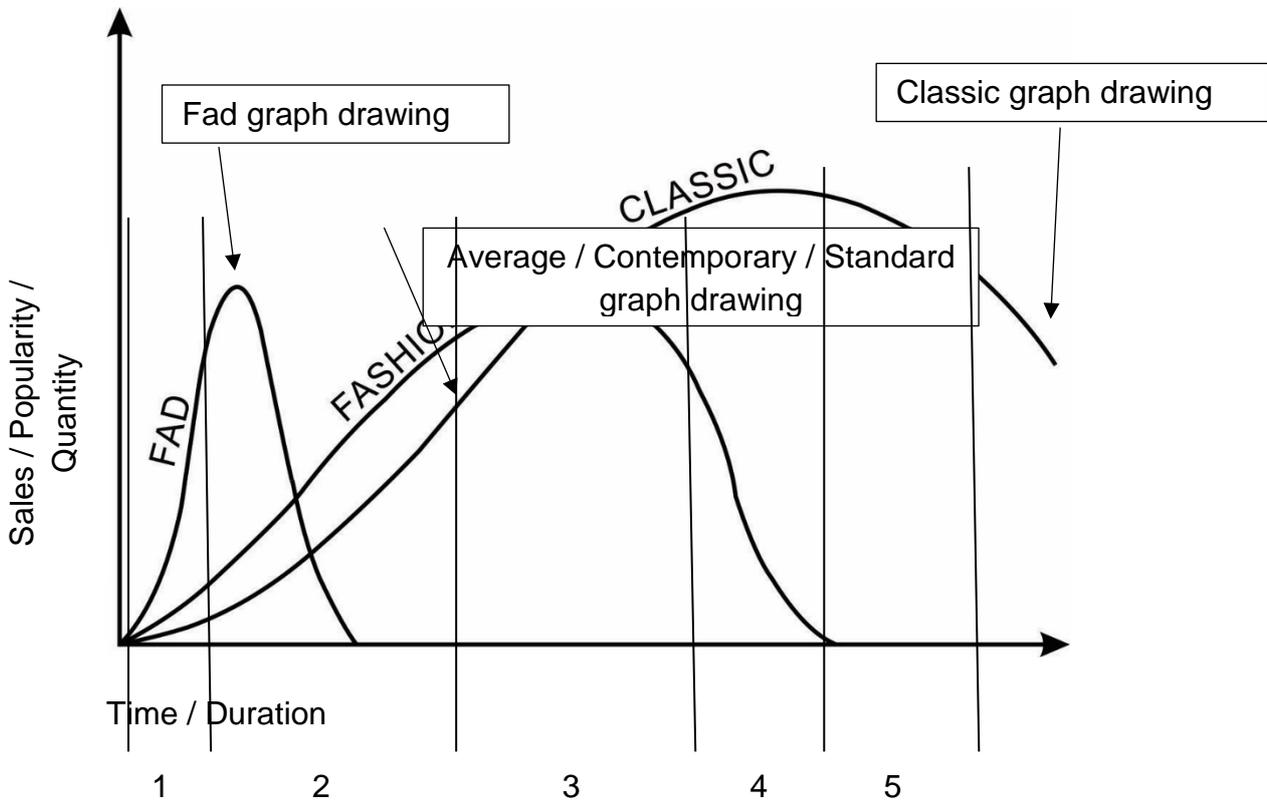
A = Average / Contemporary / Standard fashion / Trend

C = Fad fashion / Retro

- 9.2 *Outfit B can be identified as classic fashion. Why is it important to include classic styles in the wardrobe of a young adult entering the world of work?*

- Classic styles tend to be timeless.
- Simplistic has possibilities of dressing up or dressing down, mix and match with other items.
- Remain popular thus can be worn for more than one season by just changing accessories.
- Are considered good taste as it is simplistic and timeless.
- Are worn over a long period of time which means you don't have to replace clothing often.
- Are suitable for most people and therefore will flatter most figure types.
- Are good quality and therefore a good investment.
- Suitable for most occasions and company dress codes

9.3 Draw a graph of the fashion cycles represented by Outfit A, B and C. Label the graphs and the various stages of the fashion cycle.



Different stages:

1. Introduction / launch / beginning / new
2. Rise / growth / increase / incline
3. Peak / maturity / culmination
4. Decline
5. Obsolete / end / rejection / outdated

**QUESTION 10**

Explain the effect of textile research and new technology on clothing production, resulting in fashion change.

- Development of synthetic micro fibres and new finishing processes resulted in the improvement of fabric properties and new production methods and thus ongoing change in the fashion industry.
- Clothing production industry is mostly mechanised and to a certain extent computerised which results in more clothes being produced and thus making fashion change easier.
- With improved sewing and knitting machines, more clothes are produced, thus, cost of fashion items decreases lower prices help to stimulate production and further sales, promoting frequent change in fashion.
- Wider/More variety of clothing styles
- Improved communication via social media platforms
- Faster and easier payment methods
- Technology lead to more sustainable material and styles that promotes fashion change

**QUESTION 11**

11.1 *Explain why the appropriate choice of clothing for a work interview is important.*

- You need to convey your talents, skills and personality as positively as possible in a very short time.
- Ensure that you find out what the dress code of the company is before you go for an interview. You will then be able to select the most appropriate clothing for the interview.
- It is always better to overdress than underdress for an interview, as you will be under scrutiny of senior personnel present at the interview.
- For a professional job the most appropriate dress code would be business professional.
- Your clothing is a vital form of communication and will tell your interviewer how serious and professional you are. You will be judged during the interview.
- You only have that one chance to create a positive first impression and nothing makes a greater impact than the way we present ourselves.
- Clothing, personal hygiene, body language and facial expression all contribute towards a first impression.
- A person that is dressed appropriately and smartly for an interview will give the impression that he or she is confident, competent, serious and ready to learn and should be considered seriously.
- Colours – explain why certain colours are more appropriate/suitable for the work environment

11.2 *Provide reasons why neither of these outfits would be appropriate for an interview as a receptionist of a hotel.*

- Hotel receptionist – first contact the visitors have with the hotel. Dressing for the interview would need to reflect the general dress code of the hotel, thus look professional as it will be the first contact visitors have with the hotel and impressions will be formed about the hotel.
- Ripped jeans and miniskirts are not appropriate for a professional job as it shows too much flesh / skin (revealing) and to create a professional look, one should avoid overly sexy clothing such as the ripped jeans and miniskirt.
- High heels will not be appropriate as the receptionist is on her / his feet all day and for an interview the individual wants to convey the message that he / she is aware of what the job entails.
- Outfits are too informal, which makes it difficult to create a professional look for the interview. It is always better to rather be overdressed than underdressed for an interview.
- Yellow frayed jersey shows too much flesh / skin which is not appropriate for someone interacting with guests from different countries and cultures. Good to be sensitive towards the beliefs of others.  
(Answer should relate back to dressing for an interview)

11.3 *Suggest four guidelines regarding suitable clothing choices for a work interview.*

- Ensure clothes are neat and well laundered / Dress neatly
- Wear a smart and comfortable pair of shoes
- Keep accessories minimal and professional
- Dress to suit the working environment or dress code of the company (no T-shirts with slogans)
- Classic styles are a good choice as they are timeless / not too fashionable
- Do not wear clothes that may seem provocative / revealing
- Clothing must fit well
- No underwear should be visible

## QUESTION 12

12.1 *Predict the outcome on the South African clothing industry if consumers keep supporting illegal clothing imports.*

- Less and less clothing will be manufactured in South Africa
- Local clothing and textile industry will suffer
- Leading to job losses and no income
- Poorer communities
- Would be detrimental to the country's economy
- Farmers producing raw fibres for clothing production such as cotton, bamboo, hemp and wool will lose income due to less clothing being produced
- Local designers will leave the country

12.2 *Formulate a strategy to promote local or "Proudly South African" clothing products.*

- Advertising campaigns on TV and social media to make a wide audience of the general public aware of the availability of locally produced clothing.
- Registering as "Proudly South African" will give access to local tenders and marketing platforms.
- Promoting the quality of locally produced items by educating consumers with regard to the criteria necessary to become part of the "Proudly South African" campaign and the use of locally sourced products. Proof of quality by way of certification from an accredited verification body or industry association.
- Promoting fair trade practices as the "Proudly South African" trademark specifies labour and environmental practices to participants, where workers are not exploited which is part of the campaign.
- Promoting the adherence to specific environmental standards.
- Get more local manufacturers involved in the campaign by means of incentives to be part of the campaign, such as tender processes.

- Promote a campaign at craft markets where local manufacturers sell their clothing.
- Promote the advantages of buying local such as job creation.
- Get fashion influencers / famous personalities to wear and promote locally produced clothing via social media.
- Promote the usage of these clothing items by linking it to charity organisations or events

**SECTION C            HOUSING AND FURNISHINGS AND THE CONSUMER****QUESTION 13**

13.1 *Choose the correct term in brackets. Write only the term next to the question number in your Answer Book.*

13.1.1 Monthly insurance

13.1.2 Inspection fee

13.1.3 Occupational rent

13.2 *Give the term for each of the descriptions below. Write only the term next to the question number in your Answer Book.*

13.2.1 Simple interest

13.2.2 Transfer fees (costs) / Conveyancing fees

**QUESTION 14**

14.1 *Give reasons why the above-mentioned townhouse would be suitable for Khumo's lifestyle.*

- She is single and the townhouse provides good security as it has a secured perimeter and controlled access.
- Save money on the cost of having to maintain a larger property and garden.
- As she will travel a lot and is frequently away from home, Khumo can just lock up and go.
- Close to airport where she works.
- She can enjoy the common facilities such as the library, landscaped gardens and shuttle service to shopping centre.
- Close enough to business centre and shopping shuttle available.
- From the picture it can be assumed that it is a sectional title home where the body corporate will oversee management of complex.

14.2 *Khumo is a first-time buyer and does not know whether she should buy or rather rent a property. Suggest, with supporting reasons, the best choice for Khumo.*

**Buying**

- Khumo becomes the legal owner of the property
- Sense of pride, security and independence
- Can be used as security for a bank loan
- Investment as family can inherit
- She can make a profit when selling as the value of property generally increases over time
- Owning a first home often leads to the purchase of a better home later

**OR:**

Renting

- May be a more affordable option in the beginning
- Monthly expenses may be lower – no levies
- Rental is a fixed amount per month
- Khumo does not pay for insurance of the property
- She does not pay property rates or taxes
- She will not be responsible for any maintenance
- Easy to move (usually after notice period)

(Come to a clear conclusion with reasons – 1 mark)

**QUESTION 15**

15.1 *Select a builder and give a reason for your choice.*

Advert B / Joel Human – builder is registered to the NHBRC

15.2 *State the advantages and disadvantages of building your own home. Tabulate your answer.*

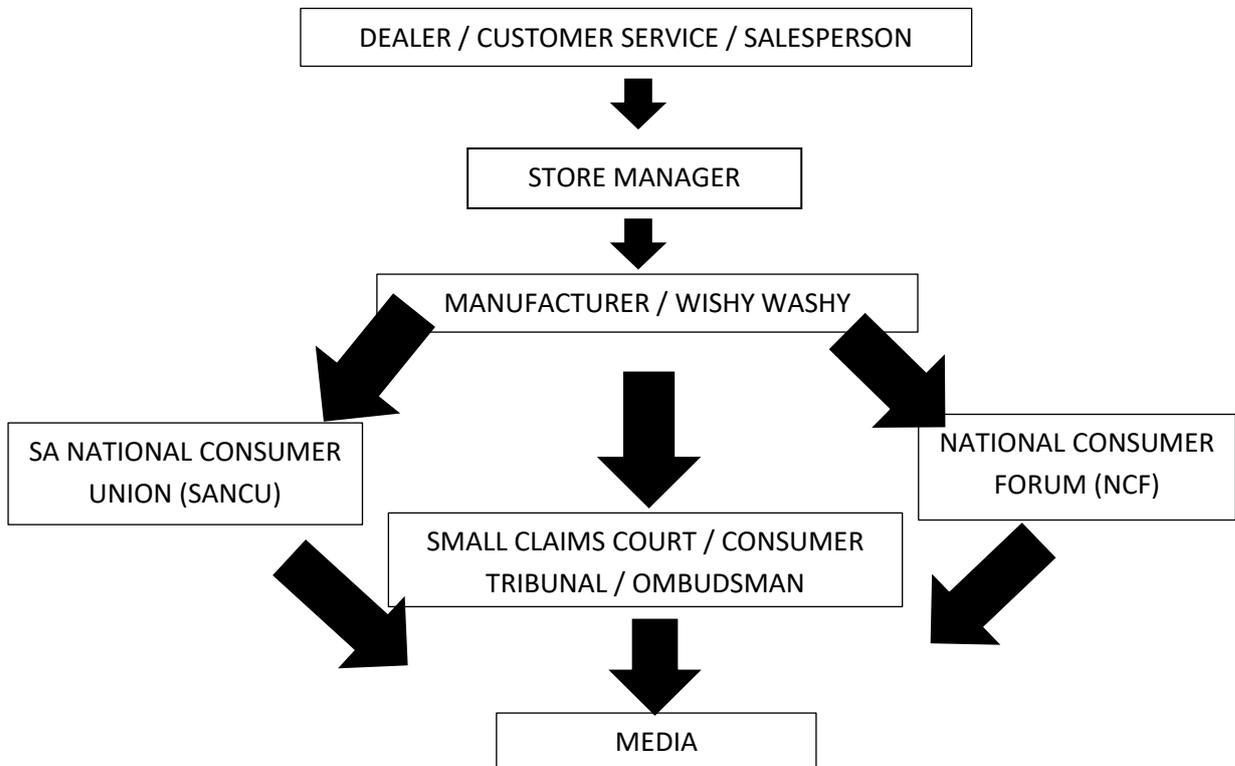
<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>• It can cost less than buying a house (provided you know what you do)</li> <li>• Can be designed to suit owner's needs and taste</li> <li>• The latest designs and technology can be included</li> <li>• The house can be completed according to the owner's own schedule</li> <li>• The owner can choose fixtures, paint and flooring to suit their taste</li> <li>• If there are not enough funds, the building work can be halted for a while</li> <li>• It is an investment/asset</li> <li>• It is a way of saving</li> <li>• No transfer duty</li> <li>• The owner will not inherit previous faults and poor workmanship</li> <li>• New houses are often in developing areas, which have an increased property value</li> </ul>	<ul style="list-style-type: none"> <li>• It can cost more than buying a house as there is always the risk of faulty construction and design</li> <li>• Risk of faulty design and floor plan cost escalation during building process</li> <li>• Quality control is very important</li> <li>• The process can be time-consuming and complicated (delays)</li> <li>• Managing and supervising sub-contractors is a tricky, complex and risk-laden task</li> <li>• Starting a new garden is expensive</li> </ul>

15.3 *List the documentation needed by the bank before approving a building loan.*

- Fully completed home loan application
- Proof of income and expenditure and assets and liabilities / proof of stable income
- Title deeds of land
- A detailed quotation from the builder (registered at the NHBRC)
- Proof of enrolment of home with NHBRC
- Contract between builder and yourself
- A schedule of fittings and finishes
- A building plan (Municipal Approved/Provisional building plans)
- Copy of Identity Document/s or smart card ID
- Copy of Offer to Purchase, except where no sale is taking place
- Latest 3 month's bank statements original and stamped
- Building contracts/ quotes signed by you and the builder
- Builders All Risk Insurance Policy
- Income Tax number
- FICA (proof of residency)

**QUESTION 16**

16.1 *Draw a flow diagram / chart of the correct channels (ports of call) for consumers to follow when they have a complaint.*



Dealer-Manufacturer-Consumer Organisation-Legal Action (Courts)-Media

**(-1 mark if not flow diagram / chart)**

16.2 *The complaint received by Hellopeter.com lacked important information.*

*Write an e-mail to the manufacturer, including all the relevant information, to achieve the best possible outcome. (This e-mail should be no longer than one page). Fictional information must be used.*

Learners must write an e-mail to the manufacturer that include the following information.

- Name / initials or surname
- Telephone number for home / business / cell
- Account number (if applicable)
- Nature of the complaint and why he / she is dissatisfied
- Details of the store where the purchase was made
- Date and place of the transaction
- The cost of the product or expenses due to broken washing machine
- Method of payment
- Invoice number or any information that can identify the product
- What was wrong
- Clear on what is expected of the outcome
- How long he / she is willing to wait
- Attach all documents (please see attached documents)

Example:

Date (usually automatic)

To: wishywashy@hotmail.co.za  
 Cc: the store / manager  
 From: Florence Nightingale  
 Subject: Repairs of washing machine

Dear (manager name) / To whom it may concern

Introduction:

Explain who you are and why you are writing  
 Faulty washing machine

Body:

First paragraph – state what you bought, when and where, including serial numbers where appropriate.

Second paragraph – state the problem you have with the product. Give as many details as possible.

Attach copies of any relevant documentation (receipts, warranties, letters, etc.).

**Conclusion:**

In the final paragraph – state what action you want taken to resolve your complaint. Give precise but reasonable timeframes for actions. State that if you do not hear from them you will take further action. ✓

Yours sincerely

Signature

Printed name

- Be formal and to the point / neat and easy to read / short and to the point

16.3 *The outcome of the complaint was that the consumer received a refund and must now buy a new washing machine.*

*Explain to the consumer the financial responsibility before buying new appliances.*

Before:

- Compare different brands / energy levels and shop around / Some suppliers give the option of comparing different appliances on their websites / Product comparison reports are a useful tool
- Compare different stores
- Make sure the store that you finally buy from is reputable / reliable dealer
- Ask about extra costs such as service charges, installation charges, delivery cost and administration costs
- Read the store's return or exchange policy
- Make sure the item comes with a guarantee / warranty
- Read the guarantee / warranty and contract very carefully
- Compare the financial implication of buying cash or on credit
- Ensure that purchase is within your budget/financial means

16.4 *The consumer needs to choose between the following three washing machines. Study the labels below and then answer the questions that follow:*

16.4.1 *Rank the three washing machines with regard to their energy consumption from the best to the worst.*

1. Machine B
2. Machine A
3. Machine C

16.4.2 *Rank the three washing machines with regard to their water consumption from the best to the worst.*

1. Machine B
2. Machine A & C

16.4.3 *Choose the machine that is the most sustainable with regard to energy and water consumption.*

Machine B

16.4.4 *Evaluate the impact on the environment when a family uses a tumble dryer every day.*

- If the family uses lower temperatures, electricity and money would be saved and their carbon footprint will be reduced. The anti-crease cycle will help that the clothing does not need any ironing which will reduce electricity usage and save money.
- Except for gas dryers, dryers are not energy efficient (B- to D-)
- However, a family will have larger loads of washing and this family is using the dryer every day, which increases their electricity usage increasing their carbon footprint. Fossil fuels are necessary to generate electricity and harmful gases are released into the atmosphere.
- Every day usage might result in the dryer being replaced often, and some parts can't be recycled
- Lint of machine may cause pollution
- Old machines are noisy and add to sound pollution
- Clothes may not last long, need to be replaced and old clothes may end up on landfills, harming the environment

**Conclusion**

The family should rather hang their clothes outside if the weather permits it. If they use the dryer with discretion, their financial cost and environmental impact will be reduced.

By using the dryer daily, they are increasing their electricity usage and it will have a negative impact on the environment as well as the family's finances.

(4 marks evaluation + 1 mark conclusion)

**SECTION D EXTENDED WRITING RESPONSE****QUESTION 17**

Study the extracts below. Using the information, write an essay, debating whether the use of Genetically Modified (GM) food should be allowed. You must form a clear opinion on the issue and substantiate your position.

Use the following points in your preparation:

- Provide a title for your essay.
- Organise your essay by using paragraphs.
- Provide a definition for the term *Genetically Modified Organisms (GMOs)*.
- Come to a clear conclusion.

Marks will be allocated according to the rubric.

<b>Statement 1</b>
<p><b>South Africa's unique position on GM</b></p> <p>While many countries allow GM production, South Africa's Genetically Modified Organisms Act of 1997 is more or less unique. It allows maize modified to contain soil protein fatal to insects to enter the human food chain – most countries that allow GM staples to be grown do so only for use in animal food. According to one study, GM planting in South Africa increased production by 1,1%, although attempts to evaluate the benefits are strangely few and far between.</p> <p>[Adapted from: Sunday Times, Food Basket, April 2017]</p>
<b>Statement 2</b>
<p>All over Europe and the USA, anti-GM activists tore up crops and dug for legislation to close down trials. In the years since, several studies suggest that public opinions have calmed down. Consumers had two primary concerns: that GM foods pose an inherent health risk, and that the corporations who create GM seeds would dominate chains and penalise smaller, poorer growers with high prices.</p> <p>[Adapted from: Sunday Times, Food Basket, April 2017]</p>
<b>Statement 3</b>
<p><b>Most South Africans, without their knowledge or consent, are unknowingly consuming genetically modified food products every single day.</b></p> <p>"Local farmers are continuing to use toxic glyphosate-based products and are farming crops that have been genetically modified and are therefore Genetically Modified Organisms. Even if these products were correctly labelled, the majority of South Africans would have little choice but to consume them," said Haidee Swanby from the African Centre for Biosafety (ACB).</p> <p>[Source: &lt;<a href="https://www.health-e.org.za/">https://www.health-e.org.za/</a>&gt;]</p>
<b>Statement 4</b>
<p>Significant developments in GM crops have been made in South Africa's agricultural sector, including increased crop yield, which has a direct impact on food production and food security, as well as a decreased use of pesticides and herbicides in GM crop fields. "This has a considerable impact on the environment, biodiversity and health of farm workers who could be exposed to chemicals while applying them to the fields," says the Council for Scientific and Industrial Research biosciences principal researcher, Dr Eugenia Barros.</p> <p>[Source: &lt;<a href="http://www.engineeringnews.co.za/">http://www.engineeringnews.co.za/</a>&gt;]</p>

Rubric:

Criteria	4	3	2	1	0
Candidate provides a concise definition for the term "genetically modified organisms"	.		Excellent definition for the term "genetically modified organisms" is given that shows understanding of the term.	The term "genetically modified organisms" is explained but with little understanding.	No definition given.
Candidate differentiates between advantages and disadvantages of using GMOs (4 x 2 = 8)	Excellent differentiation between the advantages and disadvantages are made. 4 x advantages 4 x disadvantages	Clear differentiation between advantages and disadvantages are made.	An attempt is made at differentiating between the advantages and disadvantages.	Candidate has only given either advantages or disadvantages, not both.	Bullet has not been addressed in this essay.
Candidate analyses the positive and negative impacts of GMOs with reference to the statements	It is clear from candidate's analysis that his / her knowledge of GMOs is exceptionally sound. Candidate refers to all the different statements during the analysis.	Analysis has a clear understanding of the positive and negative impact of GMOs. Candidate refers to only some of the statements during analysis.	Candidate fails to provide a meaningful analysis, but may still provide some understanding of GMOs. Candidate refers to only one of the statements during analysis.	Candidate omits either the analysis OR addresses only one positive or one negative impact. No reference is made to any of the statements.	No attempt to address this issue is made.
Conclusion			Clearly understands the topic in depth and presents a clear concise conclusion.	Little understanding of the topic. No clear conclusion.	No conclusion.
Organisation and mechanics:  Tone  Professional argument  Language and terminology  Heading  Introduction  Paragraphs	Tone of article is mature. Suited, appropriate and professional argument. Excellent and appropriate use of language and terminology. Appropriate heading for article. Interesting introduction. Correct paragraphing with good transitions.	Tone is consistent and suited to professional argument. Good and appropriate use of language and terminology. Heading given for article. Mostly appropriate introduction and paragraphing.	Tone, language and terminology is weak. Heading does not relate to article. Attempts at correct introduction and paragraphing.	Writing is almost unintelligible. Tone, language and terminology exceptionally weak. Introduction and paragraphing not present.	No title given. Organisation and mechanics are not met.

**The essay is marked holistically using the IEB source-based essay rubric with the following guidelines.**

**Definition:**

Genetic modification is the result of genetic engineering. The genetic code inside living cells is made of DNA. The long, chain-like molecules of DNA are divided into chromosomes and the chromosomes are divided into units called genes. Genes control the characteristics of living things, such as the colour of a flower petal or a child's eyes.

Scientists can now identify the individual gene responsible for a desired characteristic, extract it, copy it and insert the copy into another organism. That organism will then also possess that property.

Genetic engineering thus allows genetic material from one organism to be implanted into another organism in order to introduce characteristics from one species into another.

**Advantages:**

- Crops can be modified so they are resistant to pests.
- Fewer pesticides need to be sprayed on crops, which is better for the environment.
- Some crops are modified so that they are resistant to weed-killing chemicals.
- Chemicals can then be used to wipe out weeds without killing the crop.
- Crops may have an increased resistance to disease, drought and fluctuations in temperature, which makes it possible for crops to be grown in regions with low agricultural productivity.
- The crop yields are greater.
- More people can be fed.
- Production costs may be lower.
- Food products made from genetically modified crops have a longer shelf life, with better processing and manufacturing properties.
- Genetically modified food is cheaper and more plentiful.
- Crops may have an improved flavour, appearance and texture.
- Food can be used as an edible vaccine.
- Food may have more nutritional value than conventionally grown crops.

**Disadvantages:**

- It is unclear what happens to genes that are inserted into other products.
- It is not known how these crops influence the direct environment, such as the soil in which they are grown.
- No one knows what will happen if genetically modified plants pollinate conventionally grown plants.
- It is possible that genetic modification may be used to cause animals to grow bigger and faster than usual so they can be slaughtered for consumption at a younger age. This is unethical.
- There is no specific data that proves that genetically modified foods are harmless.
- The practice of genetic modification is vague and the scientific developments that make it possible have occurred so recently that there is no guarantee that we will not experience problems in the future.

**Positives:**

- Insect resistant, increased production, increased yield, better food security, longer shelf life, export of food to poorer countries, access to more nutrition-rich foods.
- Decreased use of pesticides and herbicides in GM crop fields. This has a considerable impact on the environment, biodiversity and health of farm workers who could be exposed to chemicals while applying them to the fields.
- Less greenhouse gas emissions.

**Negatives:**

- Soil protein fatal to insects may enter the human food chain – most countries that allow GM staples to be grown do so only for use in animal food – risk of gene migration.
- GM foods pose an inherent health risk – humans might become antibiotic resistant, unknown allergic reactions.
- Corporations who create GM seeds would dominate chains and penalise smaller, poorer growers with high prices.
- Even if these products were correctly labelled, the majority of South Africans would have little choice but to consume them.

**Total: 200 marks**