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.
SECTION A FOOD AND NUTRITION AND THE CONSUMER

QUESTION 1

Give the correct terms associated with the following statements:

1.1 Osteoporosis (adults) Accept: rickets (children)
1.2 Anorexia
1.3 Diabetes/Diabetes Mellitus/Diabetes Type 1 or 2/Glucose intolerance
1.4 Glycaemic index
1.5 Hypertension/high blood pressure
1.6 Atherosclerosis


QUESTION 2

Match each type of fat in Column A with the correct example in Column B. Write the letters only.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>D</td>
</tr>
<tr>
<td>2.2</td>
<td>A</td>
</tr>
<tr>
<td>2.3</td>
<td>B</td>
</tr>
<tr>
<td>2.4</td>
<td>C</td>
</tr>
</tbody>
</table>


QUESTION 3

3.1 Identify the possible nutrient deficiency that Sarah was suffering from. Iron deficiency anaemia/Anaemia/iron deficiency (1)

3.2 Explain what led you to come to this conclusion.

- She was feeling very tired all the time.
- The fact that she should avoid tea/coffee with/after meals as the tannins interfere with iron absorption.
- She was advised not to drink fizzy drinks – carbonates inhibit iron absorption.
- 17 year old menstruating therefore more prone to iron deficiency. (3)

1 mark: identify; 3 marks: motivation

[4] anal
QUESTION 4

Differentiate (explain the difference) between a food intolerance and a food allergy and provide an example of each. Tabulate your answer as shown:

<table>
<thead>
<tr>
<th>Explanation:</th>
<th>Intolerance:</th>
<th>Allergy:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intolerance is an adverse reaction that occurs when the body reacts to a food as if it is a poison. It produces unpleasant symptoms but is usually not harmful or life threatening. It happens every time the food is eaten. Can be due to a lack of a particular enzyme so one cannot digest the food. Does not involve the immune system.</td>
<td>An allergy is when the immune system reacts to a protein in food, sees it as harmful and produces antibodies to fight it. The reaction can be extreme and life-threatening (anaphylaxis).</td>
</tr>
<tr>
<td></td>
<td>Explanation: 2 facts (2)</td>
<td>Explanation: 2 facts (2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Example:  One example</td>
</tr>
</tbody>
</table>

2 marks to describe each condition, 1 mark for an example of each


QUESTION 5

5.1 Explain the term 'genetically modified organisms' (GMOs).
Scientists are able to identify the genes responsible for various characteristics of an organism. A particular gene may be transferred into another organism, even one belonging to a different species. This means that genetic material has been altered in a way that does not occur naturally. This genetically modified organism (and its offspring) will then possess that characteristic.
Genetic modification is done to improve the quality/characteristics of a species. (3)K
Explain question therefore must give three valid points to obtain the marks

5.2 There is a wide range of readers' reactions to the question posed in the article. Debate this issue, giving both advantages and disadvantages of genetically modified organisms (GMOs), and come to a conclusion.

[68% of readers said yes – GM food is a 'monster'; 12% said no; 20% don't know]

<table>
<thead>
<tr>
<th>Advantages of GMOs:</th>
<th>Disadvantages of GMOs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crops can be modified to be pest-resistant – farmers can use fewer pesticides, which is more economical, better for the environment and safer for the farm workers.</td>
<td>It is unknown if/how these organisms will influence the environment (the soil in which they are grown, as well as insect, bird and animal life). GM animals and plants could become super organisms that will cause natural plant and animal species to die out.</td>
</tr>
<tr>
<td>Crops may be modified to be resistant to weed-killing chemicals, i.e. weeds may be sprayed with chemicals that do not kill the crops.</td>
<td>It is unknown what will happen if GM plants pollinate non-GM plants (outcrossing) – this might have an effect on food security and food safety.</td>
</tr>
<tr>
<td>Crops may be modified to be more resistant to diseases, droughts or temperature fluctuations, i.e. crops can be grown in previously unfavourable areas.</td>
<td>GM crops will lead to a decrease in biodiversity.</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>It allows for greater crop yields therefore more people can be fed (food security). Grows quickly.</td>
<td>Non-target organisms may be affected, e.g. insects that are not pests.</td>
</tr>
<tr>
<td>Production costs may be lower (less water and chemicals needed) so the food could be cheaper for consumers to buy.</td>
<td>Antibiotic-resistant genes may cause humans to become resistant to antibiotics.</td>
</tr>
<tr>
<td>Produce has a longer shelf-life, which also allows for more people to be fed.</td>
<td>There are various ethical issues to be considered, such as animals may be manipulated to grow bigger or faster.</td>
</tr>
<tr>
<td>Crops may be engineered to have improved flavour, texture and appearance.</td>
<td>Long-term effects are as yet unknown, e.g. environmental impact, effects on human health (e.g. safety and toxicity, or possible allergic reactions – so far none but is still a risk). The main argument against GMOs is that nobody knows what the effects of tampering with nature will be.</td>
</tr>
<tr>
<td>Nutritional value may be enhanced.</td>
<td>Initial process is expensive – developing countries cannot afford GMO</td>
</tr>
<tr>
<td>Food could be used as an edible vaccine. Some GM sheep produce a human protein in their milk that can be extracted and used in the treatment of some lung diseases.</td>
<td></td>
</tr>
<tr>
<td>Bacteria and other microorganisms can be used in the manufacture of medications, e.g. insulin that is used by diabetics.</td>
<td></td>
</tr>
<tr>
<td>Less labour intensive</td>
<td></td>
</tr>
</tbody>
</table>

**Other points to consider that candidates might use:**
- People in some countries have been eating GM foods for about 20 years already – no adverse effects are apparent.
- Plants and animals have been bred for their most desirable characteristics for hundreds of years.
- Genes do cross from one species to another in nature as well as by conventional plant breeders. Wheat is an example of a cross-species hybrid.
- Genetic engineering is very precise and scientific.
- Compared to other food production methods, e.g. artificial additives, etc., GM foods may be more natural/desirable.
- There is concern over the control of GM seeds (big companies monopolising).
- Many scientists think that it is a safe way of producing food, and it is needed for future world food security.

**Conclusion: candidates must reach a conclusion, either for or against GMOs.**

**For example:** agree because scientific methods such as genetic modification are essential in order to produce enough food to feed an ever-growing world population/to produce affordable food/to reduce the use of artificial chemicals and toxic sprays …

**OR** disagree because people should not be interfering with nature/long-term effects cannot be known until it could be too late to reverse/it is unethical/could be monopolised …

**plus 1 mark for conclusion (not just 'agree/disagree')**

Does not have to be four of each as question does not specify must be both advantages and disadvantages + 1 mark for the conclusion
5.3 Propose reasons as to why the majority of the Fair Lady readers seemed to be aware of the disadvantages of GMOs:

- Lack of knowledge – they don't know enough about the topic, have heard people talking (word of mouth)/seen headlines, etc. and have jumped to conclusions without finding out more.
- They do not understand what is actually done to the crops and assume that it is undesirable/dangerous.
- They assume that GM foods are inferior quality because they are cheaper.
- Genetic modification is seen as interfering with nature without knowing the possible consequences – people are scared of it.
- The media / social media / post on internet have given a lot of negative publicity, e.g. the title was worded – '… the monster we think it is'; this could have influenced their opinion.
- Organisations such as Greenpeace and some scientists are very against such 'tampering with nature' and are very vocal – therefore people may have heard things but only one side of the argument.
- Labelling of food is inadequate so people are not familiar with GMOs/do not realise they probably eat them regularly as ingredients in processed foods.
- Safety of GM foods has not yet been established and people are unaware of the long-term effects.
- People more educated and aware of the health effects; they are more aware of the disadvantages of GM products.

(Accept other valid arguments) (5) syn [17]
**QUESTION 6**

Recommend three foods/drinks from the list below that would be **best** for a person suffering from 'full blown' AIDS. Motivate your choices by providing a valid nutrient-related benefit for each. Do not repeat reasons.

Tabulate your answer as shown:

<table>
<thead>
<tr>
<th>Recommended foods/drinks:</th>
<th>Reasons:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lentil soup</td>
<td>• Good source of soluble fibre – helpful for diarrhoea, slows emptying of stomach</td>
</tr>
<tr>
<td></td>
<td>• Soup – helps with dehydration – replenish liquids lost</td>
</tr>
<tr>
<td></td>
<td>• Vitamin- and mineral-rich – helps support weakened immunity</td>
</tr>
<tr>
<td></td>
<td>• Filling due to fibre content</td>
</tr>
<tr>
<td></td>
<td>• CHO – energy (one nutritional reason)</td>
</tr>
<tr>
<td>Flavoured milk</td>
<td>• Milk is nutritious – protein (immune system/antibodies, promote wound healing, prevent muscle loss, calcium (strengthen teeth and bones), vitamins for health and body functions</td>
</tr>
<tr>
<td></td>
<td>• Flavoured milk will be sweetened – sugar will provide extra energy value</td>
</tr>
<tr>
<td></td>
<td>• Forms part of fluid intake – a more nutritious choice than water or cold drink; fluid replacement is necessary due to diarrhoea/vomiting. (one nutritional reason)</td>
</tr>
<tr>
<td>Scrambled eggs on toast</td>
<td>• Starch in bread for energy</td>
</tr>
<tr>
<td></td>
<td>• Starch will help to maintain weight</td>
</tr>
<tr>
<td></td>
<td>• Protein is filling – can eat a small amount at a time and be satisfied; eggs are also nutrient dense</td>
</tr>
<tr>
<td></td>
<td>• Protein needed for immune system/antibodies, promote wound healing, prevent muscle loss          (one nutritional reason)</td>
</tr>
<tr>
<td>Macaroni and cheese</td>
<td>• Starch in pasta for energy</td>
</tr>
<tr>
<td></td>
<td>• Starch will help keep weight stable</td>
</tr>
<tr>
<td></td>
<td>• Milk and cheese for nutrient density (protein, calcium, vitamins as above) (one nutritional reason)</td>
</tr>
</tbody>
</table>

Refer to table for specifics on nutrients

<table>
<thead>
<tr>
<th>Protein</th>
<th>Legumes, egg, milk, cheese</th>
<th>Builds up &amp; strengthens immune system. Helps prevent loss of muscle tissue.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A</td>
<td>Egg, Cheese</td>
<td>Keeps skin, mucous membranes in lungs and digestive tract healthy. Antioxidant that prevents damage to cells and infections.</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>Lentils</td>
<td>Maintains healthy immune and nerve system.</td>
</tr>
<tr>
<td>Selenium</td>
<td>Milk, cheese, eggs</td>
<td>Helps activate T-helper cells. Antioxidant that prevents infection and damage to cells.</td>
</tr>
<tr>
<td>Zinc</td>
<td>Milk, cheese</td>
<td>Protects and strengthens immune system.</td>
</tr>
<tr>
<td>Iron</td>
<td>Lentils, egg</td>
<td>Maintains the immune system.</td>
</tr>
</tbody>
</table>

Any 3 choices above from given list and a different nutritional reason for each  

\[(3 \times 2) \text{ anal} \]

[6]
Candidates may not choose the following due to the following reasons:

<table>
<thead>
<tr>
<th>Foods/drinks not best choices:</th>
<th>Reason:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toasted wholewheat bread and Marmite</td>
<td>Wholewheat has rough bits and toast is hard – could hurt a sore mouth; Marmite could be too strong and sting sore mouth. Insoluble fibre promotes peristalsis. (Will aggravate diarrhoea.)</td>
</tr>
<tr>
<td>Black coffee</td>
<td>Avoid caffeine – it dehydrates one. (Aids patient may have vomiting and diarrhoea so loses fluids.)</td>
</tr>
<tr>
<td>Chocolate mousse</td>
<td>Too rich – Aids patient will probably be nauseous; raw egg – risk of salmonella contamination – immunity is low.</td>
</tr>
<tr>
<td>Fried fish and chips</td>
<td>Too fatty – will aggravate diarrhoea, feel nauseous.</td>
</tr>
</tbody>
</table>

**QUESTION 7**

7.1 B F G (3)K

Letters can be in any order

7.2 Based on your knowledge of the nutrients and food groups, discuss in detail the findings of the researchers (in the resource material) compared to Professor Noakes's viewpoint that a low-carbohydrate, high-fat diet will have a bigger impact on weight loss. Conclude by recommending the best dietary approach for an obese person to follow.

- Carbohydrates (starch and sugar) are energy foods and provide kilojoules. If energy is not used, the spare kJ are stored as fat, therefore less sugar and starch in the diet will lead to weight loss. Hypoglycaemia less sugar in the blood results in less body fat storage.
- Noakes advocates high fat, which is high in kilojoules – but fat has a high satiety value, so one eats less. High fat increases cholesterol levels.
- Kilojoules eaten should balance with energy used to maintain weight (not gain or lose) – this will apply to both diets.
- High GI carbohydrates, such as sugar and refined starch, have a low satiety value and cause one to feel hungry quite soon after eating, which leads to overeating.
- High GI carbohydrates, such as sugar and refined starch, contribute to weight gain by providing 'empty kilojoules'.
- It is widely believed that cutting out 'carbs' is a good way to lose weight – but there are 'good carbs' (fruit, veg, whole grains), which are valuable and nutritious and 'bad carbs' (refined, in snacks, sweetened drinks, etc.), which can/should be avoided or limited.
- Low GI carbohydrates provide fibre and are filling – this helps to control appetite therefore will help with weight loss.
- One should not avoid a whole food group – should eat the correct balance of food types to maintain good health (food pyramid).
- The researchers found that weight loss is more to do with the total kilojoules consumed rather than what foods provide the kilojoules. Fats have a much higher energy/kJ value than carbohydrates, but less fat is needed in order to feel full.
- Protein can also provide energy, but it is filling and has a good satiety value so helps to control appetite; however in order to relate to weight loss, moderate rather than high amounts should be eaten (or other suitable comments).
**Conclusion:** The researchers did not find significant benefits of a low-carb/high-fat diet for weight loss over longer periods although the LCHF diet tends to cause rapid and encouraging weight loss at the start of the diet. Therefore the LCHF diet might motivate the obese person to lose weight, but either approach would be effective over time. (Or other suitable conclusion.)

Only TWO dietary effects need to be accepted

9 points = 9; conclusion 1
8 points = 8, conclusion 2

(10) eval

7.3 A middle-aged man has a BMI of 38 (is obese). This puts him at risk of developing certain dietary-related diseases/health problems. Name and explain three of these health problems.

**Coronary heart disease / Cardiovascular disease / Heart attack /**

**High cholesterol**
- Excess weight puts more strain on his heart as it has to work harder to pump blood around his very large body, which in turn could increase his risk of heart disease.
- His high BMI indicates that he is obese (approaching morbid obesity), which means that he probably follows an unhealthy diet rich in fatty foods therefore he is at risk of heart disease due to high cholesterol levels. This can cause atherosclerosis and heart attacks.
- A waxy substance called plaque builds up inside the coronary arteries. This oxygen-rich blood supply is then restricted.

**Atherosclerosis**
- The narrowing of the arteries caused by a build-up of cholesterol and plaque in the blood vessels.

**Diabetes /Hyperglycaemia**
- Type 2 diabetes can be caused by excessive kilojoule intake along with lack of exercise and older age. Obese people generally do not do much/any exercise. His obesity therefore puts this middle-aged man at high risk of type 2 diabetes.
- His diet is likely to be high in refined carbohydrates, sugar and fats and low in fibre – this can easily lead to type 2 diabetes over time.
- If he suffers from hypertension he has a higher risk of developing diabetes.
- A condition in which the body cannot control the glucose (sugar) levels in the blood.
- Diabetes is diet related. The body does not respond to or produce insulin. HYPERGLYCAEMIA
- An excess of glucose in the bloodstream, often associated with diabetes mellitus.

**Hypertension/high blood pressure / Stroke**
- Obesity goes hand in hand with poor diet – this man has probably subjected his body to processed/convenience or junk foods, which are high in salt and fat (saturated/trans fats – contribute to build-up of arterial plaque) – this can cause high blood pressure.
- Hypertension can lead to heart disease/ heart attack/ congestive heart failure, stroke and kidney disease.
- Blood pressure is the force of blood against the walls of the arteries when the heart beats and when it rests.
- Obese people tend to have high blood pressure. This can lead to strokes, renal disease and heart attacks.
• STROKE: When the blood supply to part of the brain is interrupted or severely 
  reduced, depriving brain tissue of oxygen and nutrients.

Cancer
Obesity has been shown to be a risk factor for certain cancers – e.g. colon cancer 
possibly linked to a low fibre diet that is high in processed foods. Cancers thrive in 
a high sugar environment – likely in an obese person. 
A disease caused by an uncontrolled division of abnormal cells in a part of the 
body.

Asthma and chest infections
• Obesity puts strain on the lungs and obese people often have trouble with their 
  breathing. 
• This is also often associated with a sedentary lifestyle/lack of physical activity, 
  which is common in the obese.

  Cannot get a mark for saying obese. 
  Health problems must be related to obesity 
  Name 3 conditions = 3; explain 3 conditions = 3 
  (6) app
  [19]
QUESTION 8

To what extent do you think that this consumer behaved/reacted appropriately or inappropriately in this situation? Discuss in detail and come to a conclusion.

The consumer behaved correctly/appropriately:
- They complained to the manager – this is the correct person to approach.
- They complained immediately.
- They were assertive in trying to receive what they saw as their right to the special.
- They were aware of their consumer right to get what is advertised / to complain about unethical advertising.
- They will not be shopping there again – consumers can express dissatisfaction by shopping elsewhere so that unsatisfactory goods or service will not be supported.
- They did take the complaint further – they approached a watchdog organisation and thereby ensured that other consumers would be made aware of the false advertising.

The consumer's behaviour was not appropriate:
- They admit that they were angry when they spoke to the manager – this could have come across as rude or aggressive. They acted in the heat of the moment and let their emotions direct their response – they should have remained calm.
- Usually going to the media is the last step in the complaints procedure. They should have attempted other methods of resolving their complaint first before contacting the watchdog organisation.
- They could have phoned/emailed/written a letter to the supermarket head office before putting the complaint in the public domain on the hellopeter website. There were two issues – the misleading signage for the special and the rudeness of the manager that could have both been dealt with by the head office.
- If they still could not resolve the issue, they could have approached the Advertising Standards Authority about the misleading/false advertising.
- However, word-of-mouth is very powerful and this is achieved by posting on the website.

Conclusion:
To a large extent they behaved correctly although there are other avenues of consumer help available before going public OR they did not behave appropriately as they should have tried to resolve the issues before going public … or other suitable comment.

Candidates must show understanding of the situation

7 marks for discussion, 1 for conclusion

To get the full allocation of marks they will have to discuss both some positive and negative points

[8] eval

70 marks
SECTION B  CLOTHING AND THE CONSUMER

QUESTION 9

| 9.1 | D |
| 9.2 | A |
| 9.3 | G |
| 9.4 | E |
| 9.5 | F |
| 9.6 | B |

[6] app

QUESTION 10

Name and discuss three social factors that influence fashion change.

- **Different market segments** such as youth, elderly need different (age appropriate) fashions and styles.
- **Increased mobility/travel** – many people work and have holidays in other countries so are exposed to other cultures and trends.
- **Education** – types of jobs and income levels – the changing role of women in the workplace means they need work clothes/want fashionable work clothes.
- **Lifestyle** – sport/gym and leisure clothes are in demand due to the adoption of healthy lifestyles; people also have more need for casual clothing than in the past – casual fashions are in demand.
- **Peer groups/peer pressure** – teens especially want to conform and fit in therefore follow fashion changes to ensure that they belong to their group.
- **Well-known personalities and celebrities** have an influence on fashions and trends as people are influenced by the rich and famous.
- **Religion and culture** – some religions require certain styles and standards of dress; many cultures have traditions to do with clothing. Cultural festivals expose visitors to new fashions at these events. Cross cultural contact and sub cultural groups introduce new fashion.
- **Current events**, e.g. World Cup soccer/rugby, royal wedding/pregnancy, also disasters and wars have an effect on clothing that is available and therefore fashion choices of people.
- **Geographical location** – urban vs rural influences fashion change
- **Media** – fashion changes due to the influence of TV, magazines, internet, etc.

If they name the incorrect social factor but their reasoning is appropriate then they can be awarded 1 mark for reasoning.

3 factors discussed

\[ (3 \times 2 = 6) \]

QUESTION 11

Read the statement below made by the famous clothing designer Versace. Analyse what he meant by the statement and motivate whether or not you agree with his opinion.

"When a person alters their style too much from season to season, they become a fashion victim"

[Adapted from: Versace <www.behtek.com>]

- Fashion victims are victims because they are vulnerable to following fads and conforming to the latest fashions – therefore follow society's trends instead of developing their own sense of style. He means that he/she is a fashion follower rather than developing and sticking to their own style / lack of individuality / reflection of self-esteem (status symbol).
- A person should dress to suit their figure, colouring, personality, lifestyle and age (mutton dressed as lamb) rather than changing what they wear according to the latest trends as not all fashions suit everyone. This person who does not have their own style is going to have a different look every season according to the latest fashion trends – not necessarily suiting them. People should update their look and adapt fashions according to what suits them and not just because there is something new or different.
- New fashions and fashion changes are mostly due to commercial interests of the fashion industry – fashion victims are victims of this materialism and profit-making consumerism. Adds to consumer expense = victim.
- A victim means a sufferer or casualty. A 'fashion victim' is therefore someone for whom the particular fashion is not successful.
- Certain fashions that do not suit their personal style should be rejected to avoid being a fashion victim – they can use trendy accessories to look modern and up to date.
- If someone can afford to continuously update their fashion then they are not being a victim as they can afford to update and act as a status symbol.

Candidates may agree or disagree but must discuss reasons. No mark for agree/disagree.

[5] anal

QUESTION 12

12.1 The illustrations A and B both depict a particular fashion cycle. Identify and explain this type of fashion cycle.

Fad
It is a fashion that enters the market and experiences rapid growth in popularity.
It is short-lived and disappears quickly – often within a season or even less.
It is often extreme/flashy and not well-made/good quality.
There is a high demand, usually by 'tweens'/teenagers/young adults, but lacks the ability to hold consumer interest for a longer period.

1 mark to identify and 2 points to explain

(3) app
12.2 **Draw a labelled diagram/graph of the fashion cycle that would apply to these illustrations.**

Candidates must draw a high narrow curve to show a fad fashion = few people wearing it
Two axes labelled appropriately (time/years; number of people/population/sales) (3) syn

12.3 **Label the five stages of the fashion cycle on your diagram or graph.**

QUESTION 13

Compare the impact on the natural environment of the production of a shirt made from polyester and conventionally grown cotton by discussing the following aspects. Answer in a tabulated format as shown.

<table>
<thead>
<tr>
<th></th>
<th>Polyester</th>
<th>Conventionally grown cotton</th>
</tr>
</thead>
</table>
| **Sustainability**  | • Polyester is a manufactured/man-made/synthetic fibre made from crude oil/petroleum, which is a non-renewable resource; it is not sustainable.  
                      • Mining for coal and drilling for oil cause environmental damage and destroy ecosystems; this is also not sustainable.  
                      • Polyester is the most widely used synthetic fibre therefore large volumes are produced; it has a large impact on use of raw materials and creation of waste.  
                      • Recycling adds to sustainability, e.g. PET bottles are recyclable. | • Cotton can be planted over and over and can keep growing – is sustainable but lots of land is needed = loss of bio-diversity as well as degradation of land, which is not sustainable.  
                      • It is a widely grown crop in many countries of the world and thus has a large impact in terms of volumes produced – it causes destruction of huge areas of land – this is not sustainable. |
| **Energy usage**    | • Polyester is a widely used synthetic fibre, therefore large volumes are produced, which has a large impact on energy consumption – mining, transporting from the mines, manufacturing the fibres and making into fabric and clothing such as the shirt.  
                      • By-products of polyester production are emitted in the waste water from polyester manufacturing plants – a lot of water is used and contaminated so it is unfit for re-use. | • Cotton requires processing that uses farm equipment (fuel) and large factories and machinery – so it uses a lot of electricity and is very damaging to the environment. |
| **Pollution**       | • Pollution is caused from the beginning to the end – mining, transport, the factories and machinery, production of packaging used – all cause toxic emissions that pollute the air.  
                      • By-products of polyester production are emitted in the waste water from polyester manufacturing plants – a lot of water is used and contaminated so it is unfit for re-use. | • Cotton production would cause pollution of the soil mainly through the use of artificial fertilisers; of the air through spraying with pesticides.  
                      • Bleaches, dyes and other finishes (anti-shrink, anti-bacterial, anti-microbial, anti-static, anti-odour, anti-flame, anti-wrinkle, anti-stain) used in cotton production all contain chemicals that are toxic/pollute the water. |
| **Biodegradability**| • Polyester is not biodegradable – discarded polyester textiles will remain in landfills for many years.  
                      • However, PET bottles are recyclable into good quality polyester so that less needs to be manufactured from scratch – less damage to the environment. | • Cotton is biodegradable therefore it will disintegrate into soil. |
| **Water usage**     | • A lot of water would be needed for the mining and all the processes of manufacturing polyester.  
                      • Because the water used is so polluted, it cannot be used for other purposes so more clean water is required.  
                      • Substantial water usage during dyeing: finishing water used to wash out excess dye. | • Cotton production requires lots of water – in growing the crops and during the cleaning and processing.  
                      • Because the water used is so polluted it cannot be used for other purposes so more clean water is required.  
                      • Excessive water usage in dyeing: finishing water used to wash out excess dye. |

One mark for each factor (5) One mark for each factor (5)

Factors need to be discussed – not one-word answers; must show understanding

Only half marks awarded to this question if they have just mentioned and not discussed

[10] syn
QUESTION 14

14.1 Give two examples of registered trade names in the article.
Nike, Roxy, Lion (2) comp

14.2 Suggest four reasons why there is a large market for counterfeit brand name goods.
• Teens and young adults like to wear brand labels in order to fit in and be socially accepted amongst their peers.
• Brand names amongst adults fulfil esteem needs for some people as many brands are considered status symbols – people like to appear to have a higher social status or to appear wealthier than they are.
• Genuine brand names are often expensive so people buy the counterfeit articles as they are cheaper.
People who buy cheap counterfeit clothes will be able to purchase more 'brand label' items that are within their budget instead of just one or two genuine items.
• The real brands advertise and market their goods therefore there is much awareness in the market and the names are well known/recognisable. Brand label clothing is advertised and portrayed as being highly desirable must-have items (this creates consumer desire supply and demand because there is a large demand counterfeit products are widely available) but fakes are more affordable.
• Similar to the genuine product therefore opt to purchase the counterfeit, cheaper item.
• Creates informal employment (sales on the side of the road).

Any 4 valid reasons (4) comp

14.3 Assess three ways that 'the trade (of counterfeit goods) was ultimately hurting the economy' in South Africa.
• Fake/imitation products are usually poor quality. This can cause customers to lose their trust or desire for certain brands – the registered brands then lose money and their reputation, which can lead to future losses of income too.
• Counterfeits are much cheaper than the real branded products – many people buy the cheaper option resulting in huge losses to the real brands that spend money on quality materials, labour and advertising thereby providing jobs.
• The big brand companies then make less profit therefore will pay less business tax, which has an impact on the economy – taxes are the government's income.
• The more expensive branded goods cannot compete against the cheap fakes so will no longer be available in that market (supply and demand). This means less competition in the market place.
• Counterfeits are illegal and are smuggled into the country therefore no import tax is being paid to the government loss of government revenue.
• Customs officials and police resources are wasted trying to apprehend these criminals – this wastes resources of the country, costs the tax payers.
• Many job losses in SA are due to the local textile and clothing industry having unfair competition from cheap fake goods.
• Counterfeit goods that are imported benefit other countries' economies rather than keeping the money in SA.

3 factors discussed (3 × 2 = 6) comp [12]

50 marks
SECTION C  HOUSING AND FURNISHINGS AND THE CONSUMER

QUESTION 15

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<thead>
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<td>15.2</td>
<td>D</td>
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<tr>
<td>15.3</td>
<td>D</td>
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<tr>
<td>15.4</td>
<td>A, C</td>
</tr>
<tr>
<td>15.5</td>
<td>B, D</td>
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</table>


QUESTION 16

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<tr>
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<td>C</td>
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<tr>
<td>16.2</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>16.3</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>

(3)K

Letters can be in any order

QUESTION 17

There is presently an energy crisis in South Africa. In view of this, explain two reasons why it is important for all consumers to use electricity sparingly.

- Coal is used to produce electricity – fossil fuels are a non-renewable resource.
- Industry and manufacture need sufficient energy – lack of energy has a detrimental effect on the economy of the country as factories will not operate at full capacity – could lead to reduced production and job losses. If consumers use less, there will be more available for commerce and industry.
- Power stations use 2ℓ water per kWh of electricity produced – also scarce resource, expensive, possible future water shortage.
- More demand than supply so we should all reduce consumption to help reduce the need for load-shedding, which is inconvenient and detrimental to running of households/small businesses from home.
- Rise in cost of electricity – affects consumer's pocket.

2 reasons explained not just listed, must relate to energy crisis in SA
Accept ½ mark if reason given but not explained

[2] comp
QUESTION 18

18.1 Identify the type of housing ownership depicted in the advertisement.
Sectional title ownership (1) app

18.2

F | A | E/D | D/E | G | B | C

(7) app

18.3 Provide the missing sections of the following statements. Write the words only.
18.3.1 the property is registered in their name/date of transfer
18.3.2 the local municipality /municipality
18.3.3 market value / price / location / size of property / municipal valuation (3) K

18.4 List four 'hidden costs' (over and above the price of the flat) that they would be responsible for if they were to buy the flat. Relate your answer specifically to the property purchase transaction.
- Administration fee (paid monthly to bank for administration of mortgage loan).
- Initiation fee (to bank for processing the application).
- Valuation or inspection fee (to bank to assess the property).
- Stamp duty (= tax, included in bond registration fee).
- Compulsory insurance (HOC) to cover replacement cost of flat (e.g. in case of fire).
- Life insurance/assurance policy (in case the owner dies – will pay back bond).
- Portion of rates /Interim rates (for the time between registration of property and the date next rates payment is due).
- Interim interest (if bond registration is delayed – from the time the loan was granted to date of first payment).
- Occupational rent/interest (if they move in before transfer date).
- Transfer duties
- Transfer fees (Conveyancing fees)
- Bond registration costs / Mortgage registration fee
- Deeds office fees (4) K

Any 4 (not deposit, moving costs, bond payments, insurance for contents, etc.)

18.5 Explain the following terms in connection with buying/selling property:

18.5.1 Electrical Compliance Certificate
When a house/building is to be sold, the electricity supply and wiring has to be checked by a qualified electrician for safety (SA national regulations) – the transfer cannot go through without this; the electrical compliance certificate has to be obtained (and paid for) by the seller. (3) K

18.5.2 Title deed
Document that proves ownership of the property; it gives all details of the property and the legal owner; is obtained from the Deeds Office when the transfer of ownership has legally gone through. A copy is kept at the Deeds Office as evidence of ownership. (2) K
18.5.3 **Sole mandate**
Document/agreement signed between seller and estate agent that gives the agent permission to be the only one allowed to market the house. (2) K

18.6 **Evaluate the suitability of this home for the needs of the couple by discussing three advantages and three disadvantages. Come to a conclusion.**

**Advantages:**
- Security is good – fenced, electric gate, close proximity of others.
- Easy upkeep – small; they don't need to maintain the exterior.
- Flats are usually in urban areas – reasonably close to work/easy access for work and amenities (they pay rates and taxes therefore it is within a municipal area).
- Two bedrooms – one spare for guests as they enjoy entertaining.
- Enclosed balcony = extra living space/entertainment space.
- 'Superb kitchen' – they like entertaining.
- Spacious rooms – they like having friends over.
- Rates – less than for a freehold title house; an advantage for a young couple.
- Air conditioning could make it more comfortable in both summer and winter.
- Can use as collateral for credit.
- Buying the property therefore an asset / investment.
- Can be bequeathed (left in their will).
- Having a parking bay – do not have to park in the street (safety).

**Disadvantages:**
- Will have levy to pay – extra cost to budget (although levy has benefits, such as maintenance of the building exterior and common areas). Increased cost due to additional rates and taxes.
- Air conditioning – expensive to run.
- Only one bathroom to share and also when they have guests to stay.
- Only one parking bay and no lockable garage.
- When entertaining, they would have to be aware of neighbours close by (noise).
- Neighbours could be noisy and disturb them.
- They could outgrow the flat when they have a family.

**Conclusion:**
YES – a 2-bedroom flat is a good first home for a young couple/buying is an investment rather than paying rent – they can sell when they need a bigger place/they will have a deposit if they sell for a profit/lock-up-and-go' lifestyle/paying their bond is a form of forced saving …

OR:
NO – buying a flat is not a good idea – they will have to sell if they want to move out = extra hassle/they should rent until they have saved enough/rent until they find their ideal home that they can live in long-term/rather buy something suitable for having a family.

3 valid advantages & 3 valid disadvantages, must be related to case study (6)
Assess suitable motivation for conclusion (1)
(7) eval
If Alan and Mandy were unable to find a suitable home on the market, another option would be to have a house built.

List four contractual responsibilities they should be aware of when entering into a contract with a builder/property developer.

- Ensure that they understand all terms and conditions (consequences of breach of contract / clause of cancellation – null and void) of the contract before they sign.
- The signatures of both parties must be witnessed and signed by the witnesses.
- Check if builder is registered with NHBRC – national home builders registration council / builders warrantee / guarantee.
- Check on builder's reputation and (if possible) financial stability – ability to finish house.
- The building plans must be approved by the municipality before the builder starts. (exact dimensions)
- They and the builder must each have a copy of the contract and building plans. Specification list must be attached to the plans.
- Ensure that quality building materials are to be used (SABS).
- Ensure that there is a deadline/time-line for completion (and penalty clause).
- The land must be transferred into their name before building starts.
- Ensure that payments are made on time to the builder as the building progresses (breakdown of costs).

Suggest, with reasons, five ways in which they could minimise electricity consumption in their home.

- Have the house well insulated, especially ceilings. This will save on heating/cooling required.
- Ensure that the house is built to face north/have large windows that face north to make maximum use of natural warmth and light – less artificial lighting and heating needed.
- Limit west-facing windows/shade west-facing windows with shutters or awnings to reduce the amount of heat that enters/less need for fans or air conditioners.
- Have deep eaves/roof overhangs to shade walls and windows to keep rooms cooler.
- Install gas for heating and cooking to reduce the amount of electricity used.
- Install solar panels to heat water to make use of free energy from the sun and less electricity required.
- Have a timer on the geyser so that it is only on for a short time each day.
- Have a geyser blanket and insulation on hot water pipes to reduce heat loss.
- Use light colours inside to reflect light and reduce the need for artificial lighting during the day.
- Buy appliances that have 'A' energy rating – use less electricity.
- Use energy-saving light globes/LED lights that use less electricity.
- Turn off lights when not in a room + reason.
- Unplug appliances when not in use + reason.
- Hang clothes up instead of using a tumble dryer + reason.
- Wash on a cold water cycle + reason.
- Use blankets instead of heaters to keep warm.

Award half marks if suggestion given but no reason.

Assess five valid suggestions explained (5) comp
18.9 **Draw up a comparison for Alan and Mandy of two financial implications of owning and renting a home.**

*Answer in tabulated format as shown below.*

<table>
<thead>
<tr>
<th>Owning</th>
<th>Renting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term investment/large financial commitment but provides security in the long run.</td>
<td>They would have more expendable income but no proper investment or asset.</td>
</tr>
<tr>
<td>Potential growth of wealth – particularly in a good area, re-sale prices increase/profit from sale.</td>
<td>No financial growth as you do not own an asset /you are paying someone else's bond.</td>
</tr>
<tr>
<td>Able to renovate and upgrade your property therefore increase the value of your asset.</td>
<td>Property does not belong to you therefore unable to make structural changes – but save money as maintenance done by landlord.</td>
</tr>
<tr>
<td>Increase in repayments due to interest rate hikes is a possibility but you can fix interest for a period of time so makes it easier to budget.</td>
<td>No control over annual rental fluctuations, which are directly affected by inflation. Rent payments are usually fixed for a certain period.</td>
</tr>
<tr>
<td>Always have a roof over your head as you are contributing to a financial asset.</td>
<td>No guarantee of lease renewal – may find yourself without a roof over your head – no asset.</td>
</tr>
<tr>
<td>Retirement years – bond is paid off therefore have a secure home and more disposable income for retirement.</td>
<td>Retirement years difficult to keep up with rental payments on a pension (fixed income).</td>
</tr>
<tr>
<td>Collateral for a loan or for credit.</td>
<td>Cannot be used as collateral as it does not belong to you.</td>
</tr>
<tr>
<td>Maintenance costly and the owner has to bear all the costs.</td>
<td>Maintenance is done by the landlord and he/she carries the costs.</td>
</tr>
<tr>
<td>Owner responsible for electricity, water and rate payments (utilities).</td>
<td>Payment of utilities is dependent on the rental contract.</td>
</tr>
<tr>
<td>Have to provide security measures – owner.</td>
<td>Security is provided by the landlord therefore it is not an additional expense.</td>
</tr>
<tr>
<td>If bond not paid, house can be repossessed.</td>
<td>If rent not paid, tenant can be evicted.</td>
</tr>
</tbody>
</table>

**Direct comparisons between owning and renting are required**

\[(2 \times 2 = 4)\] comp

[42]

60 marks
SECTION D INTEGRATED EXTENDED WRITING RESPONSE

QUESTION 19

Use the extract below taken from an article on the City Press website to assist you in answering Question 19.

It is recommended that total debt repayments should not amount to more than 30% of income but many South Africans are 'paying up to 76% of their income on debt repayment'.

Discuss the following:

The influence of inflation on consumers:

Definition of inflation
The prices of goods and services increase, which means money is worth less as it buys less. E.g. the article says: 'Food inflation is running at 5% or 6%' – this means that food prices have increased by 5–6% compared to the previous year.

Consumers on fixed incomes may find that their standard of living drops (can't meet needs) as they cannot afford what they used to be able to buy. Consumers with high level of debt will struggle with inflationary price hikes as they have little or no spare money.

Consumers who have savings and investments could lose money as their savings will lose value over time – interest rates often do not beat the inflation rate.

Consumers who owe money, e.g. on loans, could benefit if interest rates are lower than the inflation rate because what they pay back is worth less than the amount they borrowed.

Cannot afford to save for their future.

4 valid point discussed (4)K

The impact of high debt levels on malnutrition amongst South Africans:

Families paying up to 76% of their income on debt means that there is very little money left over for food. They will buy cheap food (such as bread, mealie meal, margarine, processed meat such as polony) that is not nutrient-dense and will lack nutritious foods (such as good quality proteins, fruits, vegetables, dairy products and healthy fats), which are more expensive.

Their food intake will be insufficient – this means insufficient kilojoules as well as a lack of nutrients. Under-nourished adults will be underweight/weak/sickly while children will be under-developed/fail to grow properly, and lack energy. They will suffer from various deficiency diseases such as kwashiorkor, marasmus and scurvy/death.

On the other hand, many people who live on cheap foods are poorly nourished through lack of a balanced diet but have too many kilojoules from energy-dense foods with low nutritive value, therefore are overweight. They will also be likely to have deficiency diseases.

Food security = high debt levels lead to a lack of food security.

Inflation – lack of education as school fees, etc. unaffordable, leads to poverty, malnutrition, unemployment (lack of skills).

Bad debt – lack of clean water (bills not paid) can lead to other diseases, e.g. cholera, E. coli, etc.

8 valid points discussed (8) eval/syn
Other possible consequences that consumer debt will have on the South African nation as a whole.

From the article it is evident that South Africa is a country drowning in credit. Increased credit may lead to increased interest rates – one of the methods the government employs to reduce consumer spending, which will put further stress on over-indebted consumers.

People become desperate when faced with high debt and may turn to crime to try and pay back the debt – increased crime rate.

Desperate people might turn to unscrupulous micro-lenders ('loan sharks') and put themselves into even more debt.

Lower consumer spending due to high debt repayments will lead to less production and may lead to job losses. Economic recession may result.

Families may lack in basic essentials and standards of living will decrease due to less disposable income.

High levels of debt means no savings for the future, i.e. retirement, therefore people become dependent on the government for financial assistance in their retirement years.

More people dependant on the Government, which could lead to tax increases and extra burden on the Government health care system.

Loss of resources (house, car, furniture, etc.) for families could also be a result – due to unmanageable debt and repossession of goods in order to pay debt back.

Stress and depression increases and family units could break up due to indebtedness. In extreme cases, suicide may occur.

Fewer luxury goods could be sold which would mean fewer import goods – less import duty paid to Government.

Investors could pull out of the country.

Strike = not earning enough (debt) affects the economy.

Inflation – lack of education as school fees, etc. unaffordable leads to poverty, malnutrition, unemployment (lack of skills).

Inflation and debt can have a negative effect on food security in the country – not enough nutritious, affordable food for people.

8 valid points discussed (8) eval/syn

20 marks

Total: 200 marks