GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

PROVINCIAL EXAMINATION

JUNE 2019

GRADE 11

ECONOMICS
PAPER 2

MARKING GUIDELINE

25 pages

GAUTENG DEPARTMENT OF EDUCATION

PROVINCIAL EXAMINATION

ECONOMICS
(Paper 2)

MARKING GUIDELINE

SECTION A: (COMPULSORY)

QUESTION 1:

1.1 **MULTIPLE-CHOICE QUESTIONS**

1.1.1 C (Income elasticity) √√

1.1.2 D (MR = AVC) √√

1.1.3 B (Unique) √√

1.1.4 C (Perfect Market) √√

1.1.5 D (Marginal Cost) √√

1.1.6 A (2 ice-creams) √√

1.1.7 A (Increase) √√

1.1.8 B (TR) √√ (Total Revenue)

(8 x 2) **(16)**

1.2 **MATCHING ITEMS**

1.2.1 K √

1.2.2 E √

1.2.3 F √

1.2.4 G √

1.2.5 I √

1.2.6 H √

1.2.7 A √

1.2.8 C √

(8 x 1) **(8)**

1.3 **GIVE THE TERM (NO ABBREVIATIONS, ACRONYMS OR EXAMPLES ACCEPTED)**

1.3.1 Substitute goods √

1.3.2 Variable Cost √

1.3.3 Total Cost √

1.3.4 Price elasticity of demand √

1.3.5 Utility √

1.3.6 Unitary elastic demand √

(6 x 1) **(6)**

[30]

SECTION B:

QUESTION 2:

2.1 **Answer the following questions**

2.1.1 **List any TWO methods of non-price competition**

- Loyalty programmes √
- Discounts and promotions √
- Door to door delivery
- After-sales service

(Accept any other relevant, correct response) (2 x 1) (2)

2.1.2 **Why would a change in the price of a good influence consumers' demand for that specific good?**

A change in price will influence the demand of consumers because consumers have limited income (resources) which they have to use to satisfy multiple needs and wants, therefore consumers will be willing to buy goods at a lower price but not be willing to buy goods at a higher price. √√

(Accept any other relevant, correct response) (1 x 2) (2)

[4]

2.2 **Consider the graph and answer the questions that follow:**

2.2.1 **Which market structure is represented by the graph?**

Perfect market √ (1)

2.2.2 **What does point e on the graph represent?**

Profit maximisation point. (MR = MC) √ (1)

2.2.3 **Briefly explain the concept *price taker*.**

A firm that has to charge the market price as determined by demand and supply.√√

(Accept any other relevant, correct response)

(2)

2.2.4 **Why is the demand curve of this market structure a horizontal line?**

There are so many sellers in the perfect market that no individual seller can influence the price. √√
(Accept any other relevant, correct response) (2)

2.2.5 **Determine the economic profit made by the firm. Show all calculations.**

TI = R120 x 50 ✓

TI = R6 000

TK = R105 x 50 ✓

TK = R5 250

Profit = R6 000 – R5 250

Profit = R750 ✓✓

Alternative response:

TR – TC

$= 120 - 105$ √

$= 15$ √

$Profit = 15 \times 50$

= R750 ✓✓

(4)

[10]

2.3 **Study the cartoon and answer the questions that follow:**

2.3.1 **Which illegal activity is depicted in the cartoon?**

Price fixing (Collusion) √ (1)

2.3.2 **In which market structure is this activity possible?**

Oligopoly √ (1)

2.3.3 **Briefly describe the concept *cartel*.**

A cartel is formed when two or more firms formally agree on fixing market prices to maximise profit and limit competition.√√
(Accept any other relevant, correct response) (2)

2.3.4 **Why is it more beneficial for firms to collude instead of engaging in competition?**

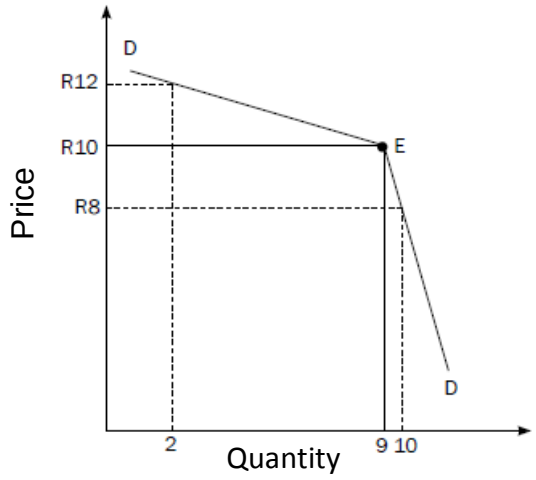
Firms will make more profit when they collude. It is difficult to constantly compete with other firms while making an agreement to limit competition means less effort.√√
(Accept any other relevant, correct response) (2)

2.3.5 **Evaluate what impact the price fixing of the three companies will have on the poor?**

- Poor people will be affected negatively as the prices will increase.√√
- The increase in prices will lead to the poor being able to buy less than before, decreasing the standard of living.√√

(Accept any other relevant, correct response) (2 x 2) (4)
[10]

2.4 **Explain, with the aid of a fully labelled graph, the kinked demand curve.**



Mark allocation

- Correct drawing of the demand curve = 2
- Labelling of the = 1
- Equilibrium point = 1

(MAX = 4)

- An oligopolist faces a kinked demand curve. This demand curve consists of two sections.√√
- The top section, relates to high prices which has a very elastic slope (i.e. demand is very sensitive to a price change.)√√
- The bottom section, relates to lower prices which is very inelastic (i.e. demand is not sensitive to a price change). √√
- Suppose the oligopolist is selling at the original / present price of R10 and 9 units of output are sold. Total revenue is R10 × 9 = R90. √√
- If the firm tries to increase profit by increasing the price by R2 to R12, the quantity demanded would fall to 2 units and the total revenue would decrease to R24 (R12 × 2). √√
- If the firm tries to increase profit by reducing the price by R2 to R8 and increasing its total sales, total revenue would be R80. √√
- The oligopolist is therefore faced with a difficult decision because in both instances it will not benefit. √√
- Increasing the price of goods or reducing the price to increase sales will not lead to greater revenue earned.

(Teachers must accept the explanation of the learners own graph and figures)

(MAX = 4) (8)

2.5 **Evaluate the nature of a product and entry / exit into the market as characteristics of the Monopolistic Competitive Market and the Oligopoly**.

Nature of the product:

Monopolistic Competition:

- The products are differentiated. Products are similar but not identical. √√
- They are similar in that they satisfy the same need of the consumer. There may be differences in packaging but the product is the same, e.g. sugar and salt. √√
- Differentiated products create opportunities for non-price competition e.g. advertising. √√

Oligopoly:

- Products may be homogenous or differentiated.√√

(MAX = 4)

Entry and exit into the market:

Monopolistic Competition

- There are many sellers. This indicates the element of competition.√√
- Entry into the market is easy and more players will join this type of market √√

Oligopoly:

- Entry is not easy in an oligopolistic market. This is due to brand loyalty and it also requires a large capital outlay.√√
  This may keep other potential players out of the market √√

(MAX = 4)
(2 x 4) (8)
[40]

QUESTION 3:

3.1 **Answer the following questions**

3.1.1 **List any TWO types of supply elasticities.**

- Perfect elastic supply √
- Relative elastic supply √
- Relative inelastic supply
- Perfect inelastic supply (2 x 1) (2)

3.1.2 **How would a firm benefit from considering the price elasticity of demand before changing prices?**

A firm will benefit by making correct price changes according to the demand (willingness to pay) of consumers. This will ensure that their profits remain stable and that they do not lose customers due to overcharging.√√ (2)
[4]

3.2 **Study the table and answer the questions that follow.**

3.2.1 **What does the abbreviation TU stand for?**

Total Utility √ (1)

3.2.2 **Why do people spend money on goods and services?**

Consumers spend money on goods and services to satisfy needs and wants.√ (1)

3.2.3 **Briefly describe the concept diminishing marginal utility.**

The additional utility (satisfaction) derived from using goods or services declines as consumption increases.√√ (2)

3.2.4 **Why would a consumer become dissatisfied with the over usage of a good or service?**

Consumers have needs and wants that have to be satisfied for survival.
Once these needs and wants are satisfied, the usage is no longer needed, therefore any consumption after the need or want is satisfied will result in dissatisfaction.√√ (2)

3.2.5 **Determine the missing values A and B in the table. Show ALL calculations**

A: 56 + 20 √ = 76 √

B: 76 – 76 √ = 0 √ (2 x 2) (4)
[10]

3.3 **Study the following graphs and answer the questions that follow.**

3.3.1 **What kind of goods are represented by the graph(s)?**

Complimentary goods √ (1)

3.3.2 **Why will the i-Phone be classified as a luxury good?**

The i-phone is not neccessary for survival. (Not part of basic needs) √ (1)

3.3.3 **How has the development of technology influenced consumers' needs and / or demands?**

Consumers' demands have changed as tehcnology has changed. Goods and services are now available that never existed before. As new products become available, consumers demand new products.√√
(Accept any other relevant, correct response) (2)

3.3.4 **What will happen to the demand for i-Phone chargers if the price of i-Phone's decrease?**

The demand for chargers will increase because more people will buy i-Phones.√√
(2)

3.3.5 **Explain the type of elasticity the i-Phone has if the price elasticity of demand co-efficient is 0,8.**

- The i-Phone will have a relative inelastic demand because the co-efficient is smaller than 1. √√
- The demand for the i-Phone will NOT drastically change when there is a change in price. √√ (2 x 2) (4)

[10]

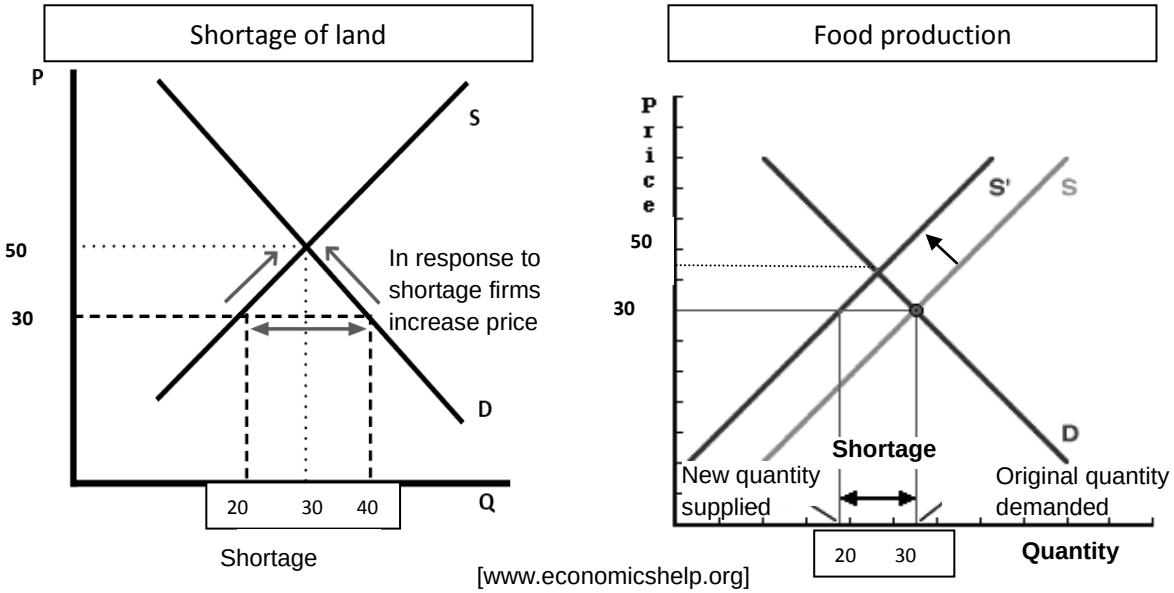
3.4 **Examine in detail the relationship between product and factor markets.**

- Factors of production are traded in factor markets, whereas goods and services are traded on the product market.√√
- Factors of production are necessary in order to produce goods or deliver services.√√
- If the cost of factors of production increases, the prices of goods and services will also increase.√√
- If there is a shortage on the factor market, there will also be a shortage on the product market.√√
- There is a direct relationship between the two most important markets as the product market is dependent on the factor market. √√
- All changes that occur in the factor market will influence the product market. √√

(Accept any other relevant, correct response)

(4 x 2) (8)

3.5 **With the aid of neatly labelled graphs evaluate the impact of land shortage on the production of food.**



[www.economicshelp.org]

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- Labelling of axes = 1
- Indication of shortage = 1
- Indication of decrease of suppy curve = 1
- Equilibrium point = 1

(MAX = 4)

- When there is a shortage of land, the supply (production) of food will decrease as indicated by the movement from S to S1. √√
- This is because land is the natural resource needed in order to produce agricultural products which in turn is needed for all food production. √√
- Because of the decrease in supply, there will be an increase in price from 30 to 50. √√
  NOTE: Figures and labels in learner response MUST align with figures and labels learners use on their graph.

(MAX = 4)

(8)
[40]

QUESTION 4:

4.1 **Answer the following questions**

4.1.1 **List any TWO factors that influence the elasticity of demand.**

- Availablity of substitutes √
- Time period √
- Degree of necessity of luxury
- Proportion of income spent on the product
  (Accept any other correct, relevant answer)

(2 x 1) (2)

4.1.2 **Why will consumers benefit more under perfect competition than under a monopoly?**

Consumers have a wider variety of goods to choose from at lower prices whereas in a monopoly comsumers have no other choice but to buy the available product at the price the monopolist charges.√√ (2)
[4]

4.2 **Study the extract and answer the questions that follow:**

4.2.1 **In which type of market does Eskom function?**

Monopoly √ (1)

4.2.2 **What strategy can Eskom use to prevent load shedding?**

- Eskom can use alternative sources of electricity such as wind turbines etc.√
- Encourage users to reduce consumption
(Accept any other correct, relevant response) (1)

4.2.3 **Briefly describe the concept *price maker*.**

A firm that can decide on the market price they want to charge.√√
(Accept any correct, relevant response) (2)

4.2.4 **How will load shedding influence productivity?**

Productivity will be influenced negatively because if there is no electricity, there will be no production that takes place.√√ (2)

4.2.5 **How is it possible for Eskom to implement load shedding and not lose its customers?**

- Eskom is a monopoly therefore they are the only supplier of electricity.√√
- Consumers have no other choice but to use Eskom for electricity.√√
- Going off the grid is very expensive and many people simply cannot afford it. √√
(Accept any other correct, relevant response) (2 x 2) (4)

[10]

4.3 **Study the table and answer the questions that follow:**

4.3.1 **Identify the market represented by the table.**

Perfect Market.√ (1)

4.3.2 **What is represented by the -25 in the profit column above?**

A loss of R25.√ (1)

4.3.3 **Determine the values of A and B.**

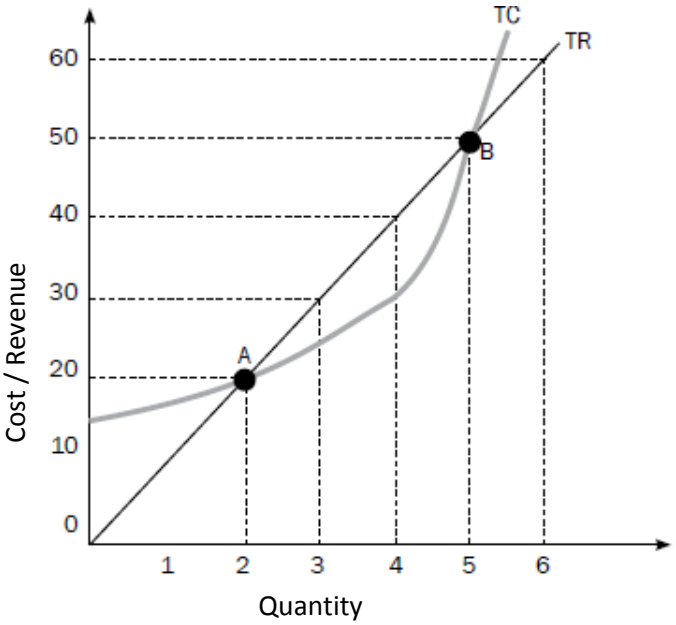
A: 50 √

B: 110 √ (2)

4.3.4 **Why is there a value for TC when production (quantity) is zero?**

There will always be a fixed cost even if no production takes place. Firms still have to pay these fixed costs as they are not related to production levels. √√ (2)

4.3.5 Present TR and TC on the same set of axes.



Mark allocation

- Correct drawing of TC curve = 2
- Correct drawing of TR curve = 2

(4)
[10]

4.4 **Differentiate between productive (technical) efficiency and allocative efficiency as characteristics of a perfect market.**

- **Productive efficiency** means producing / manufacturing without wasting the resources.
- In the long run in a perfectly competitive market, because of the process of entry and exit, the price in the market is equal to the minimum of the long-run average cost curve. √√
- In other words, goods are being produced and sold at the lowest possible average cost. Therefore, resources will not be wasted and productive efficiency is possible.√√

(MAX = 4)

- **Allocative efficiency** means that the firm is producing the correct goods in the correct quantities according to consumers' demand. √√
- In a perfectly competitive market, the price will be equal to the marginal cost of production.√√
- The consumers are willing to pay the price charged due to the price being √√ determined by the interaction between demand and supply, therefore there is a demand for the good and the consumers are willing to pay the price.
- Thus, allocative efficiency is reached. √√

(MAX = 4)

(2 x 4) (8)

4.5 **Evaluate the impact of the law of diminishing returns on the producer.**

- The law of diminishing returns plays a role in determining the cost of production. √√
- The law states that as more variable inputs are used, while all other inputs stay the same, each additional input used in production will eventually produce less and less output.√√
- The marginal product of the variable input declines.√√
- The marginal product produced by the inputs first increases and then decreases, meaning that less is being produced while inputs are being increased.√√
- This affects the producer negatively as they will spend more money on inputs but earn less revenue due to less output. √√

(Accept any other correct, relevant answer) (4 x 2)(8)

[40]

TOTAL SECTION B: 80

SECTION C:

QUESTION 5:

- Compare the market structure of a *perfect market* with that of a *monopoly* (in detail) using the characteristics. (No graphs required) (26)
- With reference to the graphs, explain how the price formation process takes place in the perfect market. (10)

INTRODUCTION

A market is any organisation that brings buyers and sellers together.√√
(Accept any other relevant introduction) (2)

Main Part:

1. **Characteristics of a perfect market**
   There should be a large number of buyers and sellers √

- It should not be possible for one buyer or seller to influence the price.√√
- When there are many sellers the share of each seller in the market is so small that the seller cannot influence the price. √√
- Sellers are price takers, they accept the prevailing market price. √√
- If they increase prices above the market price, they will lose customers. √√

Free access to and from markets √

- Producers may enter and leave a market with little interference.√√
- Entering and leaving a perfect market is easy as less capital is required and there are fewer legal restrictions. √√

The factors of production are completely mobile. √
The factors of production are completely unrestricted and move around freely. √√

Nature of the products √

- Products must be identical. There should be no differences in style, design and quality.√√
- In this way products compete solely on the basis of price and can be purchased anywhere. √√

No preferential treatment / discrimination√

- Collusion occurs when buyers and sellers make an agreement to limit competition. In a perfect market no collusion takes place.√√

- Buyers and sellers base their actions solely on price, homogenous products fetch the same price and therefore no preference is shown for buying from or selling to any particular person. √√

Free competition √

- Buyers must be free to buy whatever they want from any firm and in any quantity. √√
- Sellers must be free to sell what, how much and where they wish. √√
- There should be no state interference and no price control. √√
- Buyers should not form groups to obtain lower prices, nor should sellers combine to enforce higher prices. √√

Efficient transport and communication √

- Efficient transport ensures that products are made available everywhere. √√
- In this way changes in demand and supply in one part of the market will influence the price in the entire market. √√
- Efficient communication keeps buyers and sellers informed about market conditions. √√

All participants must have perfect knowledge of market conditions√

- All buyers and sellers must be fully aware of what is happening in any part of the market.√√
- Technology has increased competition as information is easily obtained via the internet√√
- In reality there are few perfect markets, however there are some sectors such as mining (e.g. gold)√ and agriculture (e.g. maize) where many of the conditions are met. These sectors illustrate the way in which the market mechanism works.√√

2. **Characterictics of monopolies**

- There is only one seller of the product √√
- There are barriers to entry. These are caused by patents and other forms of intellectual property rights, control over resources, government regulations and decreasing costs. √√
- Products are differentiated and unique. Monopolies manufacture a variety of products which are difficult for other companies to copy. √√
- The are no close substitutes. The product cannot be easily replaced. √√
- Consumers have no choice in price and quality of the product.√√
- The monopolist is regarded as a price maker since it is able to influence the market price through changing the quantity it supplies to the market.√√

- There is no competition. One business in the market will control the supply of goods and services.√√
- Large amounts of starting capital are required. Large industries like Eskom and SASOL require millions of starting capital. √√
- Monopolies have legal considerations. New inventions are protected by patent rights. √√
- Services, like the Post Office are protected by law and other businesses are prohibited from entering the market. √√
- It is also possible for the monopolist to make an economic profit in the long run. √√
- This is because it faces no competition from new entrants as a result of the barriers to entry.√√
- Monopolies can be classified as two main groups due to barriers that exist.

Natural monopolies: √
High development costs prevent others from entering the market and therefore the government supplies the product.√√
E.g. Electricity √ in South Africa is provided by the government enterprise, Eskom. It costs billions of rands to build and maintain power stations and therefore there are no other suppliers.√√

Artificial monopolies: √ Here the barriers to entry are not economic in nature. √√
An example of a barrier is a patent. √ A patent is a legal and exclusive right to manufacture a product, √√ e.g. Denel Land Systems manufacturing Casspirs.√

(26)

Max 8 for headings

Max 8 for perfect markets and 1 mark for example =9

Max 8 for Monopoly and 1 mark for example =9

Additional Part:

- The market forces of demand and supply determines the price at R10 and Quantity at 100. √√
- The sellers are too insignificant to influence the market price; hence they are price takers. √√
- Each individual producer is forced to sell his goods at R10. √√
- Thus the demand curve is flat / horizontal / perfectly elastic √√
- The individual producer will not increase his price to R15 because he will be able to sell all his products at market price of R10. √√
- The individual producer will not decrease his price to R5 as this will decrease his income. √√

(Accept any other correct, relevant response) MAX = (10)

Conclusion:

Both the monopoly and the perfect market will make economic profit in the short run. However, the perfect market will make a normal profit in the long run and the monopoly will realize economic profit. √√
(Any relevant conclusion (Higher order)

(2)
[40]

QUESTION 6

- Explain in detail the price elasticity of demand with the aid of graphs. (26)
- Evaluate how a monopolist like Eskom can benefit from using the price elasticity of demand for their product.

Introduction:

Price elasticity of demand determines the percentage demand change when there is a certain change in price.√√
(Accept any other relevant introduction) (2)

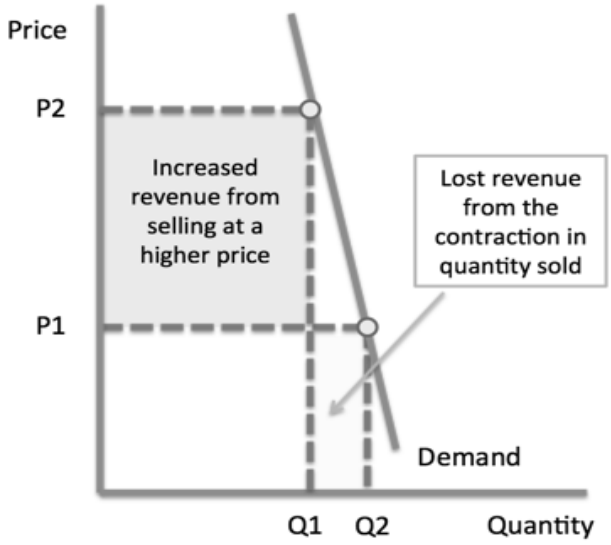
Main part:

1. Inelastic demand (Ped <1):
   If Ped is between 0 and 1 (i.e. the % change in demand from A to B is smaller than the percentage change in price), then demand is inelastic.√√

Inelastic Demand (Ped < 1)

If the co-efficient of price elasticity of demand <1, then demand is said to be price inelastic i.e. unresponsive to a change in price √√

- Following a change in price, the total revenue earned by the producing firm will depend on the √√ PED for its product.
- If the coefficient of PED is <1, a rise in market price (e.g. from P1 to P2) will lead to an increase in √√ total revenue.



Mark allocation

- Correct heading = 1
- Correct drawing of demand curve = 1
- Labelling of axes = 1
- Change in quantity = 1

(MAX = 4)

Explanation = 2 marks; Graph = 4marks

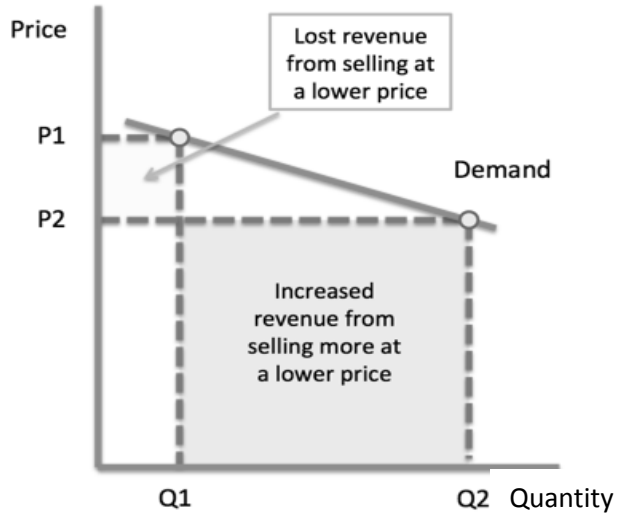
2. Elastic demand (Ped >1):

If Ped > 1, then demand responds more than proportionately to a change in price i.e. demand is elastic. √√ For example if a 10% increase in the price of a good leads to a 30% drop in demand. √√

Elastic Demand (Ped > 1)

If the co-efficient of price elasticity of demand >1, then demand is said to be price elastic i.e. highly responsive to a change in price √√

- If demand for a product is price elastic, a supplier stands to gain extra revenue if they reduce their prices. √√
- The change in quantity demanded will be proportionately higher than the reduction in price. This is shown in the diagram opposite. √√



Mark allocation

- Correct heading = 1
- Correct drawing of demand curve = 1
- Labelling of axes = 1
- Change in quantity = 1

(MAX =4)

Explanation = 2 marks; Graph = 4marks

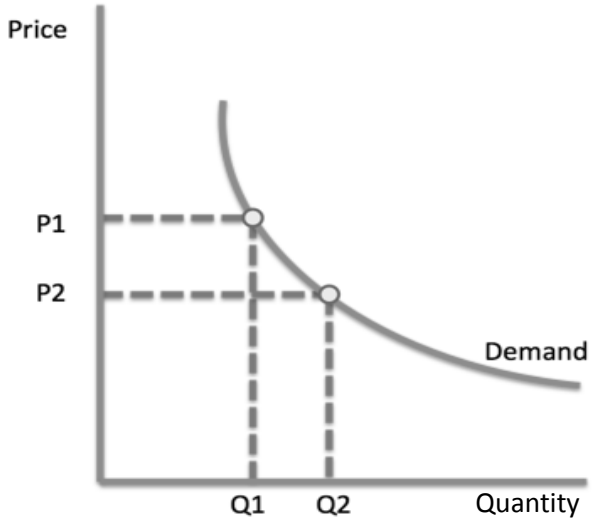
3. Unitary price elasticity of demand:

If Ped = 1 (i.e. the % change in demand is exactly the same as the % change in price), then demand is unit elastic. √√ A 15% rise in price would lead to a 15% contraction in demand leaving total spending the same at each price level. √√

Unitary Elastic Demand (Ped = 1)

A demand curve with unitary price elasticity has a coefficient of PED equal to 1 (unity) throughout √√

- With a demand curve of unitary price elasticity, a change in price is met with a proportionate √√ change in demand.
- This means that total spending by consumers on the product will remain the same at each √√ price level.



Mark allocation

- Correct heading = 1
- Correct drawing of demand curve = 1
- Labelling of axes = 1
- Change in quantity = 1

(MAX = 4)

Explanation = 2 marks; Graph = 4 marks

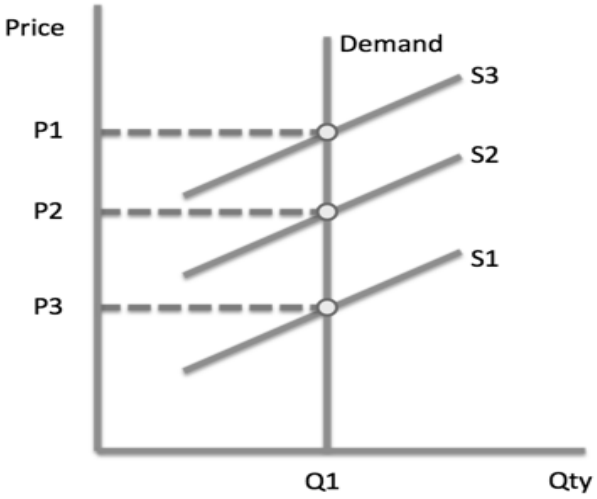
4. Perfectly inelastic demand (Ped = zero):

If Ped = 0 demand is perfectly inelastic - demand does not change at all when the price changes – the demand curve will be vertical.√√

Perfectly Inelastic Demand (Ped = 0)

If the co-efficient of price elasticity of demand = zero, demand is perfectly inelastic i.e. demand does not vary with a change in price √√

- A perfectly inelastic demand curve is an extreme case for it implies that consumers are willing and able to pay any price for the product.√√ If supply falls, equilibrium market price can rise without any contraction in the quantity demanded.√√



Mark allocation

- Correct heading = 1
- Correct drawing of demand curve = 1
- Labelling of axes = 1
- Change in quantity = 1

(MAX = 4)

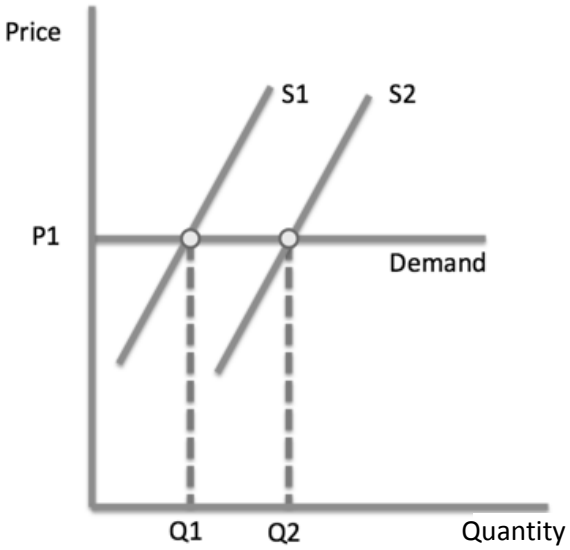
Explanation = 2 marks; Graph = 4 marks

5. Perfectly elastic demand:

Perfectly Elastic Demand (Ped = infinity)

If the co-efficient of PED = infinity, then demand is perfectly elastic – there is one price at which consumers are prepared to pay √√

- If demand for a product is **perfectly elastic**, a change in market supply (shown on the right as an outward shift of supply) will not lead to any change in the equilibrium √√ price. This demand curve applies to highly **competitive markets** where no supplier has any "pricing power".



Mark allocation

- Correct heading = 1
- Correct drawing of demand curve = 1
- Labelling of axes = 1
- Change in quantity = 1

(MAX = 4)

Explanation = 2 marks; Graph = 4 marks

(26)

Additional:

- Eskom functions as a monopoly which means that they are the only supplier of electricity.√√
- This implies that they have full market power and can decide on the prices they want to charge. (Price makers)√√
- Consumers will have no other choice, but to pay the prices Eskom wants, if they want electricity.√√
- However, there are alternative products available such as candles, gas, solar panels etc.√√
- If Eskom charges more for electricity than the price of alternative goods, consumers would rather sacrifice the convenience of electricity for the sake of cheaper alternatives (Note: there are no substitutes).√√
- If Eskom uses the price elasticity of demand before determining their market price, they can charge the maximum price that consumers are willing to pay, √√ thus ensuring maximum revenue and maximum demand from consumers.
  (Accept any correct, relevant response)

MAX = (5 x 2) (10)

Conclusion:

Producers and retailers will have a good idea of how consumers may react when the price of the product increases and therefore can charge the maximum price consumers are willing to pay to maximize revenue. √√
(Any relevant higher order conclusion) (2)

[40]

TOTAL SECTION C: 40

TOTAL: 150