GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

PROVINCIAL EXAMINATION

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GRADE 11

ECONOMICS
(PAPER 2)

MEMORANDUM

16 pages

GAUTENG DEPARTMENT OF EDUCATION

PROVINCIAL EXAMINATION

ECONOMICS
(PAPER 2)

MEMORANDUM

SECTION A **30 MARKS – 20 MINUTES**

QUESTION 1

1.1 **MULTIPLE-CHOICE QUESTIONS**

1.1.1 B (perfect and monopolistic)✓✓
1.1.2 B (normal profit)✓✓
1.1.3 A,B,C (intermediate goods)✓✓
1.1.4 A, C (oligopoly)✓✓
1.1.5 A (marginal)✓✓
1.1.6 B(variable costs)✓✓
1.1.7 C (smoking harms the health of passive smokers)✓✓
1.1.8 A (opportunity cost)✓✓ (8x2) (16)

1.2 **MATCHING ITEMS**

1.2.1 F – sales maximisation✓
1.2.2 A – the changes in the price of one product and the resulting change in the demand for another product.✓
1.2.3 H – Normal Profit✓
1.2.4 G – $\frac{TR}{Q} = AR$✓
1.2.5 B – TFC + TVC✓
1.2.6 D – change in price has no effect on supply ✓
1.2.7 C – price✓
1.2.8 E – The only supplier of a product✓ (8x1) (8)

1.3 **GIVE ONE TERM**

1.3.1 The long run✓
1.3.2 Explicit costs✓
1.3.3 Monopoly✓
1.3.4 Cartel✓
1.3.5 Monopolistic competition✓
1.3.6 Perfect market / unregulated market ✓ (6x1) (6)

TOTAL SECTION A: 30

MEMORANDUM	ECONOMICS (PAPER 2)

SECTION B
Answer TWO of the THREE questions in this section in the ANSWER BOOK.

QUESTION 2 **40 MARKS – 30 MINUTES**

2.1 2.1.1 **Give any TWO examples of monopolistic markets.**

- Restaurants✓
- Hairdressers✓
- Petrol Stations✓
(Accept any other relevant answer.) (2x1) (2)

2.1.2 **What do you understand by the *law of diminishing returns*?**

The Law of diminishing returns states that as more of a variable input is added to a fixed input, the returns from the variable input will decrease. ✓✓ (1x2) (2)
(Accept any relevant response)

2.2 **DATA RESPONSE**

2.2.1 **List any TWO advantages of competition as mentioned in the article.**

- Give people options. ✓✓
- There is comparison of prices ✓✓
- Efficient services✓✓
- Reduce theft✓✓
(Accept any relevant answer) (2x2) (4)

2.2.2 **Define a *monopoly*.**

- A monopoly is a single seller in the market✓✓ (only supplier)
- It is an industry in itself ✓✓
- The monopoly does not allow any substitutes. ✓✓
(Accept any characteristic of the Monopoly)
(2x1) (2)

2.2.3 **Why would you describe the taxi industry in South Africa as a monopoly? Explain your answer.**

- The taxi industry is the largest privately-owned transport organization ✓✓
- The taxi industry dominates the private transport industry, and does not easily allow other transport services, such as bus services to infringe on its market.✓✓
(Accept any other relevant answer.)

(Allocate marks if the response is in the negative)
(2X2)(4)

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

2.3.1 **Define *complementary products*.**

- Complementary products are different products that are used together at the same time to satisfy a need or want.✓✓ (2)

2.3.2 **Why is it important for the producer to understand the relationship between complementary goods?**

- Enables producers to predict what impact a change in the price of compliments will have on the demand for their product.✓✓
- They will then be able to implement measures to counteract the effect of price changes in an effort to try and maximize their profits.✓✓
- There are cost-effective measures like producing more output with the same amount of input.✓✓ (2x2) (4)

2.3.3 **What is the effect on Product X if the Price of Product Y decreases?**

- The supply will decrease as the supply shifts to the left. ✓✓
- The quantity of product X will decrease from Q0 to Q1.✓✓
- Demand for product X will increase ✓✓
- The price of product X will increase from PO to P1✓✓

(Any 2x2) (4)

2.4 **Briefly discuss the characteristics of *utility*.**

- **Satisfaction is abstract because utility cannot be measured.**✓
  - There is no standard way to measure someone's satisfaction or utility, so economists sometimes simply assign it a value and call the measurement utils.✓✓

- **Utility is subjective because it differs from person to person**.✓
  - The satisfaction that two people get from consuming the same product differs depending on personal preferences e.g. some people will find that ice cream has a high utility, while others would prefer to have cold drinks.✓✓

- **Utility differs from one situation to another, from time to time.**✓
  - Warm clothes provide satisfaction in winter as opposed to summer.✓✓

- **Utility differs from place to place.**✓
  - A swimming costume will be satisfying at the beach but not in the classroom. ✓✓ (4x2) (8)

2.5 **Explain how the price mechanism works in conditions of perfect markets.**

- At the equilibrium price, demand and supply are equal and there is no shortage or surplus.✓✓
- If the price rises, consumers will buy fewer goods and the quantity demanded will decrease / drop.✓✓
- This will result in a surplus in the market as supply exceeds demand.✓✓
- Producers will then have to reduce their prices and the price returns to equilibrium.✓✓
- If the price drops below equilibrium, demand will increase and there will be a shortage in the market as demand exceeds supply. ✓✓
- This will cause the price to rise again and it returns to equilibrium.✓✓
- The firm is the price price taker in the perfect market✓✓
- No individual producers can influence the market price✓✓
- Individual producers cannot sell above or below the market price. ✓✓

Any (4x2) (8)
[40]

QUESTION 3 **40 MARKS – 30 MINUTES**

3.1 3.1.1 **List TWO objectives of businesses.**

- To make a profit✓
- Survival of the business✓
- Maximizing revenue / profit✓
- Maximizing sales✓
- Setting targets for growth✓
- Improve efficiency of production✓
- Increase market share✓
- Improved worker satisfaction✓ (Any 2) (2x1) (2)

3.1.2 **What is meant by excess demand?**

- It is a situation in which the market demand for an item is greater than its market supply thus causing its market price to increase. ✓✓ (1x2) (2)

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

3.2.1 **Indicate which market structure is depicted in the cartoon**

- monopolistic competition✓✓ (2)

3.2.2 **Explain the meaning of the term *chains* as used in the cartoon.**

- A chain store is one of a series of stores owned by one company and selling the same goods.✓✓
- The cartoonist is indicating that consumers are forced to accept the price✓✓
- (Chained to) these supermarkets by the system of market capitalism which exploits the consumers ✓✓
  (Accept any other relevant answers.) (2)

3.2.3 **How does the Competition Act protect consumers? Explain your answer.**

- The Act does not allow companies to use restrictive trade practices, such as price fixing, ✓✓ controlling output or dividing the market between themselves (colluding) ✓✓, or exploit consumers with high prices. ✓✓ (2)

3.2.4 **What are the factors that influence the consumption patterns of the consumer?**

- The marginal utility of items for the consumer✓✓
- The price of the goods / income / seasonal factors / fashion changes / preference and tastes ✓✓
  (Any other relevant answer) (2x2) (4)

3.3 **DATA RESPONSE**

3.3.1 **What is meant by MC = MR?**

- Where profit is maximized / point of profit maximization ✓✓
- Break- even point✓✓
- Revenue is equal to cost✓✓

(Accept any other relevant answer) (2)

3.3.2 **Define the term *marginal cost*.**

- Additional cost of producing another unit✓✓ (2)

3.3.3 **Calculate the values of A, B and C.**

- A = 48 ✓✓
- B = 4✓✓
- C = 12✓✓ (3x2) (6)

3.4 **Differentiate between the concepts *absolute advantage* and *comparative advantage*.**

Absolute Advantage:

- Refers to the ability of a country to produce more of an item or service than its competitors can produce, using the same amount of resources✓✓
- Developed countries with their large capital resources have absolute advantage over developing countries. ✓✓
- E.g. SA produces gold at an absolute advantage. ✓✓ (Max.4)

Comparative advantage:

- Refers to the ability of a country to produce the same output using fewer resources.
- It occurs when a country specializes in a product that it can make more efficiently, compared to other products. ✓✓
- Countries benefit more by producing and exporting goods they can produce more efficiently. ✓✓
- E.g. both SA and Brazil can produce maize and coffee at a comparative advantage.✓✓ (Max.4) (8)

3.5 **Compare the characteristics of monopolistic competition and oligopolies.**

- Monopolistic competition is a market structure in which several or many sellers✓✓ each produce a similar type of item or service but the products are slightly different, ✓✓ such as computer games, cell phones or motor cars. ✓✓ Each producer can set its own price ✓✓ and quantity without affecting the marketplace as a whole.
- An Oligopoly has a small number of firms (few) ✓✓ that control all or a large majority of the market. They all make similar products. ✓✓ Each producer makes enough of the total output to be able to influence the price ✓✓ and the quantity supplied.

(Accept any other relevant answer) (2x4) (8)

[40]

QUESTION 4 **40 MARKS – 30 MINUTES**

4.1 4.1.1 **State TWO types of monopolies.**

- Natural Monopoly ✓
- Artificial Monopoly ✓
- Local Monopoly✓
- Legal Monopoly✓
- Duo Monopoly✓

(Accept any other) (2x1) (2)

4.1.2 **What will the producer do if total costs exceed total revenue?**

- He will cut back on production up to the point where the total revenue exceeds total cost. ✓✓
- Produce goods where marginal revenue is equal to marginal cost (MR = MC) ✓✓
- The producer can shut down if it cannot cover its average variable costs. (1x2) (2)

4.2 **Study the graphs and answer the questions that follow.**

4.2.1 **Define the concept of *elasticity of demand*.**

- The responsiveness of quantity demanded to changes in price ✓✓ (2)

4.2.2 **Why is the price elasticity of demand important to producers?**

- Tells the producer that for every action there is a reaction.✓✓
- By studying price elasticity of demand, we can predict what the change in price will be for the producers.✓✓
- Price elasticity of demand is useful to help businesses decide how to increase their total revenue.✓✓
- To increase its total revenue the producer can (a) increase the price to get more revenue per product and (b) decrease the price to increase the quantity sold✓✓
- If the buyers are sensitive to the price (elastic demand), they will buy more if the price decreases, so the producers should decrease the price.✓✓
- If the buyers are not sensitive to price (inelastic demand) they will not buy much less even if the price goes up, so the producers should increase the price✓✓
- To increase sales, increase the price when the demand is inelastic, or decrease the price when the demand is elastic.✓✓
- Producers want to know how sensitive the market supply is to a change in the price of the product.✓✓ (Any 2x2) (4)

4.2.3 **Distinguish between the types of elasticity of demand in the graphs. Explain your answer.**

- **Graph A**: A % change in the price leads to a greater % change in the quantity demanded. ✓✓
  Relative elastic✓ (2)
- **Graph B**: A % change in the price leads to a smaller % change in the quantity demanded. ✓✓
  Relative inelastic✓ (2)

√

4.3 **DATA RESPONSE**

4.3.1 **Define *marginal utility*.**

Marginal utility is the extra satisfaction that is gained by consuming a product. ✓✓ (2)

4.3.2 **Identify the point at which the consumer reaches maximum utility.**

- Unit 4 ✓✓
- The point where marginal utility is zero and total utility is 34 ✓ ✓ (Any 1x2)(2)

4.3.3 **Explain what happens to total utility when marginal utility becomes negative.**

Total utility decreases✓✓ (2)

4.3.4 **Give the values of A to D.**

* A = 15 ✓
* B = 12 ✓
* C = 0 ✓
* D = 31 ✓ (4)

4.4 **Explain FOUR reasons for economies of scale.**

- An increase in the production process could lead to resource specialisation. ✓✓
- Advanced technology such as computers could be used, together with highly skilled workers. ✓✓
- A business could expand its productive capacity, such as car assembly plants. ✓✓
- Businesses could experience a reduction in unit costs – larger profit levels. ✓✓
(Accept any other relevant answers) (4x2) (8)

4.5 **Calculate the cross price elasticity of demand for the following and indicate whether the goods are complements or substitutes. (Show all calculations.)**

The price of apples increases by 20 % and the quantity of pears demanded increases by 10 %.

$$\text{Xed} = \frac{\%\ \Delta\text{Qd good X (pears)}}{\%\ \Delta\ \text{P good Y (apples)}} ✓✓$$

$$= \frac{10\%}{20\%} ✓✓$$

$$= 0.5 ✓✓$$

$\therefore$ Goods are substitutes✓✓ (8)

[40]

TOTAL SECTION B: 80

SECTION C

Answer any ONE of the two questions from this section in the ANSWER BOOK.

STRUCTURE OF ESSAY	MARK ALLOCATION
Introduction	**Max. 2**
Body: **Main part:** Discuss in detail / In-depth discussion / Examine Discuss / Analyse / Compare / Evaluate / Distinguish / Explain Assess / Debate. **Additional part:** Give own opinion / Critically discuss / Evaluate / Critically evaluate / Draw a graph and explain / Use the graph given and explain / Complete the given graph / Calculate / Deduce / Compare / Explain / Distinguish / Interpret / Briefly debate / How? / Suggest	 **Max. 26** **Max. 10**
Conclusion Any relevant higher order conclusion that should include: * A brief summary of what has been discussed / analysed without repeating facts already mentioned in the body. * An opinion or valued judgement on the facts discussed. * Additional support information to strengthen the discussion / analysis. * A contradictory viewpoint with motivation, if so required. * Recommendations	 **Max. 2**
TOTAL	**40**

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QUESTION 5 **40 MARKS – 40 MINUTES**

- **Discuss in detail the characteristics of perfect markets. (26 marks)**
- **Analyse and explain any TWO types of profit. (10 marks)**

INTRODUCTION

Perfect markets are markets where neither the individual producer, nor the individual consumer has an impact on the price. ✓✓
There is no preference to where one buys or sells the product, because all the products are the same.✓✓

(Accept any relevant introduction.) **(Max. 2)**

BODY

MAIN PART

Characteristics of perfect markets

1. **Large number of buyers and sellers**✓
   - No individual buyer or seller can influence the price / have no control over the price of goods / all businesses are Price Takers ✓✓
2. **Products are homogeneous**✓
   - Products are identical / the same type, quality and appearance. ✓✓
3. **The market is impartial and impersonal.**✓
   - No seller has an advantage over another; buyers do not mind from whom they are buying. ✓✓
4. **Freedom of entry and exit**✓
   - Suppliers can enter or exit without neither financial nor technological barriers. ✓✓ The market is totally accessible, no legal barriers can hinder the freedom of entry to and exit from the market. ✓✓
5. **Buyers and sellers have complete / perfect knowledge.**✓
   - Buyers have complete knowledge about the price, quality and availability of goods and services. ✓✓
   - Sellers have complete knowledge about production costs and market opportunities. ✓✓
   - If sellers increase prices, buyers will know and will buy from a supplier still charging lower prices. ✓✓
6. **There is high output and large choice.**✓
   - Due to many sellers, consumers can shop around and buy from whomever they want. ✓✓
   - There are no shortages because if one seller runs out, plenty of other sellers exist. ✓✓
7. **Unregulated markets**✓
   - An unregulated market means that the government does not interfere in the market. ✓✓
   - Decisions are left to individual producers and suppliers as well as to buyers.✓✓

8. No collusion✓

- Occurs when sellers or buyers enter into an agreement / arrangement to limit competition ✓✓
- Collusion does not exist in perfect markets. ✓✓

(Max. 8 marks: sub-headings and examples/Max. 18 marks: content)

(Max. 26)

ADDITIONAL PART

Analyse and explain any TWO types of profit.

- **Accounting profit ✓**

  - Also known as total profit✓✓
  - It is the difference between total revenue from sales and total costs. ✓✓
  - Accounting profit = revenue minus explicit costs✓✓

- **Normal profit ✓**

  - It is the minimum return required by the owners to continue with the business. ✓✓
  - It is the remuneration for entrepreneurship. ✓✓
  - It is included in the total cost of production. ✓✓
  - When revenue is equal to explicit cost plus implicit costs ✓✓

- **Economic profit ✓**

  - It is the extra profit that the business makes. ✓✓
  - It is the profit that the business makes in addition to the normal profit. ✓✓
  - It is also known as surplus or excess (extra) profit. ✓✓
  - Economic profit = revenue minus explicit plus implicit costs ✓✓ (Any 2x5) (10)

(Max. 10)

CONCLUSION

Perfect markets are really rare and there is a very thin line between a perfect market and monopolistic competition. ✓✓

(Accept any other relevant conclusion.) **(Max. 2)** **[40]**

MEMORANDUM	ECONOMICS (PAPER 2)

QUESTION 6 **40 MARKS – 40 MINUTES**

"Price elasticity of supply will always be positive, because of the law of supply."

- **Use graphs to explain the following price elasticity of supply.**
  - **Perfectly inelastic supply**
  - **Unit elasticity of supply**
  - **Perfect elastic supply** **(26 marks)**

- **Explain the factors influencing price elasticity of supply.** **(10 marks)**

INTRODUCTION

Price elasticity of supply measures how sensitive the market supply is to any change in the price of the product. ✓✓

OR

Price elasticity of supply is the relationship between changes in price and the proportionate changes in the quantity supplied. ✓✓

(Accept any other relevant introduction.) **(Max. 2)**

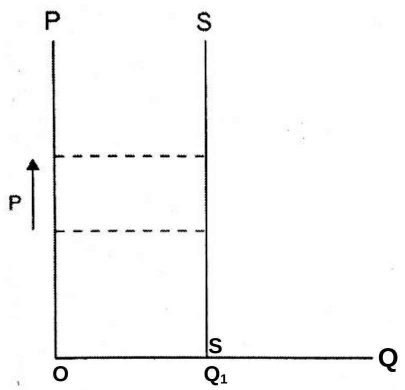
BODY

MAIN PART

*** Perfect inelastic supply**

- No matter what happens to the price, the supply remains the same.✓✓
- E.g.: Even if fans are prepared to pay much more for tickets to a rock concert, the number of seats cannot be increased. (Accept any relevant example.) ✓

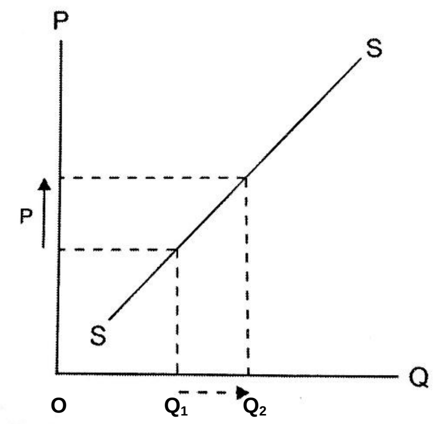
- The value of PES is 0. ✓✓



- **Unitary elasticity of supply**

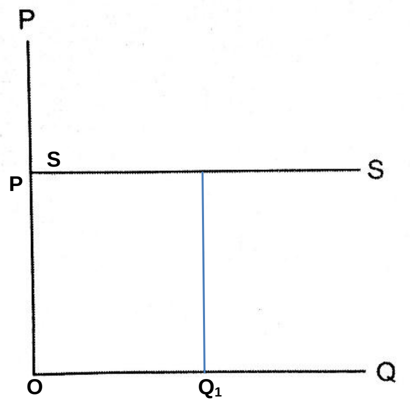
  - The change in quantity supplied is exactly the same as the change in price. ✓✓
  - E.g.: The demand for fresh orange juice would change if the price went down but probably by the same amount. (Accept any relevant example) ✓

  - The value of PES is 1. ✓✓



- **Perfect elastic supply**

  - The quantity supplied stays the same no matter how much the price changes. ✓✓
    E.g.: The price of Van Gogh paintings is in millions of dollars but there can be no change in the supply. (Accept any relevant example.) ✓
    The value of PES is ∞✓✓



Mark allocation for graphs:
1 mark: Price and quantity axes
1 mark: Labelling of s-curve
1 mark: Drawing of s-curve correctly
1 mark: Indicating changes in QS
(Max. 4 marks per graph)

(Max. 26)

ADDITIONAL PART

Factors determining price elasticity of supply

- **The level of spare capacity✓**
  - If an industry is operating below full capacity, supply will be elastic.✓
  - The industry can produce more by employing more factors of production.✓

- **The level of employment✓**
  - Under full employment, supply will be inelastic.✓
  - Supply can be increased by improving productivity.✓
  - Supply in the domestic market will be elastic if imports are available.✓

- **The ability to store the product✓**
  - Supply will be elastic if the product can be stored easily.✓
  - If the product can be stored easily, supply can be adjusted to changes in price.✓

- **The nature of the product✓**
  - Agricultural products will be inelastic in the short term.✓
  - The supply of agricultural products depends on several factors.✓
  - The supply of mining commodities will also be inelastic.✓
  - It takes a long time to increase the capacity of the mines.✓
  - The supply of manufactured goods will be more elastic.✓
  - It is easier for the manufacturing industries to change the supply of goods.✓

- **Time✓**
  - Time is an important factor affecting elasticity of supply.✓
  - Due to the technical nature of production, supply can be adjusted effectively in the long run.✓✓ **(Max. 10)**

CONCLUSION

The key to predicting elasticity of supply is knowing whether the producers are able to increase production.✓✓

The producers' ability to adapt to price changes depends on the cost, availability and mobility of the factors of production. ✓✓

(Accept any other relevant conclusion.) **(Max. 2)** **[40]**

TOTAL SECTION C: 40

TOTAL: 150