**ECONOMIC AND MANAGEMENT SCIENCES**

**GRADE 9**

**TERM 2**

The Economy – PRICE THEORY:

**Learners should achieve the following outcomes, as per CAPS:**

* Law of Demand, demand schedule and graphical illustration of the demand curve;
* Law of Supply, supply schedule and graphical illustration of the supply curve;
* Equilibrium price and quantity;
* Change in quantity demanded;
* Change in quantity supplied;
* Increase and decrease in demand; **(non-examinable)**
* Increase and decrease in supply; **(non-examinable)**
* Graphical illustration of the change in demand and the change in supply.**(non-examinable)**

**Law of demand:**

* **Demand** refers to how much of a product consumers are prepared to buy at a certain price.
* The **Law of demand** is an economic principle which stipulates that consumers will buy more of a product if the price is lower; and that they will buy less of a product if the price is higher.
* Thus; as prices increase, demand to the specific product will decrease and vice versa.

**Factors determining Demand:**

* **Income levels of consumers** – the number of products consumers buy depend on their disposable income (money available to spend).
* **The price of the product** – e.g. consumers will buy more of a product when its price is low and they will buy less of a product when the price is higher.
* **Advertising** – when a product is well advertised, consumers will buy more of it.
* **The price of other products (substitutes)** – the price of one product will influence the demand to substitute products. E.g. if electricity tariffs are very high, consumers will rather buy a gas stove instead of an electric stove.
* **Weather conditions** – the weather also has an impact on the type of products people buy. E.g. when it is hot, the demand to ice creams will be higher than the demand to soup.
* **Fashion** – fashion and other trends also determine the type of products bought by consumers. E.g. if a certain cellphone is popular, more people would buy that specific cellphone.

**Demand schedule:** A demand schedule refers to a table listing the quantity of a product consumers are prepared to buy at different prices.

**Demand schedule of ice cream:**

|  |  |
| --- | --- |
| Price of ice cream | Quantity demanded |
| R3 | 25 |
| R5 | 9 |

**Demand curve:**

A Demand curve refers to a graphic used to show the relationship between the demand to a product and the price thereof.

**Demand curve: Demand to ice cream**

y

R5

**Price**

R3

D

9 25 x

**Quantity of ice cream**

**Explanation of demand curve:**

* Price will always be depicted on the y axes and quantity on the x axes.
* When the price of a product is low, the quantity demanded will be high. On the curve it is clearly seen – when the price is R3 the quantity of ice creams bought is 25.
* When the price of a product is high, the quantity demanded will be low.

On the curve it is clearly seen – when the price increases from R3 to R5, the quantity of ice creams bought decrease from 25 to 9.

* The relationship between price and quantity demanded thus forms a curve.

**Law of Supply:**

* **Supply** refers to the quantity of a product available for consumers to buy.
* **Law of Supply** is an economic principle stipulating that if demand remains the same, the price will decrease when the quantity of a product supplied increase; and that the price will increase when the quantity of a product supplied decrease.

**Factors determining Supply:**

* **The price of a product** – the quantity of a product supplied by suppliers depend on the price consumers are willing to pay for it. If consumers are willing to pay a higher price, the business will supply more of the product.
* **The production costs** – if a product is cheap to produce, businesses will supply more of it.
* **The method of production** – the supply of a product will increase if better technology allows the supplier to producer bigger quantities.
* **The number of producers** – if there are a lot of businesses supplying the same product, supply will increase.

**Supply schedule:**

A Supply schedule is a table which shows the quantity of products suppliers are willing to supply at different price levels.

**Supply schedule of umbrellas:**

|  |  |
| --- | --- |
| Price of umbrellas | Quantity supplied |
| R50 | 30 |
| R80 | 50 |

**Supply curve:** A Supply curve refers to a graphic used to show the relationship between the quantity supplied of a product and the price thereof.

**Supply curve: Supply of ice creams**

y

S

R80

Price

R50

0

30 50 x

Quantity of umbrellas

**Explanation of supply curve:**

* Price will always be depicted on the y axes and quantity on the x axes.
* When the price of a product is low, the quantity supplied will also be low.

On the curve it is clearly seen – when the price is R50, the number of umbrellas supplied is 30.

* When the price of a product is high, the quantity supplied will also be high.

On the curve it is clearly seen – when the price increases from R50 to R80, the quantity of umbrellas supplied also increases from 30 to 50.

* The relationship between price and quantity supplied thus form a curve.

**MARKET EQUILIBRIUM:**

**Prices are determined by demand (how much products consumers are prepared to buy at a certain price) and supply (how much products suppliers are willing to supply) in a market economy.**

**Equilibrium price:** Refers to the price where the demand and supply curves cross.

Demand is equal to supply at this point.

**Equilibrium quantity:** Refers to the quantity where the demand and supply curves cross.

Demand is equal to supply at this point.

**Example:** Use the demand and supply schedules below to draw a demand and supply curve on the same set of axes.

**Demand and supply schedules of toy cars:**

|  |  |  |
| --- | --- | --- |
| **PRICE** | **QUANTITY** | |
| **DEMAND** | **SUPPLY** |
| R 100 | 300 | 100 |
| R 150 | 250 | 150 |
| R 200 | 200 | 200 |
| R 250 | 150 | 250 |
| R 300 | 100 | 300 |

**Demand and supply curve of toy cars:**

**From the curves, we can derive the following:**

Equilibrium price: R200

Equilibrium quantity: 200 toy cars

**Change in quantity demanded:**

* Changes in the price of a product/service lead to a change in the demand to a product/service.
* A movement along the demand curve occurs.

y

D

R20

**Price** R15

R10

R5 D

10 15 20 25 x

**Quantity of cold drinks**

* As the price of cold drinks changes, the quantity demanded also changes.
* E.g. when the price is R10, the demand to cold drinks is 20; but when the price decreases to R5, the demand increases to 25.
* In other words, more people buy cold drinks when the price is lower and less people buy cold drink when the price increases.

**Change in quantity supplied:**

* Changes in the price of a product/service supplied lead to a change in the supply of a product/service.
* A movement along the supply curve occurs.

y

S

R80

**Price** R65

R50

0

30 38 50 x

**Quantity of umbrellas**

* As the price of umbrellas change, the quantity supplied also changes.
* E.g. when the price is R50, 30 umbrellas are supplied, but when the price increase to R65, supply increases from 30 to 38.

**Increase and decrease in demand: (NON-EXAMINABLE)**

|  |  |
| --- | --- |
| **Reasons for increase in demand** | **Reasons for decrease in demand** |
| Market share increase due to population growth | Market share decrease due to a decline of the population |
| Quality of products improve while the prices remain unchanged | Quality of products deteriorate while the prices remain unchanged |
| A change in consumer preferences making the product more popular | A change in consumer preferences making the product less popular |
| Substitute products becoming more expensive | Substitute products becoming cheaper |
| Higher levels of consumer income | Lower levels of consumer income |

**Demand schedule of cold drinks:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Price of cold drinks** | **Initial demand (D1)** | **Increase in demand (D2)** | **Decrease in demand (D3)** |
| **R10** | **20** | **25** | **15** |
| **R15** | **15** | **20** | **10** |
| **R20** | **10** | **15** | **2** |

**The demand curves below shows the increase and decrease in demand to cold drinks:**

y

D

R20

**Price** R15

R10

R5 D3 D1 D2

2 10 15 20 25 x

**Quantity of cold drinks**

* An increase or decrease in demand that is not caused by changes in price, will cause the whole demand curve to shift.
* Where the price is R10 the initial demand to cold drinks were 20, but as substitute products (other cold drinks) become more expensive, it results in an increase in demand (from 20 to 25) and the demand curve shifts to the right.
* Where the price is R10 the initial demand to cold drinks were 20, but as substitute products (other cold drinks) become cheaper, it results in a decrease in demand (from 20 to 15) and the demand curve shifts to the left.

**Increase and decrease in supply: (NON-EXAMINABLE)**

|  |  |
| --- | --- |
| **Reasons for increase in supply** | **Reasons for decrease in supply** |
| The cost of raw materials decrease | The cost of raw materials increase |
| Methods of production and productivity improve due to better technology. | Methods of production and productivity become less effective. |

**Supply schedule of umbrellas:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Price of umbrellas** | **Initial supply (S1)** | **Increase in supply (S2)** | **Decrease in supply S3)** |
| **R50** | **38** | **50** | **30** |
| **R65** | **50** | **60** | **38** |
| **R80** | **60** | **80** | **50** |

**The supply curves below shows the increase and decrease in supply of umbrellas:**

y

S3 S1 S2

R80

**Price** R65

R50

0

30 38 50 60 x

**Quantity of umbrellas**

* An increase or decrease in supply that is not caused by changes in prices, will cause the whole supply curve to shift.
* Where the price is R65, the initial supply of umbrellas were 50, but as the cost of raw materials decrease, for instance, it will result in an increase in supply (from 50 to 60) and the whole supply curve will shift to the right.
* Where the price is R65, the initial supply of umbrellas were 50, but as the cost of raw materials increase, for instance, it will result in a decrease in supply (from 50 to 38) and the whole supply curve will shift to the left.

**ECONOMIC AND MANAGEMENT SCIENCES**

**GRADE 9**

**TERM 2**

The economy – PRICE THEORY:

**Activity 1: Concepts relating to Price theory**

* 1. **Match the correct description in Column B with the term/s in Column A. Write only the correct letter in the Answer Column.**

|  |  |  |  |
| --- | --- | --- | --- |
| **NO.** | **COLUMN A** | **COLUMN B** | **ANSWER** |
| **1.1.1.** | Demand | 1. Refers to the quantity of products consumers are prepared to buy at a specific price. | **1.1.1.** |
| **1.1.2.** | Equilibrium price | 1. The number of products where quantity demanded is equal to quantity supplied. | **1.1.2.** |
| **1.1.3.** | Supply | 1. A table listing the quantity of products consumers are prepared to buy at different prices. | **1.1.3.** |
| **1.1.4.** | Demand schedule | 1. The price where quantity demanded is equal to quantity supplied. | **1.1.4.** |
| **1.1.5.** | Equilibrium quantity | 1. Refers to the quantity of products suppliers/businesses are prepared to make available to be sold. | **1.1.5.** |

* 1. **Define the following concepts:**
     1. Law of Demand

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + 1. Law of Supply

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Activity 2: Graphical illustration of a Demand curve**

Use the information below (demand schedule) and draw a Demand curve in your workbook:

**Demand schedule of Apples:**

|  |  |
| --- | --- |
| **Price (in Rand)** | **Quantity of apples demanded** |
| **R0.50** | **200** |
| **R1.00** | **150** |
| **R1.50** | **100** |
| **R2.00** | **50** |

**Activity 3: Graphical illustration of a Supply curve**

Use the information below (supply schedule) and draw a Supply curve in your workbook: **Supply schedule of leather shoes:**

|  |  |
| --- | --- |
| **Price (in Rand)** | **Quantity of leather shoes demanded** |
| **R200** | **100** |
| **R250** | **200** |
| **R300** | **300** |
| **R350** | **400** |

**Activity 4: Graphical illustration of Demand and Supply curves**

Study the demand and supply schedule of “Tim’s Kites” and answer the following questions in your workbook.

|  |  |  |
| --- | --- | --- |
| **PRICE** | **QUANTITY** | |
| **DEMAND** | **SUPPLY** |
| R 100 | 250 | 50 |
| R 150 | 200 | 100 |
| R 200 | 150 | 150 |
| R 250 | 100 | 200 |
| R 300 | 50 | 250 |

4.1. Draw a demand and supply curve on the same set of axes.

4.2. Identify the equilibrium price and equilibrium quantity.

4.3. At what price will Tim be supplying 200 kites?

4.4. How many kites are consumers prepared to buy at a price of R150?

**Activity 5: Equilibrium; Demand and Supply schedules**

**5.1. Discuss the term market equilibrium**.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.2. Use the demand and supply schedules of photo frames below and answer the following questions (5.2.1 – 5.2.5):**

|  |  |  |
| --- | --- | --- |
| **PRICE** | **QUANTITY** | |
| **DEMAND** | **SUPPLY** |
| R 10 | 170 | 50 |
| R 15 | 140 | 80 |
| R 20 | 110 | 110 |
| R 25 | 80 | 140 |
| R 30 | 50 | 170 |

5.2.1. Equilibrium price: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

5.2.2. Equilibrium quantity: \_\_\_\_\_\_\_\_\_\_\_\_

5.2.3. How many photo frames does consumers want at R25? \_\_\_\_\_\_\_\_\_\_\_\_\_

5.2.4. How many photo frames does the business supply at R15? \_\_\_\_\_\_\_\_\_\_\_

5.2.5. **Complete:** \_\_\_\_ photo frames will be demanded at R30, whilst \_\_\_\_ photo frames are supplied by the business.

**Activity 6: Demand and Supply curves**

Use the information below to draw a demand and supply curve on the same set of axes in your workbook. Label the axes, as well as the curves. Indicate the point of equilibrium clearly.

Danny owns a toy store which specialises in selling electronic toy cars. Below is the demand and supply schedule of his toy cars:

**Demand and supply schedule of Danny’s toy cars for March 2020:**

|  |  |  |
| --- | --- | --- |
| **PRICE** | **QUANTITY** | |
| **DEMAND** | **SUPPLY** |
| R 100 | 300 | 100 |
| R 150 | 250 | 150 |
| R 200 | 200 | 200 |
| R 250 | 150 | 250 |
| R 300 | 100 | 300 |

**Activity 7: Changes in quantity demanded and supplied**

7.1. Study the Demand curve below and complete the explanation.

y

D1

R200

**Price** R150

R100

R50 D2

10 15 20 25 x

**Quantity of plastic buckets**

**Explanation:**

When the price is R50, consumers are prepared to buy \_\_\_\_\_\_ plastic buckets; but when the price increase to \_\_\_\_\_\_\_\_ , consumers are only prepared to buy 15 buckets. Thus, one can derive that when the price is \_\_\_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_\_ products will be bought by consumers.

7.1 **Study the Supply curve below and complete the explanation.**

y

S

R80

**Price** R65

R50

0

40 50 60 x

**Quantity of umbrellas**

**Explanation:**

When the price is R50, \_\_\_\_\_\_ umbrellas are supplied, but when the price increase to \_\_\_\_\_\_\_\_\_\_, quantity supplied also increases from 40 to 50. Thus, one can derive that when prices \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, quantity supplied also \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Activity 8: Increase and Decrease in Demand and Supply**

8.1. Name two reasons for an increase in demand, as well as two reasons for a decrease in demand.

|  |  |
| --- | --- |
| **2 Reasons for INCREASE IN DEMAND** | **2 Reasons for DECREASE IN DEMAND** |
|  |  |
|  |  |

8.2. Name two reasons for an increase in supply, as well as two reasons for a decrease in supply.

|  |  |
| --- | --- |
| **2 Reasons for INCREASE IN SUPPLY** | **2 Reasons for DECREASE IN SUPPLY** |
|  |  |
|  |  |