**ECONOMICS SS 2**

**FIRST TERM**

**SCHEME OF WORK**

## 

## WEEK TOPIC

## 1 Measure of Central Tendency of Group Data

2. Measure of Dispersion of Variation of Grouped Data

3 Theory of Consumer Behaviour

4 Demand And Supply

5 Elasticity of Demand

6 Elasticity of Supply

7 Income Elasticity of Demand

8 Cross Elasticity of Demand

9 Price Control / Legislation

10 Rationing & Hoarding

11 Revision

12 Examination

**REFERENCE BOOKS**

* Amplified and Simplified Economics for Senior Secondary School by Femi Longe
* Comprehensive Economics for Senior Secondary School by J.V. Anyaele
* Fundamentals of Economics for SSS By. R.A.I. Anyanwuocha

**WEEK ONE**

**MEASURES OF CENTRAL TENDENCY**

**CONTENT**

* MEAN
* MODE
* MEDIAN

**MEASURES OF CENTRAL TENDENCY:**  are the values which show the degree to which a given data or any given set of values will converge toward the central point of the data.

Measures of central tendency, also called measures of location, is the statistical information that gives the middle or centre or average of a set of data. Measures of central tendency include arithmetic mean, median and mode.

**MEAN**: This is the average of variables obtained in a study. It is the most common kind of average. For group data the formula for calculating the mean is ∑fx.

∑f

Where, Ʃ =Summation

F=frequency

X=observation

**MEDIAN:** It is the middle number in any given distribution. The formula is

Median = L + (N\2-Fb)c

f

Where; L = Lower class limit.

N = Summation 0f the frequency.

Fb = Cumulative frequency before the median class.

f = frequency of the median class.

c= Class size.

**MODE**: It is the number that appears most in any given distribution, i.e the number with the greatest frequency. When a series has more than one mode,say two,it is said to be bi-modal or tri-modal for three.

Mode= L + D1

D1+D2

Where, M=mode

L=the lower class boundary of the modal class.

D1=the frequency of the modal class minus the frequency of the class before the modal class.

D2=the frequency of the modal class minus the frequency of the class after it.

C=the width of the modal class.

**Example**: The table below shows the marks of students of JSS 3 mathematics.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 |
| Frequency | 2 | 3 | 4 | 5 | 6 | 7 |

Use the information above to calculate the following:

A. the mean

B. the median

C. the mode

**Solution**

**mark frequency mid-point fx**

|  |  |  |  |
| --- | --- | --- | --- |
| 1-5 | 2 | 3 | 6 |
| 6-10 | 3 | 8 | 24 |
| 11-15 | 4 | 13 | 52 |
| 16-20 | 5 | 18 | 90 |
| 21-25 | 6 | 23 | 138 |
| 26-30 | 7 | 28 | 196 |

27 506

**A**. Mean= ∑fx = 506\27

Ʃf =18.7

**B**. median

|  |  |  |
| --- | --- | --- |
| Mark | F | Cf |
| 1-5 | 2 | 2 |
| 6-10 | 3 | 5 |
| 11-15 | 4 | 9 |
| 16-20 | 5 | 14 |
| 21-25 | 6 | 20 |
| 26-30 | 7 | 27 |

L1= 15.5

N\2 =27\2=13.5

Fb =9

F =5

C= 5

M=15.5+ (13.5-9)5

5

M=20

**C**. mode= L+ D1

D1+D2

L1=20.5

D1=7-6=1

D2=7-0=7

C=5

M=25.5+ (1\1+7)5

M=26.125.

**EVALUATION**

The table below shows the weekly profit in naira from a mini-market.

You are required to calculate:

A. The mean.

B. The median.

C. The mode.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Weekly profit(#) | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 |
| Frequency | 6 | 6 | 12 | 11 | 10 | 5 |

**GENERAL EVALUATION QUESTIONS**

1. Outline the merits of a Joint Stock Company.
2. Describe the problems facing Agriculture in Nigeria.
3. Outline the main features of Malthusian theory of Population.
4. What is money?
5. List five characteristics of money.

**WEEKEND ASSIGNMENT**

1. Which of the following is not a set of measure of central tendency? (a) mode and mean (b) mean and median (c) mean and percentile (d) mode and median
2. The most frequently occurring value in a give data is (a) mean ( b ) mode (c ) range (d) median.
3. The formula (n+1)th is for calculating (a ) median (b ) mode (c ) mean (d) range.

2

1. The L1 in the formula for the calculation of measures of location represents......... (a) lower class boundary of the median class (b) actual frequency of the modal class (c) upper class boundary of the median class (d) frequency of the class just after the median class
2. The formation of cumulative frequency is necessary for the calculation of............ (a) mean (b) range (c) median (d) mode

**SECTION B**

The following table shows the distribution of marks scored by a class of students in a promotion examination.

|  |  |
| --- | --- |
| Marks | Number of students |
| 10-29 | 6 |
| 30-39 | 5 |
| 40-49 | 7 |
| 50-59 | 10 |
| 60-69 | 5 |
| 70-79 | 4 |
| 80-89 | 3 |

1. Calculate the mean mark.
2. Find the mode.

**WEEK TWO**

**MEASURES OF DISPERSION OF A GROUPED FREQUENCY DISTRIBUTION**

**CONTENT**

* Range
* Mean Deviation
* Variance
* Standard Deviation

**MEASURES OF DISPERSION:**  also known as measures of spread or variation describes how the data given in any distribution are spread about the ‘Mean’, or the overall spread of the data. These measures are the range, mean – deviation, standard deviation, variance, coefficient of variation, etc.

**The Range**: The range of a data is the difference between the highest and the lowest value in the data. The formula for calculation of range is:

Range = Highest value – Lowest value

**The Mean Deviation**: This measures the dispersions around the arithmetic mean. It tells us how far, on the average, the individual observations are from the mean. For a grouped frequency distribution

Mean Deviation = ∑f/x- x/

∑f

**Variance**: This is the average of the square about the deviations of the measurement about their mean.

Variance = ∑f(X – X)2

∑f

**Standard Deviation**: This is the square root of the average of the square of the deviations of the measurement about their mean.

Standard Deviation =

∑f(X – X )2

Ʃf

**Example:**

The data below shows the weight of 50 students to the nearest kg.

65 58 51 36 23 40 53 59 70 51 46 59 50 67 46 39 61 62 73 60 71 51 47 32 48 40 40 51 58 67 60 69 43 52 37 26 38 50 59 40 44 54 42 68 74 45 39 48 55.

* 1. Prepare a grouped frequency table
  2. Calculate:
     1. The range
     2. The mean deviation
     3. The variance
     4. The standard deviation

**NB:** Note that the standard Deviation is the positive square root of the variance.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **F** | **Mid-point**  **X** | **FX** | **\_**  **/X- X/** | **\_**  **F/X-X/** | **\_**  **(X-X )2** | **\_**  **F(X-X)2** |
| 21-30 | 2 | 25.5 | 51 | 25.5 | 50.4 | 635.04 | 1270.08 |
| 31-40 | 10 | 35.5 | 355 | 15.2 | 152 | 231.04 | 2310.40 |
| 41-40 | 12 | 45.5 | 546 | 5.2 | 62.4 | 27.04 | 324.48 |
| 51-60 | 15 | 55.5 | 832.5 | 4.8 | 72 | 23.04 | 345.60 |
| 61-70 | 8 | 65.5 | 524 | 14.8 | 118.4 | 219.04 | 1752.32 |
| 71-80 | 3 | 75.5 | 226.5 | 24.8 | 74.4 | 615.04 | 1845.12 |
|  | **50** |  | **2535** |  | **529.60** |  | **7848** |

∑fx = 2535 = 50.7

∑f 50

1. Range = Highest score –Lowest score

= 74 - 23

= 51kg

1. Mean Deviation

=∑f/ X –X/ = 529.60 = 10.59kg

∑f 50

(iii) Variance = ∑f/X – X /2

∑f

= 7848 = 156.9kg

50

(iv) Standard Deviation

∑f/X – X /2 156.96

∑f = =12.53kg

**EVALUATION QUESTION**

1. How is the mid-point (X) ascertained in a grouped frequency table?
2. State two advantages of the mean over other measures of central tendency (i.e median and mode)
3. The table below shows the income of forty Workers in a factory in ~~N~~

61 78 70 83 92 67 66 83

76 68 79 84 82 86 81 60

78 77 86 77 81 92 80 70

70 40 75 60 74 82 77 87

63 94 76 87 81 77 87 84.

# Using a class interval of 40-49, 50-59 etc

1. Construct a grouped frequency table of the distribution.
2. Calculate the mean of the distribution.

**READING ASSIGNMENT**

* 1. Fundamentals of Economics for SSS by R.A I. Ayanwuocha Page 97-101
  2. Comprehensive Economics for SSS by J.U Anyaele page 36 –38

**GENERAL EVALUATION QUESTIONS**

1. Give five reasons why government participates in business enterprises.
2. Define ageing population.
3. Explain the sources of finance available to a public limited liability business.
4. Explain any three weapons that can be used by a trade union during trade dispute.
5. What is occupational mobility?

**WEEKEND ASSIGNMET**

1. In a class of 5 students the following scores were obtained in a mathematics test 10,2,6,7,12. What is the median score (A) 2 (B) 4(C) 6 (D) 7

2. Which measure of central tendency can be applied to find the highest goal scorer in a football match (A) mean (b) Mode (C) Median (D) range

3. If the following scores 2, 4, 6, and 10 with frequencies 3,5,7, and 10 respectively makes up a distribution, then the mean score is (A) 5.7 (B) 6.7 (C) 7.5 (D) 5.4

4. In the formula X = ∑fx

∑f

∑fX stands for (A) total number of observations (B) Sum of frequencies times observations (C) Sum of frequencies (D) number of elements times frequencies

5. The most reliable measure of central tendency is (a) Mode (b) median (c) Histogram (d) mean

**SECTION B**

1. Give the definition of the mean deviation and the standard deviation
2. Explain the difference between continuous data and discrete data.

**WEEK THREE**

**THEORY OF CONSUMER BEHAVIOUR**

**CONTENT**

* + - * Definition of Utility
      * Cardinal school of thought/Assumption
      * Concept of Total, Average and Marginal Utility
      * The law of Diminishing Marginal Utility.

**THEORY OF CONSUMER BEHAVIOUR**

The theory of consumer behaviour is also known as the theory of household behaviour. It is primarily concerned with how the consumer or household tries to satisfy his/her wants by dividing his/her limited amount of income between the various commodities that give him equal amount of satisfaction.

**WHAT IS UTILITY?**

Utility can be defined as the satisfaction derived from the consumption of a given commodity. Hence, when a consumer derives satisfaction from the consumption of a commodity, it can be said that the commodity or service possesses utility.

Utility therefore, is relative to a consumer, depending on the time, place, form, etc.

A commodity that can satisfy a consumer’s want at a particular point in time and place may not satisfy another’s want.

**EVALUATION**

1. Define utility.
2. What is consumer behaviour?

**There are basically two schools of thought in the analysis of utility and they are as follows:**

1. Cardinal school of thought

2. Ordinal school of thought.

**CARDINAL SCHOOL OF THOUGHT:** This approach emphasizes that utility is measurable. That is, after consuming a given quantity of a commodity the consumer can simply evaluate his satisfaction through the use of figures which range from zero to infinity.

**ASSUMPTIONS OF CARDINAL APPROACH**

i. Utility is measurable

ii. The consumer is rational

iii. There is diminishing marginal utility

iv. Total utility (TU) depends on the quantity consumed.

v. Money income of the consumer is held constant

**CONCEPT OF TOTAL, AVERAGE AND MARGINAL UTILITY**

**TOTAL UTILITY:** This is the total amount of satisfaction a consumer derives from the consumption of a particular commodity at a point in time. Consumers’ utility increases as the quantity consumed increases but not at equal rate because consumer has a saturation point in the consumption of particular commodity at a given time.

 y

|  |
| --- |
| 1 2 3 4 5 |

|  |
| --- |
| 40    30    20    10 |

Units of

Utility

 TU

**X**

**Qty of goods**

**AVERAGE UTILITY:** This derived by dividing total utility by the units of the commodity consumed. That is, it is the satisfaction which a consumer derives per unit of a commodity consumed. AU = TU/Q

y

Utility

AU

**x**

**Qty**

**MARGINAL UTILITY:** This means the additional satisfaction a consumer derives from the consumption of additional unit of a particular commodity. It is then the change in the total utility as a result of the consumption of additional unit of a commodity. MU = ∆TU/∆Q

y

Utility

**x**

**Qty**

**MU**

**UTILITY SCHEDULE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Quantity of Goods consumed** | **Total Utility** | **Average Utility** | **Marginal Utility** |
| 1 | 4 | 4 | - |
| 2 | 7 | 3.5 | 3 |
| 3 | 9 | 3 | 2 |
| 4 | 10 | 2.5 | 1 |
| 5 | 10 | 2.0 | 0 |

**RELATIONSHIP BETWEEN TOTAL UTILITY AND MARGINAL UTILITY**

1. The MU begins to fall right after the first unit of the commodity has been consumed and continues to diminish until it reaches zero level on x – axis and below.
2. At the point where the MU reaches zero level on the x – axis, TU reaches its maximum point.
3. When the MU cuts the x – axis, TU begins to fall from its peak.
4. When the MU descends below the x – axis and becomes negative, the TU curve begins to slope downward

**TOTAL AND MARGINAL UTILITY CURVES**

Utility y

**TU**

**MU x**

**Qty**

**EVALUATION**

1 Calculate the missing value from the table below.

|  |  |  |
| --- | --- | --- |
| Quantity of goods consumed | Total utility | Marginal utility |
| 1 | 10 | - |
| 2 | 16 | A |
| 3 | B | 4 |
| 4 | 20 | C |

**THE LAW OF DIMINISHING MARGINAL UTILITY**

The law of diminishing marginal utility states that, other things being equal, the marginal utility of a commodity to an individual decreases with extra unit of that commodity he consumes. In other words, the law states that if a consumer goes on consuming successive equal increments in the quantity of a commodity, then the increase in total utility resulting will become smaller and smaller, that is, satisfaction per extra unit will start falling. For instance, a beer drinker may derive maximum satisfaction in the first three bottles, after which decrease in satisfaction may set in as more and more bottles of beer are consumed until he may be unable to consume anymore.

**UTILITY MAXIMIZATION**

Utility maximization is also known as equilibrium of the consumer. A point where a consumer derives maximum satisfaction when his marginal utility equates the price of the commodity consumed. That is, the additional utility derived from the consumption of additional commodity is equal to price of the commodity.

In the case of one commodity, a consumer will maximize his satisfaction in the consumption of a particular commodity when the MU of that commodity equals the price of that commodity, eg MUx = Px

In the case of two or more commodities, a consumer is said to be in equilibrium or maximizes his utility when the ratio of MU of the last unit of the commodities consumed should be equal to the ratio of the price. Alternatively, a consumer’s utility is maximized when the MU per amount spent on a product is equal to the MU per amount spent on any other product, as stated below:

MUx MUy MUz

Px = Py = Pz.

where MUx = MU of commodity X

Px = Price of commodity X

MUy = MU of commodity Y

Py = Price of commodity Y

MUz = MU of commodity Z

Pz = Price of commodity Z

**CONSUMER SURPLUS**

Consumer surplus is define as the difference between the amount a consumer budgeted to pay for a commodity based on the anticipated level of satisfaction, and the amount he actually paid to have it. When he consumed the first unit, he was willing to pay as much as #50, but the commodity’s price was #30. Thus, he saved #20.Therefore any amount above the market price of #30 represents the consumer’s surplus.

|  |
| --- |
| MU |

|  |
| --- |
| Total expenditure |

|  |
| --- |
| Consumer surplus |

|  |
| --- |
| 50  40  30  20  10 |

|  |
| --- |
| 1 2 3 4 5 6 |

**EVALUATION**

1. Define consumer surplus.
2. State the law of diminishing marginal utility.

3. Use the tale below to answer the following questions:

PLATE OF RICE CONSUMED TU MU

0 0 0

1 100 100

2 160 ?

3 ? 40

4 ? 10

5 230 ?

6 230 ?

7 200 ?

3(a). Complete the above utility schedule

(b). Draw the MU curve

(c)i At what quantity does MU equal TU?

ii What happens to the values of TU as quantity consumed increases?

iii What is the value of MU when TU is maximized?

Iv What happens to MU as the quantity consume increases?

**READING ASSIGNMENT**

1. Fundamental Principles of Economics for SS by S. A. Akande, J. A. Azike Pages 86 – 95.
2. Amplified and Simplified Economics for SSS by Femi Alonge page 29-30.

**GENERAL EVALUATION QUESTIONS**

1. Why is scarcity a fundamental problem?
2. Define labour.
3. Differentiate between implicit cost and explicit cost.
4. What is mobility of labour?
5. List four advantages of the mean

**WEEKEND ASSIGNMENT**

1. Which one of these assumptions do economists always make about consumers?

(a) That they are all wage earners (b) That they make rational decisions in the market (c) That they cannot spend more than their incomes (d) That they can measure utility derived from consumption

2. The aim of the consumer in allocating his income is (a) to maximize his marginal utility (b) to buy goods he wants most whatever the price. (c) to maximize his total utility (d) to buy those goods which fallen in price.

3. ........................takes place when the ratio MU of a commodity consumed is equal to the ratio of its price (a) consumer surplus (b) law of diminishing marginal utility (c) consumer behaviour (d) utility maximization

4. Total utility (TU) attains its peak when the Marginal utility (MU) is ..... (a) zero on x- axis (b) above x- axis (c) close to x – axis (d) under x- axis

5. The difference between the amount of money a consumer planned to pay for a commodity and the actual amount of money he paid is.......... (a) commodity price (b) consumer surplus (c) marginal cost (d) producer surplus

**THEORY**

1. With the use of table, explain the concept of diminishing marginal utility

2. Explain how utility is maximized

**WEEK FOUR**

**DEMAND AND SUPPLY**

**CONTENT**

* Change in Quantity Demanded
* Change in Demand
* Change in Quantity Supplied
* Change in Supply
* Effects of change in demand and supply on equilibrium price and quant

**CHANGE IN QUANTITY DEMANDED**

A change in quantity demanded, is otherwise known as movement along a particular demand curve that is only influenced by price. When there is a change in the quantity demanded, the demand curve does not shift. This is because the price of the commodity is the only cause of a change in the quantity demanded while other factors remain unchanged.

Y Price

D

10

5

D

x

0 20 30

Quantity

**Change in Quantity Demanded**

From the above diagram, as the price falls from #50 to #30, the quantity demanded increases from 60 to 80 units,

Hence movement along the same demand curve took place from A to B.

Further decrease or increase in price will also affect the movement along the same

demand curve.

**CHANGES IN DEMAND**

When different quantities of goods and services are demanded at a particular price, it is called a change in demand. It is caused by those factors that generally affect the demand of a commodity other than the price of the commodity; For example changes in taste and fashion, changes in income etc Change in demand shows a shift of the demand curve to an entirely new position. A shift of the demand curve to the right is termed an increase in demand while a shift of the demand curve to the left is a decrease in demand.

Price

D2

D1

D2

D1

Q1 Q2

Quantity

1. Increase in Demand

D1 D2

Price

N10

D2

D1

Q1 Q2

Quantity

(ii) Decrease in Demand

**EVALUTION**

1. State three factors responsible for the change in demand.
2. What is change in quantity demand?

**CHANGES IN QUANTITY SUPPLIED**

Change in quantity supplied is only influenced by price. It involves movement along the same supply curve

y

Price S

P2

P1

# S

x

Q1 Q2

Quantity

Change in Quantity Supplied

**CHANGE IN SUPPLY**

Change in supply is caused by factors other than the price of the commodity. It involves a bodily shift of the supply curve either to the right (increase in supply) or to the left

(decrease in supply

S2 S0

S2

So

So S1 1

So

S1

Price Price

P

Q2 Q0 Qty

Qo Q1 Qty (ii) Decrease in supply

(i)Increase in supply

**EVALUATION**

1. What is change in quantity supplied?
2. State the factors responsible for change in supply.

**EFFECTS OF CHANGES IN DEMAND AND SUPPLY ON EQUILIBRIUM PRICE AND QUANTITY**

Changes in demand and supply lead to a change in the equilibrium price. Once there is any change in either demand or supply, the initial equilibrium will be disrupted and a new equilibrium will be created. The market equilibrium price can be affected in the following ways.

1. **Increase in Demand**

Price

D2

S

D1

P2

P1

S D2

D1

Q1 Q2 Quantity

Effects of increase in demand

* 1. Increase in the equilibrium price from P1to P2
  2. Increase in the equilibrium quantity from Q1 toQ2

2. **Decrease in Demand**

D1

S

Price

D2

P1

P2

S D1

D2

Q2 Q1 Qty

Effects of Decrease in Demand

1. Decrease in the equilibrium price from P1 to P2
2. Decrease in the equilibrium quantity from Q1to Q2

3. **Increase in Supply**

S1 S2

Price

D

P1

P2

S1 D

S2

Q1 Q2

Quantity

**Effects of Increase in Supply**

1. Decrease in the equilibrium price from P1 to P2
2. Increase in the equilibrium quantity from Q1to Q2

**4. Decrease in supply**

D

D

S2

S1

Price

P2

S2

P1

S1

Q2 Q1

Quantity

# **Effects of Decrease in Supply**

a. Increase in the equilibrium price from P1 to P2

b. Decrease in the equilibrium quantity from Q1to Q2

# **EVALUATION QUESTION**

1. What is the equilibrium quantity?
2. Illustrate with a diagrammatic sketch the market situation at a price lower than the equilibrium price”
3. Explain with the aid of diagrams how the market equilibrium price is affected by the combined effects of:
4. Increase in demand and increase in supply.

# Decrease in demand and decrease in supply.

1. Increase in demand and decrease in supply.

**READING ASSIGNMENT**

Amplified and Simplified Economic for SSS by Femi Longe page 290--296

Fundamentals of Economics by Anyawuocha page 166-168

**GENERAL EVALUATION QUESTIONS**

* 1. Distinguish between fixed cost and variable cost.
  2. Under what condition will a perfectly competitive firm maximize profit.
  3. Describe each of the following;

(a) abnormal demand ( b) Effective demand

* 1. What is a public corporation.
  2. Explain the causes of a declining population.

**WEEKEND ASSIGNMENT**

* 1. At the equilibrium price, quantity demanded is (a) greater than quantity supplied (b) equal to quantity supplied (c) less than quantity supplied (d) equal to excess supply
  2. If the government fixes a price of a commodity above the equilibrium price, the quantity supplied will be (a) less than the quantity demanded (b) equal to the quantity demanded (c) greater than the quantity demanded (d) equal to zero
  3. The market price of a commodity is normally determined by the (a) law of demand (b) interaction of the forces of demand and supply (c) total number of people in the market (d) total quantity of the commodity in the market
  4. The gap between demand and supply curves below the equilibrium price indicates (a) excess demand (b) excess supply (c) equilibrium quantity (d) equilibrium price
  5. If prices fall below the equilibrium (a) demand will equal supply (b) demand will be greater than supply (c) supply will be greater than demand (d) quantity supplied will be zero

**SECTION B**

* + 1. Given the demand and supply function for a crate of eggs as follows:

Qd = 12 –2p; Q = 3+1p

Determine the equilibrium price and quantity

* + 1. What is the excess supply at the price of N3.50?

**WEEK FIVE**

**ELASTICITY OF DEMAND**

**CONTENT**

* Definition of Elasticity of Demand
* Types of Elasticity of Demand
* Price Elasticity of Demand
* Types of price elasticity of demand and graphical representation
* Factors affecting elasticity of demand

**DEFINITION OF ELASTICITY OF DEMAND**

Elasticity of demand may be defined as the degree of responsiveness of demand as changes in price, income, prices of other commodities etc.

**Types of Elasticity of Demand**

1. Price elasticity of demand

2. Income elasticity of demand

3. Cross elasticity of demand

**EVALUATION**

1. Define Elasticity.

2. State three types of Elasticity of demand.

**PRICE ELASTICITY OF DEMAND**

Price elasticity of demand is the degree of responsiveness of demand for a particular commodity to changes in its price. It is the rate at which the quantity demanded changes as its price changes.

To measure price elasticity of demand we use the formula:

% change in Quantity Demanded

% change in price

This formula can be broken down or simplified as:

Old Quantity – New Quantity X 100

Old quantity

E= Old Price – New Price X 100

Old Price

**Illustration**

When the price of a given product is reduced from N90 to N80, the quantity demanded increases from 50 to 60 units. Deduce the co-efficient of elasticity of demand.

**Solution**

Old price = N90, New price = N80

Change in price = 80 – 90 = -10

= 10 x 100

90 1 = 11.1%

Old quantity = 50, New quantity = 60

Change in quantity = 60 – 50 = 10

= 10 x 100

50 1 = 20%

PE = 20

11.1 = 1.8%

**TYPES OF PRICE ELASTICITY OF DEMAND**

The types of elasticity of demand and their graphical representation can be shown as follows:

1. **Perfectly Elastic (or Infinitely Elastic) Demand**.

Consumers react sharply to changes in price. They are willing to buy all the goods available at a particular price and none at all at a slightly higher price. The co-efficient of elasticity tends to infinity.

Price

D

Quantity

1. **Perfectly Inelastic (or Zero Elasticity) Demand**

When the quantity demanded remains the same regardless of the change in price. The demand is said to be perfectly inelastic. The co-efficient of elasticity is zero

Price

D

Quantity

3. **Unitary (or Unity) Elasticity of Demand**

This is the situation where a change in price or income brings about the same percentage change in the quantity demanded. The co-efficient of elasticity of demand is equal to 1

Price

D

Quantity

D

P1

P2

Q1 Q2

Quantity

4. **Fairly Elastic Demand**

In this case a small percentage change in price gives rise to more than proportionate change in the quantity demanded. For example where a 20% fall in price leads to 50% rise in demand, the co-efficient of elasticity is greater than 1 but less than infinity.

# Price D

P1

P2

D

Q1 Q2

Quantity

5. **Inelastic Demand (Fairly Inelastic Demand)**

When a change in price of a commodity leads to a less than proportionate change in the quantity demanded then demand is inelastic e g a 15% increase in price bringing about 10% decrease in quantity demanded.

The co-efficient of elasticity is less than 1 but greater than zero

Price D

P2

P1

D

Q1 Q2

Quantity

**FACTORS AFFECTING (OR DETERMINING) ELASTICITY OF DEMAND**

1. **Availability of Close Substitutes:** A commodity that has close substitutes is likely to have an elastic demand
2. **Degree of Necessity of the Goods:** If a commodity is a necessity or a near-necessity, increase or

decrease of its price are not likely to affect its demand

1. **Proportion of Consumer’s Income that Is Spent on that Commodity:** Generally the higher a persons income, the more inelastic his demand for commodities
2. **Habit:** If a consumer has become addicted to a commodity, his demand for the good will tend to be monastic. An increase in the price of the commodity may therefore not affect (reduce) his quantity demanded.
3. **The Level of Consumer’s Income:** The larger the income of the consumer the more inelastic is his demand for commodities. On the other hand, the demand of consumers with low income tends to be elastic.
4. **Cheap Commodities:** The cost of some commodities are relatively insignificant and as such consumers demand for them will be inelastic.

**EVALUATION**

1. Define price elasticity of demand.

2. The figure below was-extracted from the demand schedule of Kingsley Nanta, a consumer of bread.

Price in naira Quantity Demanded

Old New Old New

50 70 200 160

You are required to calculate:

i. Percentage change in quantity demanded

ii. Percentage change in price

iii. Co-efficient of price elasticity of demand

iv. From your answer in i-iii above state whether demand is elastic or inelastic.

v. Explain your answer in (c) above.

3. With the aid of sketch diagrams explain the following types of elasticity demand (a) Unity (b) Inelastic (c) Elastic (d) Zero (e) Infinitely.

**READING ASSIGNMENT**

1. Comprehensive Economics by J.U Anyaele page 124-127

2. Fundamentals of Economics by Anyanwuocha page 227-236

**GENERAL EVALUATION QUESTIONS**

1. What is abnormal demand?
2. High the importance of opportunity cost to the government.
3. Explain three differences between public corporation and public limited liability company.
4. Distinguish between peasant farming and commercial farming.
5. Why is scarcity a fundamental problem in Economics?

# **WEEKEND ASSIGNMENT**

1. If elasticity of supply is greater than 1 supply is (a) Unitary elastic (B) Inelastic (c) Elastic (d) Infinitely elastic
2. When the demand curve is a straight line parallel to x axis, demand is (a) fairly elastic (b) fairly inelastic(c) Perfectly elastic (d) Perfectly inelastic
3. If elasticity of demand for a commodity is less than 1, demand is (a) Unitary elastic (b) Inelastic (c) Infinitely elastic (d) Zero elastic
4. If the price of a commodity rises from N2 o N4 and its demand decrease from 125 to 100 then the co-efficient of elastic of demand is (a) 0.02 (b) 0.20 (c) 0.25 (d) 5
5. For a good having close substitutes the price elasticity of demand is likely to be (a) Zero (b) negative (c) more than (d) less than

**SECTION B**

1. Define elasticity of demand.
2. State three factors that determine the elasticity of demand for goods.

**WEEK SIX**

**ELASTICITY OF SUPPLY**

**CONTENT**

* + Meaning of Elasticity of Supply.
  + Formula for Calculating Elasticity of Supply.
  + Graphical Illustration of Elasticity of Supply.

**DEFINITION** - Elasticity of supply can be defined as the degree of responsiveness of change in quantity supplied as a result of change in price. Elasticity of supply measures the extent to which the quantity of a commodity supplied by a producer changes as a result of a little change in the price of the commodity.

**MEASUREMENT OF ELASTICITY OF SUPPLY** – Elasticity of supply can be measured or calculate by using the co-efficient of price elasticity of supply. The formula used in calculating the elasticity of supply is :

Elasticity of supply (ES) = % change in supply

% change in price = %∆QS

% ∆P where ∆ = Change

QS = Quantity supplied

P = Price

% = Percentage

The table below shows the relationship between prices of goods and the unit of commodity supplied.

**Price (N) Quantity Supplied**

9 850

10 1000

11 1,150

* 1. Calculate the elasticity of supply when price falls from N10.00 to N9.00 State whether the supply in (iii) above is elastic or inelastic (WASSCE 1994)

New Qty - Old Qty x 100

Old Qty 1

Old Quantity = 1000

New Quantity = 850

New – Old x 100

Old 1

850 - 1000 x 100

1000 1

150 x 100 = 15%

1000 1

Old Price = N10

New Price = N9

New Price – Old Price x 100

Old Price 1

9 – 10 x 100 = 1 x 100 = 10%

10 1 10 1

Elasticity of Supply = 15 = 1.5

10

**EVALUATION**

1. Define elasticity.
2. State the formula for calculating price elasticity

**TYPES OF ELASTICITY OF SUPPLY**

* 1. **Perfectly (Zero) Inelastic Supply**: Supply is said to be perfectly inelastic if a change in price has no effect whatsoever on the quantity of commodity supplied. In this case, elasticity is equal to zero, **E = 0**

Price s

10

5

O q1 Qty

**2. Fairly Inelastic Supply**: Supply is said to be inelastic, if a change in price leads to a smaller or slight change in the quantity of goods supplied. In this case, elasticity is less than one but greater than zero, E > 0 < 1 s

Price

10

5

O 10 12 Qty

**3. Unity or Unitary Elastic Supply**: Supply is said to be unitary when a change in price leads to an equal change in the quantity of goods supplied. In other words, a 5% change in price will equally lead to a 5% change in supply. In this case, elasticity of supply is equal to one, E = 1.

s

Price

10

5

O 10 15 Qty

**4. Fairly Elastic Supply**: Supply is said to be fairly elastic if a small change in price leads to a greater change in the quantity of commodity supply. In this case, elasticity is greater than one but less than infinity, E > 1 < o0.

Price s

10

5

O 25 30 Qty

**5. Perfectly ( Infinitely ) Elastic Supply**: Supply is said to be perfectly elastic when a change in price brings about an infinite effect on the quantity of goods supplied. In other words, a slight increase in price can make producer to increase the supply of the commodity, while a slight decrease in price will make producer to stop the supply of the commodity. In this case, elasticity is equal to infinity, E = o0.

Price

5 S

O 10 15 20 Qty

**FACTORS AFFECTING ELASTICITY OF SUPPLY**

1. **Cost of Production:** The low cost of production normally results in elastic supply, and while the high cost of production results in inelastic supply.
2. **Nature of Goods:** While durable goods are inelastic due to their nature, perishable goods are elastic in supply.
3. **Cost of Storage**: Producer will supply all their goods to the market if the cost of storage is very thereby making the supply to be elastic, and vice – versa.
4. **Time:** This relates mainly to agricultural produces which remain for a long time in the farm before they are harvested. Before their harvest, their supply is inelastic but after harvest, it becomes elastics.
5. **Market Discrimination:** Elasticity of supply of a commodity depends on where it is sold. When few commodities are sold at a particular location as a result of lower price, such commodity can be taken to another location where the price are higher. In this case, supply is elastic and vice – versa.
6. **Availability of Storage Facilities:** The availability of storage facilities leads to inelastic supply after harvest, while non – availability of storage facilities leads to elastic supply.

**EVALUATION**

1. Define price elasticity of supply
2. State the formula for calculating price elasticity

**READING ASSIGNMENT**

1. Amplified and Simplified Economics for SSS by Femi Longe Page 284 – 288
2. Comprehensive Economics by J.U. Anyaele page 130 – 134

**GENERAL EVALUATION QUESTIONS**

1. Explain any five reason why a joint stock company is preferable to a one – man business.
2. Why is the small scale traders important in West Africa?
3. Distinguish between: (a) want and demand, (b) economic resources and non – economic resources
4. What is unemployment?
5. Explain any three types of unemployment.

**WEEKEND ASSIGNMENT**

1. If the co-efficient of elasticity of supply is 0.3, then the supply is........... (a) fairly inelastic (b) perfectly elastic (c) fairly elastic (d) perfectly inelastic
2. Price elasticity of supply measures the responsiveness of quantity supplied to.... (a) changes in suppliers’ income (b) changes in prices of other commodities (c) a change in the price of the commodity (d) a change in the demand for the product
3. The price elasticity co-efficient indicates...... (a) how far business can reduce cost (b) the degree of competition (c) the extent to which supply curve shifts (d) consumer responsiveness to price changes
4. The equilibrium price of mangoes is #100. If the price falls to 50k, there will be........... (a) an excess supply (b) no seller in the market (c) a shortage in supply (d) a surplus in the market
5. When the price of a given commodity falls from #100 to #90, the quantity supplied reduces from 60 to 50 units. From this, we can conclude that the product’s......... (a) supply is elastic (b) supply is inelastic (c) supply is perfectly inelastic (d) supply is perfectly elastic

**SECTION B**

1. What is price elasticity of supply?
2. State the formula for the calculation of the coefficient of price elasticity of supply

**WEEK SEVEN**

**INCOME ELASTICITY OF DEMAND**

**CONTENT**

* Definition
* Types (Positive and Negative)
* Measurement of Income Elasticity of Demand

**DEFINITION:** Income elasticity of demand is the degree of responsiveness of quantity demanded of a commodity to a little change in consumer’s income. That is, it measures how changes in income of consumers will affect the quantity of commodities demanded by such consumers.

Mathematically, income elasticity of demand is expressed as:

% change in Quantity Demanded

% change in Income

When the percentage change in income brings about an equal change in the quantity demanded, then income elasticity is unit.

When the percentage change in income is greater than the percentage change in quantity demanded, income elasticity is less than unit, hence income is inelastic.

When the percentage change in quantity demanded is greater than the percentage change in income, then income elasticity is greater than unit, hence income elasticity is elastic.

**TYPES OF INCOME ELASTICITY OF DEMAND**

1. **Positive Income Elasticity of Demand:** is the type of income elasticity of demand in which an increase in income of consumer will equally lead to an increase in the quantity of commodity demanded. This is applicable majorly to normal goods.
2. **Negative Income Elasticity of Demand:** is the type in which an increase in income of consumers will lead to a decrease in the quantity of commodity demanded. This is applicable to inferior goods.

**EVALUATION**

* + 1. Define income elasticity of demand.
    2. State the formula for calculating income elasticity of demand.

**Illustration:** The table below shows the various income and demand for different commodities.

**Income Quantity Demanded**

# Kg

A. 20,000 120

B. 36,000 96

C. 40,000 160

D. 44,000 200

E. 45,000 240

F. 47,000 252

a) Calculate the income elasticity between (i) A and B (ii) C and D (iii) E and F

b) What kind of good relationship is between (i) A and B (ii) C and D

**SOLUTION**

Income Elasticity of Demand = % Change in Quantity Demanded

% Change in Income

(a) Income Elasticity of Demand

i Between A and B

= 120– 96 x 100

120 = 0.25

36000 – 20,000 x 1000

20,000

ii Between C and D

200 – 160 x 100

160 = 2.5

44000 – 40,000 x 100

40,000

iii Between E and F

252 – 240 x 100

240

= 1.125

47000 – 45000 x 100

45000

(b) i. Giffen goods or inferior good

ii. Normal goods

It should be re-emphasized that positive income elasticity of demand is for ‘normal’ or ‘superior’ or ‘luxury goods’, whereas Negative income elasticity of demand is for ‘abnormal’, or ‘inferior goods.

**EVALUATION**

1. What is income elasticity of demand?
2. Explain two types of income elasticity of demand

**READING ASSIGNMENT**

1. Comprehensive Economics Page 124 – 127

2. Fundamentals of Economics Page 227 – 236

**GENERAL EVALUATION QUESTIONS**

1. Explain five reasons why a joint stock company is preferable to a one-man business.
2. State the law of Diminishing returns.
3. Define Labour as a factor of production.
4. What are the factors affecting the size of a firm?
5. Distinguish between fixed and variable cost.

**WEEKEND ASSIGNMENT**

1. The responsiveness of demand to a change in income is the measurement of\_\_\_\_\_\_\_(a) arc elasticity of demand (b) cross elasticity of demand (c) income elasticity of demand (d) Price elasticity of demand

2. Given the income of A and B as\_\_\_\_\_\_\_\_

**Income Quantity demanded kg**

A 20,000 120

B 36,000 96

The income elasticity between A and B is \_\_\_\_\_\_\_\_

(a) 0.25 (b) 0.95 (c) 2.3 (d) 2.7

3. What kind of good is between A and B above?

(a) private good (b) public good (c) luxury (d) necessity

4. Given income C and D and quantity demanded as follows:

**Income Quantity Demanded**

40,000 160

44,000 200

Calculate the coefficient of income elasticity of demand

(a) 2.5 (b) 4.7 (c) 0.44 (d) 6.5

5. When an increase in consumer’s income leads to a decrease in quantity demanded of a commodity, income elasticity of demand is............? (a) indeterminable (b) positive (c) constant (d) negative

6. Income elasticity of demand is negative for............... (a) normal goods (b) competitive goods (c) inferior goods (d) complementary goods

**SECTION B**

1. Differentiate between normal goods and inferior goods

2. The table below shows the various incomers and demand for different commodities.

**Income Quantity Demanded (kg)**

A 10,000 60

B 18,000 48

C 20,000 80

D 22,000 100

E 22,500 120

F 23,500 126

(b) Calculate the income elasticity between (i) A and B (ii) C and D (iii) E and F

(b) What kind of good is between : (i) A and B (ii) C and D

**WEEK EIGHT**

**CROSS ELASTICITY OF DEMAND**

**CONTENT**

* Definition
* Types (Positive and Negative)
* Measurement of Income Elasticity of Demand

**DEFINITION**: Cross Elasticity of Demand is the degree of responsiveness of quantity demanded of commodity X to a little change in the price of commodity Y. Cross elasticity of demand is applicable mainly to goods that are close substitute as well as complementary goods. For example the demand for Milo will increase as a result of an increase in the price of Bournvita, all other things being equal.

Mathematically, cross elasticity of demand can be expressed as

% change in quantity demanded of commodity X

% change in price of commodity Y

**TYPES OF CROSS ELASTICITY OF DEMAND**

**Positive Cross Elasticity of Demand**: With substitute goods, the cross elasticity of demand is always positive, ( ie greater than zero), which means it is Elastic. This positive relationship is high with close substitutes and low with substitutes not very close.

**Negative Cross Elasticity of Demand:** With complementary (or jointly demanded goods), eg car and petrol, the cross elasticity of demand is always negative ( ie less than zero), which means it is Inelastic. Here, too, a high negative cross elasticity of demand indicates that the goods involves are highly complementary and, vice versa, i.e, a low negative cross elasticity of demand means that the goods concerned are not highly complementary.

**EVALUATION**

1. Briefly explain cross elasticity of demand
2. Differentiate between complementary goods and substitute goods in relation to cross elasticity of demand

**Illustration:**

The table below shows the response of quantity demanded to changes in price for two pairs of commodities. Use the table to answer the questions that follow:

Commodities Changes in Commodities Changes in Quantity

Price Demanded

Old# New# Old kg New kg

Bread 25 40 Yam 1000 3000

Liter of petrol 50 100 Car 400 250

Calculate the cross elasticity of demand for : (i) Bread and Yam, (ii) Petrol and Car.

**SOLUTION**:

i. Cross elasticity of demand for bread and yam

Let x = yam, y = bread

Old demand = 1000kg, New demand = 3000kg

Change in demand = 3000 – 1000 = 2000kg

2000 x 100

= 1000 1 = 200%

Old price = #25, New price = #40

Change in price = 40 – 25 = #15

15 x 100

25 1 =60%

CE = 200

60 = 3.3%

ii. Cross elasticity of demand for petrol and car

Let x = car, y = petrol

Old demand = 400, New demand = 250

Change in demand = 400 – 250 = 150cars

150 x 100

400 1 = 37.5%

Old price = #50, New price = #100

Change in price = 100 – 50 = #50

50 x 100

50 1 = 100%

CE = 37.5

100 = 0.4%

**EVALUATION**

**1.** How would you deduce complementary goods from a calculation of cross elasticity?

2. WAEC June 2000 Question No 2.

**READING ASSIGNMENT**

1. Comprehensive Economics Page 124 – 127

2. Fundamentals of Economics Page 227 – 236

**GENERAL EVALUATION QUESTIONS**

1. What are capital goods
2. Explain five reasons why a joint stock company is preferable to a one-man business.
3. State the law of Diminishing returns.
4. Define Labour as a factor of production.
5. What are the factors affecting the size of a firm?
6. Distinguish between fixed and variable cost

**WEEKEND ASSIGNMENT**

# When the coefficient of cross elasticity of demand is less than zero, it indicates.....? (a) complementary goods (b) composite goods (c) derived goods (d) competitive goods

1. The proportionate change in quantity demanded of commodity A in response to a change in price of commodity B is............... (a) arc elasticity of demand (b) price elasticity of demand (c) cross elasticity of demand (d) income elasticity of demand
2. The cross elasticity of demand for close substitute goods is always....... (a) inelastic (b) zero (c) elastic (d) indeterminable
3. The numerical value that shows the proportionate change in demand to a change in price of goods is known as ............. (a) coefficient of multiplier (c) coefficient of elasticity (c) coefficient of accelerator (d) coefficient of indexation
4. The measurement of cross elasticity of demand for complementary goods is.... (a) inelastic (b) zero (c) elastic (d) indeterminable

**SECTION B**

1. How is cross elasticity of demand measured?
2. Shoe the nature of cross elasticity of demand for : (i) substitute goods, (ii) complementary goods

**WEEK NINE**

**PRICE CONTROL/ LEGISLATION**

**CONTENT**

# Meaning

* Objectives
* Types (Minimum and Maximum)
* Effects of price control policy

**PRICE CONTROL POLICY:** is defined as a process by which the government or its agency fixes the price of essential commodities. That is, it is a situation where the government uses the instrument of law to fix the price of certain commodities. It can be in the form of maximum or minimum price control. In Nigeria, price regulation or control on essential commodities is being carried out by the Price Control Board.

**OBJECTIVES OF PRICE CONTROL POLICY**

1. To prevent exploitation of consumers by producers.
2. To avoid or control inflation.
3. To help low income earners, eg minimum wage earners.
4. To control the profits of companies especially monopolists.
5. To prevent fluctuation of prices of some goods, eg agricultural produces
6. To stabilize the income of some producers, eg farmers.
7. To make possible planning for future output.

**TYPES OF PRICE CONTROL POLICY**

1. **Minimum Price Control Policy**: is the lowest price by law, at which goods and services (labour and agricultural produces) can be bought. Buyers are allowed to offer a higher but not a lower price. The main purpose is to allow workers a certain level of income, especially during inflation and to protect agricultural producers against a fall in income due to bumper harvest.

A minimum price is usually above the equilibrium price and thus supply tends to be greater than demand, leading to excess supply and thus surplus, that ia increase in unemployment in the case of labour. It also leads to Black market in which people offer themselves for employment at a wage below the minimum price.

Wage Rate

D Excess Supply S

P2

P1

S D

O q2 q3 Qty of labour

1. **Maximum Price Control Policy**: is the highest price by law, at which goods and services can be sold. Sellers can sell at prices below it but not above it. The aim is to protect consumers, in general, and the poor community, in particular, especially during a period of rising prices.

A maximum price is usually below the equilibrium market price. Whereas this is agreeable to consumers, suppliers find it highly unsatisfactory. Therefore, demand for the commodity tends to be greater than the supply of it. This leads to excess demand and thus shortage of the commodity in the market. It also leads to Black market in which sales are made secretly, at higher prices to those who can afford it and, at the fixed price, to relatives and friends. Also, there will be rationing in which consumers are allowed specified quantities at regulated period of time.

Price D S

P1

P2

S D

Excess Demand

O q2 q3 Qty

**Effects of Price Control Policy**

a) Hoarding of goods

b) Stimulation of demand i.e. excess demand, which cannot be satisfied.

c) Shortages of goods in the market

d) Queues for the good concerned

e) Black market dealing/under –counter sales

f) Reduction in supply

g) Rationing of the good

h) Favouritism, bribery and corruption

.

**EVALUATION QUESTIONS**

1. Explain how government policy and taxation can affect price determination.

2. What is the effect of maximum price control on the equilibrium price of a commodity?

Explain with a diagram.

**READING ASSIGNMENT**

Amplified and Simplified Economics for SSS by Femi Longe Page 292-296

**GENERAL EVALUATION QUESTIONS**

1. Explain the term net migration.
2. Distinguish between a public company and public corporation.
3. What is trade by barter?
4. Identify the functions of money.
5. State the characteristics of money.

**WEEKEND ASSIGNMENT**

1. The gap between demand and supply curves below the equilibrium price indicates (a) excess demand (b) excess supply (c) equilibrium quantity (d) equilibrium price.
2. A minimum price control is usually set ................ the equilibrium price. (a) below (b) ahead (c) above (d) behind

3. Which of the following is not an advantage of price control (a) control of inflation (b) distortion of price mechanism (c) prevention of exploitation (d) control of producer’s profit especially monopoly.

4. When the price of a commodity is fixed by law either below or above the equilibrium the mechanism is known as (a) price discrimination (b) equilibrium price (c) free market (d) price control.

5. .................. is when consumers are allowed specified quantities of commodity at regulated period of time. (a) black market (b) hoarding (c) rationing (d) bargaining

**SECTION B**

1. Distinguish between minimum price control and maximum price control

2. List three objectives of price control.

**WEEK TEN**

**RATIONING AND HOARDING**

**CONTENT**

* Meaning of Rationing and Hoarding
* Effects of Rationing and Hoarding
* Black Market and its Effects

**DEFINITIONS:**

**RATIONING**: is a prevailing economic situation of scarcity of essential commodities in the market in which consumers are allowed to have access to these commodities at specified quantities and at regulated period of times. The scarcity of these essential commodities in the market may be man – made, and which is known as artificial scarcity, created majorly by some people to make super- normal profits from the sales of their goods.

**Effects of Rationing:**

1. It denies some people access to essential commodities
2. It involves struggle and uncertainty
3. Insufficient rationing affects people standard of living

**HOARDING:** is a situation in which a deliberate effort is made by a seller or a producer of a particular commodity who decides to create artificial scarcity of such commodity by keeping it locked up in his store and not releasing it to the market to circulate for sales. Hoarding of essential goods can be done deliberately to push the selling price of commodities up for the purpose of making abnormal profits or by refusing to sell at the regulated lower price fixed by law for essential commodities by the government.

**Effects of Hoarding:**

1. It leads to artificial scarcity.
2. It makes price to go high.
3. Non-availability of goods through artificial scarcity affects economic and material welfares of the people.

**BLACK MARKET:** is a market situation where trading transactions and allocation of resources are being carried on outside the conventional norm or principle of market forces of demand and supply or the price fixed by law for essential commodities by the government. This is a market pattern which does not abide by the simple principle of the market forces of demand and supply, and thus shrouded in secrecy, where exchange of goods and services cannot be done openly. Hence, the reason why it is called black market.

**Effects of Black Market:**

1. It leads to exploitation of consumers.
2. It leads to favouritism, corruption and bribery.
3. It adversely affects the growth and development of the economic.
4. It creates an avenue for abnormal profits for some producers.

**EVALUATION:**

1. How does black market affect the economic growth and development of a Country?
2. Explain hoarding in relation to people material welfares.

**READING ASSIGNMENT**

Amplified and Simplified Economics for SSS by Femi Longe Page 292 – 296

**GENERAL EVALUATION QUESTIONS**

1. Give five reasons why Government participates in business enterprises.
2. Define ageing population.
3. Explain the sources of Finance available to a public limited liability business.
4. Explain any three weapons that can be used by a trade union during trade dispute.
5. What is occupational mobility?

**WEEKEND ASSIGNMENT:**

1. One of the major effects of hoarding is................. (a) availability of goods (b) struggle and uncertainty (c) increase in price (d) enjoyment of consumers
2. When the price fixed by law is below the equilibrium price, then the policy is,,,,,,,,,,,, (a) minimum price control (b) normal price control (c) maximum price control (d) abnormal price control
3. A deliberate effort to create artificial scarcity of commodities is called....... (a) rationing (b) black market (c) hoarding (d) bargaining
4. When an exchange of goods and services does not abide by the conventional principle of market forces of demand and supply or price fixed by law, such an exchange is termed................ (a) rationing (b) black market (c) hoarding (d) auctioning
5. The practice of favouritism is a common effect in.............. (a) hoarding (b) auctioning (c) rationing (d) black market

**SECTION B**

1. What is black market?
2. State the difference between hoarding and rationing.