

A DIRECT APPROACH **ECONOMICS** YEAR 12



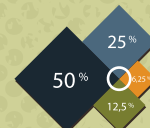
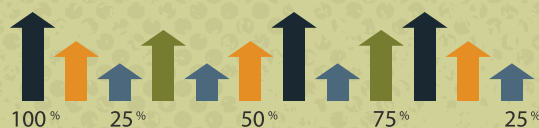
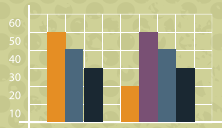
MINISTRY OF EDUCATION, HERITAGE AND ARTS
CURRICULUM DEVELOPMENT UNIT

Produced by the Ministry of Education, Suva, Fiji

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ECONOMICS

YEAR 12

**CURRICULUM DEVELOPMENT UNIT
MINISTRY OF EDUCATION
SUVA, FIJI 2015**



PREFACE

"Change is the law of life and those who look only to the past or present are certain to miss the future."

-John F. Kennedy

This textbook has been written to guide, support and reinforce the level of skills, understanding and knowledge captured at year 11 level. Since it is an extension of Year 11 economics, we have decided to entitle the book as "The Direct Approach - Year 12 Economics" textbook. This is an essential book which is imperative for students to follow as it is aligned to the new syllabi of year 12.

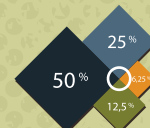
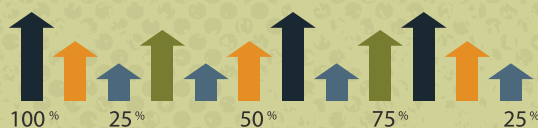
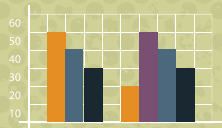
On that same note, the text will save more time and solve the problem of collating notes and activities from a variety of textbooks as is usually experienced by senior Economic teachers. Notice that we have tried to integrate a wider array of activities to allow advance exposure upon student learning. However, teachers must not regard the book as exhaustive, since changes are inevitable and there will always be a need to accommodate these changes as we embark into new horizons.

Furthermore, we have also incorporated the curriculum perspectives which will broaden the holistic overview of a child's learning. Namely, a few of them included: Careers Education, Citizenship Education, Cultural Economics and Financial Education.

The book uses simple explanatory verbs to guide students on the usage. It has a total of five strands whereby a general strand outcome is formulated for each strand. The strand outcomes are further refined into achievement indicators which are the concrete measurable performances students must meet as indicators of achievement.

The book is also recommendable as it has highly incorporated special pedagogical aids. This extraordinary feature will enhance the students' ability to use key concepts in new abstract situations. This includes recent resource interpretation activities which will produce critical and analytical thinking individuals.

It is hoped that this first edition of the Direct Approach for Year 12 Economic students will illuminate students' learning and teachers alike. We should develop responsible critical thinkers in this major transitional learning period to meet the changing needs of our society and at the same time developing a sound and knowledge-based society.



ACKNOWLEDGEMENTS

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Mr. Sipiriano Nemani	Principal Policy & Convention Officer – Department of Heritage & Arts
Mrs. Lusiana Fotofili	Director - Department of Heritage & Arts
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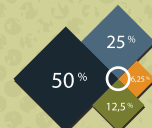
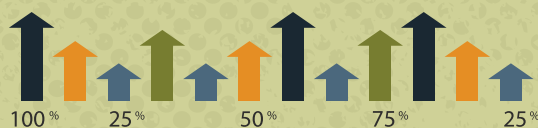
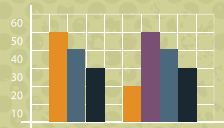


TABLE OF CONTENTS

Preface

Acknowledgements

STRAND 1 : INTRODUCTION TO ECONOMICS	5
Lesson 1.1 The Theory Of Production Possibility Curve.	6
Lesson 1.2 Concepts Illustrated By PPC.	7
Lesson 1.3 Marginal Rate Of Transformation.	9
Lesson 1.4 Shifts Of PPC.	11
 STRAND 2 : MICROECONOMICS	 21
Lesson 2.1 Cost of Production	22
Lesson 2.2 Productivity	25
Lesson 2.3 Law Of Diminishing Returns	27
Lesson 2.4 Economies And Diseconomies Of Scale	34
Lesson 2.5 Secondary Industry Or Manufacturing Industry	37
Lesson 2.6 Elasticity	40
Lesson 2.7 Industry Economics	51
Lesson 2.8 Imperfect Competition	63
 STRAND 3 : MACROECONOMICS	 85
Lesson 3.1 National Income	86
Lesson 3.2 Limitations Of GDP	89
Lesson 3.3 Role Of Government	95
Lesson 3.4 Money Supply	103
 STRAND 4 : INTERNATIONAL ECONOMICS	 111
Lesson 4.1 Gains From International Trade	112
Lesson 4.2 Trade Agreement For Fiji	115
Lesson 4.3 Importance Of Foreign Investments In Fiji	119
 STRAND 5 : DEVELOPMENT ECONOMICS	 120
Lesson 5.1 Economic Development	120
Lesson 5.2 The Cultural Industries In Fiji	125



SUBJECT OUTCOME

Recognize, analyze and explain how people satisfy their needs and wants by managing and making optimum use of the available resources in enterprising ways with a commitment to ecological sustainability.

STRAND 1 INTRODUCTION TO ECONOMICS

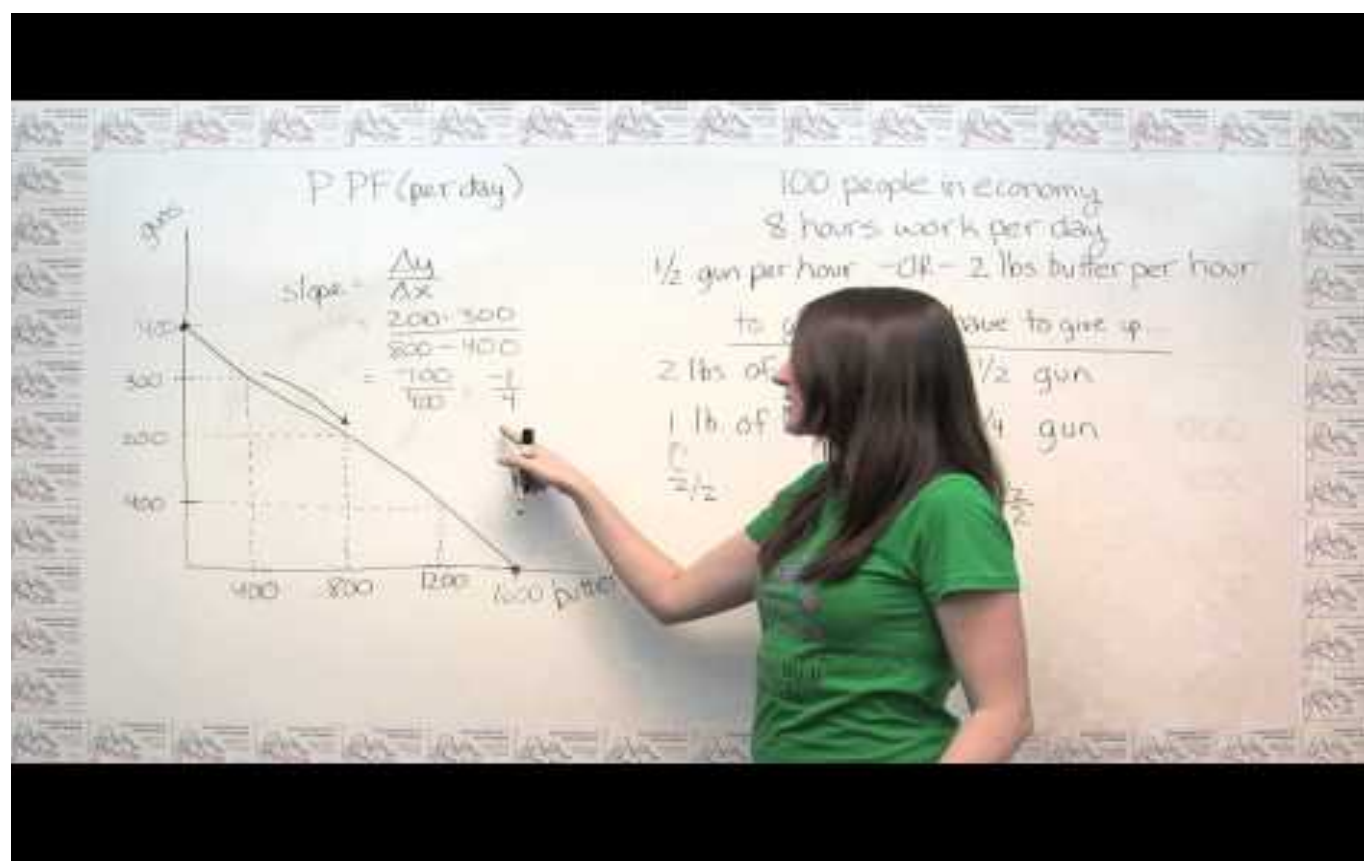
Strand Outcome

Explore the relationship between scarcity, choice and opportunity cost.

Achievement indicators

Upon completion of this strand students will be able to achieve the following outcomes:

- Define and draw production possibility curve.
- Identify and explain five assumptions of PPC.
- Calculate opportunity cost and marginal rate of transformation (MRT)
- Identify and explain the economic concepts illustrated by PPC.
- Explain the shape of PPC
- Explain the points and shifts of PPC.





LESSON 1.0 INTRODUCTION TO ECONOMICS

The study of economics has developed as a result of scarcity. Scarcity is the fundamental economic problem faced by all economies in the world. The term scarcity means that there are not enough resources available to satisfy everyone's needs and wants. Thus people need to make choices to maximize their welfare.

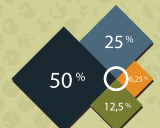
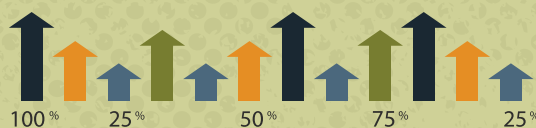
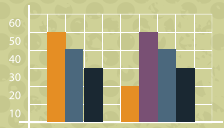
LESSON 1.1 THE THEORY OF PRODUCTION POSSIBILITY CURVE

The Production Possibility Curve (PPC) shows the maximum possible combination of two goods that can be produced with given level of resources and technology in a given period of time. PPC is an economic model which gives a simplified picture of reality. It is a device based on certain assumptions which we use to demonstrate and predict the consequences of a particular aspect of economic behavior.

PPC is based on five assumptions:

1. All resources are fully employed.
2. All the resources are fixed in supply.
3. All resources can be transferred from production of one good to the other.(under straight line PPC all resources are equally transferable).
4. Only two goods are produced.
5. The level of technology is fixed.



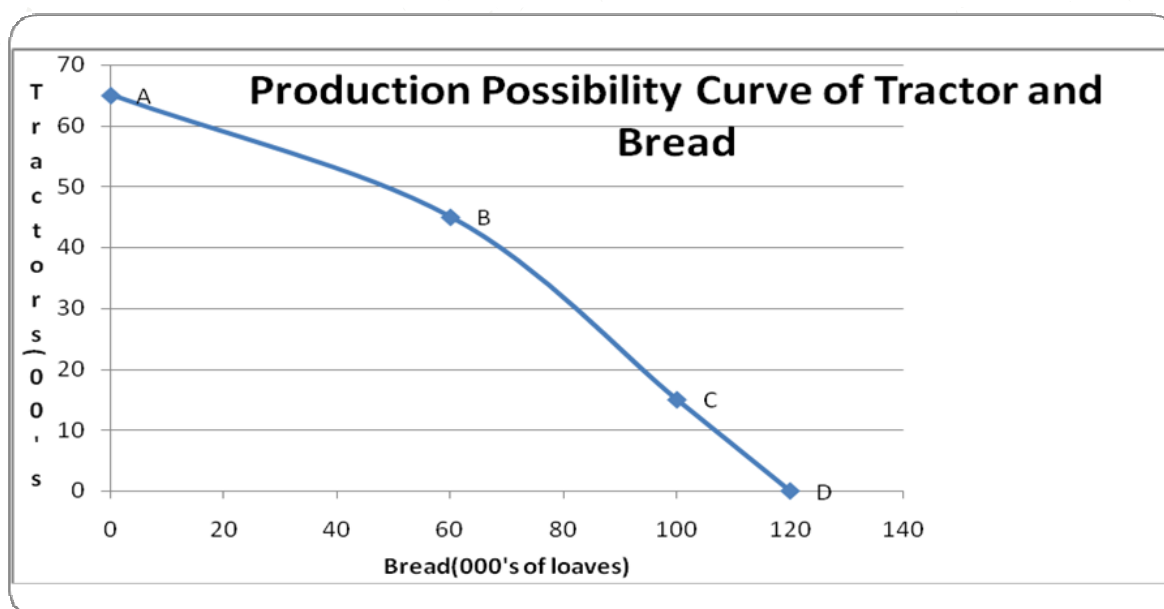


Construction of PPC

The above assumptions are used to construct the PPC Schedule. The table below indicates the maximum combination of two goods which society might choose to produce at any given time.

Production Possibility Schedule For Bread and Tractors

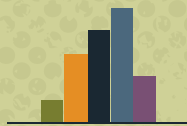
Alternatives	Bread (000's of loaves)	Tractors (00's)
A	0	65
B	60	45
C	100	15
D	120	0



LESSON 1.2 CONCEPTS ILLUSTRATED BY PPC

The Production Possibility Model illustrates a number of economic concepts of which are: scarcity, choice, opportunity cost, law of diminishing returns and efficient resource allocation.

1. **Scarcity** – PPC illustrates the idea of scarcity in the sense that either we can produce one commodity or the other or a combination of both but nothing more than the amount of resources available.(beyond the production possibility boundary)
2. **Choice** – given the alternatives we have to make a choice of what combination we can produce.
3. **Opportunity cost refers to trade-off** – in order to obtain more of one good, the economy has to forgo certain units of the other good because we cannot have more of the both goods.



4. **Law Of Diminishing Returns** – PPC also illustrates the law of diminishing i.e. at the top of the PPC where resources are allocated to produce capital goods, we say that the curve represents maximum output of capital goods at point A. And as resources are diverted away from point A, Output falls quite slowly reflecting the law of diminishing returns.
5. **Efficiency** – points of PPC illustrates concept of efficiency i.e. production efficiency and allocative efficiency.

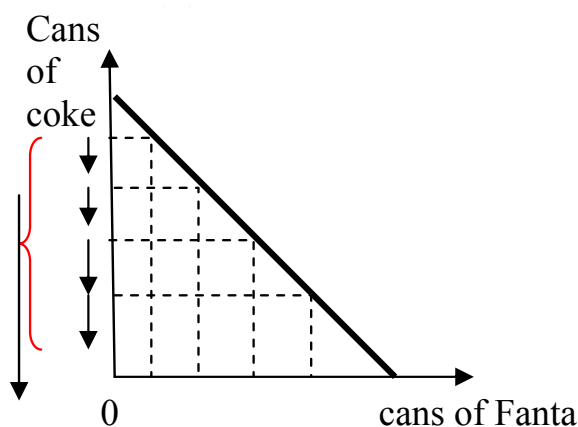
Production efficiency means producing maximum with the given level of resources. Production efficiency is achieved when economy is operating on its production possibility frontier

Allocative efficiency is achieved when the economy is producing the unique combination of goods that best meets the needs of that society at given point in time. It refers to the combination of goods that would maximize economic welfare.

Shapes of PPC

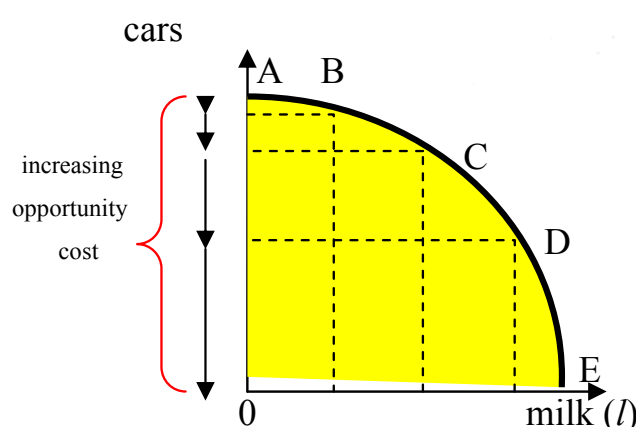
A PPC can be drawn as a straight line, or concave to the origin.

Straight line PPC



Constant opportunity cost

Concaved PPC

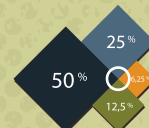
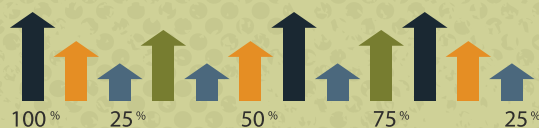
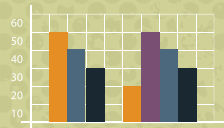


The shape of PPC is concave to the Origin bowed outwards, illustrating the law of increasing opportunity cost.

The law of increasing opportunity cost states that as production of one good increases, the opportunity cost of producing additional units is increasing.

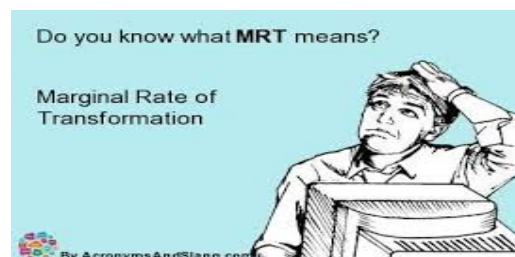
The shape of PPC is straight line due to the law of constant cost.

The law of constant opportunity cost states that as production of one good increases the opportunity cost of producing additional units remains constant.

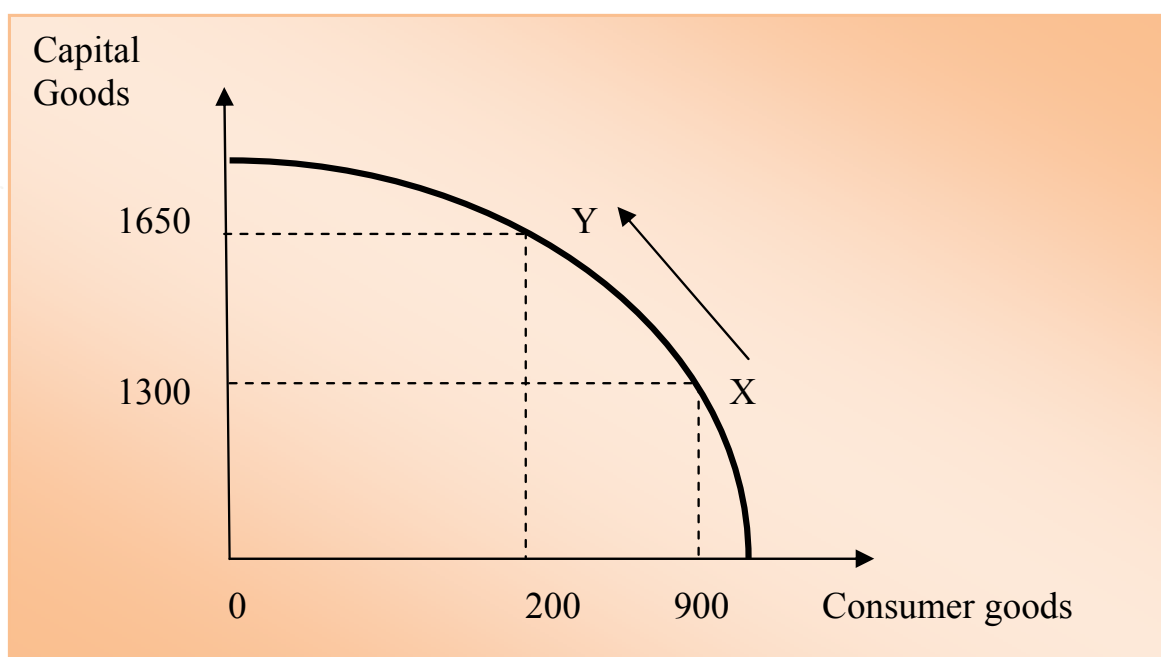


LESSON 1.3 MARGINAL RATE OF TRANSFORMATION

Marginal rate of transformation (MRT) measures the extent of the sacrifice of moving from one point on PPC to another.



For example as illustrated in the graph below at point Y 200 million units of consumer goods and 1650 million units of capital goods are possible and at point X 1300 million of capital goods with 900 million units of consumer goods is possible



If the economy moves from point X to point Y, it will gain 350 units of capital good i.e. 350 units and 700 units of consumer goods would be sacrificed/forgone. The economy is operating on its production possibility Frontier and cannot have had more of capital goods without diverting resources away from consumer goods.

The marginal Rate of Transformation is therefore calculated as follows:

$$\begin{aligned} \text{MRT} &= \text{Gain: forgone} \\ &= 350:700 \\ &= 1:2 \end{aligned}$$

The economy has to forgo 2 units of consumer goods for each additional unit of capital good.



NOTE: Calculation for Opportunity Cost and MRT

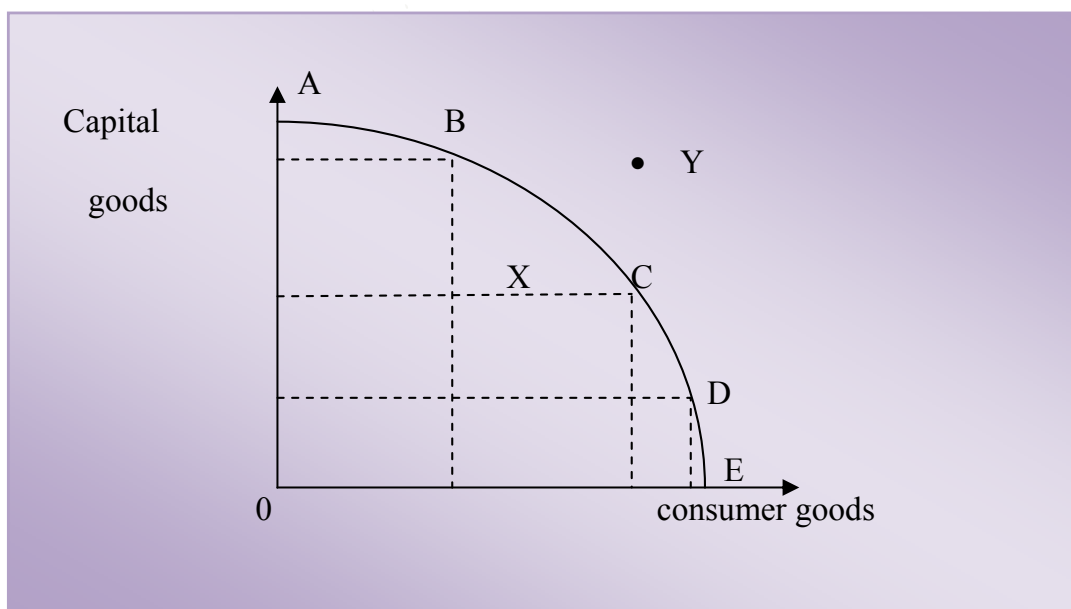
1. What is the opportunity cost of producing each additional unit of consumer goods when the economy moves from point to point y.

ANS: OC = F /G
 = 700
 350
 = 2 units of consumer goods for additional unit of capital goods.

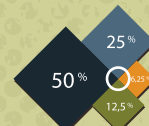
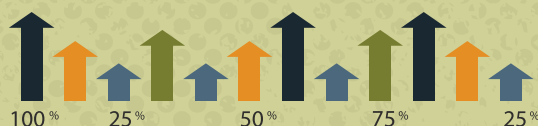
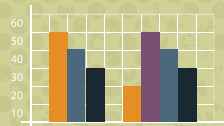
2. What is the opportunity cost of producing consumer good if the economy moves from point x to point y.

ANS = 700 units of consumers goods.

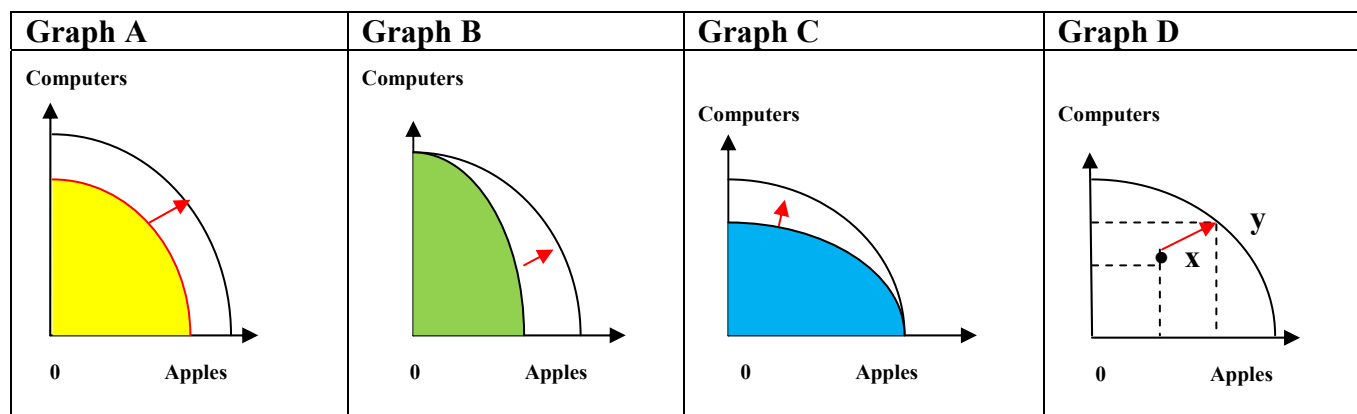
Points of PPC



1. Points A, B, C, D and E illustrates full employment of resources or full utilization of resources.
2. Point X-Points inside PPC refers to inefficient allocation of resources or unemployment of resources, under utilization of resources or some resources are lying idle
3. Point Y-Points outside PPC is unattainable point with the given level of resources and technology. It could only be achieved through external trade or through economic growth.



LESSON 1.4 SHIFTS OF PPC



Graph A shows increase in production of both goods due to improvement in the quantity and quality of resources and technology.

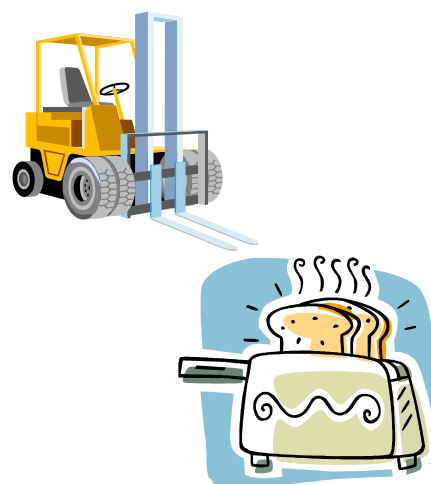
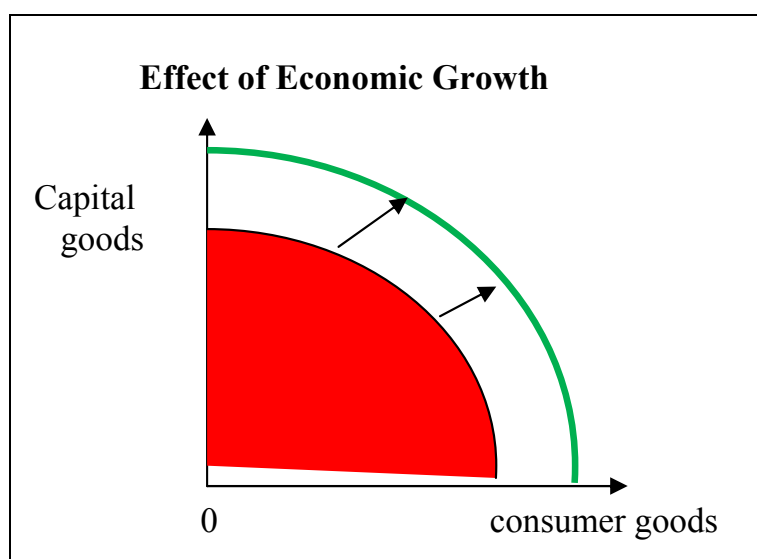
Graph B shows increase in production of apples only due to improvement in the resources and technology used to produce apples.

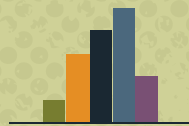
Graph C shows increase in production of computer only due to introduction of modern technology to produce computers.

Graph D shows movement from point inside PPC to point on the PPC. This illustrates increase in efficiency of resource use. This movement can be achieved without incurring any opportunity cost.

Economic growth and PPC

Economic growth means increase in productive capacity of a nation. Economic growth leads to an expansion in the production possibility.





ACTIVITY 1.1

Multiple Choice Questions

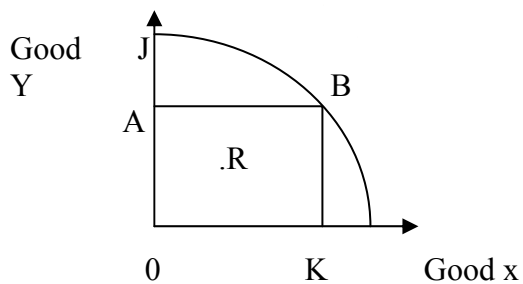
Question 1 is based on the following production possibility schedule

Combination	A	B	C	D	E	F
Food (tonnes)m	0	2	4	6	8	10
Machines (000)	24	22	18	13	7	0

1. The opportunity cost of the first 2 million tonnes of food is

- A. 1000 machines
- B. 2000 machines
- C. 6000 machines
- D. 2100 machines

Use the graph given below to answer questions 2 and 3

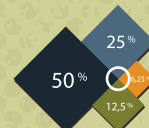
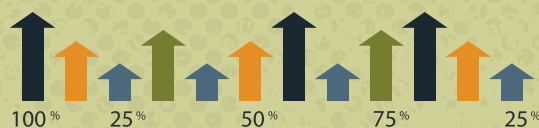
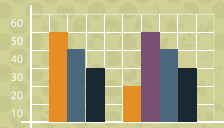


2. If the economy produces OK of good X then it sacrifices

- A. OJ of good Y
- B. OA of good Y
- C. AJ of good Y
- D. KB of good x

3. The movement from point R. to point B would mean

- A. Underutilization of resources
- B. Unattainable point with the given level of resources and technology.
- C. Increase in production of resources without incurring any cost
- D. Increase in economic growth



Questions 4 and 5 are based on the following production possibility schedule

Possibility	A	B	C	D	E	F	G
Televisions(000s)	21	20	18	15	11	6	0
Cars (000s)	0	1	2	3	4	5	6

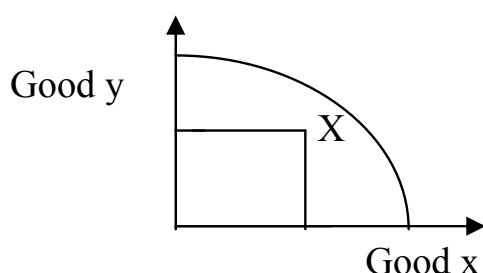
4. As production of cars increases ,the opportunity cost of producing them

- A. Remains constant
- B. Increases
- C. Decreases
- D. Falls

5. A combination of 14000 television and 2000 cars

- A. Would mean some resources have not been fully utilized
- B. Is impossible given the resources and technology available
- C. Would mean too many resources are being used to produce televisions
- D. Means resources are fully utilized

The graph given below shows production level in economy Z



6. Which economic concept illustrated by PPC is violated in the above economy?

- A. Scarcity
- B. Opportunity cost
- C. Economic Choice
- D. Economic efficiency

7. "Any combination of goods outside PPC is unattainable with the given level of resources and technology" this statement clearly illustrates the concept of;

- A. Efficiency
- B. Opportunity cost
- C. Choice
- D. Scarcity



8. The production possibility curve is concave to the origin because of the law of

- A. constant cost
- B. increasing costs
- C. decreasing costs
- D. demand and supply

9. The term the best describes the production possibility frontier is

- A. Indifference curve
- B. Transformation curve
- C. Law of variable proportion
- D. Lorenz curve

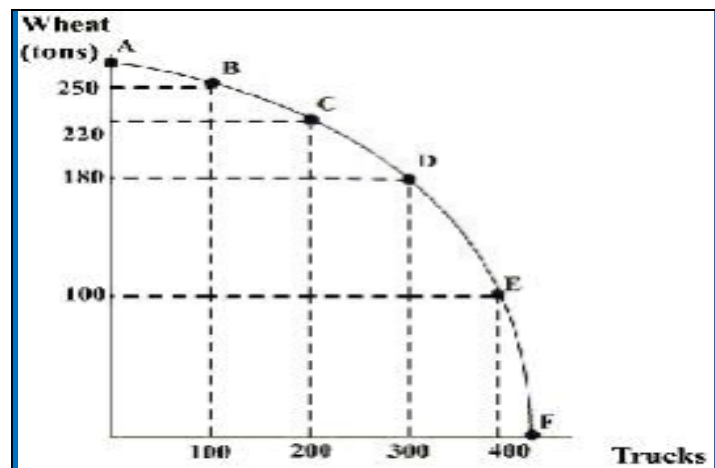
10. Marginal rate of transformation is

- A. the opportunity cost
- B. the slope of transformation curve
- C. measures efficiency
- D. rate of return

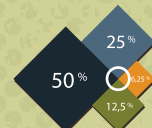
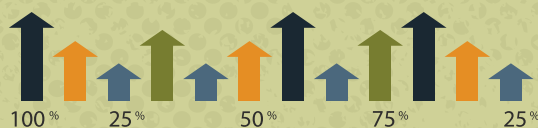
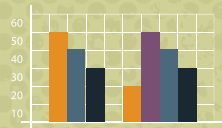


ACTIVITY 1.2

Use the information in the graph below and your knowledge to answer the questions

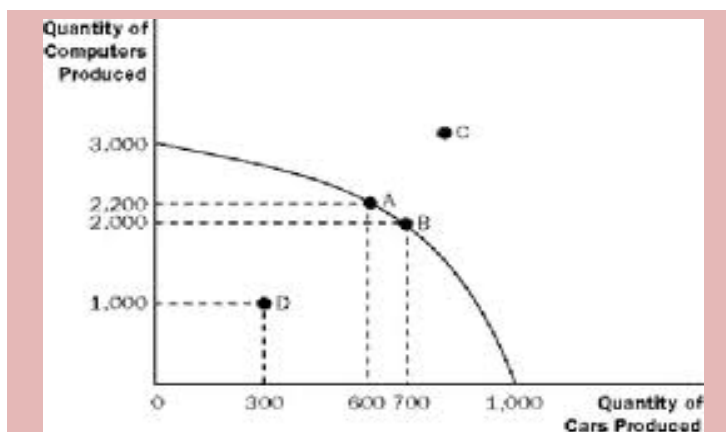


- i. What is the real cost of producing an additional ton of wheat if the economy moved from point C to point B
- ii. Define the term production efficiency and allocative efficiency in relation to PPC and identify the productive efficient and allocative efficient points from the graph.
- iii. State one way this economy can increase wheat production? Use graph to illustrate
- iv. Explain how the economic concept of scarcity and law of diminishing returns are illustrated by PPC



ACTIVITY 1.3

Use the information in the production possibility curve given below to answer the questions that follow

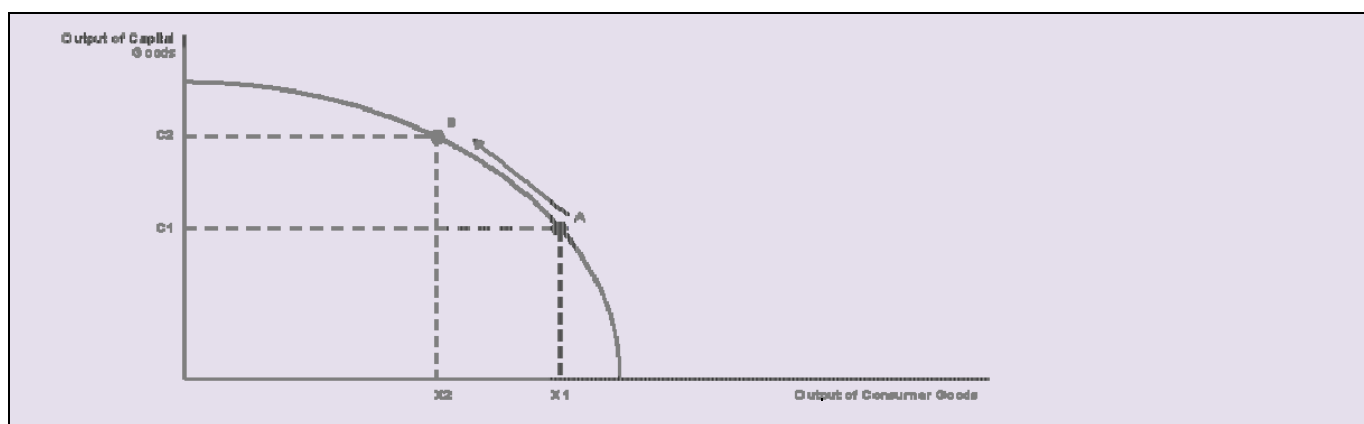


- Calculate MRT if the economy moves from point A to point B
- Explain why point C is unattainable.
- Is it advisable for the economy above to produce at point D? Explain
- Explain how the concept of opportunity cost is illustrated by PPC

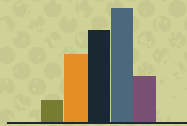


ACTIVITY 1.4

Use the information given below and your knowledge to answer the questions that follow.

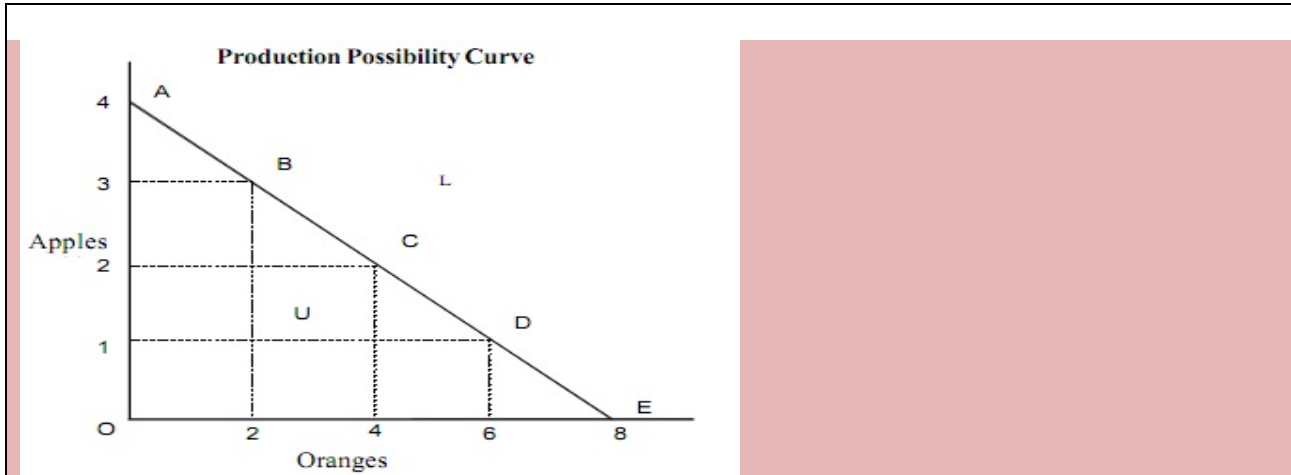


- Identify the economic concept illustrated by the PPC above
- Discuss the effect of the movement from point A to point B on the economy in terms of economic growth and standard of living.



ACTIVITY 1.5

Use the production possibility given below and your knowledge to answer the question to follow.



- If the PPC is a straight line, it illustrates the principle of constant cost. Explain
- State one assumption based on straight line PPC.
- What does the term trade-off mean in relation to PPC

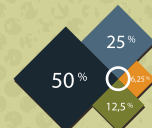
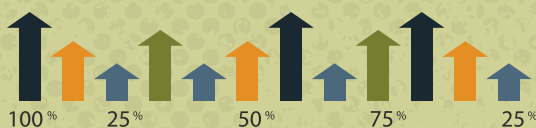
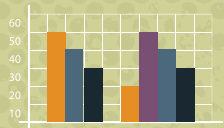


ACTIVITY 1.6

Use the information given below and your knowledge to answer the questions that follow

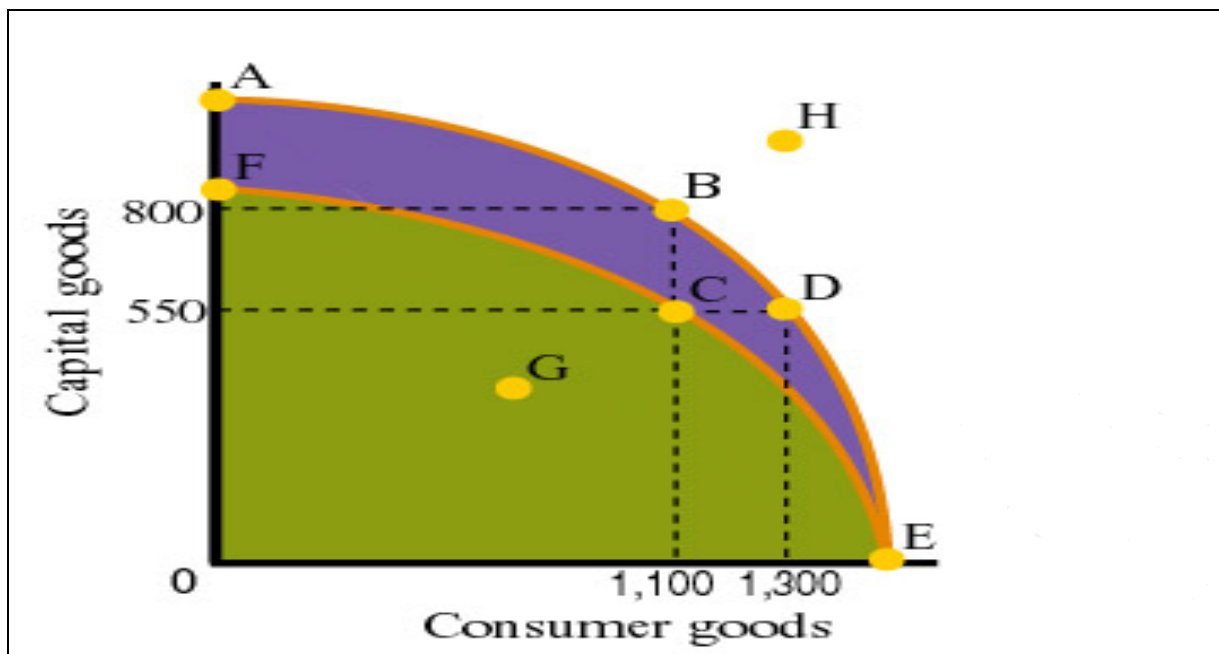
Possibility	A	B	C	D	E
Computers(m)	12	10	7	2	0
Food (tones)	0	1	2	3	4

- Draw and fully label the production possibility frontier for food and computers
- Production possibility curve illustrates the concept of opportunity cost. Explain.
- What do the points on the production possibility indicate?
- The economy is currently producing at point C ,what would be the opportunity cost of producing each additional unit of food if the economy moved from point C to point D
- With a food production of 2 tones, what would be the largest quantity of computers the producer could produce?
- Explain how a point outside PPC can be achieved?



ACTIVITY 1.7

Use the figure above to answer the following questions

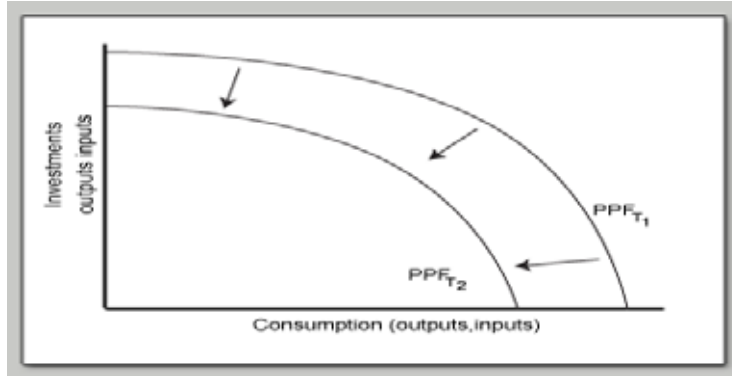


- At what point will the economy be producing if it devotes all of its resources to production of consumer goods ?
- What is the maximum unit of consumer goods the economy can produce with 550 units of capital goods
- The shift in the graph shows increase in production of capital goods. Explain the effect of this on current and future standard of living of people in the economy.
- What does Point G and point H in the figure represents?
- Explain the law of increasing cost?
- List two assumptions of production possibility curve



ACTIVITY 1.8

Use the diagram given below and your knowledge to answer the question that follows

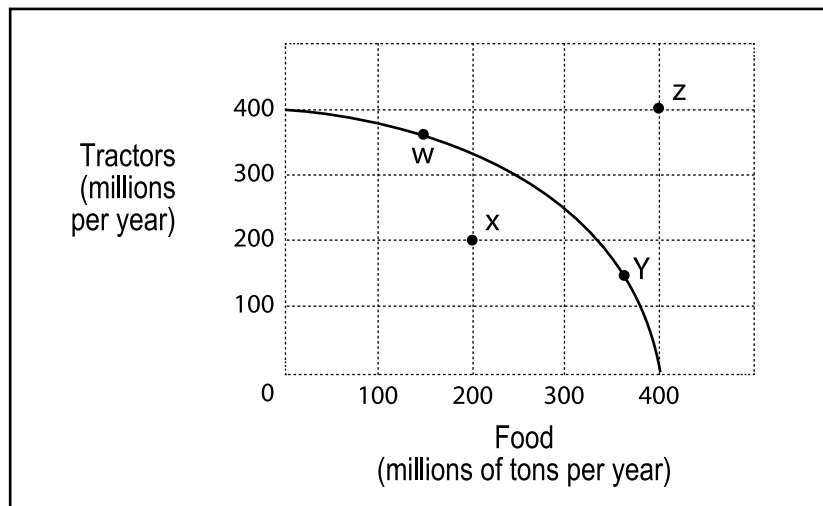


- Explain the shift in the PPF from PPF_{T1} to PPF_{T2} and state the cause of the shift.
- Explain why the PPC is concave to the origin?
- Differentiate between opportunity cost and scarcity.

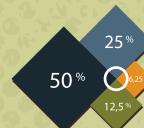
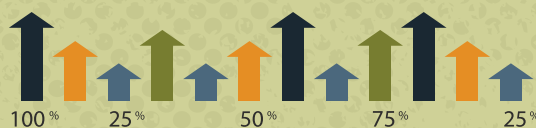
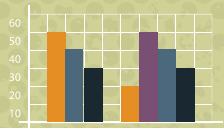


ACTIVITY 1.9

Use the information in the production possibility curve given below to answer the questions that follow

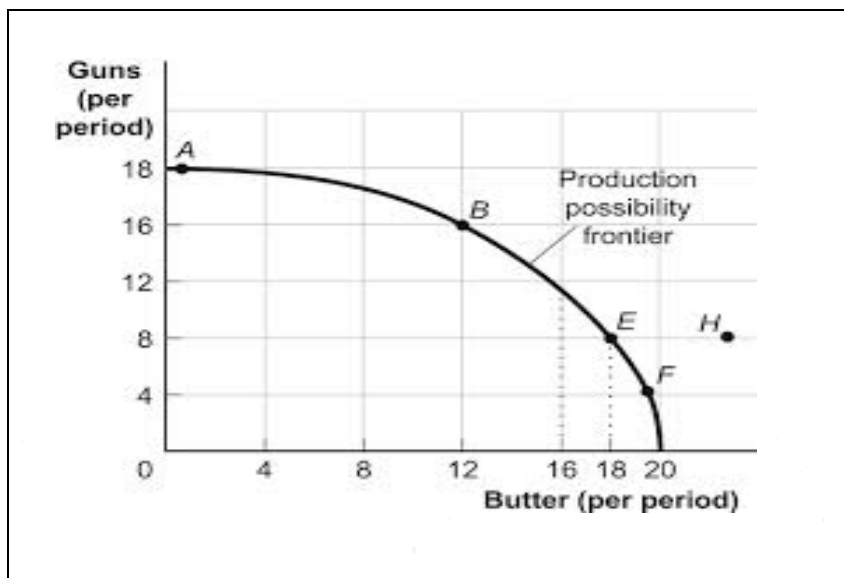


- What is the opportunity cost of producing each additional Tractor if the economy moves from Y to W?
- Suppose the economy is producing at point X. Comment on the Economies production.
- State one way in which combination Z can be achieved.
- If PPC is a straight line, it illustrates the principle of constant cost. Explain.

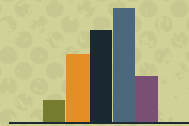


ACTIVITY 1.10

Use the diagram given below and your knowledge to answer the question that follows

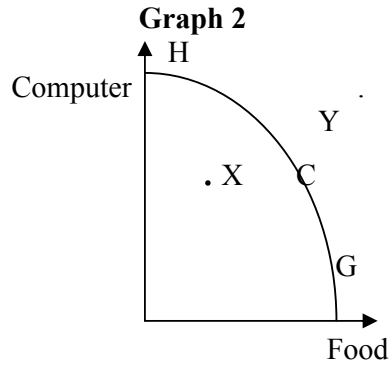
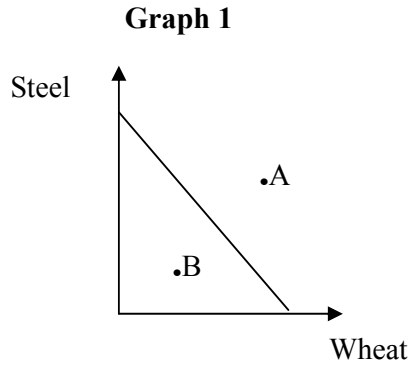


- The economy above would not prefer to produce at point A .Explain.
- Explain the concept of choice and allocative efficiency in relation to PPC.
- Using graph explain the effect of technological progress in the economy.
- Calculate the opportunity of if the economy moved from point E to point B on the graph.
- Calculate MRT if the economy increased its butter production from 0 units to 12 units.



ACTIVITY 1.11

Match up each situation in the table with the appropriate letter or graph.



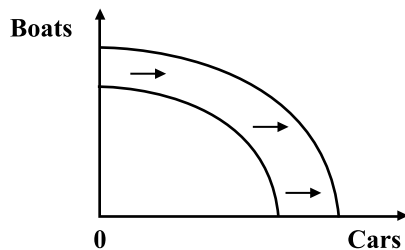
Situation	Letter or graph number
1. some resources are unemployed	
2. a level of output beyond capacity	
3. Resources Are Equally suited To Produce Both Goods	
4. Resources are more suited to production of one good than the other.	
5. production efficient point	
6. point indicates that the economy can increase the standard of living without incurring an opportunity cost	



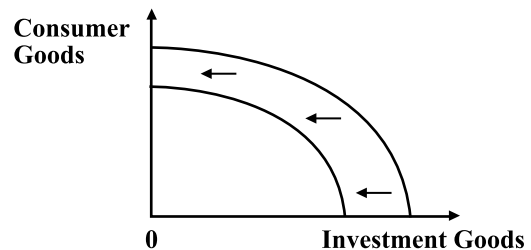
ACTIVITY 1.12

Study the four production possibilities curves below and answer the questions that follow.

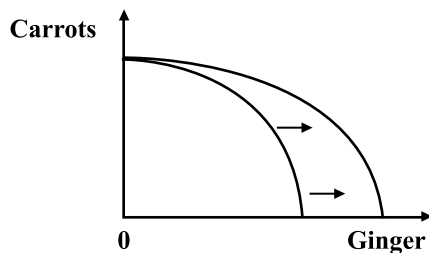
Production Possibilities Curve A



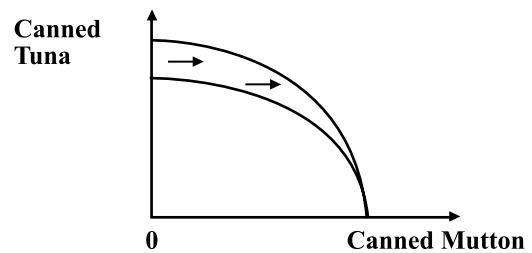
Production Possibilities Curve B



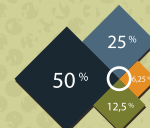
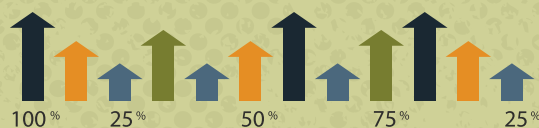
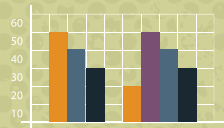
Production Possibilities Curve c



Production Possibilities Curve D



Explain what each of the four production possibilities curves show



STRAND 2 MICROECONOMICS

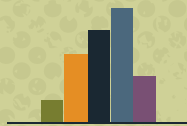
Strand Outcome

Investigate production processes used by manufacturing industries, the responsiveness of demand to changes in the market price and the performance of different market structures.

Achievement indicators

Upon completion of this strand students will be able to achieve the following outcomes:

- Calculate and illustrate graphically the Production Costs.
- Define Productivity and ways of improving productivity to increase output.
- Calculate productivity
- Define law of diminishing returns and illustrate graphically.
- Define and illustrate economies and diseconomies of scale and illustrate graphically
- Identify the nature and production of manufacturing sector
- Discuss the importance of manufacturing sector to Fiji's economy
- Identify the domestic and import resource based industries.
- List the importance of diversification in manufacturing.
- Identify the problems associated with manufacturing sector production in Fiji
- Interpret and analyze statistical data related to manufacturing sector.
- Investigate government strategies and policy implemented to curb the problems in manufacturing sector.
- Define elasticity
- Define and identify the formulas measurement of price, income and cross elasticity of demand
- Interpret PED in relation to various goods
- Explain the responsiveness of elasticity using graphs
- Identify and define the different markets structures
- Identify domestic examples of firms in these market situations
- Identify features of different market structures
- Explain using graphs the short run and long run situations
- Describe the performance of all market structures

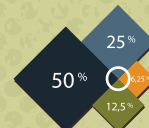
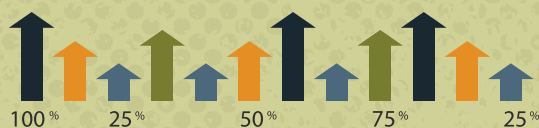
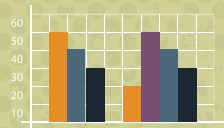


LESSON 2. 1.

COSTS OF PRODUCTION



COSTS	DEFINITION	FORMULA	shape
Total Cost (TC)	Is the sum of fixed and variable cost	$TC = FC + VC$	
Variable Cost (VC/TVC)	Costs that varies with the level of output	$VC = 0$, when output $= 0$	
Fixed Cost (FC /TFC)	Cost that remains fixed or constant irrespective of the changes in the output.	$FC = TC$, when output $= 0$	
Average Total Cost (AC/ATC)	Is the per unit cost. It is 'U' shape curve	$ATC = TC / \text{output}$	
Average Variable Cost (AVC)	Generally 'U' shape. AVC initially falls and later starts to rise due to law diminishing returns	$AVC = TVC / \text{output}$	
Average Fixed Cost (AFC)	Declines as output increases	$AFC = TFC / \text{output}$	
Marginal Cost (MC)	MC is additions to total cost. MC is 'J' shape or a '√' shape curve.	$\frac{TC_2 - TC_1}{Q_2 - Q_1}$	



ACTIVITY 2.1.1

Complete Table 2 below by filling in the SIX missing numbers.

Table 2: Costs and Revenue for a Firm

Units of Output	Total Cost	Average Cost	Marginal Cost	Total Revenue	Marginal Revenue
2	170		25	160	70
3	190	63.33			50
4		55	30	240	
5	270	54	50		10

(2 marks)



ACTIVITY 2.1.2

Complete the table.

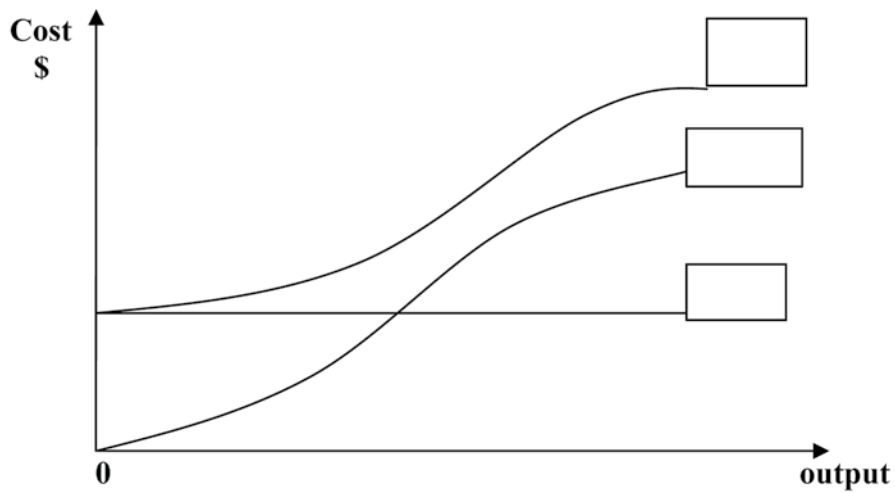
Quantity	FC	VC	TC	AC	AFC	AVC
1			720	720		
2			1000			300
3		830	1230	410	133.33	276.67
4		1000	1400			
5		1100	1500			
6			1900	316.67	66.67	
7	400			400	57.14	342.86

(11marks)

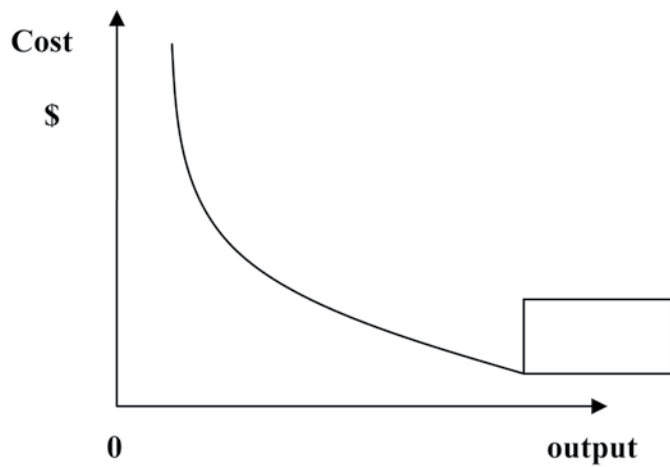


ACTIVITY 2.1.3

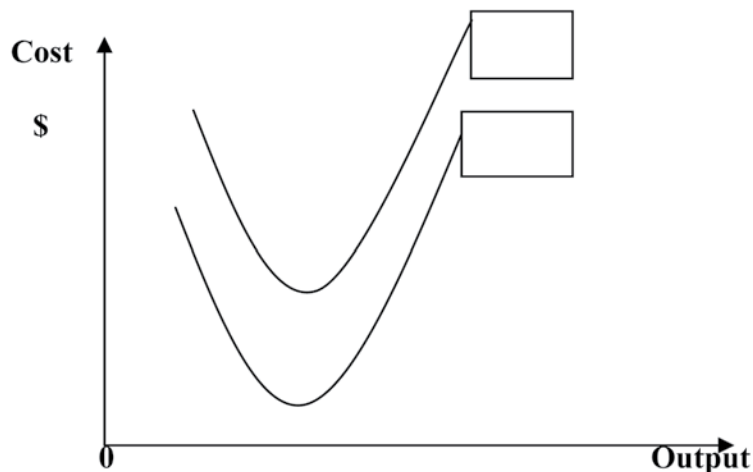
Label the Curves given below

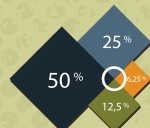
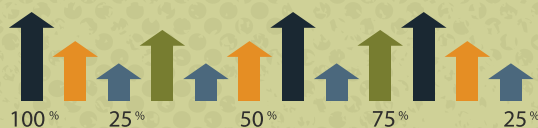
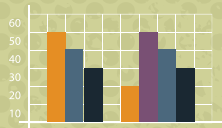


Label the Curves given below.



Label the Curves given below.





LESSON 2.2

PRODUCTIVITY



What is **Productivity**?



Productivity is expressed or measured as a mathematical division of the following parameters (functions).

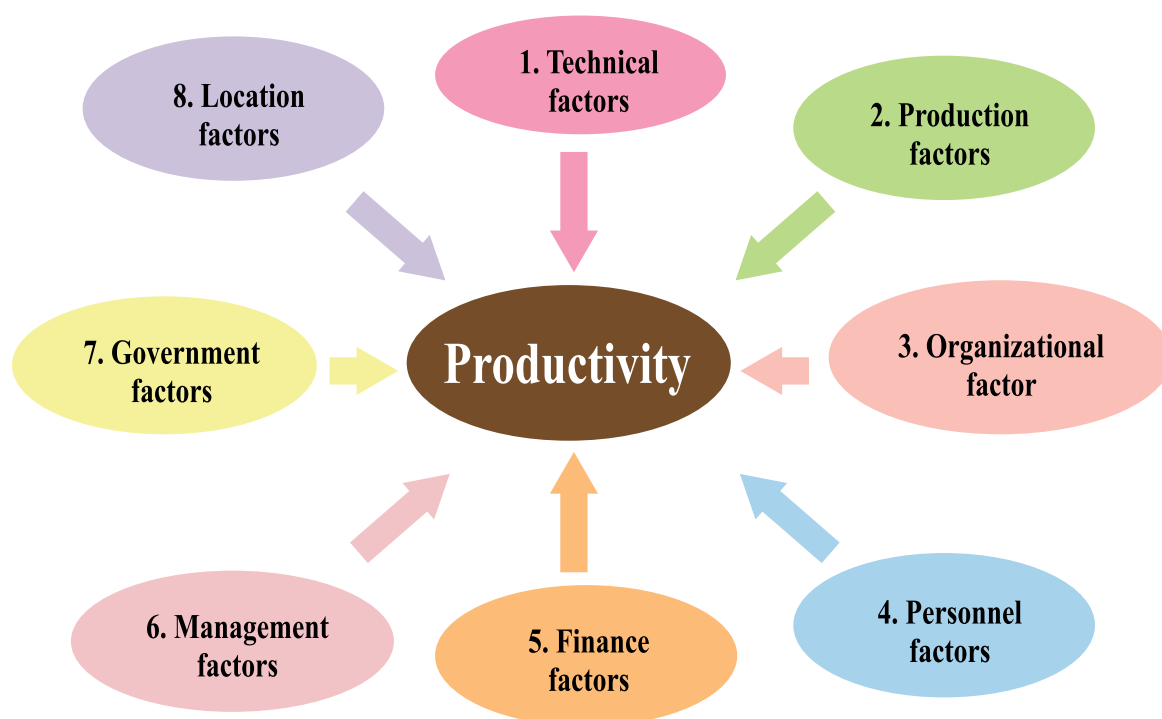
$$\text{Output} / \text{Input} = \text{Productivity}$$

The term productivity generally refers to the relationship between the volume of goods and services produced overtime and the volume of resources used in their production.

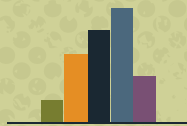
Productivity is output per unit of input. Labour productivity is total output per workers.

$$\text{Productivity} = \frac{\text{total output}}{\text{No. of units of input}}$$

Productivity will increase if the output of goods and services rises more than proportionately increases in any input of resources.



Factors that affect or influence Productivity.



Ways of Improving Productivity.

There are a number of ways a firm can employ to improve productivity.

- i. Increase in specialization i.e when each firm tends to confine its activity to the production of a particular good or service.
- ii. Interdependence means mutual reliance is when each sector specializes in a certain good or service and exchange or depend on each other to satisfy their wants.
- iii. Division of labour increases productivity since it allows people to do work for which they are best suited and take full advantage of their existing skills talents and abilities.
- iv. Automation is an extension of mechanism where human control is replaced by mechanical control e.g. computerization of production process.
- v. Productivity is also improved through economies of scale and mass production. An economies of scale is sometimes called increasing returns to scale or economies of mass production. The scale of a firm's operation increase as firm becomes bigger, reducing per unit cost of production.



ACTIVITY 2.2.1

- i. What is meant by the term productivity?
- ii. Distinguish between increase in production and increase in productivity.
- iii. Identity ways of improving productivity in a garment industry.

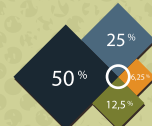
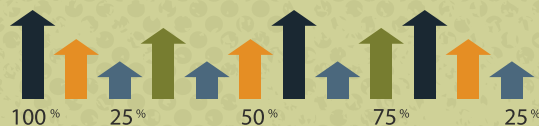
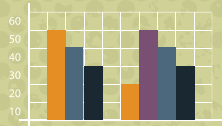


ACTIVITY 2.2.2



Melee decides to start her business growing vegetables for sale at the local market. Melee is specializing in the production of vegetables only

- i. Explain how specialization affects productivity of workers and total output. (2 marks)
- ii. Explain how specialization creates interdependence. (2 marks)



LESSON 2.3 LAW OF DIMINISHING RETURNS

The law of diminishing returns states that as increasing quantities of a variable factor input are added to a fixed factor input, the additions to total output eventually begins to fall.

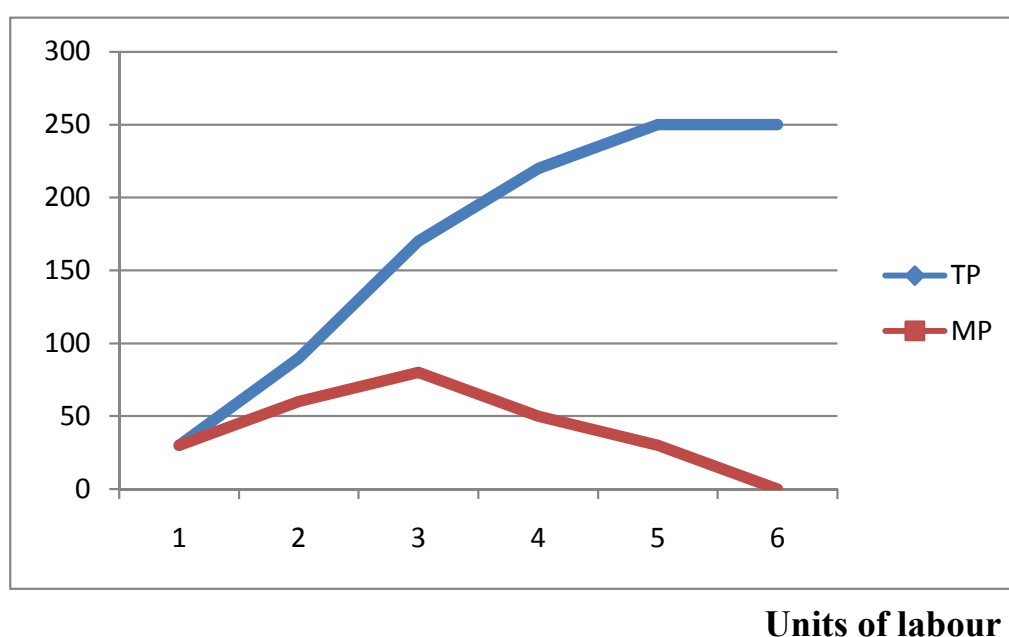
Marginal product is additions to total production or output. The law of diminishing returns is also called Law of Variable Proportions. The law of diminishing returns will only happen in short run because at least one factor is fixed.



Illustrative example

Units of labour	Labour (Hectares)	Total output	Marginal output
0	2	0	0
1	2	30	30
2	2	90	60
3	2	170	80
4	2	220	50
5	2	250	30
6	2	250	0

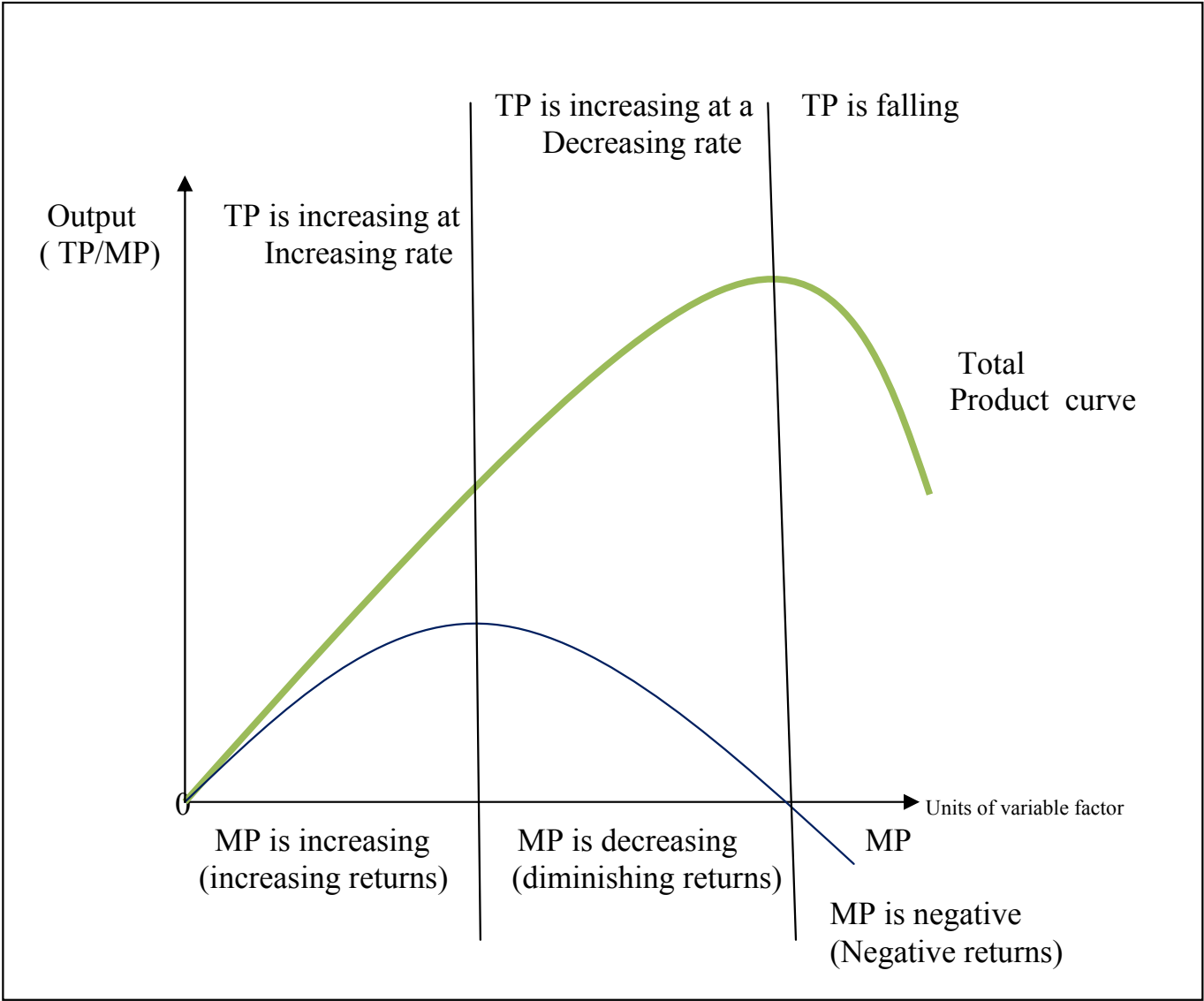
Graph Showing Total Product and Marginal Product

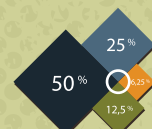
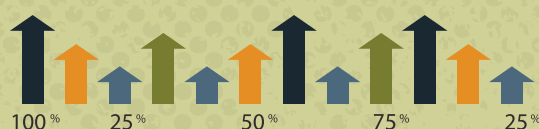
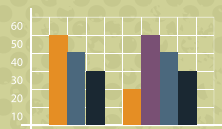




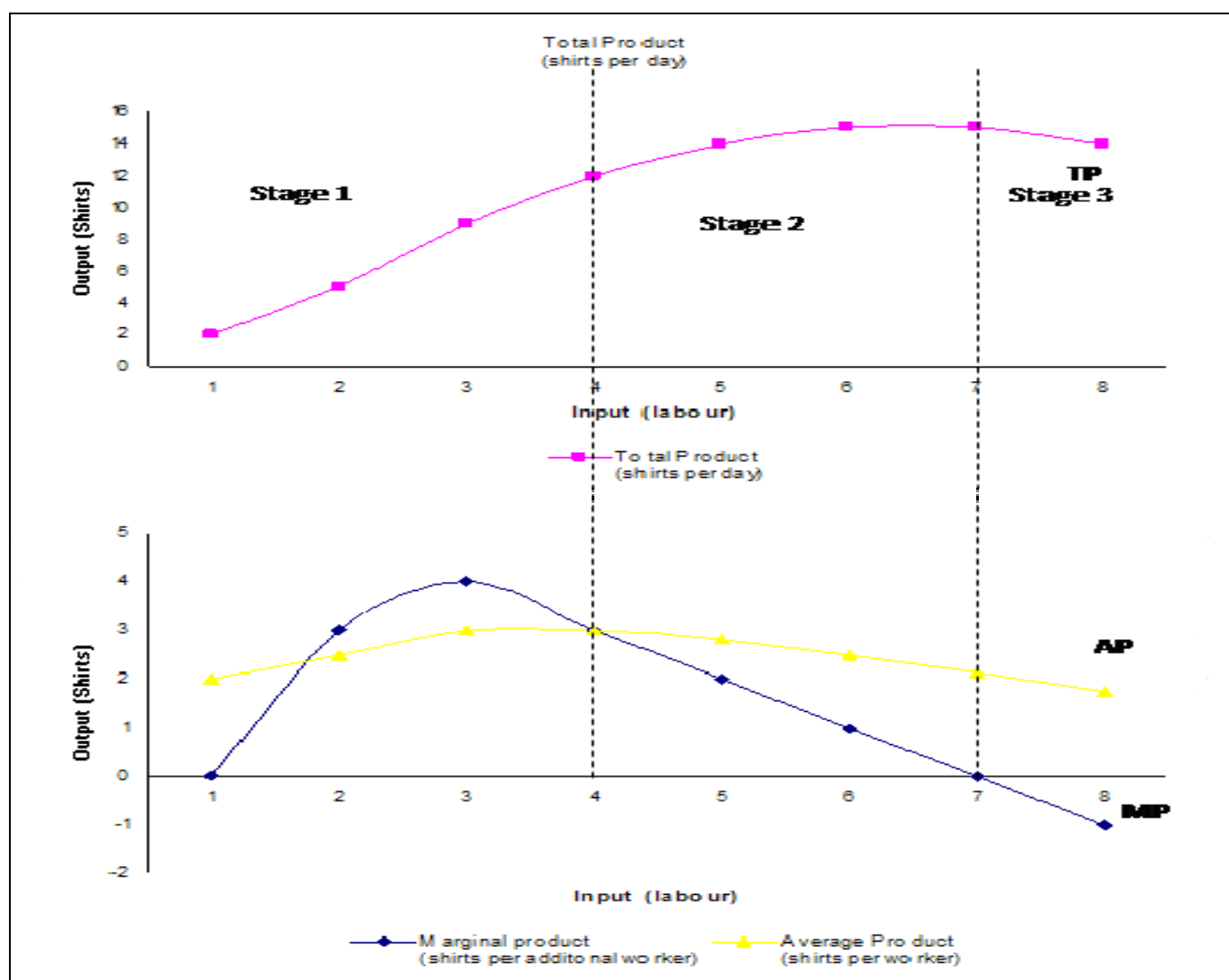
Relationship Between Total Product and Marginal Product

Total product	Marginal product	Terminology
Increasing at an increasing rate	Positive and rising	Increasing returns
Increasing at an decreasing rate	Positive and falling	Diminishing returns
Constant at maximum	Zero	Constant returns
Falling	Negative	Negative returns



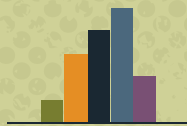


Graph Showing Relationship between Total Product and Marginal Product



Note: Stage 1 indicates increasing marginal returns
 Stage 2 indicates diminishing marginal returns
 Stage 3 indicates negative marginal returns

Fixed factor Machine	Variable factor labour	Total product in units	Average product in units	Marginal product in units	Stages
1	2	3	4	5	
1+	1	10	10	10	Increasing Returns
1+	2	22	11	12	
1+	3	36	12	14	
1+	4	52	13	16	
1+	5	66	13.2	14	
1+	6	76	12.6	10	Decreasing Returns
1+	7	80	11.4	4	
1+	8	82	10.2	2	
1+	9	82	9.1	0	Negative Returns
1+	10	78	7.8	-4	



ACTIVITY 2.3.1

1. Division of labour is seen when workers undertake

- A. Unskilled tasks.
- B. Dual operations.
- C. Specialized tasks.
- D. Trade union activities.

Question 2 and 3 are based on the following production data for a firm which uses only two inputs, land and labour.

Land units	Labour Units	Total Product units
1	1	60
1	2	130
1	3	210
1	4	280
1	5	340
1	6	340
1	7	320
1	8	310

2. The law of diminishing returns begins to operate with the employment of

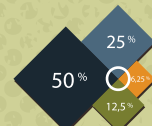
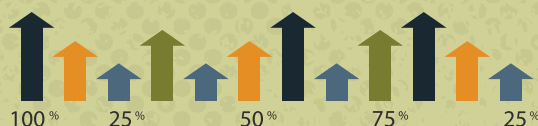
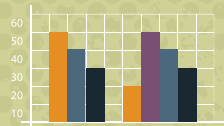
- A. the first unit of labour
- B. the fourth unit of labour
- C. the sixth unit of labour
- D. the seventh unit of labour

3. On the data shown, the firm will employ a maximum of

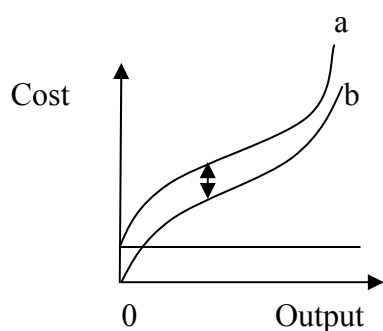
- A. Three units of labour
- B. Four units of labour
- C. Five unit of labour
- D. Six unit of labour

4. The law of diminishing marginal returns states that

- A. The marginal utility falls as each successive units are consumed
- B. The additions to total product eventually decline as more variable factor is added
- C. The marginal cost increases as output decreases
- D. The average cost falls as output increases



Use the graph given below to answer the question 15

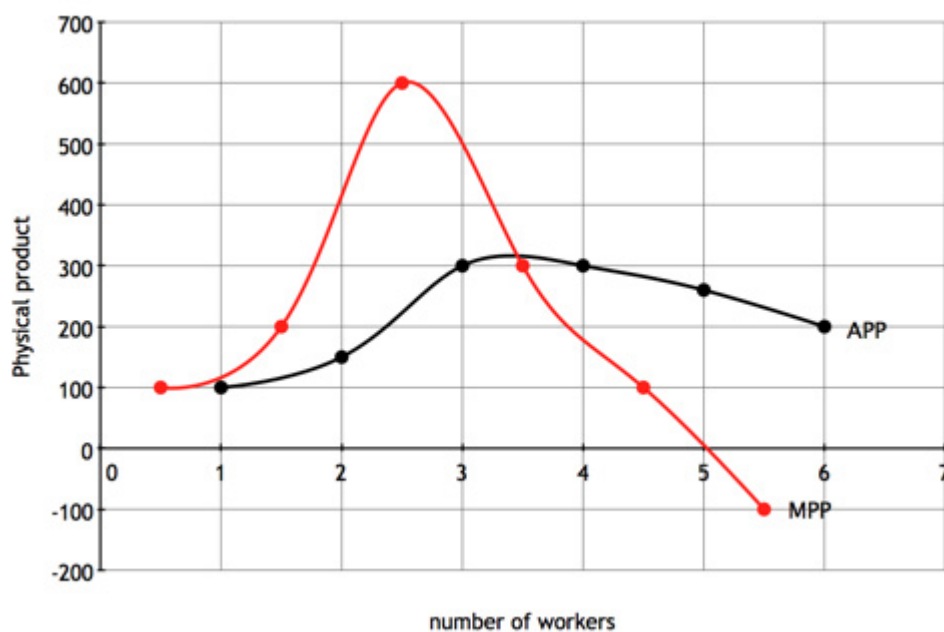


5. The vertical distance between curve a and curve b illustrates firms

- A. Variable cost
- B. Fixed cost
- C. Total cost
- D. average cost



ACTIVITY 2.3.2



- i. Label increasing ,decreasing and constant returns on the graph (3marks)
- ii. After employment of _____ no. of workers the law of diminishing returns is set in.
- iii. Explain why firms experience diminishing returns in short run.

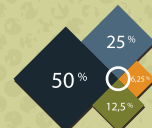
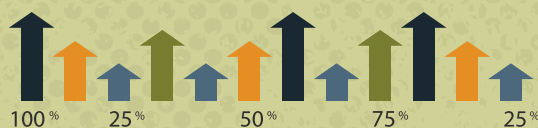
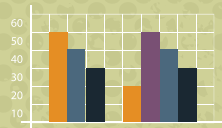


ACTIVITY 2.3.2

- a) Use the information given below and answer the questions that follow
- What is meant by the law of diminishing returns?
 - The following table shows production data for tomatoes grown on a 1000 hectares farm
- b) Complete the table given below and answer the questions that follow.

Labour input	Total product	Marginal product
0	0	0
1	500	500
2	2400	1900
3	5100	-----
4	8000	-----
5	-----	3000
6	12000	-----
7	-----	800
8	13300	-----
9	13300	-----
10	13000	-----

- Which factor is fixed? Which is variable?
- What is the marginal product of 3rd worker?
- What is total product of 7th worker?
- Complete the Statement: 'the law of diminishing returns sets in with the employment of the _____ worker.'



ACTIVITY 2.3.2

2. Use the table to answer the questions that follow.

TABLE 2 Productivity of Workers at the Tennis Racket Producing Firm Note: Tennis racket factory workers are paid \$10 per hour.			
Total Output (number of tennis rackets)	Total hours worked	Hours required to increase output by one unit	Marginal cost of producing extra units
1	10		\$100
2	15	5	
3	40		\$250
4	70	30	
5	110		

- Complete the table by calculating and filling in the six missing numbers. (3 marks)
- At which output level do diminishing returns begin? (1 mark)
- Explain why diminishing returns cause the marginal cost of tennis racket production to increase. (2 marks)

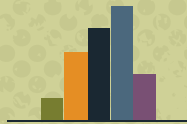


ACTIVITY 2.3.3

Use the information given below and answer the questions that follow

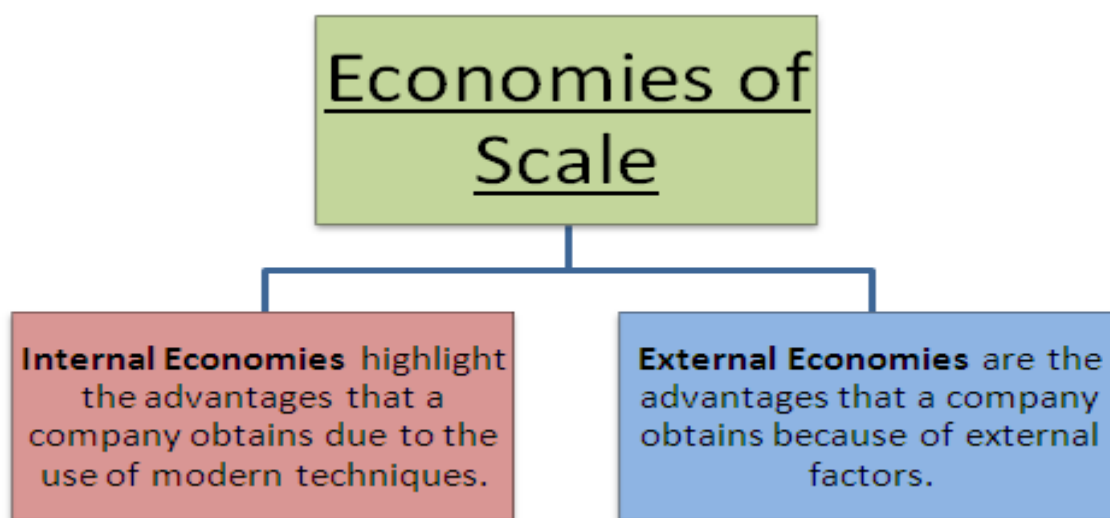
Workers	Output	Marginal Product
0	0	
1	20	
2	50	
3	90	
4	120	
5	140	
6	150	
7	155	

- Calculate marginal products for each level of output. (2marks)
- Draw total product and marginal product curves (2marks)
- State one relationship between TP and MP (1mark)



2.4 ECONOMIES AND DISECONOMIES OF SCALE

Economies of scale refer to reduction in per unit cost as output increases.



Internal economies of scale refer to reduction in per unit cost as the firm increases its plant size. The factors that lead to economies of scale are:

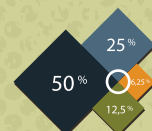
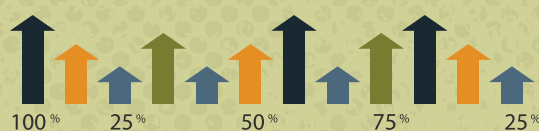
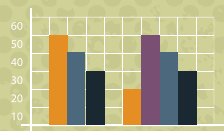
- i. Increased specialization of labour
- ii. Bulk buying
- iii. Increased use of capital
- iv. Better access to finance

External economies of scale refer to reduction in per unit cost which is the result of forces outside the control of the firm.

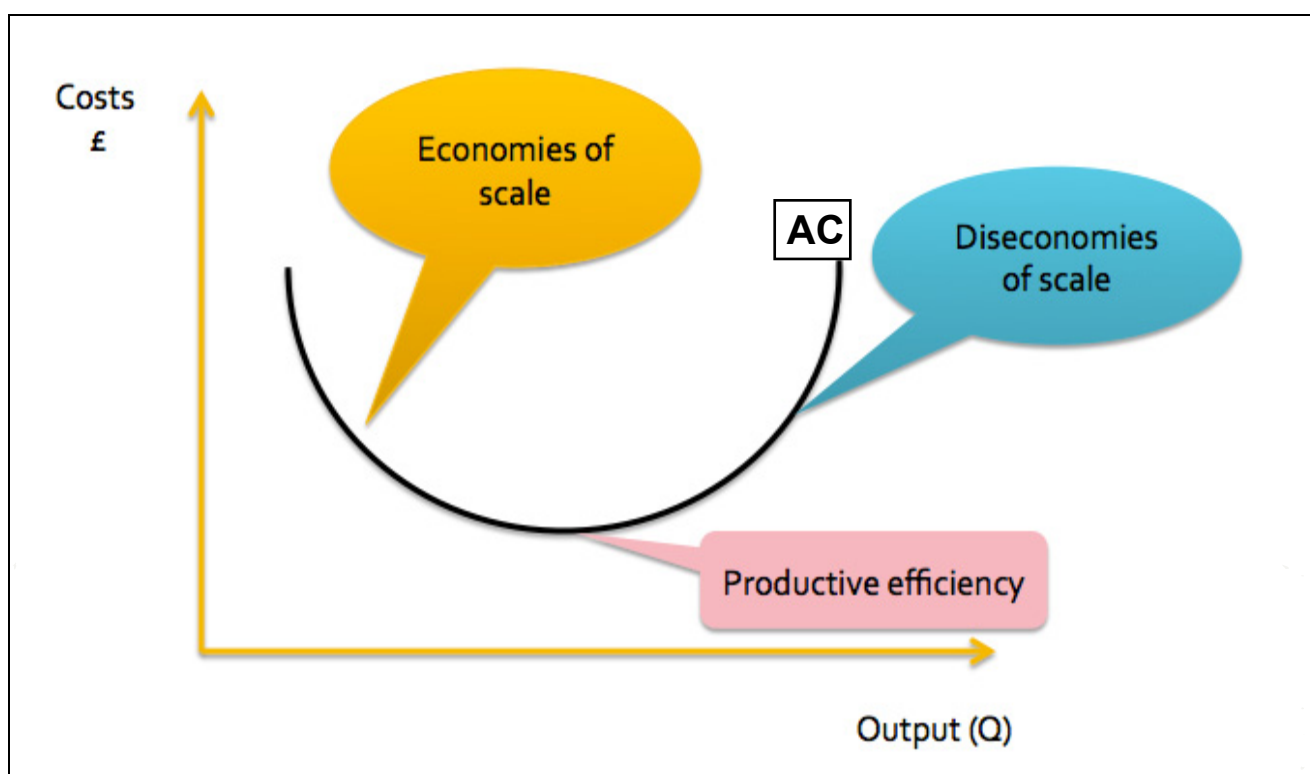
The factors that may lead to external economies of scale are:

- i. Lower resource prices
- ii. Better education and training of labour force
- iii. Increased research and development within the industry.
- iv. Increased growth and efficiency of the capital market.

Diseconomies of scale refer to increase in per unit cost as output increases. It results when the firm starts to produce beyond the optimum plant size.



Graphical illustration of economies and diseconomies of scale



Optimum plant size is at productive efficient point



ACTIVITY 2.4.1

- The concept of economies of scale refers to a long-run situation because
 - The production process has an element of discontinuity.
 - The production process uses different weighing scales.
 - All productive resources are variable.
 - Employees do more shift work.
- Reduction in per unit cost which occurs as the firm increases the size of its plant are called
 - Economies of scale
 - Diseconomies of scale
 - decreasing returns to scale
 - increasing returns to scale



3. The technical optimum level of output is the
- The output the corresponds with the point $MR = MC$
 - The point at with LR average cost curve is at its minimum
 - It is the excess capacity level of production
 - Is point where law of diminishing returns is set in
4. Increase in per unit cost as output increases results in
- Diminishing returns
 - Increasing returns
 - Diseconomies of scale
 - Economies of scale



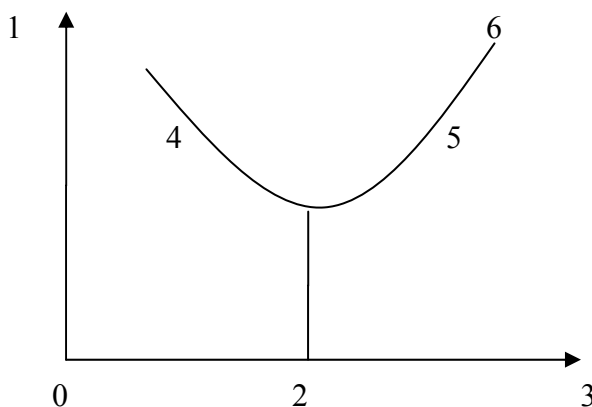
ACTIVITY 2.4.2

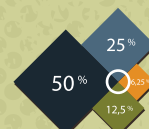
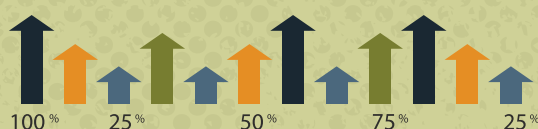
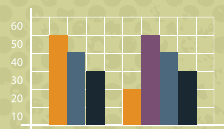
Use the labels in the Resource List to correctly match the different parts of the graph numbered 1-6 in your answer book. (3marks)

Resource list

Optimal output, Diseconomies of scale, Diminishing returns	Costs, Average cost,	Economies of scale, Average variable cost,	Output,
--	-------------------------	---	---------

Label the graph using the information given in the resource list.





2.5 SECONDARY INDUSTRY OR MANUFACTURING INDUSTRY

Manufacturing industry deals with processing raw materials into semi-finished or finished goods

Two Major Manufacturing Industry in Fiji:

- Garment
- FMF

LESSON 2.5.1 Garment Industry

Nature of industry

- Garment industry is a secondary industry where raw materials (clothing material) are turned into finished goods. (Coats, shirts, dresses.)
- The industry makes use of labour and capital for production purposes. It is a specialized industry where division of labour is practiced.
- Garment is produced in Fiji for local consumption as well as for export purpose.

Importance

- Creates employment opportunities
- Earns foreign exchange
- Contributes towards the GDP
- Satisfies the needs of the locals
- The increase in garment production has resulted in an increase in the development of other sectors e.g. Transportation, banking, insurance and so on.

Problems

- Workers are not paid well
- Strikes by workers who demand better working conditions
- Congested working places
- Workers employed for long hours
- Harassment of female workers at work place
- Leads to pollution land
- Expiry of Tax free agreement leads to ceasing operations and creates unemployment
- Factories employ foreigners and as a result locals are left unemployed
- Factories close without prior notice to their employees
- Power failure affects production level

Government Policies to Curb the Problem in Garment Industry.

- The introduction of Tax Free Zone and Tax Free Factories has boost the production in the garment industries in the recent years in Fiji.
- Introduces minimum wage rate.
- Provide Subsidy to company.



ACTIVITY 2.5.1.1

Year	Export Earning(garment)
1999	128.9
2000	122.7
2001	160.7
2002	120.8

- In which year was export earning
 - the highest
 - the lowest
- Explain the trend in export earnings?
- Construct a line graph using information from the table.
- State 2 reasons why garment industries are important to Fiji's economy.



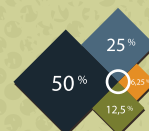
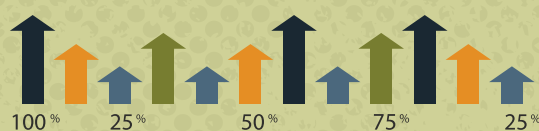
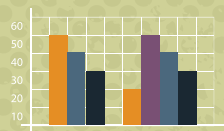
ACTIVITY 2.5.1.2

- Study the photograph below and answer the question that follows.



Source: Policies and Programmes for Sustainable Growth 1997

- Name the type of industry shown in the above photograph. Give a reason for your answer.
- State two problems faced this industry
- Outline the contributions of this industry towards Fiji's economy.
- Discuss the government policies that would help the industry grow.



2.5.2 Flour Mills of Fiji LTD (FMF)

Nature of the Industry

- FMF industry is a secondary industry where raw materials are turned into finished goods. (Biscuits, Snacks, cereal)
- The industry makes use of labour and capital for production purposes.
- It is a specialized industry where division of labour is practiced.
- FMF in Fiji produces for local consumption as well as for export purpose

Importance

- Provides employment opportunities for local people.
- Exports of manufactured goods earn foreign exchange
- Contributes to GDP
- Satisfies domestic consumptions.
- Leads to development of other sectors
- Has led to an increase in Fiji export base.

Problems Associated With Manufacturing Industry in Fiji

Many factors determine the future of these industries.

- Limited natural resources and distance to markets
- Lack of technology and skillful people.
- Relatively low wages and poor working conditions
- Lack of incentives for workers
- Low productivity
- Lack of competition
- Deregulation
- Fluctuations in world market price
- Political instability
- Duplication of activities in production and types of production which lowers overall economic productivity.

Government strategies and policy to solve problems faced by the secondary industry

Government can:

- Identify of new products to manufacture to increase export base
- Provide Additional assistance to small scale industries to help improve their profitability.
- Help Improve productivity and efficiency by increasing by education and training.
- Introduce more tax free zones and tax free factories to encourage growth in secondary sector
- Provide funds to improve the level of technology used.



ACTIVITY 2.5.2.1

1. Define
 - a) export orientation
 - b) Import substitution
2. State 2 reasons why the manufacturing industry is important for Fiji?
3. State four factors that will hinder the development of the manufacturing industry?

ESSAY WRITING

Educational fieldtrip are organized for Form 7 Economics students to visit a primary, secondary and tertiary industry. This field trip often marvels the students as they witness the real I situation.

Discuss the above statement with reference to:

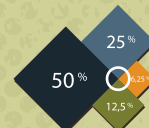
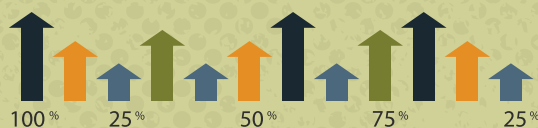
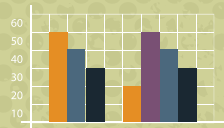
- The nature , purpose and scope of your selected industry (3marks)
- Any three problems encountered by the industry (3marks)
- Measures or policies taken by the government to remedy such problems (3marks)

2.6 ELASTICITY



© Can Stock Photo - csp6886559

The term elasticity is used in economics to measure responsiveness or reaction of one variable to changes in another.

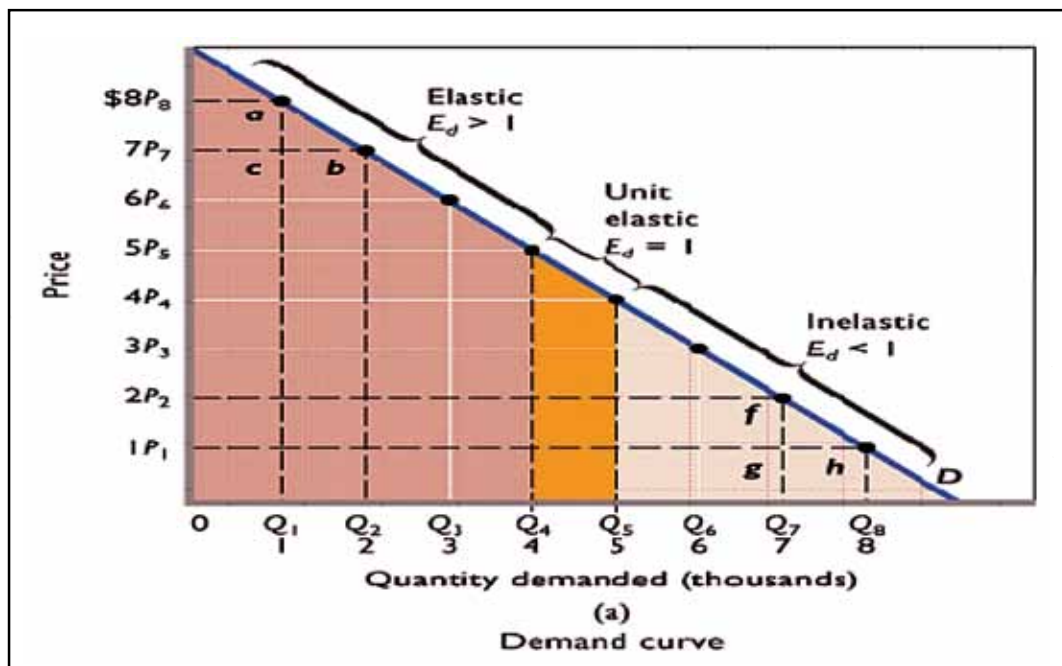


Lesson 2.6.1 Price elasticity of demand

Price elasticity of demand (PED) measures the responsiveness of quantity demanded to change in price.

$$PED = \frac{Q_1 - Q_2}{Q_1 + Q_2} \times \frac{P_1 + P_2}{P_1 - P_2}$$

Note: Ignore Negative Sign When Calculating PED



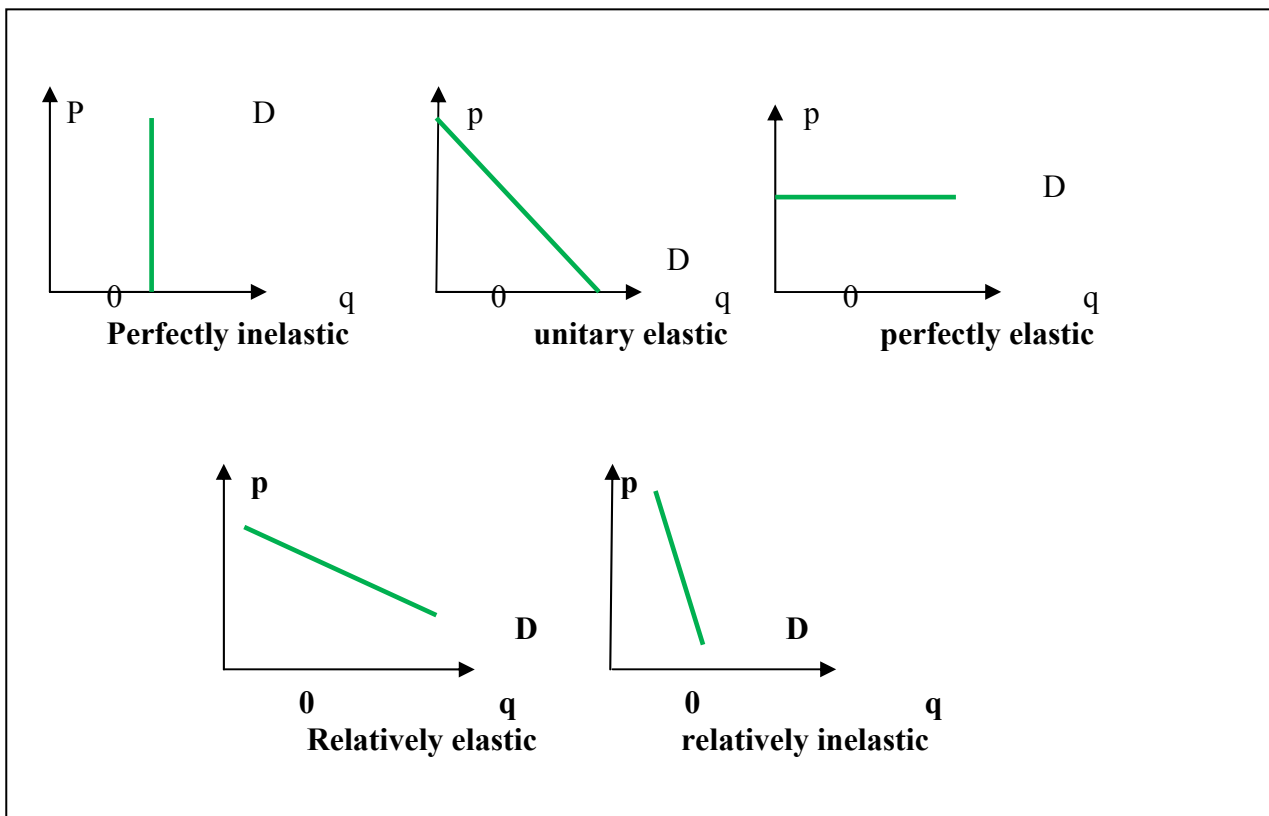
Describing PED

Value of PED coefficient	Terminology : Demand is...	Description in terms of general formula.
PED = 0	perfectly inelastic	Qty. demanded does not respond to price change
0 < PED < 1	relatively inelastic	A change in price leads to a smaller than proportional change in qty. demanded.
PED = 1	unitary inelastic	A change in price leads to a same proportional change in qty. demanded
∞ > PED > 1	relatively elastic	A change in price leads to more than proportional change in qty. demanded
PED = ∞	perfectly elastic	Purchases are prepared to buy all they can at going prices but not even a slightly higher price. Changes on QD have no effect on price.

[Source : Introducing Economics Bk 1 By Barry Collier]

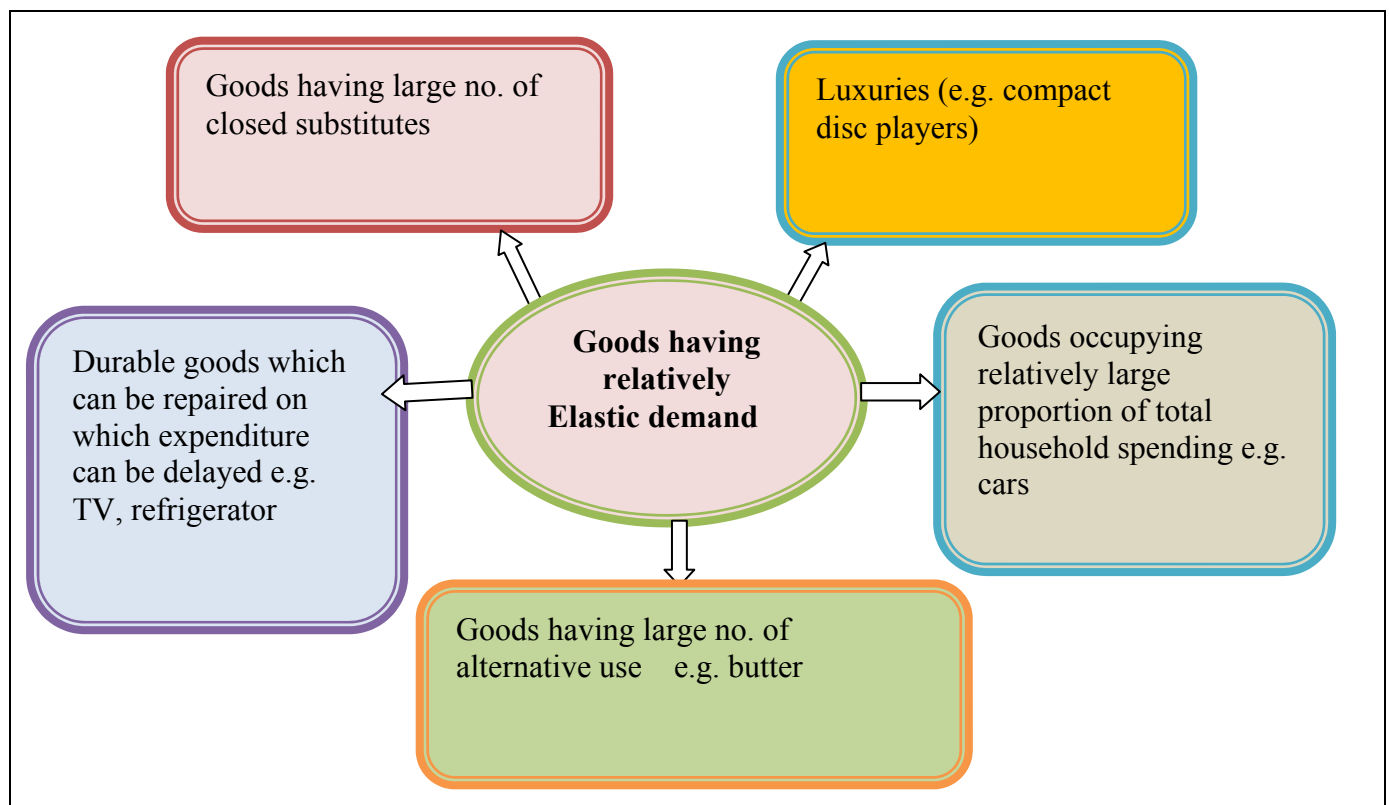


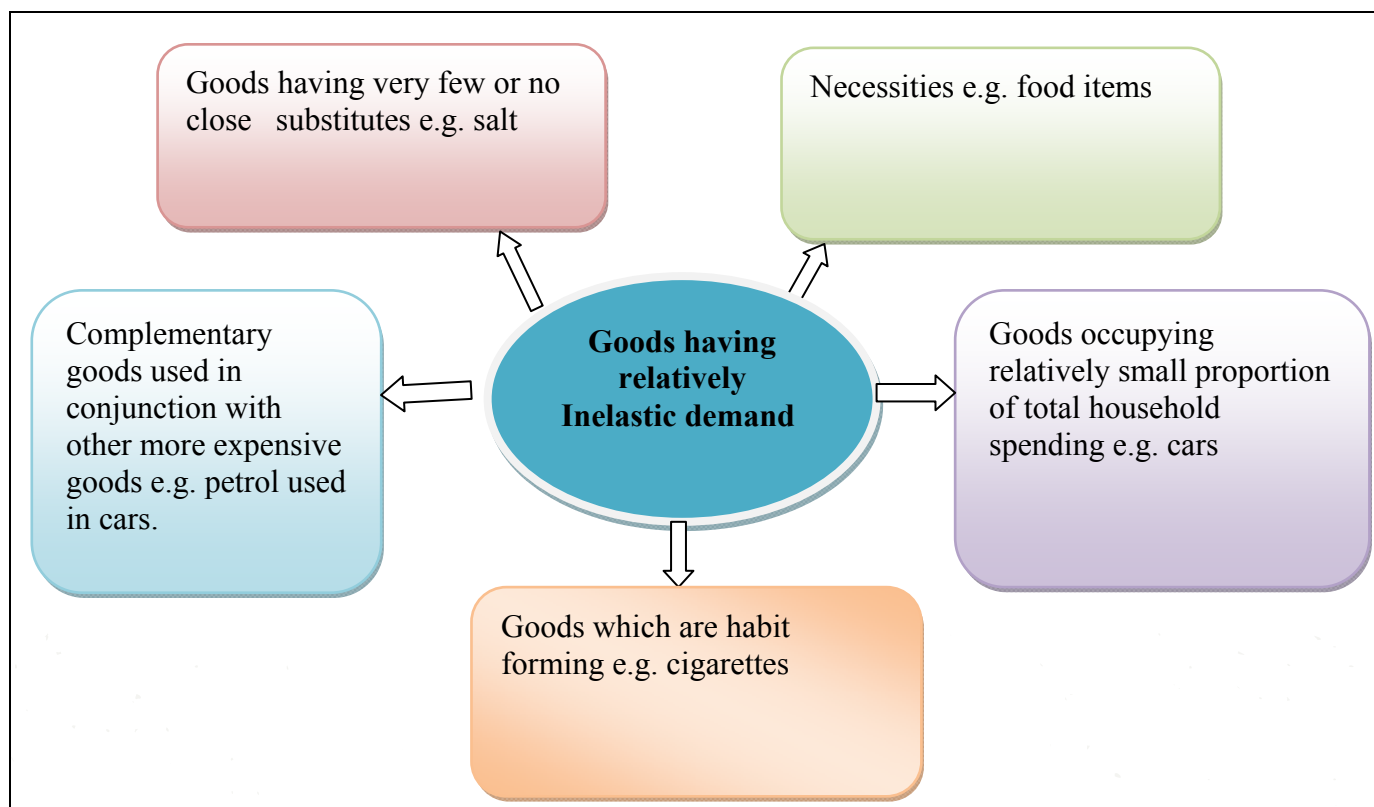
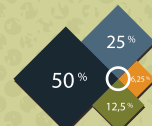
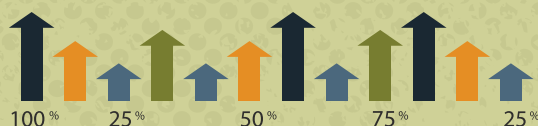
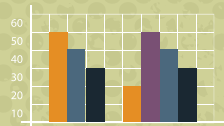
PED Graphical Summary



[Source : Introducing Economics Bk 1 By Barry Collier]

Classifying Goods According to PED





[Source : *Introducing Economics Bk 1* By Barry Collier}

ELASTICITY AND TOTAL REVENUE TEST

Price Elasticity Demand

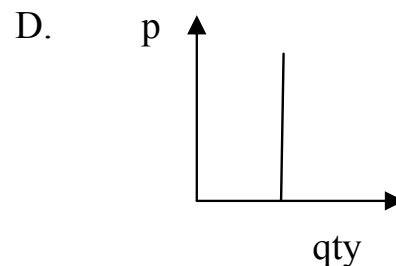
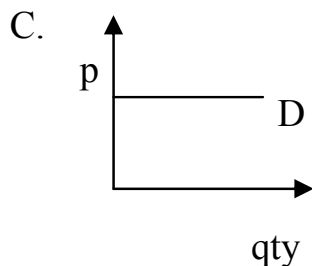
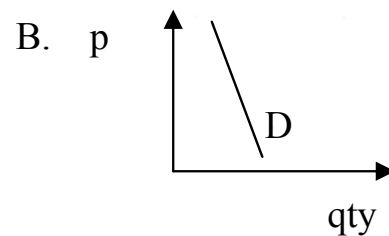
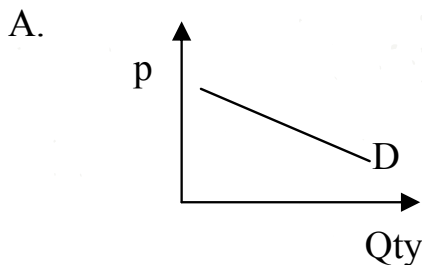
Absolute Value of Elasticity Coefficient	Demand Is:	Impact on Total Revenue of a:	
		Price Increase	Price Decrease
Greater than 1 ($E_d > 1$)	Elastic or relatively elastic	Total revenue decreases	Total revenue increases
Equal to 1 ($E_d = 1$)	Unit or unitary elastic	Total revenue is unchanged	Total revenue is unchanged
Less than 1 ($E_d < 1$)	Inelastic or relatively inelastic	Total revenue increases	Total revenue decreases



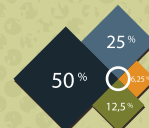
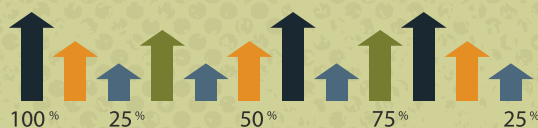
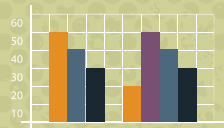
ACTIVITY 2.6.1.1

Multiple Choice Questions

- Which of the following is a characteristic of a good with elastic demand?
 - The good is a necessity e.g. basic food item.
 - Consumers spend a small proportion of their income on the good
 - Goods which are habit forming. E.g. drugs.
 - Goods that are durable and for which expenditure can be delayed.
- Suppose the price elasticity of a good is 0.4. The graph that best depicts the good is



- The price elasticity of demand for the international air travel is 3. An increase in the international air fares will:
 - Increase the demand for international travel
 - Increase the annual expenditure on the international travel
 - Decrease the annual expenditure on the international travel
 - Have no effect on the annual expenditure on international travel
- A rise in retail price of petrol will increase the total revenue of oil companies if the demand for petrol is
 - Relatively elastic
 - Relatively inelastic
 - Inversely elastic
 - Unitary elastic



5. Demand can be said price elastic when

- A. a decrease in price causes a smaller percent increase in quantity demanded
- B. an increase in price causes a smaller percent decrease in quantity demanded
- C. a decrease in price causes a larger percent increase in quantity demanded
- D. an increase in price causes a larger percent increase in quantity demanded

6. The price elasticity of demand for goods depends on

- A. the number of substitutes available for the goods
- B. the quality of the good
- C. the amount of supply in the market
- D. The income of the buyers.

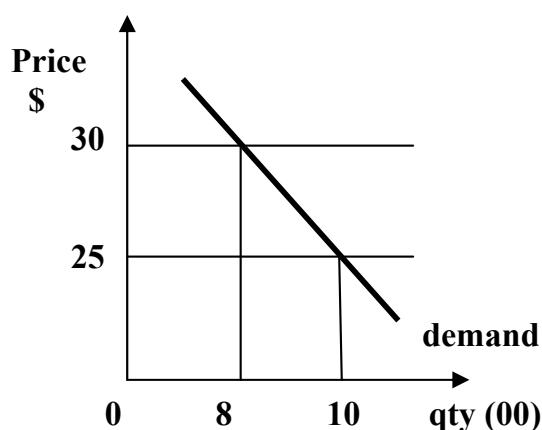
7. A restaurant manager notices that, when he increases the price of the meals, the total revenue also increases ;the price elasticity of demand for meals therefore is

- A. Elastic
- B. Unit Elastic
- C. Inelastic
- D. Perfectly elastic



ACTIVITY 2.6.1.2

Use the diagram about tennis balls to answer the questions that follow



- i. How many tickets are sold at \$25.
- ii. Calculate the revenue at \$30.
- iii. Calculate the price elasticity of demand from the graph given above.
- iv. Describe the elasticity calculate in part iii.



ACTIVITY 2.6.1.3

Classify the Following Goods According To PED. Place a tick to indicate PED for the following goods

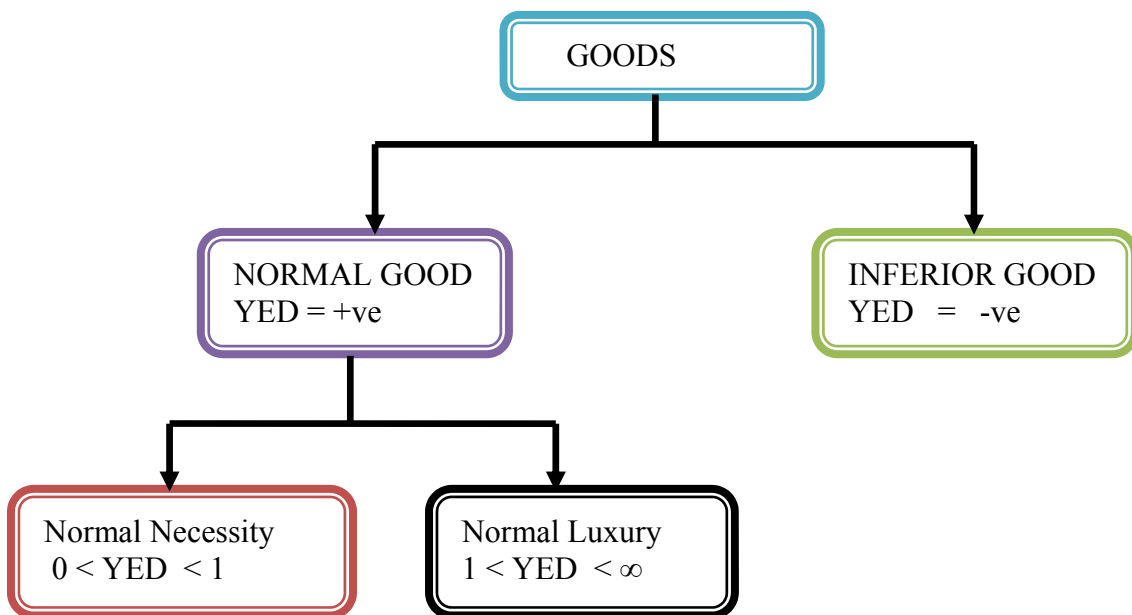
GOODS	ELASTIC DEMAND	INELASTIC DEMAND
1. meals at restaurant		
2. compact DVD player		
3. butter		
4. food		
5. car		
6. soft drink		

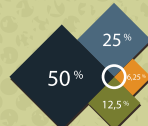
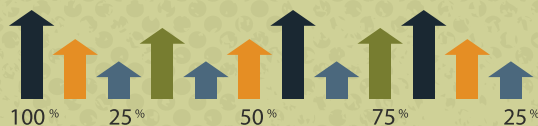
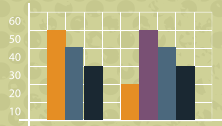
Lesson 2.6.2 Income Elasticity of Demand (YED)

Income elasticity of demand measures the responsiveness of quantity demanded of a commodity to a change in income.

$$YED = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}$$

Describing YED





Examples of different types of goods

Normal Luxury	Normal Necessity	Inferior Good
International air travel	Fresh vegetables	Fresh vegetables
Fine wines	Instant Coffee	Cigarettes
Luxury chocolates	Natural cheese	Processed cheese
Private education	Fruit juice	Margarine
Private health care	Spending on utilities	Tinned meat
Antique furniture	Shampoo/toothpaste/detergents	Value "own-brand" bread
Designer clothes	Rail travel	Bus travel



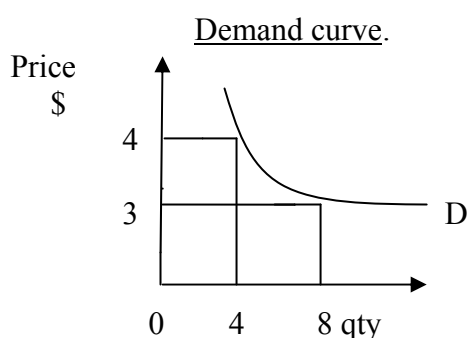
ACTIVITY 2.6.2.1

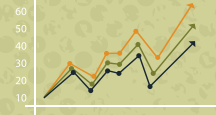
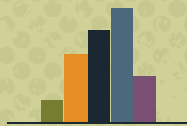
- Which of the following is an example of an inferior good?
 - Mobile phones
 - Bread
 - Wine
 - Second hand computers
- If income elasticity of demand for a good is equal to -2 , the good is
 - normal good
 - an inferior good
 - a substitute
 - a complement



ACTIVITY 2.6.2.2

A.





- i. Calculate the price elasticity of demand if price falls from \$4 to \$3 (answer to 2dp)
Describe the type of elasticity. (1 mark)
- ii. Consumer's income fall during recession. The income elasticity of demand for four products are given below

Income elasticity of demand

Fashion clothing	2.8
Cinema visits	3.0
Shoes	0.9
New cars	1.9

Which retail item would be most affected during recession? Give a reason to your answer. (2marks)

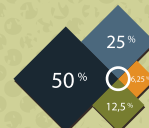
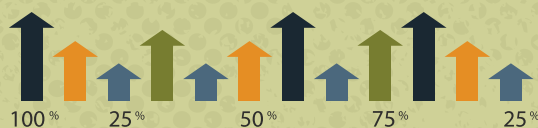
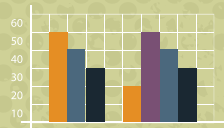


ACTIVITY 2.6.2.3

Use the information given below and answer the questions that follow:

Product or Service	Coefficient of Price Elasticity of Demand (E_d)
Milk	.63
Household appliances	.63
Movies	.87
Beer	.90
Shoes	.91
Motor vehicles	1.14
Beef	1.27
China, glassware, tableware	1.54
Residential land	1.60
Restaurant meals	2.27
Lamb and mutton	2.65
Fresh peas	2.83

- i. Identify the goods which would fall under habit forming normal necessity and normal luxury goods. (3marks)
- ii. Explain the term relatively elastic demand and relatively inelastic demand. (1 mark)



Lesson 2.6.3 Cross Elasticity of Demand (CED)

Cross elasticity of demand measures the responsiveness of quantity demanded of one commodity to a change in price of another commodity.

$$CED = \frac{Q_{x_2} - Q_{x_1}}{Q_{x_2} + Q_{x_1}} \times \frac{P_{y_2} - P_{y_1}}{P_{y_2} + P_{y_1}}$$

Describing CED

Complements CED = -ve
e.g. car & petrol
An increase in price of car will result in a decrease in quantity demanded for petrol.

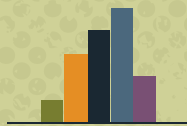
Cross elasticity of demand

Substitutes CED = +ve
E.g. coke and Pepsi
An increase in price of coke will result in a increase in quantity demanded for Pepsi.



ACTIVITY 2.6.4

- Which of the following would have a positive cross elasticity of demand
 - Second hand clothes
 - Food item
 - Butter and margarine
 - Pen and ink
- An increase in price of good A causes a decrease in demand for good B, then good A and good B are
 - Substitutes goods
 - Complementary goods
 - Inferior goods
 - Normal goods
- Complementary goods are goods that are used in conjunction with one another, example car and petrol.
 - Explain how decrease in price of cars would affect the demand for petrol. use graph to explain (1 mark)
 - If a decrease in price of cars decreases total revenue for car dealers, describe the type of elasticity of demand for cars. (1 mark)



ACTIVITY 2.6.5

Calculate cross elasticity of demand and indicate if the products are substitutes or complementary goods.

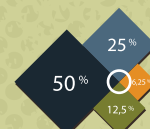
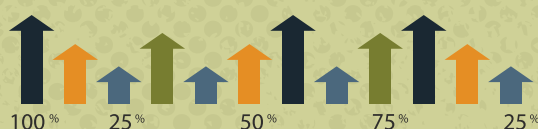
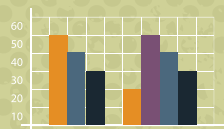
- The price of good A increased by 8% and the quantity demanded of good B rose by 5% (1 mark)
- The price of good A increased from \$8 to \$12 in response to purchase of good B decreased from 200 units to 100 units (1 mark)
- The consumption of good X rose by 20% when price of good Y fell by 5%.
- The quantity of good C fell from 120 units to 100 units as a result of a fall in price of good D from \$15 to \$12



ACTIVITY 2.6.5

Write true or false for the following statements

Statements	True or false
i. If the cross elasticity is negative, the products are substitutes	
ii. If the cross elasticity is negative, the products are complements	
iii. If the cross elasticity is positive, the products are substitutes	
iv. If the cross elasticity is positive, the products are complements	
v. If the price decreases for one product and quantity demanded increase for another product, then these products are substitutes	
vi. If the price decreases for one product and quantity demanded increase for another product, then these products are substitutes	



2.7 INDUSTRY ECONOMICS

MARKET MODELS

The market environment of any firm will be influenced by two factors, firstly demand for the product at each possible price level and secondly, the type of competition it encounters from its rivals in the market. In the form of four simplified market structures which can serve as models.

- Perfect competition
- Monopoly
- Monopolistic competition
- Oligopoly
- Duopoly

LESSON 2.7.1 PERFECT COMPETITION

Perfect Competition – a market structure of a large number of individual firms each selling a standardized product and each having so small a share of the total market that none can influence market price.

Characteristics of Perfect Competition

For perfect competition to exist, an ideal world containing the following six market conditions apply.

- There are large number of buyers, all so small that no single buyer can influence the price ruling in the market or the demand.
- There are large numbers of sellers, all so small that no single seller can influence price or quantity demanded. All firms are Price takers.
- There are no barriers to entry in Long Run; there is total freedom to enter or exit the market therefore normal profit is earned in long run.
- There are Homogenous products. This guarantees that prices of all firms remain same and if one firm did raise the price it would lose its market share.
- Perfect knowledge exists between buyers and sellers.
- Cost of production for all firms is identical.
- Resources are employed in accord with consumer sovereignty.
- Homogenous products provide little consumer choice.

Examples of Perfect Competition are: Baby-sitting, Suburban lawn mowing runs, Domestic cleaning, Market Vendors.

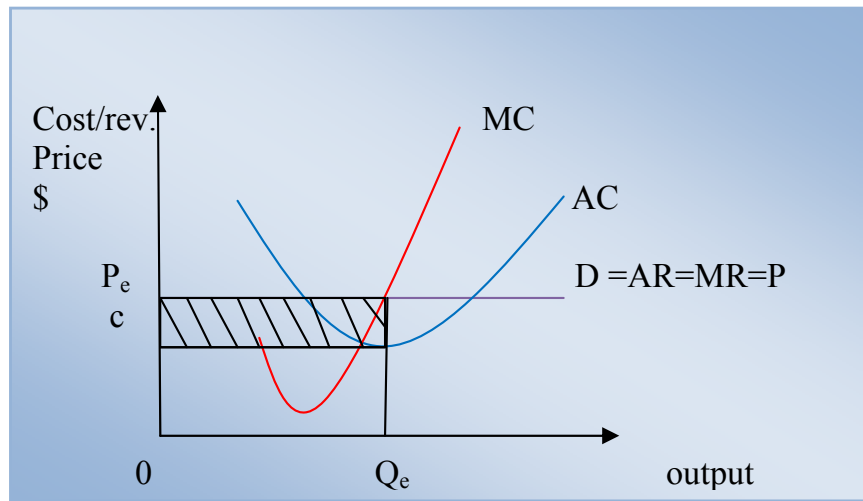


Short Run Profit situation under Perfect Competition

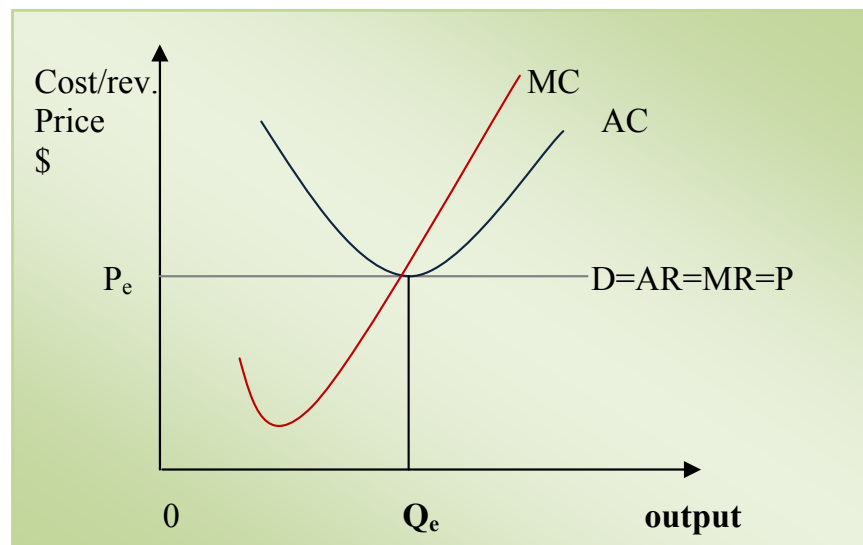
In short run there are possible profits situations

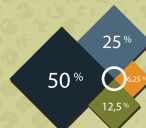
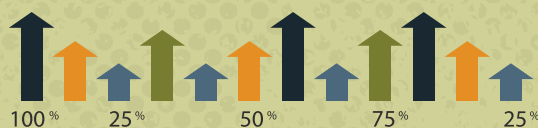
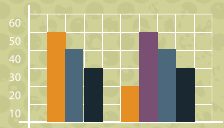
- i. **Super Normal profit** – occurs when firm's total revenue exceeds its total costs, both implicit and explicit. It is also known as super profits or economic profit.

Supernormal profit



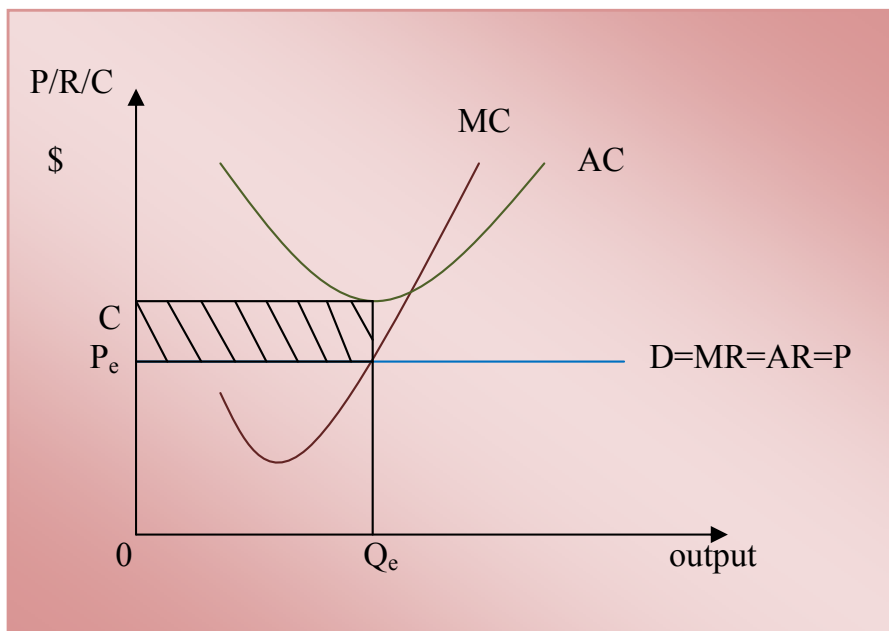
- ii. **Normal Profit** - occurs when a firm's total revenue is exactly equal to its total cost. Normal profit situation is also known as break even situation where the firm is making zero profit.
 $TR = TC$ – Normal profit





iii. **Subnormal Profit** – occurs when the firms total cost exceeds total revenue. It is a loss in the firm. $TC > TR$ - Subnormal profit made

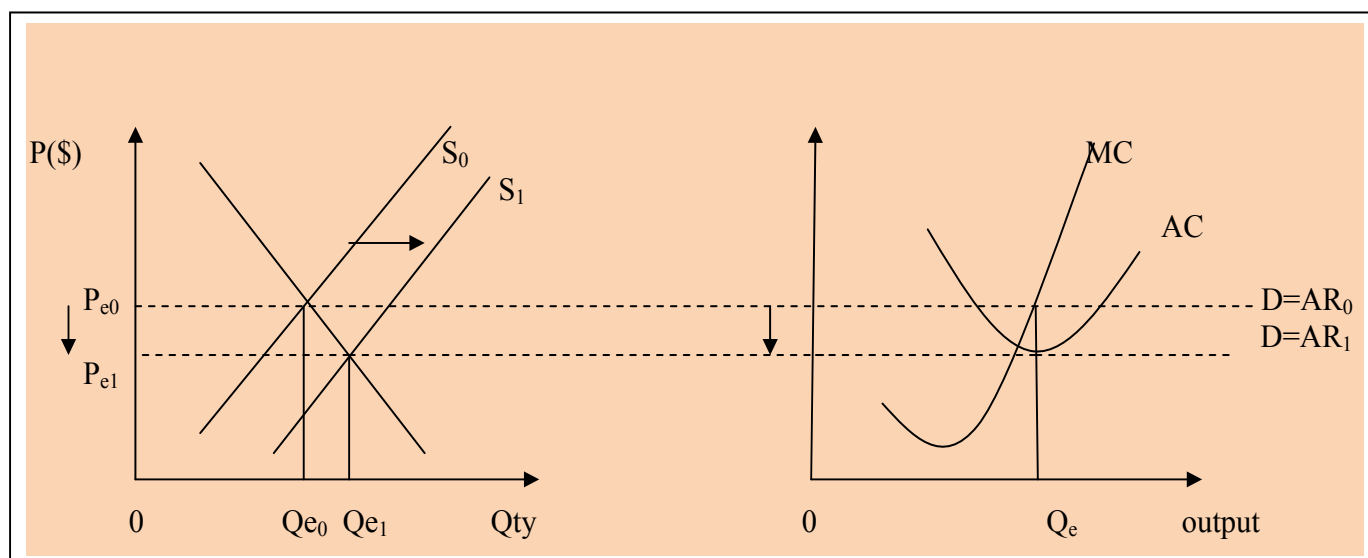
Graphically

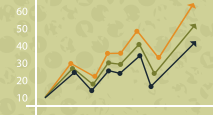
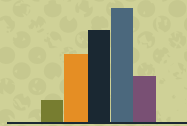


Perfect Competition in Long Run

- In long run, all productive factors are variable. New firms can enter the market and existing firms can leave it.
- In case of supernormal profit is being earned by perfect competition firms, new firms will be attracted. As new firms enter the industry the supply will increase, the price in the market will fall and this will continue until normal profits are earned.

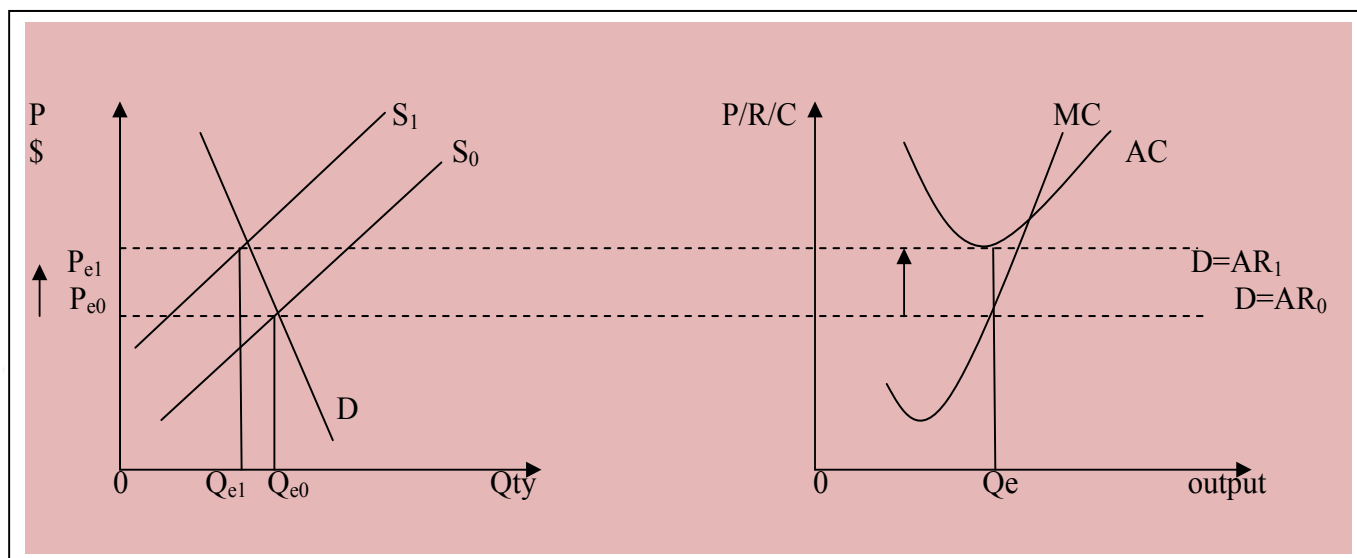
Graphically : Incase of Supernormal Profit





However, if firms are experiencing losses in the short run, some existing firms will exit. As some firms exit the market the supply will decrease and cause an upward movement in price until normal profits are being earned again.

Graphically In case of subnormal Profit

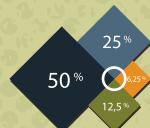
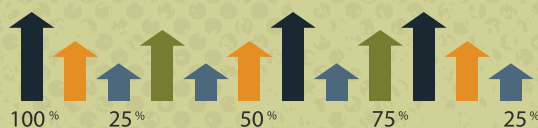
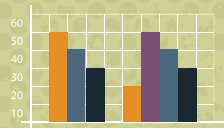


LESSON 2.7.2 PERFORMANCE OF PERFECT COMPETITION

- In long run, the firms operate where $P = MR = MC = SRAC = LRAC$ therefore charge lowest prices to consumers.
- Perfectly competitive firms provide optimal result from society's point of view, achieving economic efficiency. In other words they produce at socially desirable level of output.
- At point E, the firms able to achieve productive efficiency meaning producing highest possible output at minimum cost
- In addition, at point E the firms achieve allocative efficiency since perfectly competitive firm's produce according to consumer demand so they allocate resources to those goods that are in demand therefore there is no wastage.

Disadvantages of perfect competition:

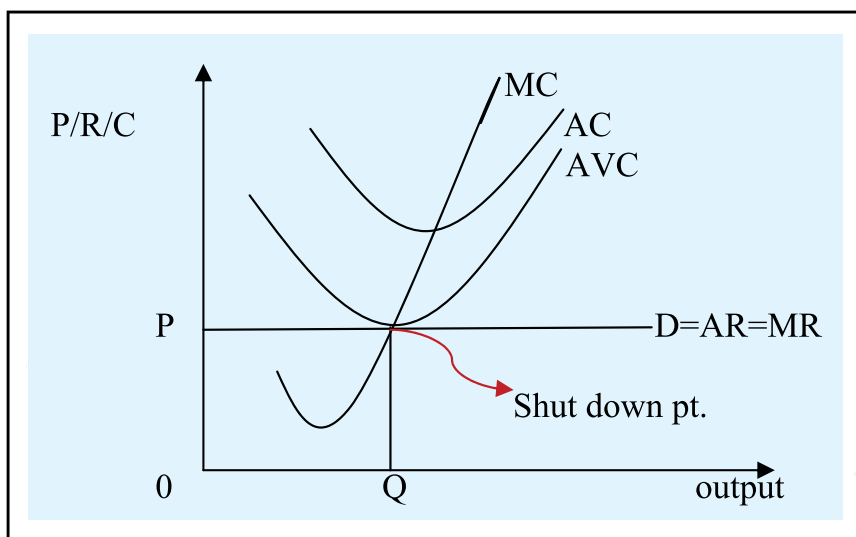
- Lack incentive to innovate or undertake research and development since they only earn normal profits in LR.
- Not able to enjoy economies of scale due to small scale production.
- Profits earned are competed away due to freedom of entry and exit.
- Homogenous product therefore lack of consumer choice.



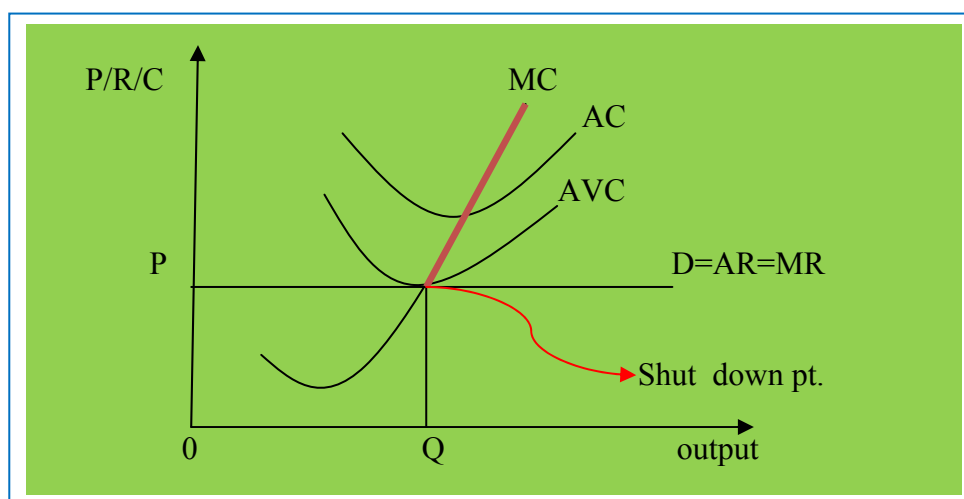
BREAKEVEN AND SHUTDOWN POINTS

Shutdown Point – is a point at which only variable costs are covered. It makes the differences between keeping the firm going in short run in a loss situation and shut down altogether in long run. If the firm is not able to cover its fixed cost, there is no point in trading/ operating.

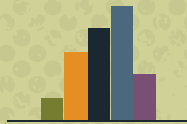
Graphically: Shut Down Point Is At Minimum AVC



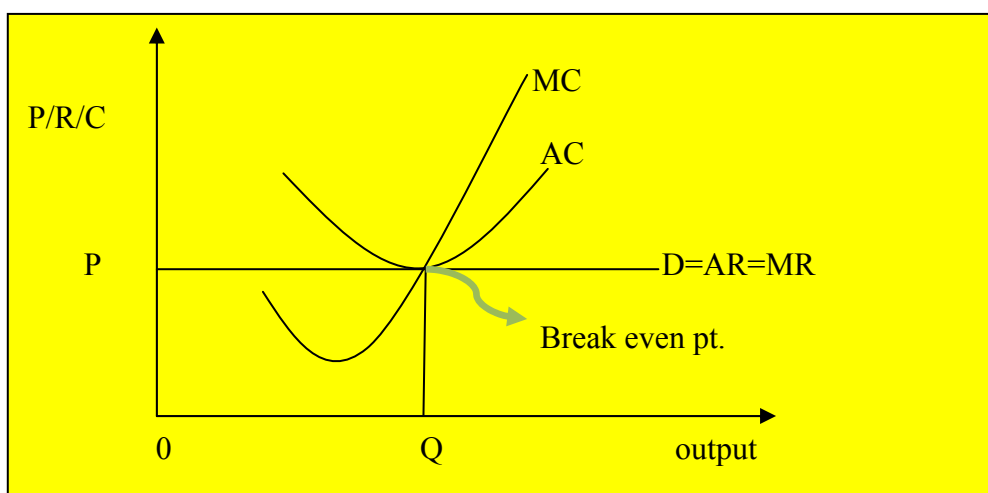
Firm's Supply Curve is MC above the shut down point.



Therefore no firms will supply anything below its shutdown point. A firm's supply curve is its MC curve above the shutdown point if $MC < AVC$, firm is not covering its variable cost and its better not to operate.



BREAK EVEN POINT - is at minimum AC

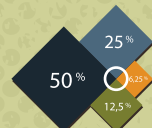
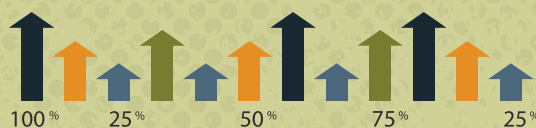
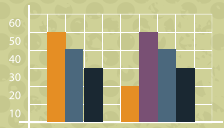


NOTE: A firm in the long run must be able to cover all its costs, including variable and fixed i.e. earning normal profit. Owner remains in business. This point is called breakeven point and this point, the firm is earning zero economic profit.



ACTIVITY 2.7.2.1

1. If the price in a perfectly competitive market is \$5 then the marginal revenue of a firm in that market will be
 - A. Zero as a perfectly competitive firm maximizes profit at an output where $MR=0$
 - B. Unable to determine as a competitive firm must reduce the price in order to sell more
 - C. Dependent on average cost as marginal revenue is equal to average revenue minus average cost
 - D. Is equal to \$5 , as all firms in competitive market are price takers
2. A perfectly competitive firm will shut down in the short run if :
 - A. At the loss minimizing level of output
 - B. Fixed cost exceeds total revenue
 - C. Total variable cost exceeds total revenue
 - D. Total cost exceeds total revenue
3. Short run supernormal profits in a perfectly competitive market will result in
 - A. Firms are price takers therefore face by horizontal demand curve
 - B. Long run subnormal profits as too many new firms enter the market
 - C. No changes in the long run because of strong barriers to entry
 - D. Normal profits are earned in long run due to freedom of entry



4. The marginal cost above the shut down point for a firm is its
 - A. Demand curve
 - B. Production curve
 - C. Supply curve
 - D. Close down point

5. The reason for long run normal profits under perfect competitive market is
 - A. Horizontal demand curve
 - B. Price takers
 - C. Freedom of entry and exit
 - D. Homogenous product



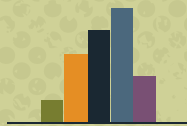
ACTIVITY 2.7.2.2

Study the information given in the table below and answer the questions that follow;

OUTPUT (Q)	TC (\$)
0	300
1	450
2	570
3	670
4	780

Price per unit of output = \$100

- i. Calculate the total fixed cost for the firm. (1 mark)
- ii. Calculate the total revenue from producing 4th unit of output? (1 mark)
- iii. Determine the firms profit maximization price and output level. (1 mark)
- iv. Identify the market structure that is depicted by the information above. (½ mark)



ACTIVITY 2.7.2.3

A. Use the information given below and answer the questions which follow:

There are 100 small firms selling vegetables on the island Taveuni.



- Name the type of market structure that vegetable sellers come under. (1 mark)
- The Fiji sugar Corporation has more control over the price of its products than vegetable sellers. Explain the significance of this statement. (2 marks)



ACTIVITY 2.7.2.4

Resource A: Feb. 2011 - Half of Queensland's sugarcane crop suffers cyclone damage

Sugarcane crops in Australia were hit hard by Tropical Cyclone Yasi last week, adding to global concerns about food prices.

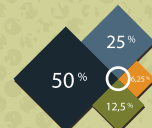
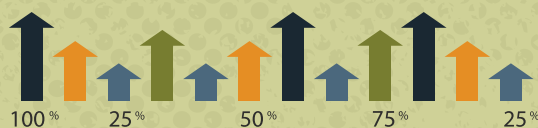
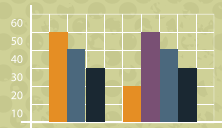


The sugar price hit a 30-year high on Wednesday, before slumping by more than 9pc on Thursday as it became clear the storm did not meet the gloomiest expectations. However, buyers were once again in the market on Friday, as demand is expected to be strong, despite the elevated prices.

Source: <http://www.telegraph.co.uk/finance/markets/8307053/Half-of-Queenslands-sugarcane-crop-suffers-cyclone-damage.html>

Assume that the growing of the sugar cane is a perfectly competitive industry and the price of sugarcane is determined on the world market. Fiji has many small sugarcane producers.

- Perfectly competitive firms are faced by horizontal demand curve. Give a reason for horizontal demand curve. (1 mark)



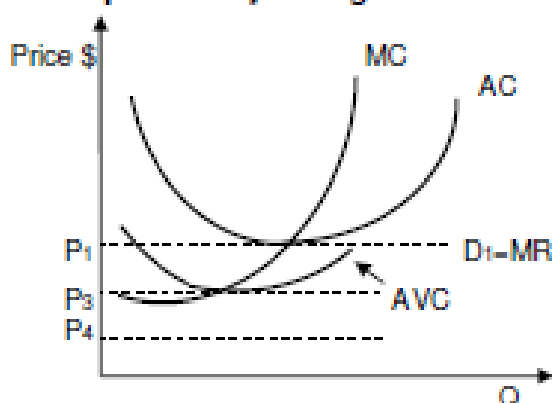
- ii. A firm in perfectly competitive market is earning supernormal profits in short run. What type of profit will this firm earn in long run? Explain (2marks)



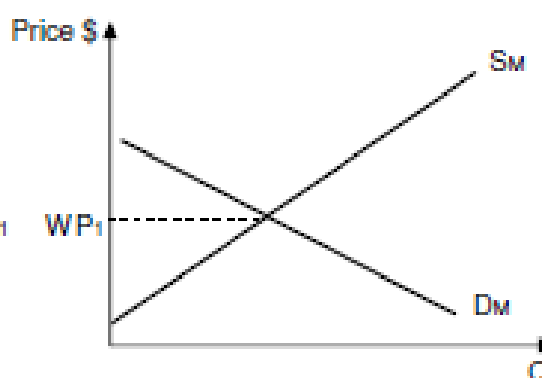
ACTIVITY 2.7.2.5

Use the graphs and your knowledge to answer the questions that follow:

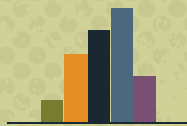
Graph 9: A Fijian Sugarcane Firm



Graph 10: The Market for Sugarcane



- i. On Graph 10, illustrate the effect on the international market for sugarcane following the damage caused by Cyclone Yasi in Queensland. Label the new world price WP2. (2 marks)
- ii. At the world price of WP1 the firm in Graph 9 is making normal profit. Explain why. (1 mark)
- iii. Explain why the Demand curve (D1) for the perfectly competitive firm is horizontal, while the Market Demand curve (DM) for sugarcane slopes down to the right. (2 marks)
- iv. On Graph 9, using the new market equilibrium price from Graph 10:
 - Draw the new Demand curve for the firm (label $D_2=MR_2=AR_2$).
 - Label the new price P_2 and the profit maximizing level of output Q_2 .
 - Carefully shade and label (SNP) the resulting area of supernormal profit. (3 mark)
- v. Fully explain why Fijian sugarcane firms may only enjoy these supernormal profits in the short-run. (2marks)
- vi. Which price on Graph 9 is the breakeven price? P_1 , P_2 , P_3 or P_4 (1 mark)
- vii. Which price on Graph 9 is the Shutdown price? P_1 , P_2 , P_3 or P_4 (1 mark)



ACTIVITY 2.7.2.6

Use the table given below and answer the questions that follow.

Product price	Quantity demanded
2	0
2	1
2	2
2	3
2	4
2	5

- What can you conclude about the type of industry in which this firm is operating? (1 mark)
- What type of profit is earned by the above type of market and why? (2 marks)
- State one way in which this industry is different from other types of market industries. (1 mark)



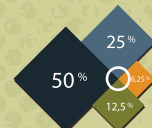
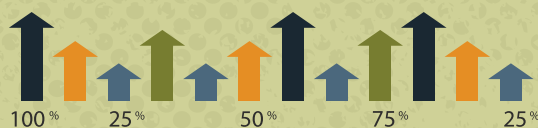
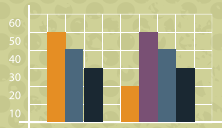
ACTIVITY 2.7.2.7

CASE STUDY

Study the case given to answer the questions that follow:

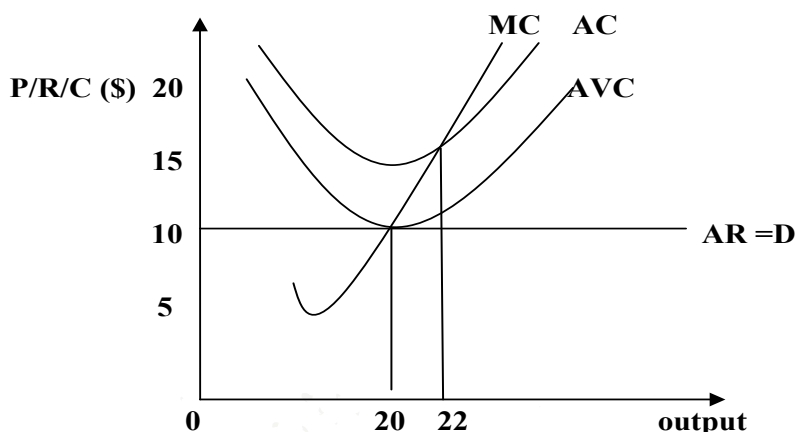
On a typical Friday or a Saturday night in Australia there is large no. of households looking for babysitters and unlimited teenagers ready for the job. The market is very easy to enter and leave. No single babysitter can block the entry of another babysitter and all of them produce identical service

- Identify the type of being discussed in the case study above. (1 mark)
- Explain what is meant 'the market is very easy to enter and leave? (1 mark)
- Is this market a perfect competitor or a imperfect competitor? Explain. (1 mark)



ACTIVITY 2.7.2.8

Use the graph given below and answer the questions that follow.



- Draw the graph and label the profit maximization price and output. (1 mark)
- Identify the type of profit earned by this firm. (1 mark)
- Calculate the amount of profit or loss earned by this market shown above. (1 mark)
- Explain the long run situation of the market. (2marks)



ACTIVITY 2.7.2.9

Essay writing

- Perfect Competitive firms are an ideal type of market structure that has many buyers and sellers.

With reference to above statement discuss:

- Three main features of perfect competitive firms
 - The profit situations of perfect competitive firm in short run
 - Explain the long run profit situation for the form in long run.
- If all firms operate in a perfectly competitive market then their performance would be regarded as most efficient.

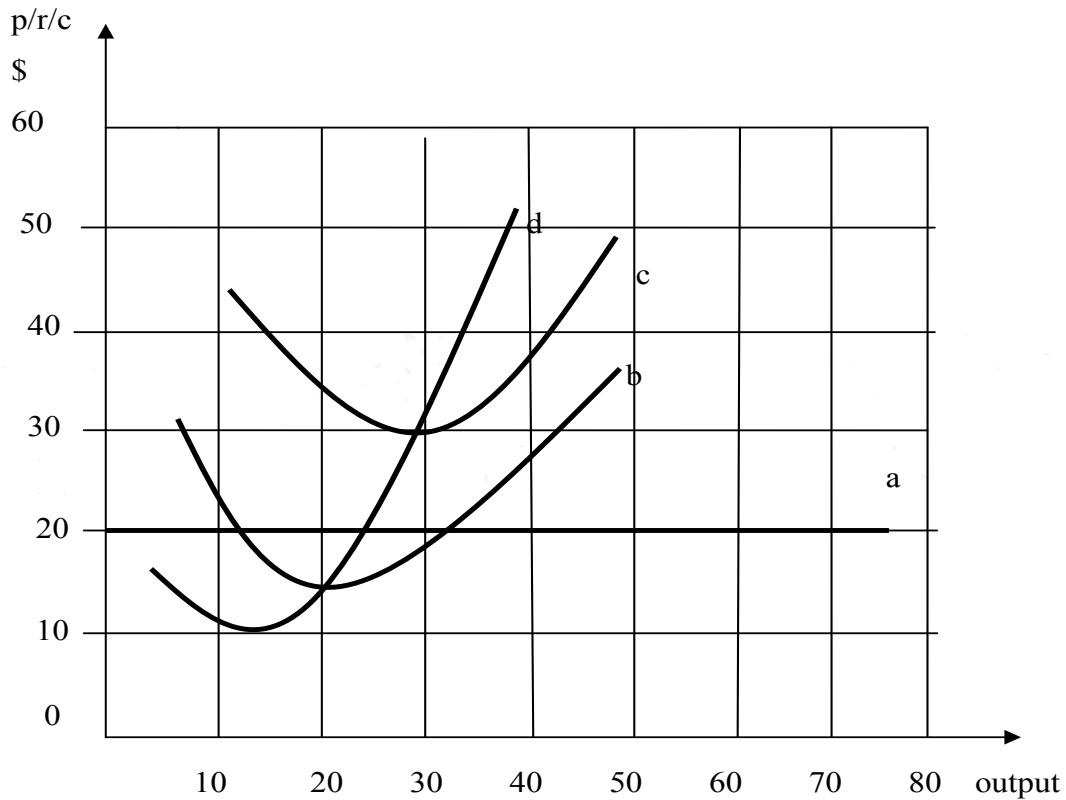
With reference to the above statement discuss

- Describe the type of product ,the demand curve and barriers to entry in relation to perfectly competitive firm
- Explain the performance of perfect competitive firm.
- Discuss how perfectly competitive firms are able to protect public interest.

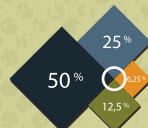
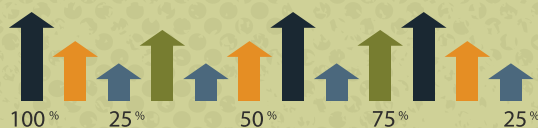
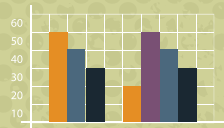


ACTIVITY 2.7.2.10

The information given below show a perfectly competitive firm.
Use the information given in the graph and answer the questions that follow



- Label the graphs marked a - d. (2marks)
- Mark the breakeven price and output. (1 mark)
- Mark and label supply curve for the market. (1 mark)
- Identify the profit maximization price and output level for the firm. (1 mark)
- State the type of profit earned by this firm. (1 mark)
- Calculate the amount of profit or loss earned by this firm. (1 mark)



ACTIVITY 2.7.2.11

The table below shows the total cost and total revenue schedules for a particular market structure. Refer to the table to answer the questions that follow.

Output	Total cost	Total revenue
0	10	0
1	30	50
2	60	100
3	80	150
4	120	200
5	170	250
6	200	300
7	220	350

- Determine the profit maximization price and output (1 mark)
- Calculate the amount of variable cost at 4th unit of output. (1 mark)
- Calculate average revenue at 3rd unit of output. (1 mark)
- Identify the type of market structure illustrate by the information in the table. (1 mark)

2.8 IMPERFECT COMPETITION

The imperfect competition market structures are:

- Monopoly
- Monopolistic Competition
- Oligopoly
- Duopoly

LESSON 2.8.1 MONOPOLY

Monopoly – is a market situation where there is a single seller of product sometimes referred to as single film market. In other words monopoly is entire industry.

Examples of monopolies are PWD, Post & Telecom, FSC, and FEA.



How monopolies created?

- Monopolies emerge because of barriers preventing entry of other firms in the industry. Such barriers are:

Legal Barriers – are the law and order that has to be observed before monopoly can emerge.

These include:

- Government Regulation – laws passed to commence the monopoly e.g. govt license.
- Government Franchise – is an exclusive right given to a firm to supply good or service e.g. Telecom has been given exclusive right to deal with all post & telecom services.
- Patent Right – is an exclusive right given to the inventor or producer to produce the particular good or services?

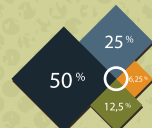
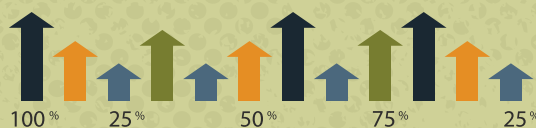
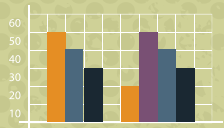
Regional barriers – If products are produced across national boundaries this leads to very high transport and tariff costs.

Technological barriers – very high capital investments required to start up monopolies or to achieve the economies of scale.

Unique Supply Of resources - e.g. Gold is only found in Vatukoula and Hydro system in Monosavu.

Characteristics of Monopoly

- Single seller of goods and services.
- Monopolies are price makers. Since they are the sole supply of goods and services, they are able to set the price and quantity combination.
- Monopolies are faced by downward sloping demand curve i.e. demand usually contracts following a price rise and expands following a price reduction.
- Monopolies maximize profit by charging higher prices and restricting output since they are profit oriented (have profit motive).
- They have strong barriers to entry so are mostly able to earn supernormal profit.
- They involve themselves in price discrimination.
- They are able to undertake research and development.

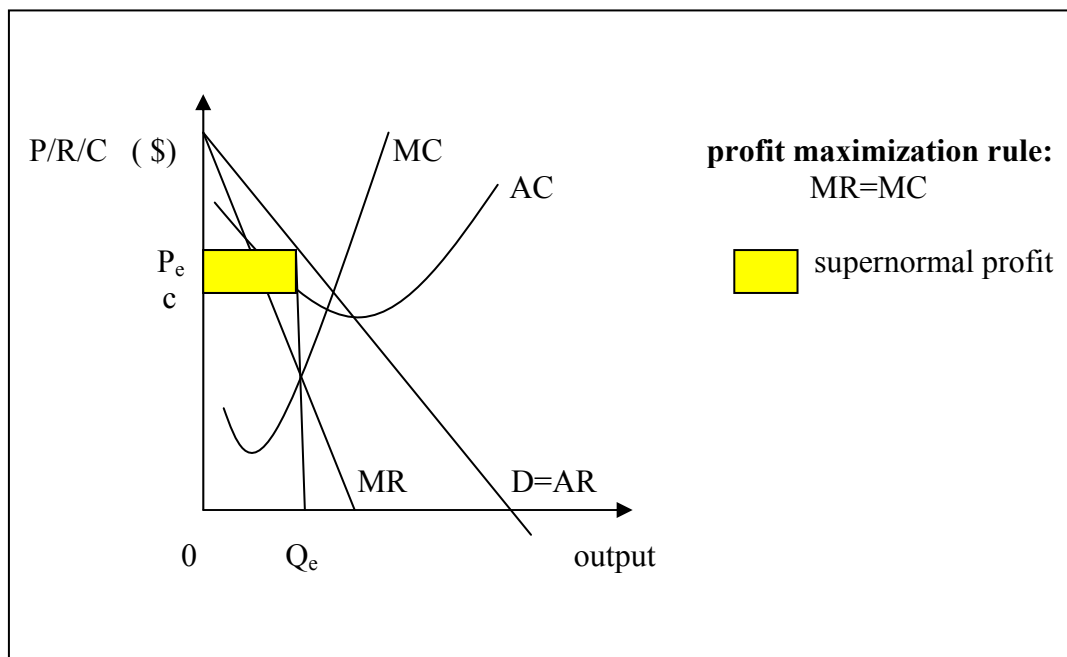


LESSON 2.8.2 PROFIT SITUATION UNDER MONOPOLY

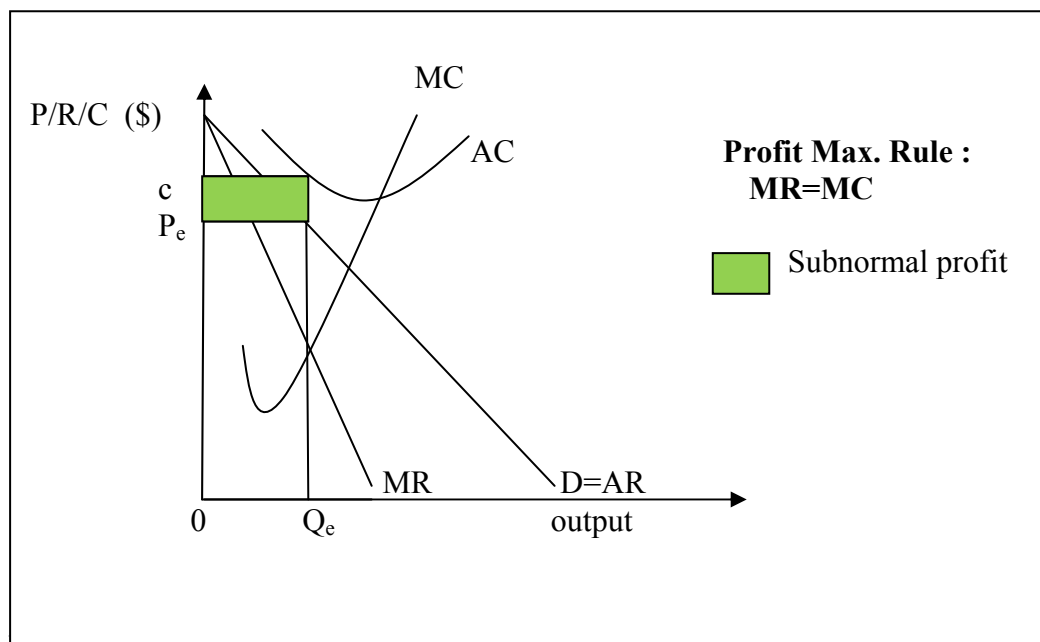
Short Run Profit Situation under Monopoly

Monopoly makes three possible profits in the short run.

i. Supernormal Profit

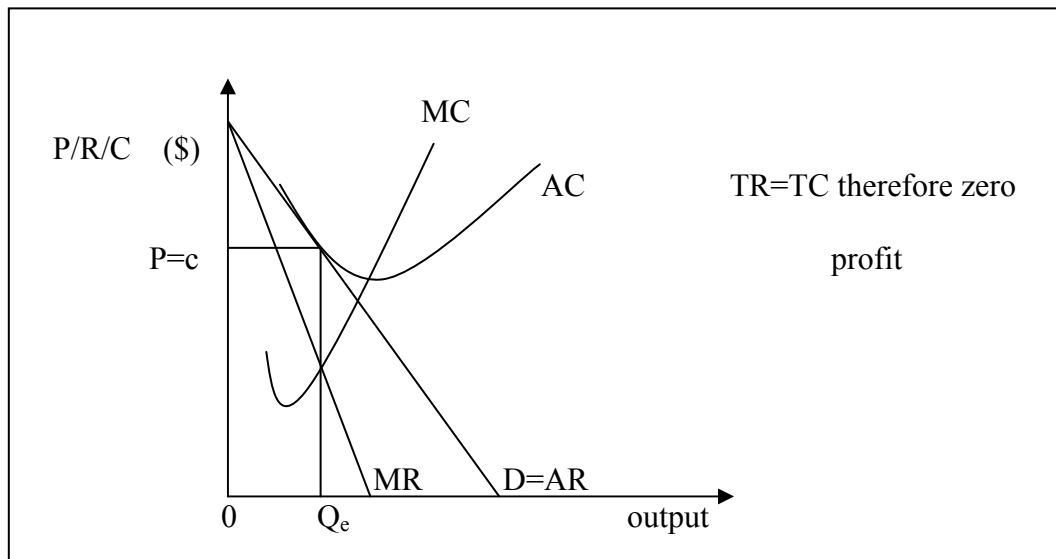


ii. Subnormal Profit





iii. Normal Profit



Long Run Equilibrium

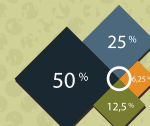
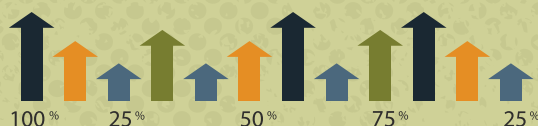
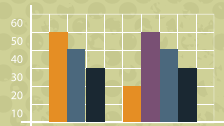
Monopolies mostly make supernormal profits in Long Run since barriers to entry restrict freedom of entry of other firms in the industry. Thus Monopoly profits are protected.

Performance of Monopolies

- Due to the fact that monopoly firm is the industry it has a significant market power and can earn supernormal profit in the long run.
- Since it is a single producer it has freedom to produce at a plant size which is less than optimal therefore loss of Economic Efficiency. In other words they do not produce at socially desirable level of output.
- Monopolists restrict output and charge prices to earn supernormal profit. Thus Consumers have to pay higher price which is not in their best interest, therefore monopolies fail to operate efficiently or respond to consumers demand (loss of allocative and productive efficiency, creating dead weight loss)
- There is no competitive therefore lack of urgency to improve their product. This is at the expense of the public service.

Good side of monopolies

- Monopolies earn supernormal profit and have strong barriers to entry; they have greatest ability to undertake research and development, innovation and diffusion.
- Monopolies are able to achieve economies of scale they may create a long run advantage to consumers.
- They have sufficient funds to innovate product quality for consumers.
- They are able to produce and supply the entire economy very efficiently.



Types of Monopolies

Natural Monopoly - occurs when a single firm can supply the entire industry output more efficiently than several sellers.

Near Monopoly - Market approaching Monopoly.



ACTIVITY 2.8.2.1

MULTIPLE CHOICE QUESTIONS

1. Monopolist are able to maximize profit by
 - A. Supplying the entire industry
 - B. Imperfect knowledge
 - C. Restricting output and charging higher prices
 - D. Selling differentiated product
2. Monopolies are able to maintain their supernormal profits because
 - A. They are price markers
 - B. They are faced by downward sloping demand curve
 - C. They have strong barriers to entry
 - D. They are imperfect competitors.
3. A monopoly is firm where there is
 - A. Single seller
 - B. Single buyer
 - C. Few sellers
 - D. Many sellers
4. Monopoly is different from all other market structures since
 - A. Produces identical products
 - B. Faced by downward sloping demand curve
 - C. Is a price marker
 - D. Is a single seller.
5. Price discrimination used under monopolies means
 - A. Competing through Non price competition
 - B. Using product differentiation
 - C. Charging different prices to different consumers.
 - D. Cut throat competition

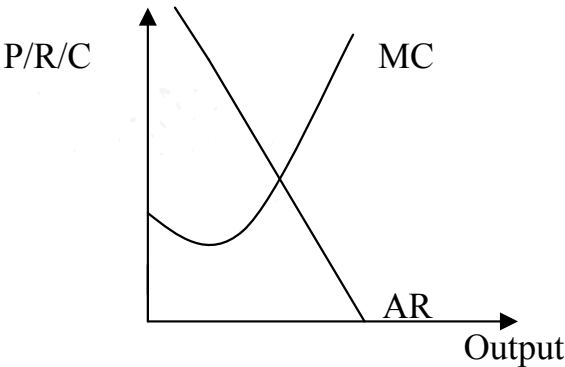


6. When comparing a perfect competitor with a monopolist which of the following is true?
- A. Monopolists have greater market power because of fewer barriers to entry
 - B. Monopolists tend to produce below optimal plant size
 - C. A monopoly is allocative efficient firm.
 - D. Both compete using price competition



ACTIVITY 2.8.2.2

- A. The diagram represents a monopolist, and the market demand curve for the output of the firm.



- i. Determine the profit maximizing level of output for this firm and level it as Q_e (1 mark)
- ii. Mark and level profit maximization price as P_m (1 mark)
- iii. Draw to illustrate supernormal profit earned by this monopoly (2mark)



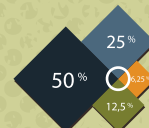
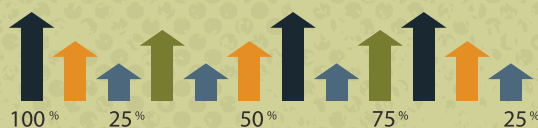
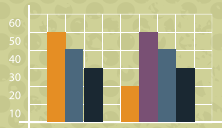
ACTIVITY 2.8.2.3

- A. Study the information given in the table below and answer the question that follow;

OUTPUT (Q)	Price \$	TC (\$)
0	0	300
1	180	450
2	160	570
3	140	670
4	135	780

Calculate the:

- i. Total fixed cost for the firm. (1 mark)

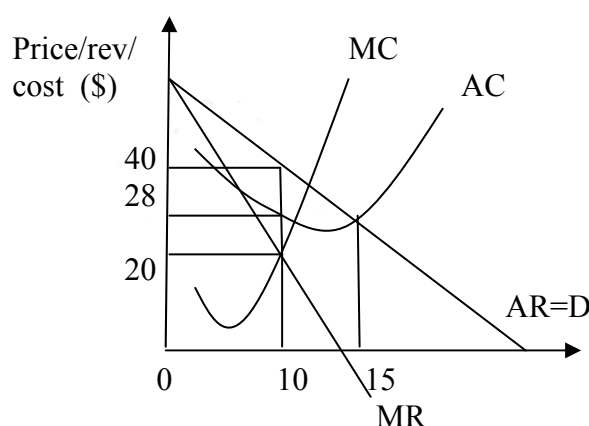


- ii. Total revenue from producing 4th unit of output? (1 mark)
- iii. Variable cost at 3rd unit of output (1 mark)
- iv. Determine the firm's profit maximization price and output level (1 mark)
- v. Explain why monopoly equilibrium does not result in Allocative efficiency. (1 mark)



ACTIVITY 2.8.2.4

Study the graph given below and answer the questions that follow



- i. State the profit maximization price and output level for the firm. (1 mark)
- ii. Calculate the amount of profit earned by the firm (1 mark)
- iii. State one feature that makes this monopoly different from a perfect competitive firm. (1 mark)



ACTIVITY 2.8.2.5

Use the statement given below and answer the questions that follow

Fiji Electricity Authority (FEA) is the sole provider of electricity in the economy



- i. Name the type of market structure that FEA comes under. (1 mark)
- ii. FEA was faced strong barriers to entry when it started. Explain what 'Barriers to entry' means and give ONE example of a barrier to entry that FEA may have faced. (2 marks)



ACTIVITY 2.8.2.6

Use the data given below to answer the questions that follow:

Schedule for kava production

Output kava	Average variable	Average revenue
(kg)	cost \$	(\$)
1	320	800
2	300	610
3	276	530
4	250	410
5	220	340
6	250	320

- Calculate the marginal cost for 3rd kg of kava.
- Calculate total cost at 4th kg of kava.
- Calculate total revenue at 5th kg of kava.
- Calculate variable cost at 6th unit of kava. (4marks)



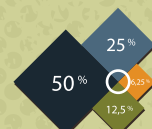
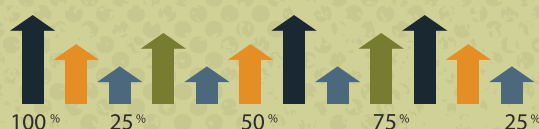
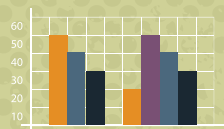
ACTIVITY 2.8.2.7

ESSAY WRITING

A Monopoly is a sole supplier in the industry.

With reference to the above statement:

- Identify and explain the three features of a monopoly. (3marks)
- Explain the three barriers to entry under monopoly market. (3marks)
- Explain the three reasons why monopolies produce against public interest. (3marks)



LESSON 2.9.1 MONOPOLISTIC COMPETITION

Monopolistic competition is a market structure that lies between two extremes of perfect competition and monopoly. It is referred to as monopolistic competition because, through its behavior in advertising, product differentiation and pricing aims to increase sales, it is able to enjoy market power like monopolies.

Characteristics of Monopolistic Competition:

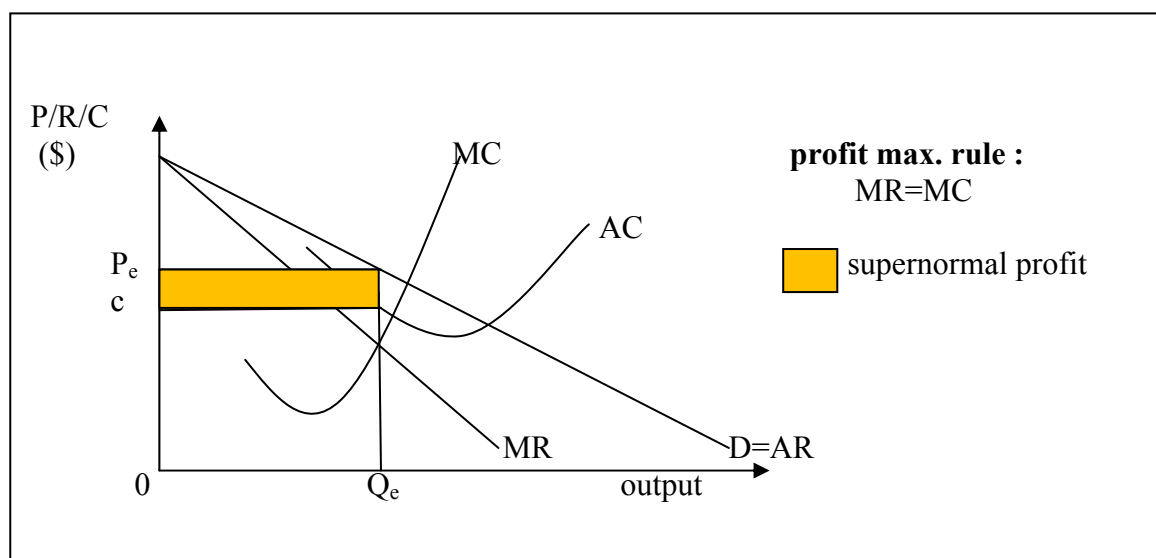
1. There are a large number of buyers and sellers therefore price fixing is impossible and price and output behavior of one firm has minimum impact on others.
2. Long run barriers are non-existent; because of their small scale i.e. small capital cost to start or operate so any one can start up monopolistic competition (unlike monopoly).
3. Similar production cost for each firm.
4. Similar product but not identical. This is called product differentiation. It is also known as non-price competition. Forms of product differentiation are packaging and quality improvement (It is most effective competitive instrument - attracts most consumers therefore sale and profitability in the long run).
5. They are price makers to some extent due to successful competition.

Examples of Monopolistic Competition are: Solicitors, restaurants, hairdresser, takeaways food stores, coffee shops and dry cleaners.

Types of Profits in the Short Run:

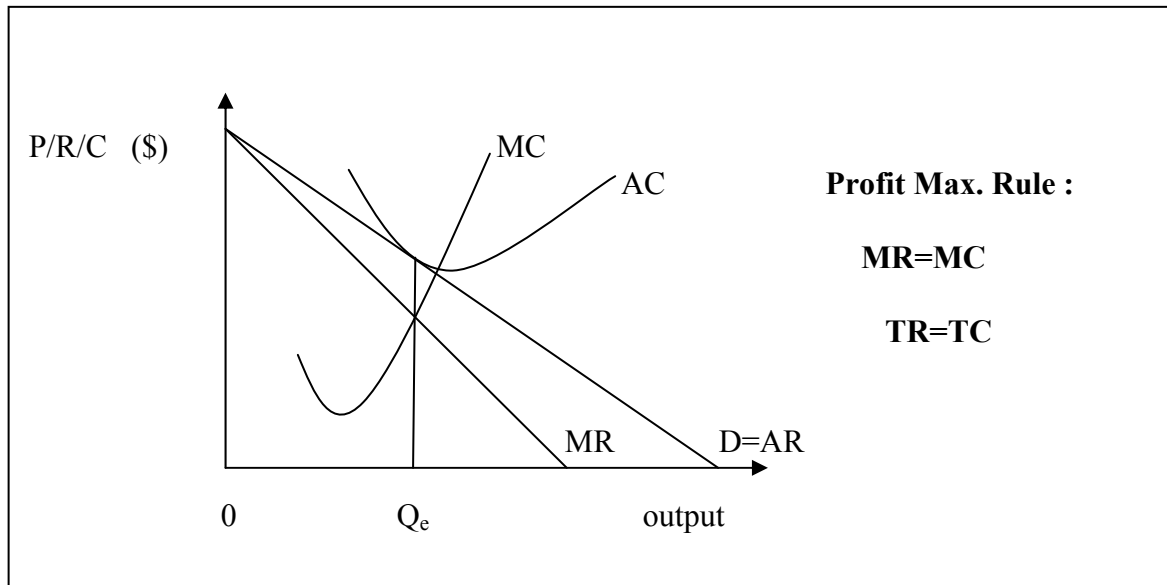
In short run it is possible for monopolistic competitive firms to earn supernormal, subnormal and normal profit.

i. Supernormal Profit



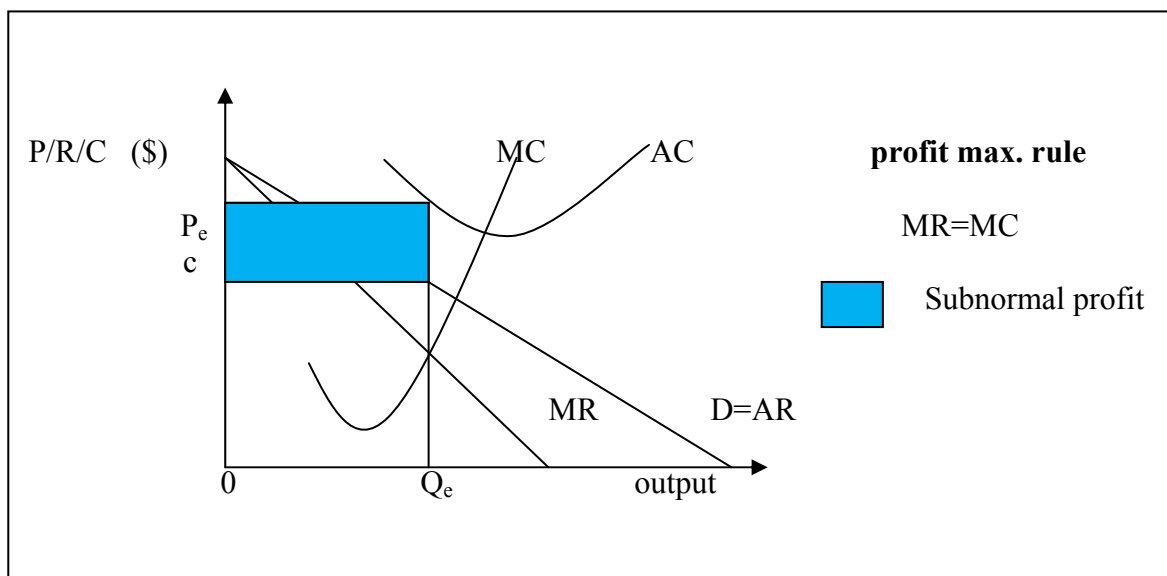


ii. Normal Profit



iii.

Subnormal Profit

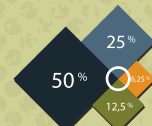
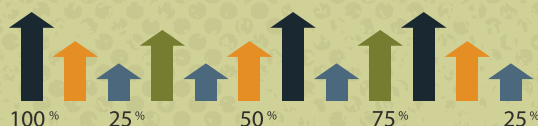
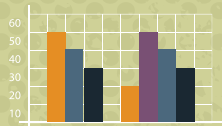


LESSON 2.9.2 Long run Equilibrium UNDER MONOPOLISTIC COMPETITION

In the long run monopolistic competitive firms earn normal profit since the supernormal profit is competed away due to weak barriers to entry.

Excess Capacity Theorem

Monopolistic competition is not able to achieve economic efficiency since they do not produce at optimum plant size. Minimum AC is considered to be the firms optimum capacity. This theorem states that each firm has the capacity to increase production to produce at optimum plant size, i.e. produce maximum at minimum average cost.



Performance of Monopolistic Competitive Firm

- No single firm is large enough to achieve economies of scale.
- Productive and economic efficiency is not achieved because MC does not equal minimum AC.
- Consumers pay high price since monopolistic competitive firms restrict output and charge higher prices
- Monopolistic Competitive firm is economically inefficient because they do not produce at optimum plant size. Thus there is misallocation of resources because too many firms producing too little (lies below than optimum plant size)
- Firms innovate and undertake research and development.
- Monopolistic competitive firms involve in real product differentiation

Product differentiation means attracting customers by making the product look different or appear different and superior to the competition's product through advertising, different packaging, different brand names, longer warrantee periods and discount offers.



ACTIVITY 2.9.2.1

1. What is the main advantage for a firm using non price competition?
 - A. Greater choice for consumers
 - B. Better quality goods for consumers
 - C. Increased cost for the producer
 - D. Increased sales or market share
2. Firms in monopolistic competition can be distinguish from firms in perfect competition by
 - A. the presence of homogeneous products
 - B. the presence of differentiated products
 - C. the absence of strong entry and exit barriers
 - D. the absence of advertising and sales promotion
3. Monopolistic competition is a price maker since
 - A. It takes the price set in the industry
 - B. It matches with the price deduction of rival firms
 - C. It has power to set its price and quantity combination
 - D. Since it earns normal profit in LR.
4. Which of the following is a form of non- price competition?
 - A. Advertising to promote sales
 - B. Imposition of Taxation
 - C. Price control by government
 - D. Price discrimination



5. Price discrimination is typical feature of

- A. Oligopoly
- B. Monopoly
- C. Perfect competition
- D. Monopolist competition

6. A Monopsony Market Structure means there is

- A. One buyer in the market
- B. One seller in the market
- C. One buyer and one seller
- D. A maximum of two buyers



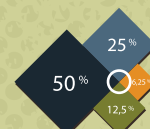
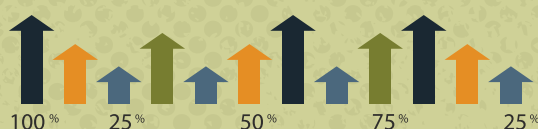
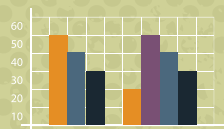
ACTIVITY 2.9.2.2

1. Monopolistic competition is so named because of its behaviour in advertising, product differentiation and pricing aims to increase sales. Discuss the above statement with reference to

- Three main characteristics of monopolistic competition
- Three ways in which monopolistic competition is different from perfect competition
- Performance of monopolistic competition ,in terms the excess capacity theorem , price maker and long run profit situation

2. Monopolistic competition is so named because of its behaviour in advertising, product differentiation and pricing aims to increase sales. Discuss the above statement with reference to

- Three main characteristics of monopolistic competition
- Three ways in which monopolistic competition is able to gain a supernormal profit
- Performance of monopolistic competition.



LESSON 2.10.2

OLIGOPOLY

OLIGOPOLY is a market structure consisting of a few, relatively large firms selling products which are close substitutes.

Characteristics of Oligopoly

1. Few sellers few large firms dominate the supply to an entire market.
2. Each firm produces similar products. (Differentiated products)
3. Entry into the industry is very difficult because it involves very high startup cost (sunk costs). (Strong barriers).
4. High degree of real and imaginary product differentiation.
5. Consumers knowledge about product differentiation is limited.
6. Rivalry between firms since there are so few firms in the Oligopoly market that each firm must consider the prices and quantity reactions of its rivals therefore leading to mutual interdependence (actions of one producer will affect the actions of others.
7. Oligopolist is faced by kinked demand curve since the firms match price reduction but do not match price reduction.
8. Loss of allocative efficiency
9. Formation of cartels a group of firms get together to enjoy monopoly power.
11. Competition is very fierce and often known as 'cut throat competition.
12. Heavy advertising throughout the years therefore it turns to be a fixed cost (FC)
13. Involve a research and development and due to large size, revenue and profit potential is greater and have funds to undertake research and development.
14. Price leadership may also develop where one large firm will dominate the industry.
15. Predatory competition occurs when a dominate firm in the market takes over smaller rivals in the same market.

Formation of cartels

Firms under oligopoly market situation form an open collusion or a group of firms form an agreement to set the price and the quantity in the industry and enjoy monopoly power and act as price makers.

Obstacles to Collusion

- Demand and cost differences
- Number of firms - large number of firms would lead difficulty to manage.
- Cheating
- Recession in the economy.

Oligopolies Kinked Demand Curve

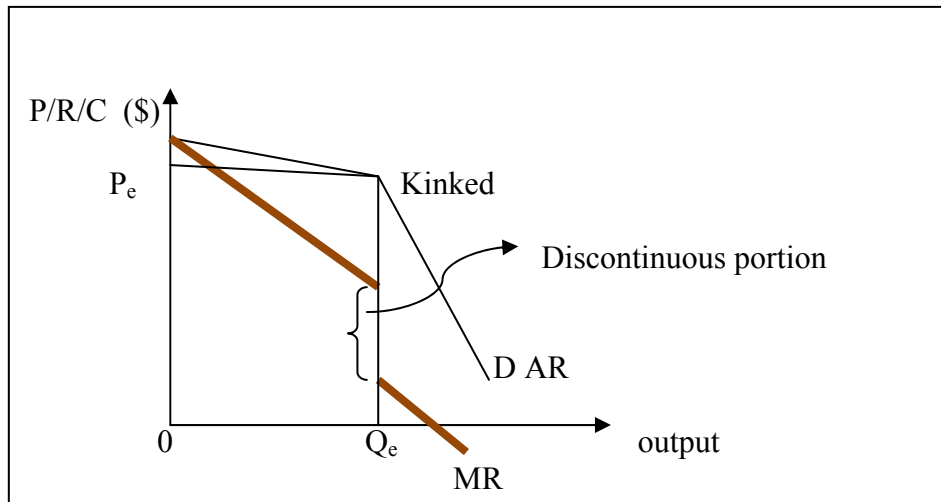
Oligopolist is faced with kinked demand curve because the rival firms match price reduction but do not match price increases.



Marginal Revenue Curve for an Oligopolist.

There is a discontinuity in the marginal revenue curve for an oligopoly firm because of price rigidity or price stickiness at kinked.

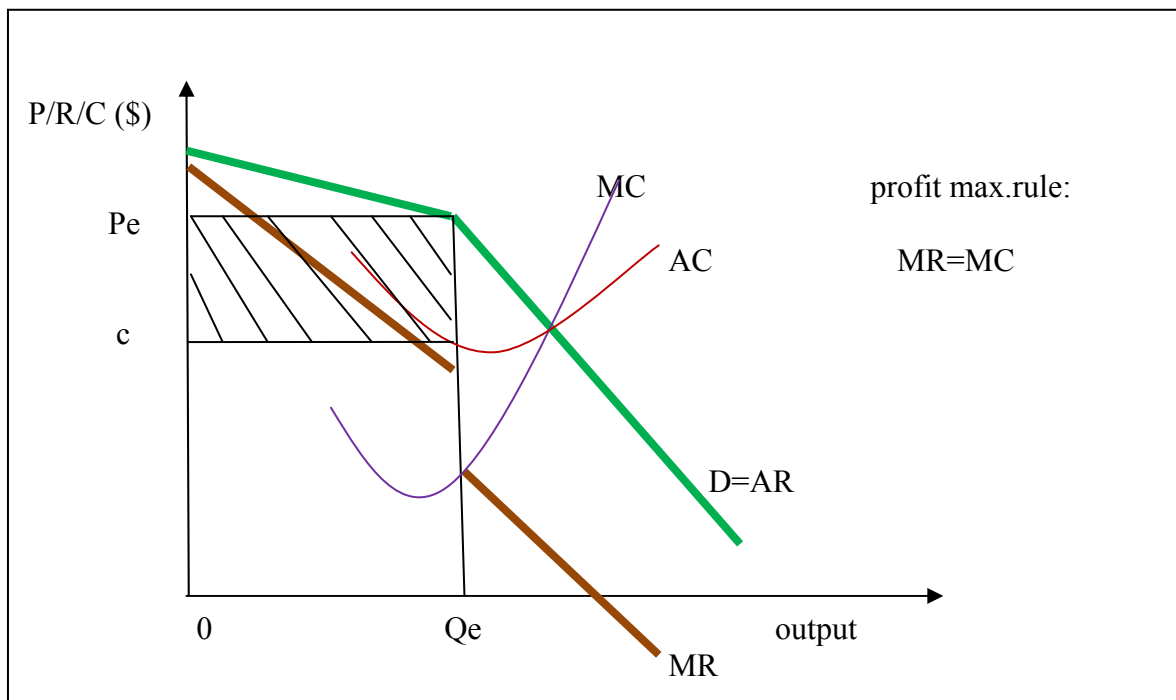
Marginal Revenue and Kinked Demand Curve for the Oligopoly

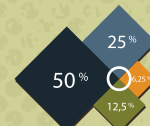
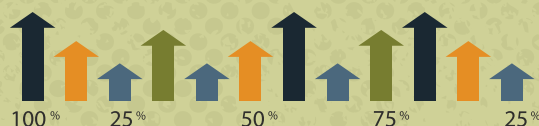
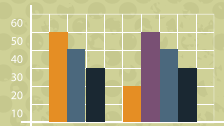


Types of profits under Oligopoly

Oligopolists mostly make supernormal profits both in short run and long run.

Supernormal Profit





Performance of Oligopolies

- There is no guarantee of efficiency
- Firms are unlikely to achieve economies of scale
- $P > MC$ i.e. mark up pricing leads to misallocation of resources or exploitation of consuming public.
- Research and development undertaken by firms. Each has sufficiently high profits to find such development and innovation. It is advantageous to consumers because of better product quality.
- They are able to enjoy monopoly power through formation of cartels.

Government controls over imperfect market structures

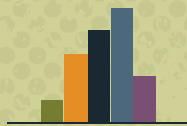
- **Government uses Competition laws** - law that promotes or maintains market competition by regulating anti-competitive conduct by companies. Competition law is known as antitrust law or anti-monopoly law to protect public interest and maintain fair competition .
- Government also uses taxation to control monopoly power
- overnment uses regulations and legislations to control monopolies in Fiji.
- Government also subsidizes monopolies



ACTIVITY 2.10.1

MULTIPLE CHOICE QUESTIONS

- The oligopoly market structure formed by
 - Many sellers
 - Many buyers
 - Few sellers
 - Single seller
- The discontinuity in the marginal revenue curve for oligopolies occurs due to
 - Price rigidity
 - Price leadership
 - Predatory competition
 - Cut throat competition
- Oligopolist is faced with kinked demand curve because
 - The rival firms match price reduction but do not match price increases.
 - The firms compete through product differentiation
 - There are very few sellers in the market
 - There is huge sunk cost



4. Oligopolies are able to enjoy monopoly power through
- A. product differentiation
 - B. cut throat competition
 - C. price leadership
 - D. formation of cartels
5. Price leadership under oligopoly market means
- A. Group of firms joining together to operate like a single firm
 - B. One large firm will dominate the entire industry.
 - C. Firms match price reduction but do not match price increases
 - D. Few large sellers in the industry



ACTIVITY 2.10.2

- a) Complete the table by naming the type of market structures in order of the number of firms in the market.

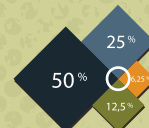
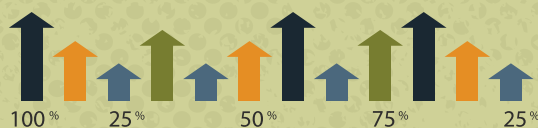
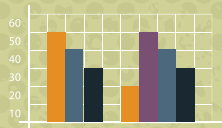
No. Of Firms	Market Structure
One firm (seller)	
Two firms	
One firm (buyer)	
A few firms	
Many firms	
Many buyers & sellers	



ACTIVITY 2.10.3

Very occasionally, a major oil company (and their retail outlets) operating in the South Pacific will lower the price of their petrol for a day or two only, to promote awareness of their brand

- i. In what way do oil companies meet the definition of an oligopoly? (Do not repeat characteristics of oligopoly mentioned below). (1 mark)
- ii. State TWO ways in which oil companies differentiate their product, other than by price. (1 mark)
- iii. Explain why the oil companies lower their price for only a short period of time. (1 mark)
- iv. Describe a barrier to entry that makes it difficult for new firms to enter this market structure (1 mark)



- v. Many petrol retailers also sell products such as groceries and fast food. Using the concept of marginal cost, explain why petrol retailers sell such products. (1 mark)



ACTIVITY 2.10.4

Study the diagram below and answer the questions that follow

Feature	Perfect competition	Monopolistic competition	Oligopoly	Duopoly	Monopoly
 = market = firm					

- Which market structure has the following characteristics?
 - has the strongest barriers to entry
 - sells a product that does not have close substitutes
 - is imperfectly competitive in nature
 (1 mark)
- What type of product does an oligopolistic market structure produce and sell? (1 mark)
- In terms of number of sellers, differentiate between a monopolistic competition and a monopoly. (2 marks)
- A perfectly competitive firm produces and sells a homogeneous product. Explain this statement. (1 mark)
- State why a perfectly competitive firm has very weak or no barriers to entry. (1 mark)



ACTIVITY 2.10.5

Read the article below and answer the questions that follow.

The structure of markets varies. Some markets are competitive in that they have many buyers and many sellers while, at the other extreme, there are markets that have only one firm with just one, or a few, sellers. We are interested in market structure because the way firms behave, when deciding on prices, output, product design, promotional activity and so on, depends on the characteristics of the market in which they operate.

Source: Economic Concepts and Applications 2008

- Identify the market structure that has the descriptive feature of having many buyers and many sellers. (1 mark)

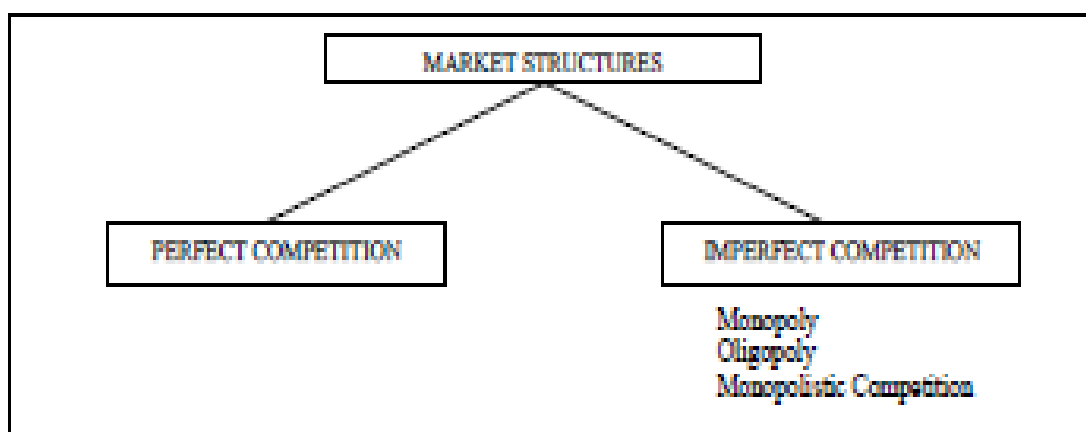


- ii. Name the market structure that has only one firm. (1 mark)
- iii. Explain why this type of market structure is said to be operating under imperfect market conditions. (2 marks)
- iv. Identify the market structure that is very large in size, a few firms exist and has an emphasis on product designing. (1 mark)

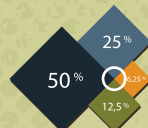
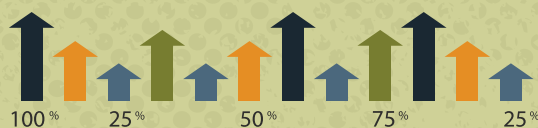
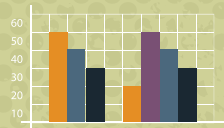


ACTIVITY 2.10.6

Study the Flow Chart below and answer the questions that follow.

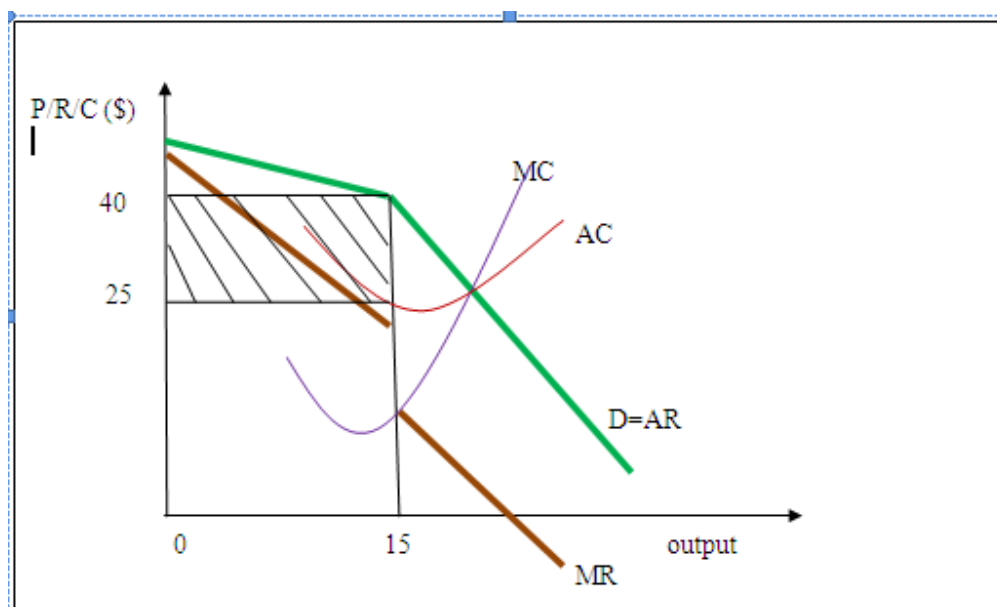


- i. In terms of the number of sellers, what is the difference between oligopoly and monopolistic competition? (2 marks)
- ii. The type of product that an oligopolistic market structure produces and sells is somehow differentiated in nature. Explain why this is so. (2 marks)
- iii. Which market structure has a perfectly elastic demand curve that is horizontal in nature? (1 mark)
- iv. A monopoly can become a perfect competitive firm overnight, if it so wishes. Comment on this statement. (1 mark)



ACTIVITY 2.10.7

Use the graph given below and answer the questions that follow



- Identify the profit maximizing price and output level for the firm. (1 mark)
- Name the type of market structure and type of profit illustrated by the graph (1 mark)
- Explain the shape of the demand curve shown in the graph. (1 mark)
- If the government regulates price at above \$40, what would be the effect on the market. (1 mark)
- Explain two ways in which this firm is able to maintain its profits (2 marks)



ACTIVITY 2.10.8

Part B ESSAY WRITING

Oligopolies comes under imperfect competition because of its ability to influence market conditions

Discuss the statement with reference to:

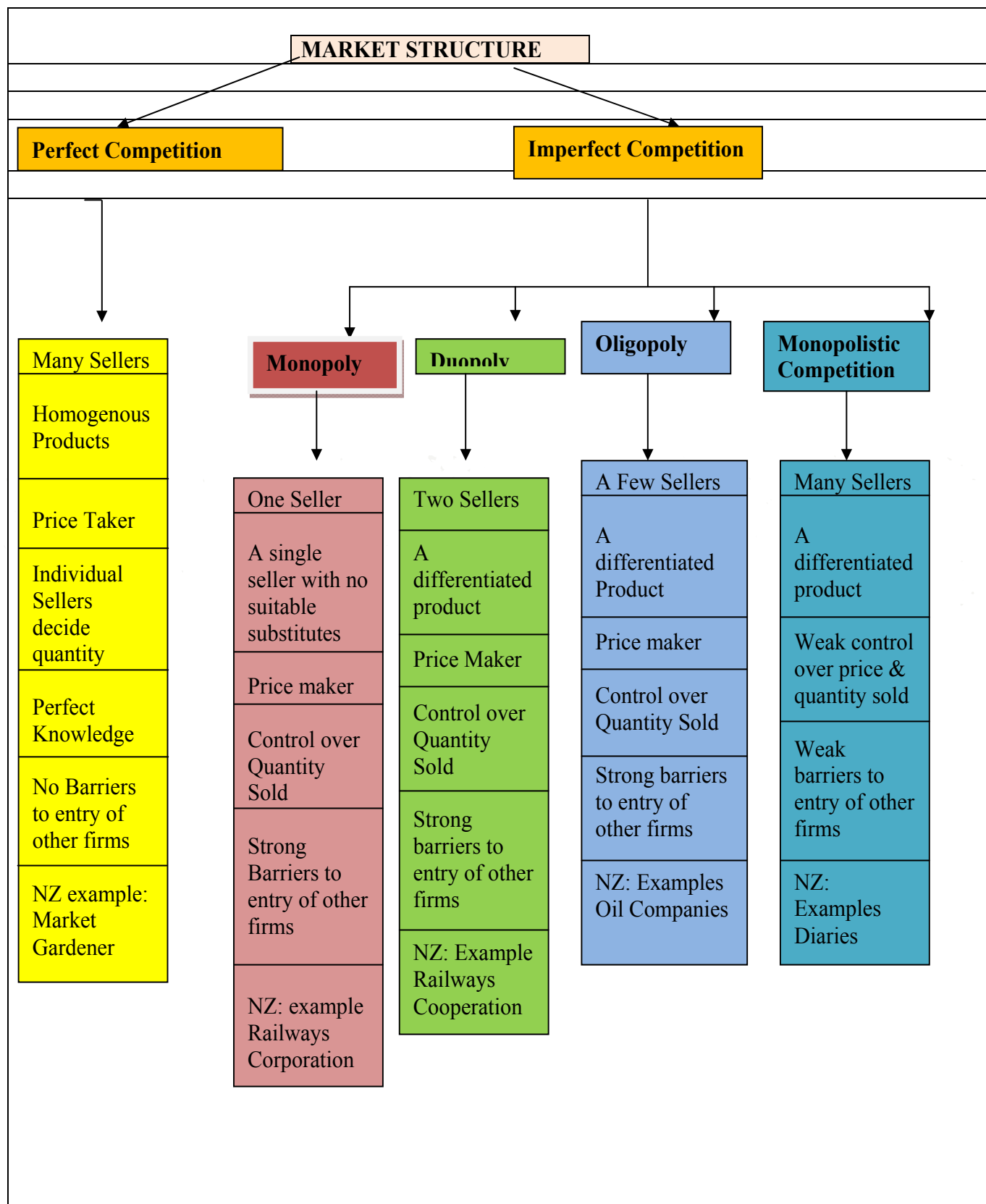
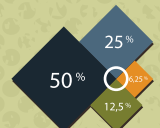
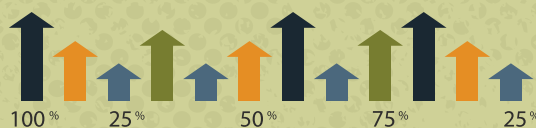
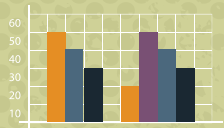
- Three features of oligopolies (3 marks)
- Illustrate with graph the nature of demand curve and profit maximization (3 marks)
- Three types of collusion oligopolies could use to safe guard their interest (3 marks)



SUMMARY

A Comparison of Perfect and Imperfect Competition

	Perfect Competition	Imperfect Competition
Resource Use	Resources employed In accordance with consumer wishes	Under employment of resources as output is restricted
Efficiency Of Production	Relatively high unit cost a few economies of scale New technology may be employed because of the competitive nature of business. Alternatively new techniques may not be employed because he supernormal profits they bring are soon competed away.	Relatively low per unit cost resulting from economies of scale. New technology may not be employed because the firms can exclude competition and thus have no need to innovate. Alternatively, new techniques may be employed because the supernormal profit they bring can be retained in part or whole.
Marketing	As products are homogenous exceptional marketing costs such as advertising are not required	Considerable expenditure is devoted to marketing through advertising, packaging and branding of products
Consumer Satisfaction	Prices depends on cost of production which may be high in the economies of scale Competition may keep prices at the lowest possible level for a given output marginal cost pricing and normal profit only being earned. Homogenous goods provide little consumer choice.	Price may be low if costs savings from economies of scale are passed on to the consumers. Lack of competition ma permit continued high prices for a given output Mark up pricing with long run supernormal profit Differentiated products allow considerable consumer choice.

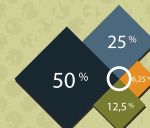
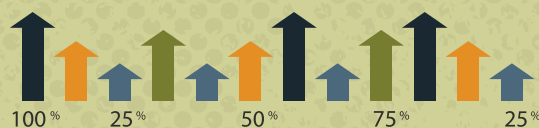
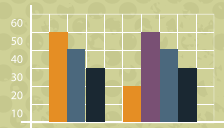


Source: New Approach & Graphical Analysis



Market Structures

Features	Perfect competition	Monopolistic competition	Oligopoly	Duopoly	Monopoly
Market Firm					
Examples	Baby sitters, lawn movers, market venders	Restaurants, clothes shop, coffee shop hair saloon	Punja and Sons Ltd FMF Ltd Moti Bhai	Vodafone And telecom	FEA
Type of competition	Perfect	Imperfect	Imperfect	Imperfect	Imperfect
Number of seller	Many firms	Many firms	A few large firms	Two firms	Single seller
Type of product	Homogenous	Differentiated	Differentiated	Differentiated	No substitute
Barriers to entry	No barriers	Weak	Strong	Strong	Strong
Control over price	Price taker	Price maker	Price maker	Price maker	Price maker
Demand curve	Horizontal demand curve 	Relatively elastic demand 	Kinked demand curve 	Normal demand 	Relative inelastic demand



STRAND 3 MACROECONOMICS

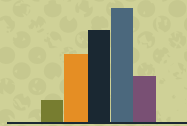
Strand Outcome

Explore the real GDP in the context of the Fiji Economy, the ways of financing a budget deficit with the effects and factors which influence the domestic market for money.

Achievement indicators

Upon completion of this strand students will be able to achieve the following outcomes:

- Calculate GDP using income, expenditure and value added approach.
- Discuss the limitations of GDP.
- Use formulas to calculate GNE, GNI, GDP at factor cost and GDP at market prices.
- Define national budget.
- Explain the effects of government budget deficits or surpluses.
- Identify ways of financing budget deficit.
- Discuss the effects of internal and external borrowing.
- Identify spectrum or medium of money measure/ monetary aggregates (component of money).
- Differentiate near and broad money.
- Define money demand and identify factors determining money demand.
- Define money supply and identify factors determining money supply.
- Determine interest rate in the economy.
- State and calculate quantity theory of money supply,



LESSON 3.1 NATIONAL INCOME

Gross domestic product is the total value of goods and services produced in an economy in a given year. It is measured at current market prices.

Calculating GDP

There are 3 main approaches of calculating GDP

INCOME APPROACH – is a method of determining GDP by summing all income earned in producing the goods and services in a particular period of time. It is made up of income earned by people in form of wages and salaries, profit earned by business firms, net indirect tax earned by the government.

Thus:

$$\text{GDP} = r + w + i + p + \text{net indirect tax} + \text{depreciation}$$

Net Indirect Taxes = Indirect Taxes - Subsidies

Consumption of Fixed capital (Depreciation)

EXPENDITURE APPROACH – measures the total amount of spending on final goods and services in a year. This is the method of calculating GDP by adding expenditure on consumption, investment, govt spending and net volume of exports.

$$\text{GDP} = \text{Consumption} + \text{Investment} + \text{Govt Expenditure} + \text{Net Exports}$$

NX is net exports = Exports - Imports (X - M)

Gross Capital Formation means Investment.

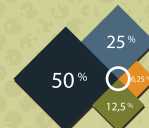
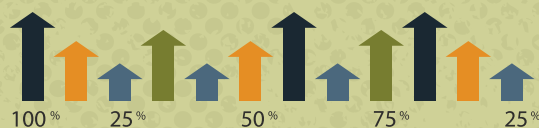
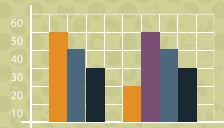
Statistical discrepancy is also added to balance income and expenditure approaches

Example of Income and Expenditure Approach

Using the figures in the table given below calculates GDP using:

- (i) Income Approach
- (ii) Expenditure Approach

Operating Surplus	21000
Increase in Stock	900
Compensation of Employees	42000
Imports of goods and services	15000
Gross Fixed Capital Formation	11000
Govt Expenditure	23000
Subsidies	400
Exports of goods and services	14000
Consumption of Fixed Capital	6000
Final Private consumption Expenditure	43000
Indirect Taxes	300
Statistical discrepancy	300



Solution: Income Approach

$$\begin{aligned}
 \text{GDP} &= r + w + P + \text{Depreciation} + (\text{Indirect Taxes} - \text{Subsidies}) \\
 &= 42000 + 21000 + 6000 + (8000 - 400) \\
 &= 69000 + 7600 \\
 &= \mathbf{\$76600}
 \end{aligned}$$

Expenditure Approach

$$\begin{aligned}
 \text{GDP} &= C + I + G + (X - \text{IM}) \\
 &= 43000 + (11000 + 900) + 23000 + (14000 - 15000) \\
 &= 43000 + 11900 + 23000 + (14000 - 15000) \\
 &= 76900 - \text{Statistical Discrepancy} \\
 &= 76900 - 300 \\
 &= \mathbf{\$76600}
 \end{aligned}$$

VALUE ADDED APPROACH

A method of determining GDP by calculating how much value is contributed at each stage of production i.e. as goods progress down the chain of production from primary production through to the end of tertiary production level; when they are finally distributed to consumers. Value added approach is also known as production approach.

Example in the production of a bottle of milk, the farmer, dairy factory, retailer and the various transporters of the milk add value

Example:

A South Pacific Island Country, Oceania has the following firms in the economy.

- *Treasure Island Ltd pays its workers \$600 to collect attractive shells and give \$200 to the land owners for collecting from their beaches.
- *Sun Shells co-operation buys the shell, washes and sells them. Sun's Shell cooperatives pay its members \$900.
- * Designers wonders buys the shells from the cooperative and uses them to make ornaments. It sells the ornaments for \$5000 and its only expenses are wages and owners profit.
- * A forth company, Husky cooperative collects coconut and sells them for \$500 which is shared among its members.

Solution

\$800 value added of Treasure Island Ltd
 \$900 value added of Sun Shells Cooperation
 \$3300 value added of Designers wonders
 \$500 value added of Husky co operations
\$5500



ACTIVITY 3.1.1

Study the information given below and answer the questions that follow

Compensation of employees	75
Consumption of fixed capital	23
Exports of goods and services	51
Final consumption expenditure –government	36
Final consumption expenditure –private	57
Gross capital formation	43
Indirect tax	30
Less subsidies	8
Operating surplus	53

- Calculate GDP using income approach (1 mark)
- Differentiate between the terms:
 - consumption of fixed capital
 - capital formation
 (2 mark)
- What is net tax (1 mark)
- State the formula for calculating GDP using expenditure approach. (1 mark)
- List two limitation of GDP as a measure of economic welfare (2 marks)

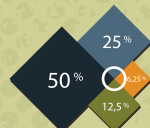
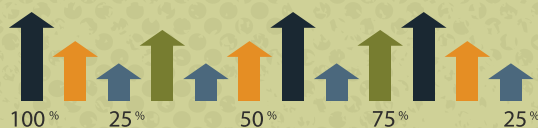
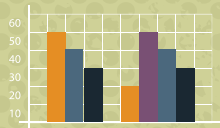


ACTIVITY 3.1.2

The following is national income statistics for the imaginary state of Pacifica. Note that some of the data is not relevant.

	\$m
Exports of goods and services	50
Final consumption expenditure: government	35
Final consumption expenditure: private	55
Gross fixed capital formation	40
Taxes on production and imports	30
Less imports on goods and services	55
Statistical discrepancy	5
Change in inventories	10

- Define Gross Domestic Product (GDP). (1 mark)



- ii. Explain why Real GDP is a better measure of a country's economic growth than Nominal GDP. (1 mark)
- iii. Use the expenditure approach to calculate GDP (1 mark)
- iv. State and briefly describe ONE other approach that can be used to measure GDP. (1 mark)
- v. List two limitation of GDP as a measure of economic welfare (2marks)



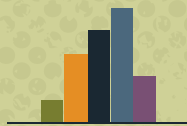
ACTIVITY 3.1.3

Using the information below calculate GDP using income and expenditure method.

	F\$ billions
Gross fixed capital formation	32
Gross operating surplus	34
Net exports	-2
Net indirect taxes	25
Physical increase in stock	2
Private Consumption expenditure	39
Government consumption expenditure	1
Statistical discrepancy	31
Compensation to employees	44

LESSON 3.2 LIMITATIONS OF GDP

1. The GDP figures do not take into account the following items.
 - (i) Non market activities i.e. the household production is not taken into account while calculating GDP. If the goods and services are sold, it can be counted but if it is not sold it is not counted therefore excluded in GDP figures. Example voluntary labour
 - (ii) Goods and services traded on informal markets.
 - (iii) Illegal market activities are not counted e.g. drugs, leisure activities are also not accounted for in GDP figures.
2. The relative merit of production – there is no distinction in the national income account of the relative "goods" or "bads" of production. For e.g. a dollar spent on cigarettes may carry out the same weight as a dollar spent on education.



3. Distribution of Income – GDP is an aggregate or a total output. It gives no indication of how this production is distributed. A country may have high GDP yet due to uneven distribution there may be a large number of people living in poverty. Not able to share the country's high level of production.
4. Social conditions, GDP does not take into account for:
 - a) Resources that were not used e.g. production lost through unemployment.
 - b) The relative social, political or the working conditions of the economy that create the output.
5. Ecological cost are underestimated in the calculation of GDP i.e. externalities created by economic activity.
6. Role of women are under represented in calculation of GDP e.g. the motherhood and the child care that moulds the young for future generation which in turn contributes to a great deal in the economy is under represented.
7. Transfer of existing assets is not counted in GDP

Calculations under National Income

Gross National Income	GNI is the national turnover of goods and services GNI = GDP - NX
Gross National Expenditure	GNE is Gross National Product GNE = C + I + G
GDP At Factor Cost	GDP at factor cost = GDP - (indirect tax - subsidy + dep) GDP at factor cost is same as Domestic Factor Income DFI = r + w + i + p
GDP At Market Prices	Refers to cost of final goods and services under current market prices. GDP = C + I + G + (X - M)

PRICE AND INFLATION

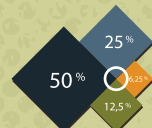
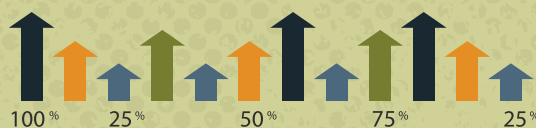
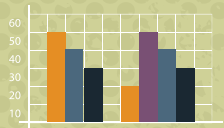
Because prices of goods and services rise and fall, we use price index to measure average prices. Price index is calculated as follows:

Commodity	Qty Bought	1990 (Base year)		1991 (current year)	
		Price	Expenditure	Price	Expenditure
6 packs of soft drinks	4	\$6	\$24.00	\$6.75	\$27
Video tapes	2	\$3	\$6.00	\$4.20	\$8.40
Total			\$30.00		\$35.40

$$\text{Price Index for 1991} = \frac{\text{Expenditure Current Year}}{\text{Expenditure Base Year}} \times \frac{100}{1}$$

$$= \frac{35.40}{30.00} \times \frac{100}{1}$$

$$= 118$$



$$\begin{aligned}
 \text{Inflation Rate} &= \frac{\text{CPI Current Year} - \text{CPI Base Year}}{\text{CPI base Year}} \times \frac{100}{1} \\
 &= \frac{118 - 100}{100} \times \frac{100}{1} \\
 &= 18\% \text{ increase in price.}
 \end{aligned}$$

ACTIVITY 3.2.1



The Consumer Price Index is the basis for the calculation of the annual rate of inflation.

CPI	
Year	CPI
2012	182
2013	114

- Define CPI.
- State two limitations of CPI.
- Use the values in the table below to calculate the annual inflation rate for a hypothetical Country A

ACTIVITY 3.2.2



Study the flow chart below and answer the questions that follow.

For each of the items tabulated below, identify by placing a tick (✓) where appropriate Whether it is a: Cause, effect or a measure of inflation.

	Cause [C]	• Effect [E]	• Measure [M] of inflation
Wage rates or raw material costs increasing.			
Increases in demand			
Redistributes income from some groups to others.			
Redistributes income from some groups to others.			
Harms those on fixed incomes.			
Government decreases its spending.			
Central Bank reduces the amount of cash settlement in the system.			



ACTIVITY 3.2.3

The following table shows the Gross Domestic Product (GDP) data for a hypothetical economy. Study the table below and answer the questions that follow.

Year	GDP at Current Price (\$)	Price Index	GDP at Constant Price (\$)
1	400	100	A
2	650	130	500
3	858	143	600
4	1023	150	B

- Define GDP at Current Price. (1 mark)
- Calculate the increase in Nominal GDP from Year 2 to Year 3. (1 mark)
-
- Calculate the rate of inflation for Year 2. (2 marks)
- Calculate the values for A & B (1 mark)
- Give ONE limitation of using changes in Real GDP as a measure of changes in the standard of living. (1 mark)

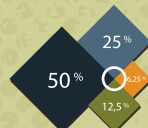
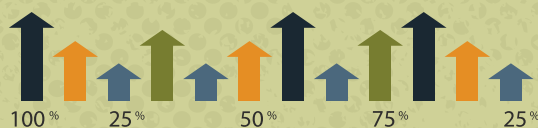
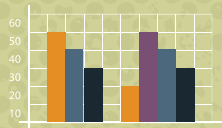


ACTIVITY 3.2.4

The following table shows the Gross Domestic Product (GDP) data for a hypothetical economy. Study the table below and answer the questions that follow.

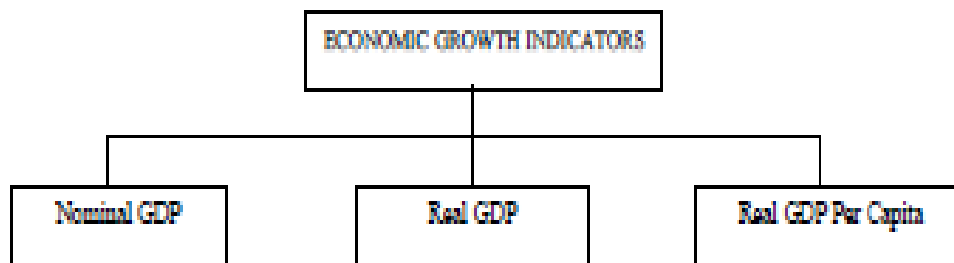
Year	Nominal GDP	Price Index	Real GDP
1	200	100	200
2	325	130	250
3	429	143	300
4	516	150	A

- Define Nominal GDP. (1 mark)
- Give another name for Real GDP. (1 mark)
- Calculate the economic growth rate in real terms from Year 1 to Year 3. Show ALL workings. (2marks)
- Complete the above table by calculating the value of A. Show ALL working (2 marks)
- What does GNI stand for in economics? (1 mark)



ACTIVITY 3.2.5

Study the diagram below and answer the questions that follow.

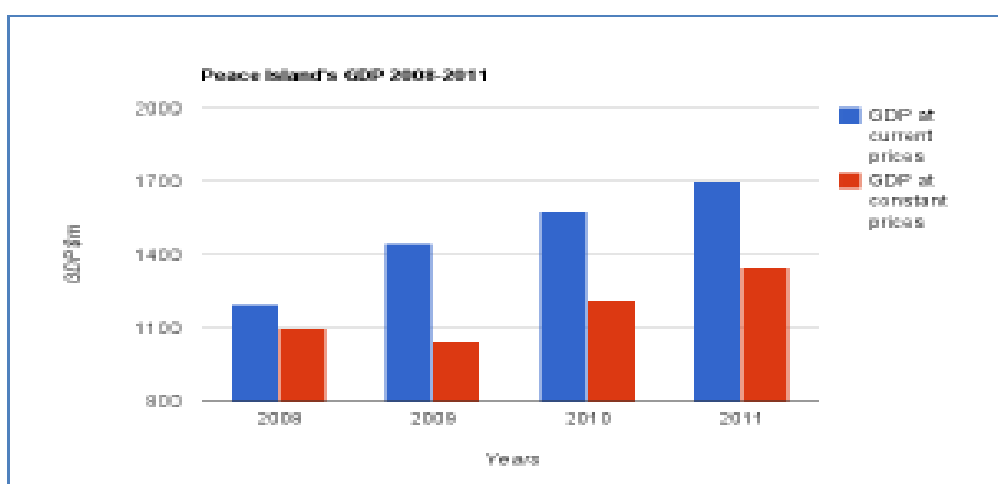


- Define the term economic growth. (1 mark)
- Which of the three economic growth indicators given above is also known as
 - GDP at Current Prices?
 - GDP at Constant Prices? (2marks)
- Give the formula for calculating
 - Real GDP
 - Real GDP per Capita (2 marks)
- Differentiate between Gross National Income (GNI) and Gross National Expenditure (GNE).

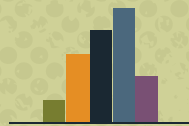


ACTIVITY 3.2.6

The graph below shows data for Peace Island's Gross Domestic Product.



- Distinguish between GDP at current prices and GDP at constant prices. (2 marks)
- Identify a year in which Peace Island experienced economic growth. (1 mark)



ACTIVITY 3.2.7

The table below shows data for three neighboring islands. Read the information and answer the questions that follow.

Island	GDP at current prices (\$m)	GDP at constant price (\$)	Population (m)	Real GDP/capita
Peace Island	1500	1200	0.2	
Happy Island	1600	1400	0.25	
Sun Island	1800	1500	0.3	

- Calculate the Real GDP/capita for each island. Write your answer in the last column of the table below.
- Explain which island has the highest economic growth and give a reason why. (2marks)



ACTIVITY 3.2.7

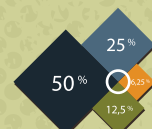
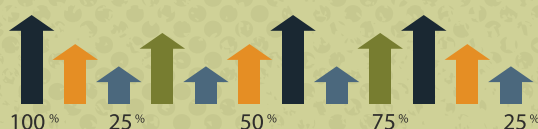
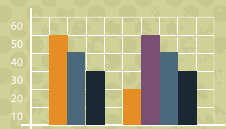
Read the excerpt below and answer the questions that follow.

A good number of economic indicators is available for economic assessors to lay their hands on; and they include the following:

- GDP at Current Prices
- GDP at Base Prices
- Real GDP per Capita

Other economic indexes such as the Consumer Price Index and the Rate of Inflation are somehow linked to the three mentioned above.

- State an advantage and a disadvantage of using GDP at Current Prices to measure the standard of living and well being of an economy. (2marks)
- Even though Real GDP per Capita is seen as the principal measure of an economy's standard of living it has its own shortcomings as well. List TWO limitations of Real GDP per Capita as a measure of an economy's standard of living. (2marks)



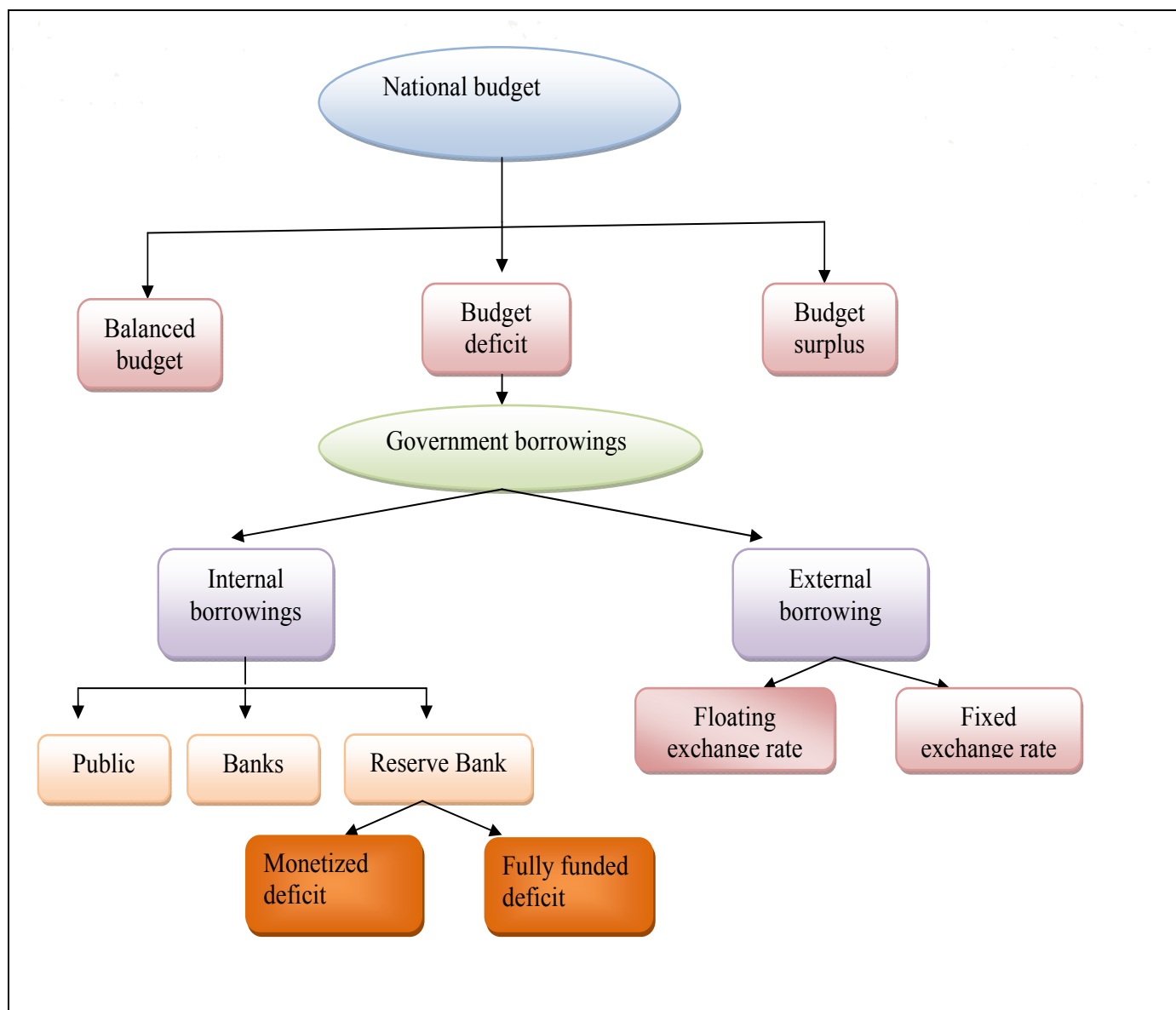
LESSON 3.3 ROLE OF GOVERNMENT

National budget is a statement which sets out the spending, tax income and borrowing plans of government over the forthcoming financial year.

Budget surplus is a situation when total tax revenue exceeds total government expenditure. Budget surplus leads to a contractionary effect on the economy. it leads to decrease in the level of income, output and employment in the economy

Budget deficit is a situation when total government expenditure exceeds total tax revenue. Budget deficit results in an expansionary effect of the economy. Increase in government spending leads to increase in income output and employment in the economy.

If government budgets for a deficit then it needs to look into ways financing this deficit.





Ways of Deficit Financing and Its Effects

There are two main ways of deficit financing

A. Internal borrowing

Borrowing from Reserve Bank simply means printing more money. The government will spend this money into the economy. This will increase domestic money supply resulting to inflationary pressure in the economy. This situation is called monetizing the deficit.

Borrowing from private sector government can borrow money from private by selling bonds or securities. As people withdraw their money from the registered banks and give to the government in return for the bonds, the money supply decreases and the interest rate increases. When interest rate increases it results in **crowding out of investment**. **Crowding out investment means decrease in the level of investment due to transfer of funds from private sector to government.**

B. External borrowing

Borrowing from overseas financial institution such as IMF, ADB and World Bank. Borrowing from overseas from overseas will lead to increase in **national debt and debt servicing burden**.

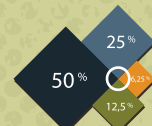
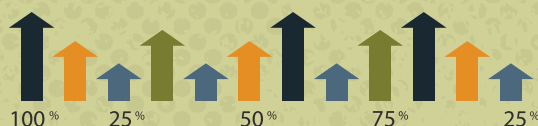
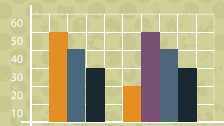
If there is a floating exchange rate –an exchange rate that is free market equilibrium, then what comes in is equal to what goes out. Therefore there is no change in the money supply. Under fixed exchange rate overseas borrowings will increase the level of money supply.

National debt is the volume of funds on loan to government in a given period of time. It is national obligations.

Debt servicing is payment made to lenders in form of interest or dividends on borrowed funds

Monetized deficit is inflationary

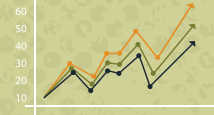
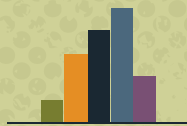
Non monetized deficit (fully funded) deficit counteracts the inflationary effect of the deficit in the operating balance.



ACTIVITY 3.3.1

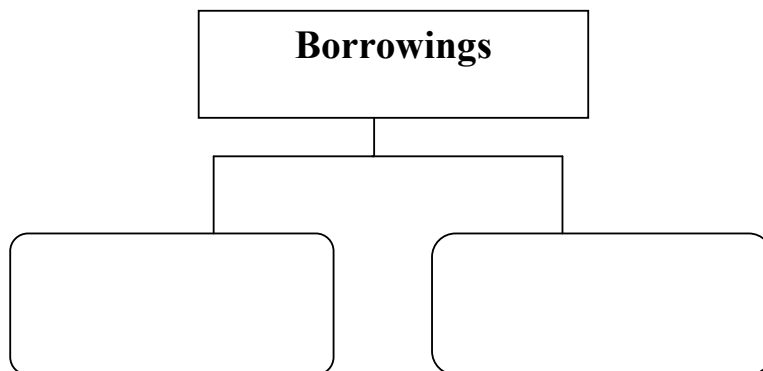
MULTIPLE CHOICE QUESTIONS

- The result of a surplus in national budget is
 - Contractionary effect in the economy
 - Expansionary effect in the economy
 - Increase in employment in the economy
 - Increase in the level of economy activity in the economy.
- Borrowing from general public by selling government bonds would result in
 - Decrease in money supply in the economy
 - Crowing out effect
 - Multiplier effect
 - Leakage effect
- Negative effect of borrowing on the economy would be
 - Increase in Compensating deficit
 - Increase in output in the economy
 - Increase in debt servicing burden.
 - Increase in investment
- Government trying to bring fairness in income distribution and wealth through progressive taxation and welfare benefits is example of
 - Allocative role
 - Stabilization role
 - Regulative role
 - Redistributive role
- A fiscal policy tool used by government to control the fluctuations in the trade cycle is
 - National budget
 - Interest rate
 - Reserve ratio
 - Open market operations
- Which of the following is not a fundamental role of government?
 - Allocative
 - Stabilizing
 - Marketing
 - Distributive



ACTIVITY 3.3.2

a) Use your knowledge to complete the flow chart given below



(1 mark)

b) Classify the following into internal and external borrowings

1. More money printed by Reserve Bank.
2. Selling government bonds or securities to general public
3. Borrowing from Asian Development Bank.

(3 marks)

c) State two effects of each type of borrowing.

(3 marks)



ACTIVITY 3.3.3

Use the information given to answer the question that follow

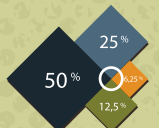
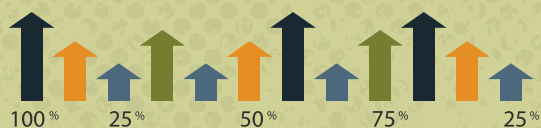
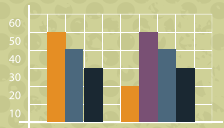
	\$m
Government expenditure	20
Taxation receipts	15
Saving	10
Investment	15

i. State two forms of government expenditures (1 mark)

ii. Calculate to show whether the economy is operating under budget surplus or a deficit (1 mark)

iii. Identify one way of deficit financing and explain its effect on the economy (2mark)

iv. Explain one way in which government regulates prices in free market system (1 mark)



ACTIVITY 3.3.4

a) Study the information given below and place a (✓) tick in the appropriate column

Functions of Government	Allocative Role	Distributive Role	Regulative Role	Stabilization Role
i. Create law and order				
ii. Provide social welfare benefits				
iii. Use monetary policy to control inflation				
iv. Use progressive taxation to bring fairness in income distribution				
v. Provide infrastructure and national defense				
vi. Enforce price controls for consumers				
vii. Use fiscal policy to control unemployment in the economy.				
viii. Provide education and health facilities				

(8marks)

b) State two sources of government revenue and two major forms of government expenditure.
(2marks)



ACTIVITY 3.3.5

A. ESSAY WRITING

The national budget is seen as the primary instrument for the government's involvement in the economy

Discuss the above statement with reference to

- the definition of National Budget and two main components of it (3marks)
- the condition that gives rise for a deficit for a deficit budget National Budget and any two reasons why a deficit National Budget is good for macro-economy (3marks)
- the relationship that exists between a deficit National Budget and the money supply (3marks)

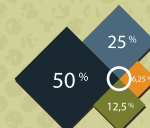
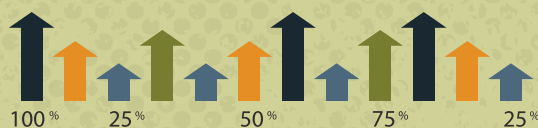
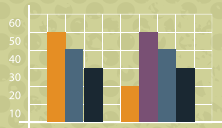


ACTIVITY 3.3.6

B. Use the information given to answer the question that follow

	\$m
Government expenditure	20
Taxation receipts	15
Saving	10
Investment	15

- State two forms of government expenditures (1 marks)
- calculate to show whether the economy is operating under budget surplus or a deficit (1 mark)
- Identify one way of deficit financing and explain its effect on the economy (2marks)
- Explain one way in which government regulates prices in free market system (1 mark)



ACTIVITY 3.3.7

a) Which of the following are Government Policies would the government use in order to control the fluctuations in the trade cycle?

- Fiscal Policy
- Monetary Policy

b) Classify each of the following government actions as either Fiscal Policy (FP) or Monetary Policy (MP) or Direct Control (DC) by placing a tick (✓) in the appropriate column.

GOVERNMENT ACTIONS	GOVERNMENT POLICY		
	FP	MP	DC
1. Increase funding for projects to help the long term unemployed.			
2. Increase in the minimum wage rate.			
3. Not allow retail stores to open on Easter Friday.			
4. Raise all petrol to be lead free.			
5. Require all petrol to be lead-free.			
6. Require a minimum 30% deposit on the purchase of all new motor cars.			

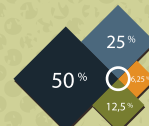
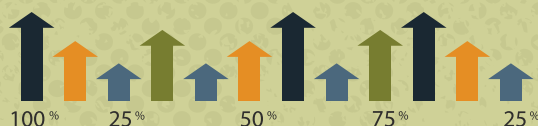
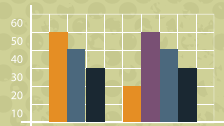


ACTIVITY 3.3.8

a) Use the information below to answer the questions that follow.

Country Z's National Budget 2014		\$m
Expenditure		1961.7
Revenue		1745.7

- i. Calculate the balance in Country Z's 2011 budget, indicating whether it is a surplus or deficit balance. (1 mark)
 - ii. Explain the effect of the type of budget balance you identified above on Country Z's economy (2 marks)
 - iii. State what a government can do with the surplus revenue when it runs a budget surplus. (1 mark)
- b A government can finance a budget deficit by borrowing from the public or borrowing from abroad.
- i. Describe the meaning of borrowing from the public. (1 mark)
 - ii. State the effect of borrowing from abroad under a fixed exchange rate on a country's rate of (1 mark)
 - iii. A government budget deficit puts more burdens on future generations. Explain the meaning of this statement. (1 mark)



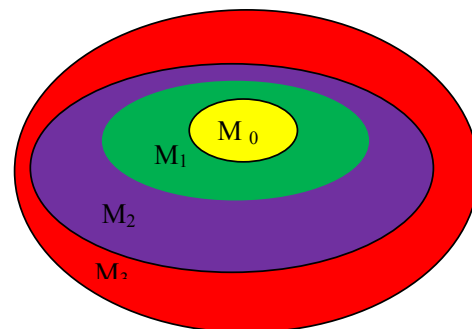
LESSON 3.4

MONEY SUPPLY

Money supply is measured using different mediums.

M_0 is the sum of total currency in circulation.

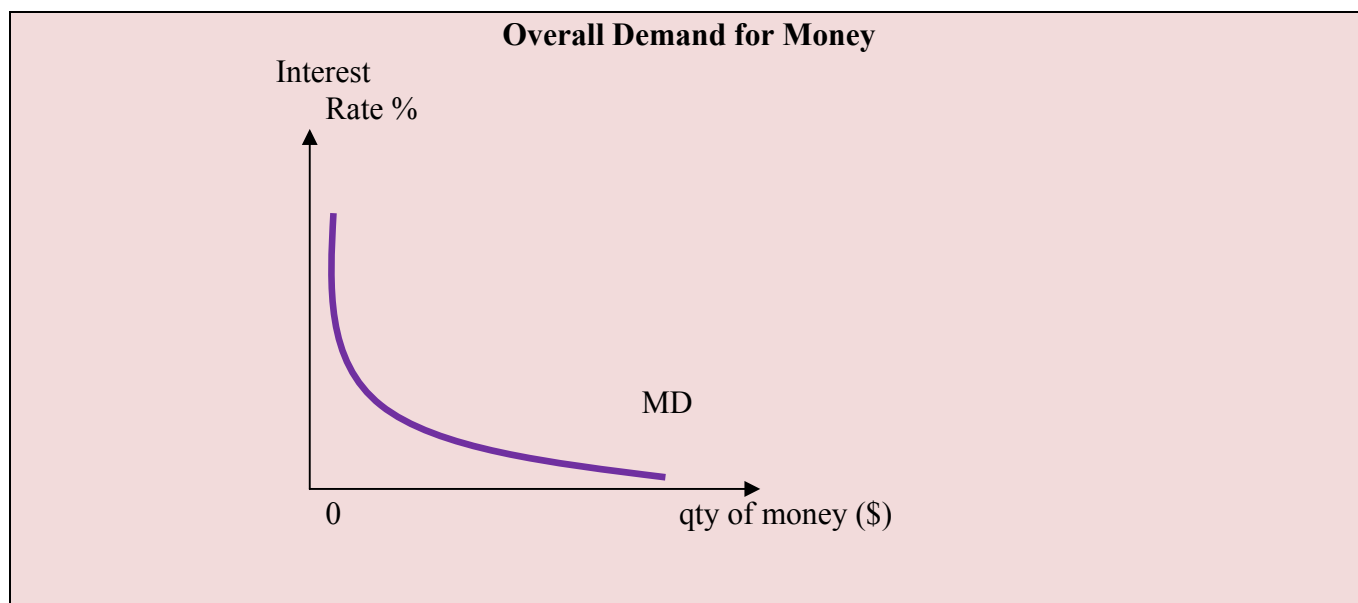
1. M_1 = coins and notes, travellers cheques + transaction accounts operable by cheques. Narrow money, include most immediate forms of money available to the general public.
2. M_2 = M_1 + other savings account. This includes EFTPOS, investments accounts and bonds. M_2 is called Near Money.
Near Money – assets that can be converted into cash easily.
3. M_3 = M_2 + term deposit held at banks or other financial institutions this is called broad money which consists of large denominators, certificates of deposits.



MONEY DEMAND

Money demand exists for three motives

1. Transaction Demand – is a desire to hold money to buy things with i.e. for means of exchange.
2. Precautionary Demand – the demand that arises due to people holding money for emergency purpose or for unforeseen circumstances.
3. Assets (Speculatory Demand) – people may hold money to buy shares now and sell later at a higher price so that they can get capital gain if they find the share price is increasing.



The demand curve for money is downward sloping because when interest rate raises, the demand for money falls.

- a) The higher the interest rate, the higher the opportunity cost for holding money for asset motive (better thing is to save or put money in the bank to earn higher interest rates/ lending).



b) At lower interest rate, the opportunity cost is lower for holding money for asset motive i.e. people could gain by buying property and borrowing.

Factors Affecting Money Demand

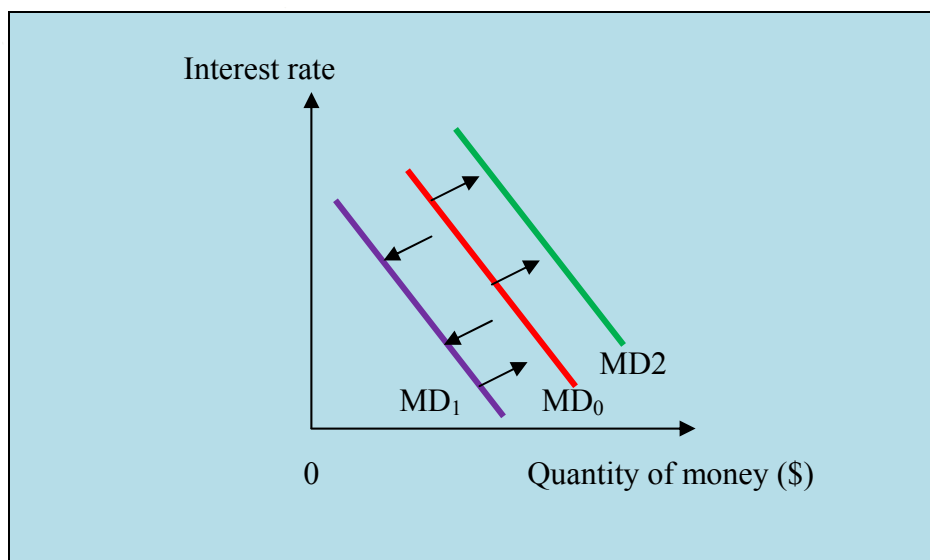
There are two factors affecting the money demand:

1. The General price Level

If the general price level rises, pushing up the price, people would demand more money than before to buy things. Therefore MD (money demand) shifts right. And general price level is falling; people will demand less money than before, therefore MD shifts left.

2. Real Income

That is, if real income increases, people will demand more money to use therefore MD will shift to the right and if real income decreases, people would demand less money to spend. Money demand shift to the left.



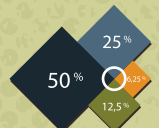
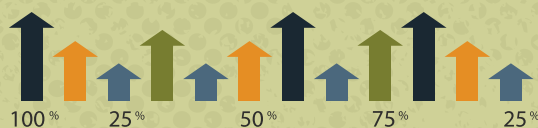
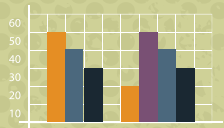
MONEY SUPPLY

Money Supply is vertical. It remains constant irrespective of the changes in the level of interest rate. The money supply is set and maintained by Reserve Bank at a certain rate in a given period of time.

Factors Affecting Money Supply

The factors affecting money supply are:

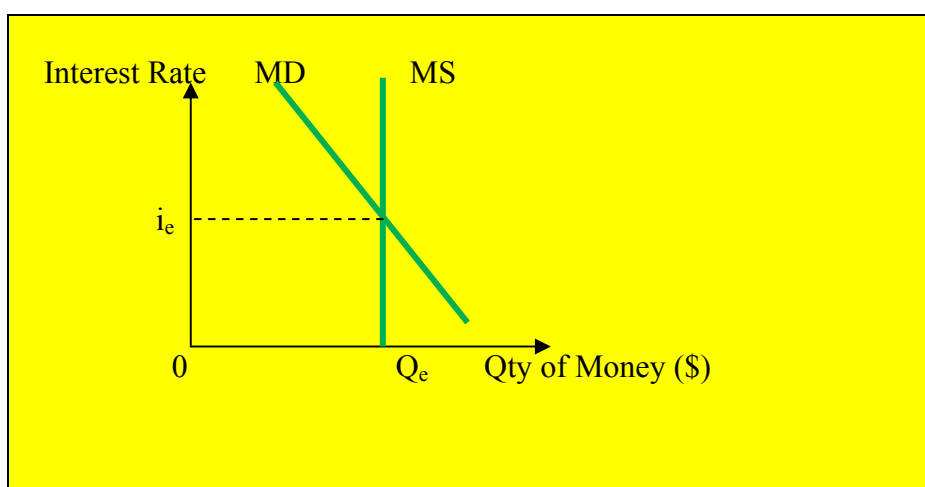
- **Open Market Operation (OMO)** - when Reserve bank purchases govt bonds from banks or the public it leads to increase the monetary base thus increasing the money supply. When the reserve bank sells bonds to banks or the public, this decreases the monetary base, therefore decreasing the excess reserve base of the banking system and thus decreasing the money supply.



- **RR** - Increase in reserve ratio leads to decrease in the loanable fund which leads to decrease in MS while decrease in Required Reserve (RR) leads to increase in advances (loanable funds) which leads to increase in MS.
- **Interest rate** – increases in interest rate leads to decrease in investment, resulting in a decrease in AD thus decrease in MS and vice versa.

Money Market Equilibrium

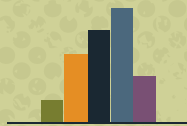
It is achieved where MD intersects with MS. The basic interest rate for the economy is determined by money market equilibrium. The overall demand for money demand set by consumers and business while the MS is set and controlled by the Reserve Bank.



ACTIVITY 3.4.1

Multiple choice questions

- The components of the narrow definition of money include
 - Notes and coins in circulation and all savings accounts.
 - Notes and coins in circulation, cheque accounts and reserves.
 - Notes and coins in circulation, cheque accounts and savings accounts.
 - Notes and coins in circulation, cheque accounts and demand deposits.
- Inflation in the economy would result in
 - Increase money supply
 - Shift the money demand curve to left
 - Increase in money demand
 - Decrease in interest rate.



3. When interest rate is low which group would gain

- A. Borrowers
- B. Lenders
- C. Suppliers
- D. Producer

4. An increase in reserve ratio will result in

- A. Increase money supply
- B. Increase in interest rate
- C. Decrease in interest rate
- D. Increase in money demand

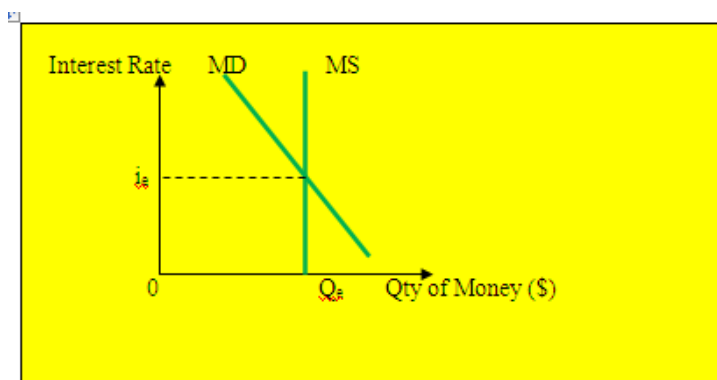
5. The money supply curve will shift right if

- A. The reserve bank buys bonds from general public
- B. The reserve bank sells bonds to the general public
- C. Reserve ratio increases
- D. Interest rate increases



ACTIVITY 3.4.2

Use the information in the graph given below and answer the questions that follow



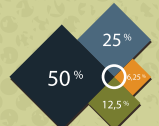
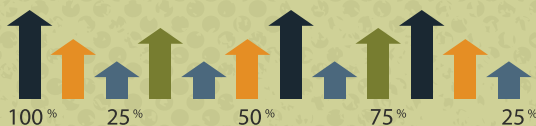
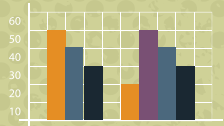
a) Explain how each of the following will affect the level of money supply.

- i. Government borrows from the Reserve Bank or Central Bank (2 marks)
- ii. Creation of credit through the banking system (2 marks)
- iii. Borrowing from overseas (2 marks)

b) Explain how each of the following factors creates inflation.

- i. Decrease in interest rates
- ii. Increase in reserve ratio
- iii. OMO –selling of government bond. (3 marks)

c) Identify the determinant for borrowing and loanable funds. (1 marks)



ACTIVITY 3.4.3

ESSAY WRITING

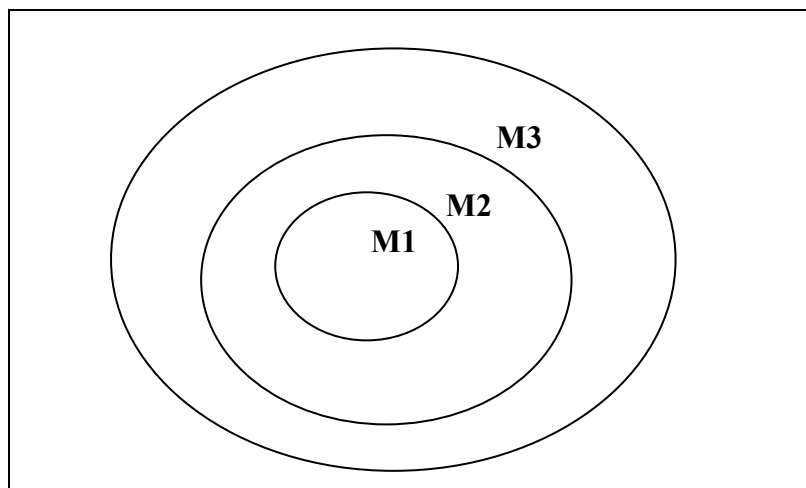
The money market, like any other market, has both a demand and supply side. Evaluate the above statement with reference to:

- Differentiate between transaction demand, precautionary demand and speculative demand. (3marks)
- State three factors that affect money demand and explain (3marks)
- Significance of the equilibrium rate of interest, how it is determined in the money market and what is likely to occur if the equilibrium interest rate is very low. (3marks)



ACTIVITY 3.4.4

The diagram below shows how the definition of money supply M1, M2 and M3, relate to each other. Study the diagram and answer the questions that follow.



- Which definition is also known as the narrow money supply and comprises notes and coins held by the public plus transactions account deposits kept in financial institutions? (1 mark)
- Which definition is also known as the broad money supply where the majority of other funding is in the form of term deposits? (1 mark)
- What happens to the liquidity of money as one moves outward from the centre of the diagram? (1 mark)



ACTIVITY 3.4.5

Use the table below to calculate the values of M1, M2 and M3.

Monetary aggregates	\$ millions
Accounts operable by EFTPOS	14 221
Accounts operable by EFTPOS and cheques	9 489
Notes and coins held by the public	2 465
Term deposits	46 355

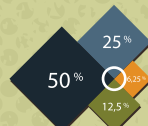
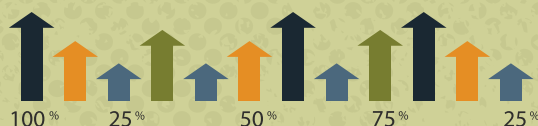
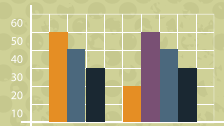


ACTIVITY 3.4.6

Use the Case Study given below and answer the questions that follow.

At the start of every month Arena's bank balance is \$2000. She receives her monthly pay of \$3000, which makes her balance \$5000. During the month she spends this \$3000 on goods and services so that by the beginning of the next month, her balance is back to \$2000 again.

- i. State the three motives of money demand (1 ½ marks)
- ii. Calculate Arena's transaction demand for money for the month. (1 mark)
- iii. Calculate Arena's transaction demand for money for the month. (1 mark)



LESSON 3.4.2

QUANTITY THEORY OF MONEY

The quantity theory of money is an identity that shows the relationship between nominal GDP, the stock of money and velocity of circulation. It is also known as the equation of exchange or Fisher Equation

The quantity theory of money:

$$MV = PQ$$

Where the:

M = MS,

V = Velocity of Circulation (the rate at which the money changes hands at a given period of time).

P = Price level

Q = Physical Value of goods and services (output therefore PQ = nominal GDP)

Some of the assumptions of these equations are:

1. Effects of change in 'P' if 'V' and 'Q' are constant

If P increase when $MV = PQ$ (PQ) then M will also increase to balance equation

Therefore $MV = PQ$

Calculation of velocity

Velocity shows the number of times average dollar spent on goods and services changes hand. The faster the dollar the changes the hand the higher the velocity. Eg If a \$2 note is used only 10 times in a year then it has a velocity of 10. Velocity is the ratio of nominal GDP to the number of dollars in the money supply. If there was \$4500 worth of transaction (output) in a year and MS was \$900. Calculate velocity.

Solution

$$MV = PQ$$

$$V = PQ/M$$

$$V = 4500/900$$

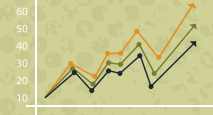
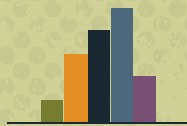
$$V = 5 \text{ times.}$$

Changes in velocity

Velocity changes due to a change in economic situation i.e. during the times of:

1. Boom – there is a high level of economic activity → ↑ in income therefore

↑ Money Supply → ↓ in the rate at which the money changes hand



2. Recession – low level of economic activity → ↓ in income therefore ↓ MS →
↑ in the rate at which money changes hands



ACTIVITY 3.3.2.1

1. The equation of exchange is referred to as
 - A. Mathematical equation
 - B. Fisher equation
 - C. Keynesian equation
2. According to the Quantity Theory of Money, which of the following will result in an increase in price?
 - A. Money supply is fixed, velocity of circulation is fixed and quantity of outputs increases.
 - B. Money supply increases but velocity of circulation and quantity of outputs remain fixed.
 - C. Money supply increases, velocity of circulation is fixed, quantity of outputs increases faster than increase in the money supply.
 - D. Money supply is fixed, velocity of circulation increases and quantity of outputs increases faster than increase in the velocity of circulation.
3. According to the formula $MV=PQ$, if the money supply increases BY 20%,the most likely effect would be
 - A. The nominal GDP will increase by 20%
 - B. The output will increase by 20%
 - C. The productivity will increase by 20%
 - D. The real GDP will increase by 20%

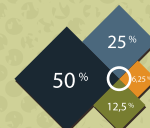
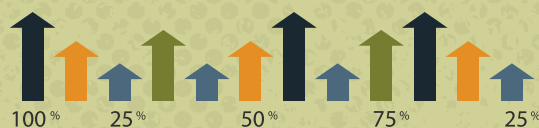
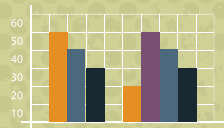
Use the equation of exchange given below and answer the question that follow.

$$MV=PQ$$

- i. State what the following stand for in the above equation.
 - M
 - P
 - V
 - Q

(2 mark)
- ii. Explain why $PQ = GDP$.

(1 mark)



STRAND 4 INTERNATIONAL ECONOMICS

Strand Outcome

Explore Fiji's Balance of Payments and its trade relations in response to the changing needs of the Fiji Economy.

Achievement indicators

Upon completion of this strand students will be able to achieve the following outcomes:

- Apply the concepts of opportunity cost, comparative advantage, specialization, exchange, markets and gains from to international trade
- Differentiate between Bilateral, Regional and Multilateral trade agreements with current examples in the Fiji context
- Describe the role of IMF and WTO on trade in the Pacific
- Explain the importance of foreign investment
- Identify and Explore the costs and benefits of multinational organizations in Fiji



LESSON 4.1 GAINS FROM INTERNATIONAL TRADE

Free International trade promotes international specialization and encourages increases in productivity and total output. Nations specialize in those goods and services in which they have some kind of advantage over other nations.

Economies can gain from international trade through Absolute Advantages and comparative advantages

Absolute Advantages - a nation has absolute advantage in a production of an item if it is able to produce more of the commodity than the other nation.

Country	Wheat Units	cheese units
Australia	50	10
Fiji	10	20

Australia has an absolute advantage in production of wheat and Fiji has absolute advantage in production of cheese.

Comparative Advantage

A nation has comparative advantage over a trading partner in production of an item if it produces that commodity at a lower opportunity cost than its partner.

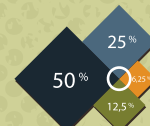
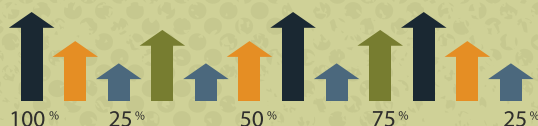
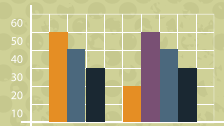
Country	Wheat Units	Cheese units
Australia	50	40
Fiji	10	20

The table shows that Australia has an absolute advantage in both wheat and cheese because Australia is able to produce more of both goods.

To determine which country has a comparative advantage in which particular commodity we must calculate the opportunity cost of producing wheat and cheese in each country.

Country	Wheat Units	Cheese units
Australia	50 F/G= 40/50 = 0.8	40 F/G =50/40 = 1.25
Fiji	10 F/G = 20/10 = 2	20 F/G = 10/20 = 0.5

From the table we can see that in Australia, producing 1 unit of wheat, the opportunity cost is 0.8 units of cheese and this is much cheaper than Fiji whose opportunity cost is 2 units of cheese. For Fiji, the opportunity cost of producing 1 unit of cheese is 0.5 units of wheat and for Australia, the opportunity cost of cheese 1.25 units of wheat. Thus Australia has a lower opportunity cost in the production of wheat therefore has comparative advantage in wheat while Fiji has lower opportunity cost in the production of cheese therefore comparative advantage in production of cheese. Hence, they are going to produce those products respectively.



ACTIVITY 4.1.1

MULTIPLE CHOICE QUESTIONS (5 marks)

Circle the letter of your chosen answer.

1. In explaining comparative advantage, economists often use the concept of

- A. Opportunity costs.
- B. Variable cost
- C. Accounting cost
- D. Ecological cost

2. A country is said to have absolute advantage if it is able to produce

- A. At a lower opportunity cost than the other.
- B. More of the product than the other
- C. Less of the product than the other
- D. At low total cost than the other.

3. Use the table given below to answer question 3

Country	Wheat Units	cheese units
Australia	80	100
Fiji	10	20

- A. Australia has absolute advantage in production of wheat only
- B. Fiji has absolute advantage in production of cheese
- C. Australia has comparative advantage in production of wheat
- D. Australia has comparative advantage in production of cheese.

4. Free international trade means

- A. Free from taxation
- B. Free from trade barriers
- C. Free from government intervention
- D. Free from influences on money supply.

5. International trade is

- A. Where countries trade globally
- B. Where trade occurs within a country
- C. Where trade occurs between firms
- D. Where firms have its branches in other countries.



ACTIVITY 4.1.2

A. The table below shows the production of dalo and canned fish per worker per week for Fiji and New Zealand.

Commodity	Fiji	New Zealand
Dalo	50	20
Canned fish	30	80

- Define the terms absolute advantage and comparative advantage.
- Which country has absolute advantage in production of dalo?
- Which country has comparative advantage in production of canned fish?
- State one advantage of free international trade



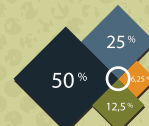
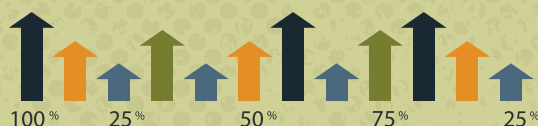
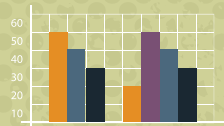
ACTIVITY 4.1.3

The following table shows the number of units of tea and coffee produced by two countries X and Y, using the same quantity of resources. Study the table and answer the questions that follow.

Country	Tea (Units)	Coffee (Units)
X	300	800
Y	200	300

- Which country has an absolute advantage in tea production?
- Which country has an absolute advantage in coffee production? (1 mark)
- Calculate the opportunity cost of:
 - Tea
 - Coffee
- Which country has a comparative advantage in
 - Tea production
 - Coffee production

(2 marks)



LESSON 4.2

TRADE AGREEMENT FOR FIJI

Trade Agreements play a very important role in the trade relations between countries or a region. Whether they are domestic, regional or international trade policies/agreements; they can play a significant role in the expansion of cultural industry trade for the region.

As an island country with a small market, regional integration plays a vital role in creating a larger trade and investment market for Fiji.

Fiji has a number of trade agreements with other countries. The three major forms of the trade agreements are:

Multi-Lateral trade agreement: - world wide trade agreement involving many countries. The most famous is GATT. (General Agreement on Tariffs and Trade).

1. Fiji joined the **World Trade Organisation (WTO)** in 1996. Since then the government of Fiji has adopted an export oriented and outward-looking trade policy in line with the realisation that export has great potential for the country. The WTO provides market access to more than 153 members.

2. **General agreement on Tariff and Trade:**

GATT- the original agreement by 23 nations in general in 1997 but now it includes over 60 of the worlds trading nations. The general aim of agreement is to reduce trade barriers.

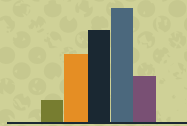
GATT is a multi-lateral with a set of rules governing the conduct of world trade. It provides the forum for the countries to discuss and seek solutions to their trading problem. Negotiation between countries to expand trading partners is also encouraged by the GATT. The main objective of GATT is to liberalize world trade so as to contribute to the economic growth and development of all member nations.

3. The **Interim Economic Partnership Agreement (IEPA)** that was initialled in 2007 by Fiji and Papua New Guinea, and the European Community. The IEPA provides duty free and quota free market access on all products from Fiji except for sugar and rice, which are subjected to longer transitional periods. Most importantly, the IEPA also provides for improved rules of origin, especially in fisheries, and this allows investors based in Fiji to use fish caught using any boats (global sourcing) and export it to the EU, provided that the fish is landed and processed (canned) in Fiji. Fiji is still negotiating a full IEPA in order to deepen its trade relationship with the EU over time;

Regional Trade Agreement (PICs)

1. The **Melanesian Spearhead Group (MSG)** Trade Agreement which is a free trade agreement that allows trade to take place freely between Fiji, Papua New Guinea, Vanuatu and Solomon Islands;

2. The **Pacific Island Countries Trade Agreement (PICTA)**, which seeks to establish a free trade area among the fourteen Forum Island Countries (FICs). Six countries have already completed the legislative requirements and are ready to commence trading under PICTA;



3. The **South Pacific Regional Trade and Economic Co-operation Agreement (SPARTECA)**, which is a non-reciprocal agreement that allows Fiji and other fourteen Forum Island Countries (FICs) to export almost all of their products to Australia and New Zealand duty free. Fiji also benefits from the SPARTECA-TCF Scheme which allows its textiles, clothing and footwear (except wool and wool blend fabrics) to be exported to Australia duty free under more favourable rules of origin.
4. The **Pacific Agreement on Closer Economic Relations (PACER)**, which is a framework agreement for co-operation on trade and economic integration between the fourteen FICs and Australia and New Zealand, with a view towards the development of a single regional market. It also provides for assistance to FICs including Fiji, to enable them to implement PICTA and address customs matters, standards and conformance and quarantine issues. The involvement of Fiji in these arrangements shows that the government is fully committed to trade liberalization. This will help enhance the volume of Fiji's trade with its regional trading partners as well as the rest of the world.

Bi-Lateral trade agreement: - trade agreements between two countries. E.g. trade agreement between Fiji and Australia.

1. **European Union (EU):**

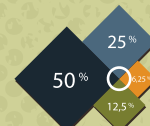
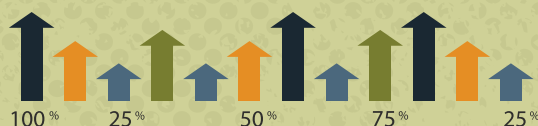
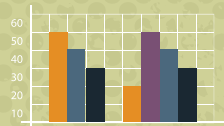
This is a bilateral trade agreement. It involves setting of what is called a customer union in which members remove all barriers to trade amongst themselves and adapt a common sense of external barriers therefore eliminating the need for customer and internal borders. Its ultimate aim has been some form of political interrogation. The EEC dates from the treaty of Rome in 1957 where its original 6 members have gone to 12 at present.

In addition customs union, the EEC now EU is trying to become a common market in which member countries allow full freedom of factor flow amongst themselves. In addition to this, EU is trying to achieve full Economic Union, in which member countries unite all their member policies including Monetary Fiscal Policy as well as policy towards Trade and Factor Migration.

International Monetary Fund (IMF):

The IMF rules are:

- Provide international fund to maintain exchange.
- Assist member countries by lending to them in the times of deficit from its holdings of goods and services and currencies.
- Loans are given to help with the short term deficit financing. These loans are not freely given out but with certain conditions:
 - When country devalues the currency
 - Raises tax (introduction of VAT in Fiji)
 - Cut government spending
 - Interest of IMF loans is paid-in full by borrowers.
 - Developing countries are charged a lower interest rate.
 - IMF has an important role as a coordinator. It provides a framework on international discussion and keeps member countries in line with the policies.



The World Bank (IBRD) (International Bank for Recons and Development)

Its fund are meant to promote development of other economies, especially that of developing countries. Projects like construction of dams, roads etc. have been undertaken by these organization. It gives advice on economic and development policies and their funds are borrowed for commercial purposes.



ACTIVITY 4.2.1

- The International Monetary Fund (IMF) is the
 - organization that maintains stability in the international financial system.
 - main body that regulates world trade and other related aspects.
 - general agreement of trade and transport for trading nations.
 - banker to the United Nations and the Asian economies.
- International Trade allocates existing goods more efficiently as well as enabling
 - zero opportunity costs.
 - increased production.
 - monopoly profits.
 - less competition.

Essay writing

Trade comes in different forms: domestic trade, international trade, free trade, bilateral trade and multilateral trade.

Discuss the above statement with reference to

- The definition of domestic trade ,international trade and free trade (3marks)
- Three advantages of free international trade (3marks)
- Differentiate between regional bilateral and multilateral trade agreements (3marks)



ACTIVITY 4.2.2

- The International Monetary Fund (IMF) is the
 - organization that maintains stability in the international financial system.
 - main body that regulates world trade and other related aspects.
 - general agreement of trade and transport for trading nations.
 - banker to the United Nations and the Asian economies.



2. International Trade allocates existing goods more efficiently as well as enabling

- A. zero opportunity costs.
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Essay writing

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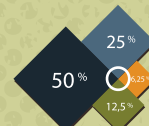
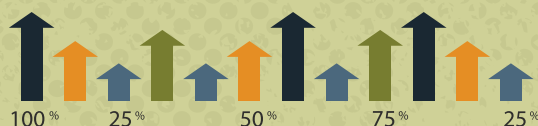
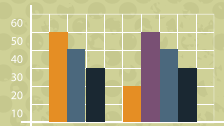
ACTIVITY 4.2.3

A. Read the article below and answer the questions that follow

The World Trade Organization (WTO) was established on 1st January 1995, and is a successor of the General Agreement on Tariffs and Trade (GATT) which was formed in 1948. As of July 2007, WTO has 151 members. All WTO members are expected to grant all other members market access on as favorable terms as that which they grant any other country.

Source: Economic Concepts and Applications 2008

- i. State the main function of the World Trade Organization. (1 mark)
- ii. State the importance of all WTO members granting all other members market access (1 mark)
- iii. What does the abbreviation IMF stand for? (1 mark)
- iv. State the main role of the IMF. (1 mark)



LESSON 4.3 IMPORTANCE OF FOREIGN INVESTMENTS IN FIJI

Foreign investment takes place when foreign individuals and companies establish new firms and industries in domestic country. Foreign investment also means setting up and expansion of subsidiaries by multinationals. Multinational corporations are firms which operate in more than one country. **Multinationals** like Coca Cola, Shell, and IBM.

Advantages of MNCs

- Private foreign investments by MNCs helps domestic achieve desirable rates of capital accumulation.
- Inflow of foreign exchange rate associated with foreign investment helps to ease BOP problems.
- Increase in domestic incomes generated by activities of multinationals lead to increase in revenue and profits thus increases government tax revenue.
- Foreign investments by MNCs facilitate the transfer of modern technology and skills from advanced nations to domestic nations.

Disadvantages of MNCs

- While MNCs provide foreign capital they effectively lower domestic savings by encouraging conspicuous consumption (rich minorities) and lowers the level of investment by local firms.
- MNCs are able to gain through transfer pricing i.e. by raising the value of imports and lowering the value of exports. Transfer pricing effectively reduces the volume of foreign exchange earning by domestic nations
- Increasing the level of private investments by MNCs means increasing foreign ownership and control over the resources of the nation.



ACTIVITY 4.3.1

Multinational corporations (MNCs) are also known as transnational corporations (TNCs) and they play a vital role in the development of less developed nations (LDCs).

Discuss the above statement with reference to:

- Foreign investment and its two importance. (3marks)
- Any three advantages of investment by MNCs (3marks)
- Any three disadvantages of investment by MNCs (3marks)



STRAND 5

DEVELOPMENT ECONOMICS

Strand Outcome

Investigate economic development in the Fiji Context and the application of cultural economics as an integral part of raising our standard of living.

Achievement indicator

Upon completion of this strand students will be able to achieve the following outcomes:

- Define the term Economic Development and Sustainable Development
- Identify the indicators of Economic Development
- Identify the measures of Economic Development
- Discuss the costs and benefits of Economic Development
- Explore the government policies or strategies used to enhance Economic Development in Fiji

LESSON 5.1 ECONOMIC DEVELOPMENT

Economic development occurs when sustained increases in real GDP per capita are accompanied by changes in economic and social structures of nation as are required to reduce the incidence of poverty among people

Sustainable development is development which meets the needs of the present without limiting the needs of the future generations. It is development which is economically, socially and environmentally viable overtime.

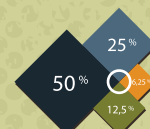
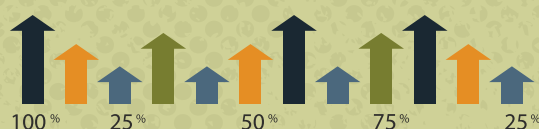
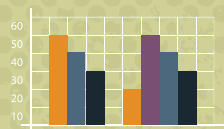
Indicators of Economic Development

There are **two broad indicators** of economic development :

1. **Monetary indicator** - is the prime indicator of economic development is real GDP per capita. 'The higher the nations real GDP per capita the higher the economic development of a nation'. The real GDP per capita is the monetary indicator that is used to show the enormous gap between living standards of LDCs and advanced nation
2. **Non Monetary Indicators or social indicators**

Real GDP per capita figures do not provide a clear picture of differences in material welfare among the world's people.

To overcome this deficiency and make international comparisons of living standards more meaningful, non-monetary or social indicators are used.



Some key social indicators are

- Life expectancy at birth measures the average number of years a new born infant can expect to live.
- The infant mortality rate refers to the percentage of babies who die before reaching their first birthday.
- Daily calories supply per capita measures the food supply available to each person.
- The adult literacy rate measures the percentage of the population aged fifteen years and over who can read and write.

Measures of Economic Development

Human Development Index (HDI) is a composite index which measures development in terms of nation's ability to meet the basic needs of its population. (Focus on human face development)

HDI measures development in terms of socio economic progress. It combines per capita income with three social indicators into a single index.

Costs and Benefits of Economic Growth

Benefits of Economic Development

Economic development is accompanied by changes in social structures and institutions which will lead to:

- Higher standard of living for people in the economy –improved quality of goods and services such as provision of Better standard of education, housing and health facilities to people
- Improved social welfare of people. Economic development reduces the level of poverty among people. Higher growth and development means more income for government to alleviate poverty and improve welfare of people
- Increased employment opportunities. Development of various sectors and industries will create more job opportunities thus reduce the level of unemployment in the economy.
- Better infrastructures- will increases efficiency in transportation and communication in the economy
- Improved participation international trade Increase in export base and will lead to healthier BOP

Costs of Economic Development

Some of the costs associated with Economic Development are:

- Rapid Economic Development may mean destruction to customs, beliefs and values which have been a vital part of any given society
- Structural unemployment may result in due to structural changes in the economy.
- High level of externality or industrial pollution due to economic development.
- Depletion of natural resources due to growth and development
- There may be Inflationary pressure on the economy



Government Policies or Strategies for Economic Development

Recently the government has funded to various sectors of the economic for growth and development

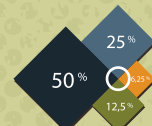
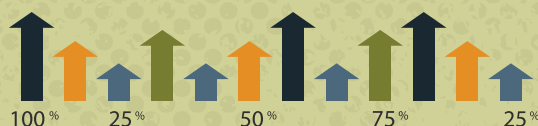
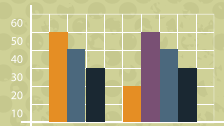
Some of the ways to encourage growth and development is by

- Reforms e.g. reforms in education sector to improve efficiency and reduce school dropouts
- Free Education Policy and Transport Assistance to poor and needy students to improve the literacy rate in the country.
- Introducing Micro Finance Policies to encourage people to start up small agro -business.
- Funded for Improvement in the Infrastructure in the economy e.g. setting up Telecenters in rural areas and upgrading roads and high ways.
- Encourage Import Substitution and Export Promotion Polices to improve international trade.
- Increase Civil Servants Salaries to encourage growth and productivity.
- Involve in Recent Trade Agreements to enhance better trading and international relationships in the global market.



ACTIVITY 5.1.1

1. The type of development that meets the needs of the present without limiting the needs of future generations is called
 - A. Environmental development.
 - B. Sustainable development.
 - C. Modern development.
 - D. Future development.
2. Which ONE of the following indicators is not a non-monetary indicator of development?
 - A. Life expectancy at birth.
 - B. Infant mortality rate.
 - C. Real GDP per capita.
 - D. .Adult literacy rate.
3. Capital accumulation is defined as
 - A. Increased production of investment goods, which adds to society's stocks.
 - B. Foregoing current consumption in order to increase production of consumer durables.
 - C. Finance that has accumulated over the years in a country's Central Bank vault.
 - D. Increased production of consumer goods, which adds to the stock-pile.



4. Governments of Least Developed Countries (LDC's) play a major role in the early stages of economic development in those countries.

Which of the following is NOT a reason why the governments play these major roles?

- A. Only government can provide a large amount of the needed basic social capital.
- B. The absence of private entrepreneurs to accumulate capital and take risks.
- C. The slowness and uncertainty of the price system in fostering development.
- D. The necessity of creating new money to finance capital accumulation.

Study this cartoon given below and answer the question that follows.



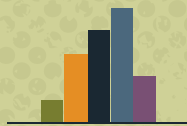
Source: *Introducing Economics* by Barry Collier et. al

5. The message of the cartoon is that

- A. the economic gap between LDC's and developed nations is widening.
- B. flies and spiders are found in both LDC's and developed nations.
- C. LDC's are more concerned with flies than spiders.
- D. advanced nations are big bullies.

6. The standard notation HDI stands for

- A. Holistic Development Index.
- B. Human Development Index.
- C. Hazard Development Index.
- D. Hyper Development Index.



ACTIVITY 5.1.2

A. Use the Case Study to answer the questions that follow:

Case study

In many developing countries, traditional social, cultural and religious beliefs and values are simply not compatible with attitudes and values required of people living in a modern economy. An advanced economy must be future oriented, out looking and conducive to changes. By contrast the traditional values held by people in Less Developed Countries (LDCs) are usually inward looking and tend to maintain the status quo. In fact often constitute positive barriers to economic development.

For example, government policies aimed at controlling population growth are likely to meet with limited success in a society which clings to the belief that large family sizes bring prestige to the heads of the household. Cultures which assign a low status for women and social conventions which keep women at home effectively restrict the potential resources' available for development.

Clearly development involves more than changes in economic relationships. In many cases, long held ideas and beliefs about rights, duties, responsibilities and obligations will be turned upside down. As people are forced to make choices, some cultures and customs are lost altogether.

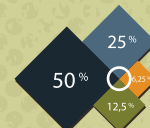
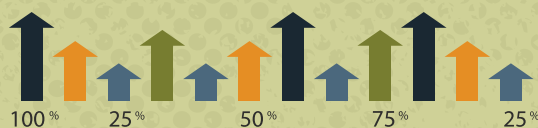
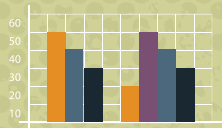
(Source: *Introducing Economics* by **Barry collier**)

- i. Define the term Economic Development.
- ii. Identify one factor that hinders development in many LDCs.
- iii. Identify one cost and benefit of Economic Development.



ACTIVITY 5.1.3

1. Differentiate between:
 - Economic Growth and Economic Development (1 mark)
 - Monetary indicators and social indicator (1 mark)
2. State monetary indicator of Economic development. (2 marks)
3. State two non -monetary indicator of Economic development (2marks)
4. State two benefits and two cost of Economic development (2 marks)
5. a. Calculate Real GDP per capita for a country with total Real GDP of \$600 000 and population 10 000. (1 mark)
- b. Calculate the percentage change in Real GDP per capita if population falls to 6 000. (1 mark)



ACTIVITY 5.1.4

The age structure of the population of a Less Developed Country includes birth rate, death rate, life expectancy and migration.

- Define the following:
 - Birth rate
 - Life expectancy

(2 mark)
- One of the tests of a country's rate of economic development is the ratio of man-made resources to the labor force. Explain the significance of this statement.

(1 mark)

LESSON 5.2 THE CULTURAL INDUSTRIES IN FIJI

Culture as an industry (where cultural products were produced and traded) was an important aspect of early Pacific societies and in Fiji, it meant the production of salt by women of Malomalo in Nadroga and bartered with clay pots (kurotuli) made by the women of Nakabuta also of Nadroga or masi (tapa) created by the women of Vatulele Island. These exchanges which were associated with elaborate rituals and ceremonies were an intricate part of i-Taukei lifestyle (and culture) and are still being practiced to some extent in parts of Fiji.



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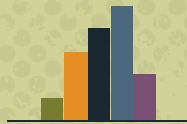
Clay pots on sale at a national exhibition of crafts held in Suva.



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A renowned masi-maker and designer prepares a piece for sale at the local market.

Nevertheless, in contemporary Fijian society, globalization has paved the way for the production of new cultural products and allow for these products to be exported to international markets in Australia, New Zealand, North America, Europe and in Asian countries as well.



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Fiji Fashion Week is a renowned annual event in Fiji where local fashion designers showcase their talent and skills. The above showcases a contemporary creation whereby local masi is used to create fashionable clothes line and a headwear (hat). These are new cultural products designed to meet local and international markets.



ACTIVITY 5.2.1

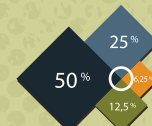
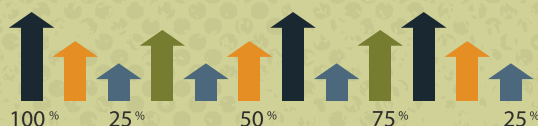
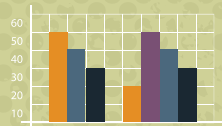
(a) Short Answer

Identify and develop a non-exhaustive list of cultural goods and services in Fiji and provide local examples to support this.

(b) Essay

Choose one specific cultural product or service of interest and elaborate on the following:

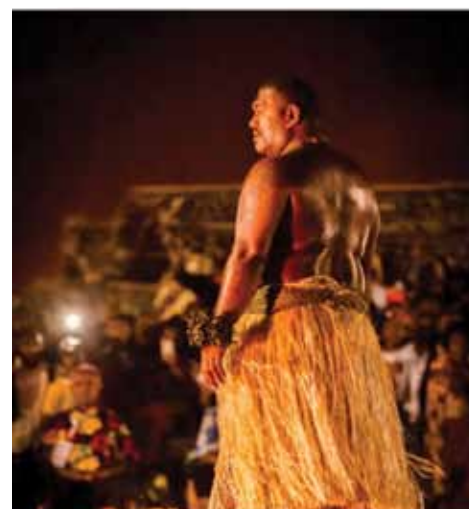
- Name of cultural product/service and location
- Raw materials needed to create the product sourced locally or imported?
- Who is/are key players involved in the production?
- Sale and distribution of product – is it mass produced or not? Who are the target audience? How and who determines the pricing of the good or service? Is the product produced for local markets or international or both?
- Estimated revenue generated from the sale of the product.
- What are some of the challenges faced and measures put in place to minimize problems encountered?



LESSON 5.2.1 CULTURAL ECONOMICS/ INDUSTRIES VALUE CHAIN

Cultural products are developed through creativity, the use of our intellect or knowledge systems and the available resources within our surroundings. In Fiji, cultural goods and services created have social and cultural meaning attached. It is best understood and analyzed through the value chain model below.

The main components of a value chain are outlined below:



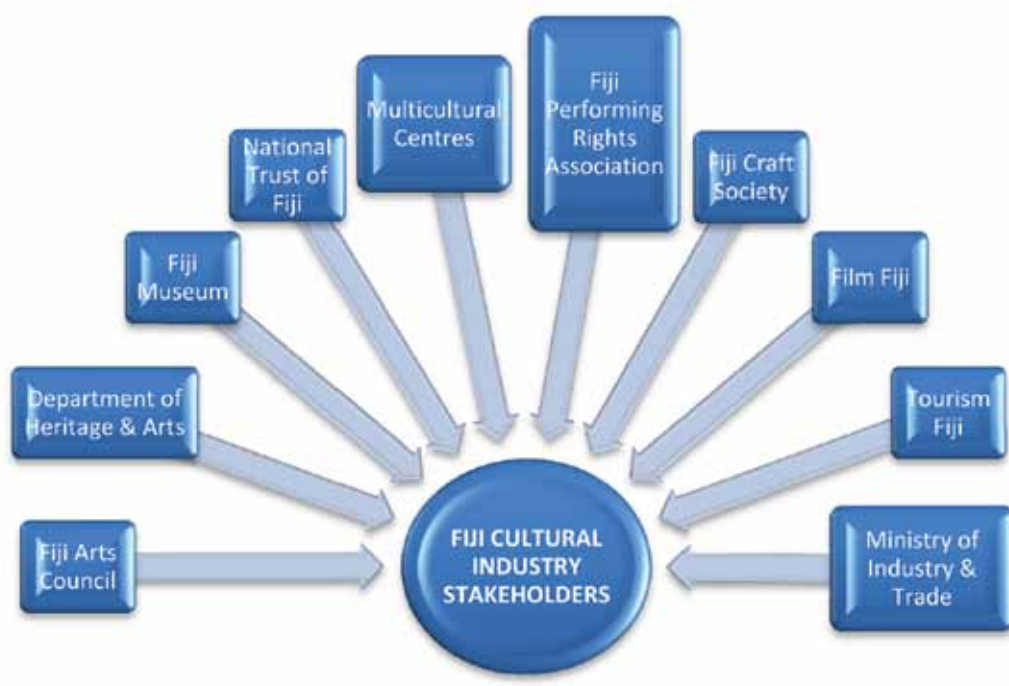
©FIJI ARTS COUNCIL
Fire walking which is a unique gift to the people of Beqa is now commoditized to meet tourist demands.

LESSON 5.2.2 KEY CULTURAL INDUSTRY PLAYERS - UNDERSTANDING FIJI'S CULTURE SECTOR

For any industry, the stakeholders play an important part in the development and maintaining of the key activities involved in a particular sector. In Fiji, the cultural industry is seen as an alternative form of livelihood or source of income generation for individuals and communities who do not have access to white and blue collar employment. Some of the key cultural industry organizations in Fiji include:

Reggae is the most successful music genre to originate from the Caribbean especially Jamaica. In the late 1990s, reggae had world sales of US\$1.2 billion with US\$300 going directly to Jamaican producers, musicians and song writers. In Jamaica live performances were estimated to be US\$50 million in 2006 alone. Jamaican success is testimony to potential that the cultural industry possesses.

SOURCE: SPC, 2012.



ACTIVITY 5.2.2

Short Answer

Using the stakeholders identified above, complete the table below by linking their role in terms of the development and promotion of the cultural industries. An example is given below:

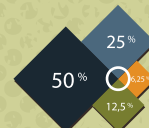
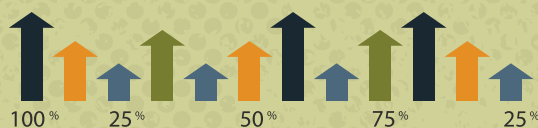
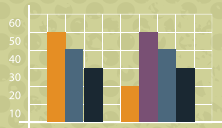
ORGANISATION	ROLE IN RELATION TO CULTURAL INDUSTRIES
e.g. Department of Heritage & Arts	Established in 2000, the Department is responsible for creating policy and regulations relevant to the protection of the cultural industry sector in Fiji.

LESSON 5.2.3 CURRENT STATE OF THE CULTURAL INDUSTRIES IN FIJI

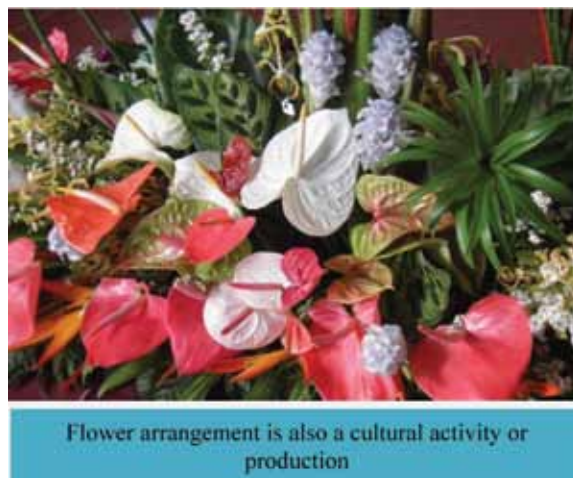
The Cultural Industry is progressing slowly and its potential has yet to be fully recognized by government. There is little investment and support for the development of the industry.

(i) Cultural Goods - Supply and Demand

Most producers of cultural products in Fiji make a living out of their works and production especially the music industry (e.g. LaisaVulakoro and SeruSerevi), dance or performing arts like the Vou Dance Group and the Rako Dance Group, visual art (painting/drawing) and other forms of activities. Most of these producers (artists) rely heavily on local markets, events and community activities for sales.



Although there are numerous outlets to promote and sell their products (e.g. Jacks Handicraft, Tappoos, Proceera Music) the biggest challenges faced by artists are piracy and competition with imported (sometimes fake) cultural products which limits the ability of the local producer to supply the local market.



(ii) International Trade on Cultural Goods and Services

Unlike Jamaica, Fiji has yet to fully utilize the opportunities access international markets to promote the export of its cultural goods and services. However, government through partnerships with other countries, international organizations, and through the Fiji Trade Missions around the world, tries to promote the exhibition, and the sale of Fijian cultural products overseas. Some international activities include the:

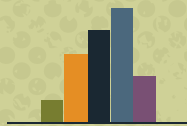
- Participation of artists in international cultural exchange and training;
- Participation of artists at International and Regional Festivals, Exhibitions, Shows e.g. the Pacific Festival of Arts held every four years;
- Participation of cultural product producers at World Expos around the world;
- The display and sales of cultural products at Fiji Embassies around the world;
- Marketing and promotions done by Tourism Fiji to attract tourists into Fiji.



©FIJI ARTS COUNCIL
Rotuman men performing traditional Rotuman dance at the 5th Melanesian Festival of Arts in Papua New Guinea



©FIJI ARTS COUNCIL
Traditional meke by the Fiji National Youth Band.



LESSON 5.2.4 INTERNATIONAL AND NATIONAL MEASURES TO PROTECT AND PROMOTE THE CULTURAL INDUSTRIES

There are a number of international and regional agreements which Fiji has signed and some which Fiji has yet to sign that assists in the production, promotion, distribution, participation and consumption (refer to the Value Chain model) of cultural products.

- Economic Partnership Agreement between African Caribbean Pacific (ACP) Countries and European Union (EU).
- Pacific Agreement on Closer Economic Relations (PACER).
- Pacific Island Countries Trade Agreement (PICTA).
- Melanesian Spearhead Group (MSG) Trade Agreement.
- MSG Framework Treaty on Traditional Knowledge and Expressions of Culture.
- Fiji-China Bilateral Cultural Cooperation/Agreement.
- Secretariat of the Pacific Community (SPC) Regional Culture Strategy
- 1970 Convention on the Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property.
- 1972 Convention Concerning Protection of World Cultural and Natural Heritage.
- 1979 amended Berne Convention for the Protection of Literary and Artistic Works.
- 1996 and 2002 World Intellectual Property Organization Copyright Treaty.
- 2003 Convention for the Safeguarding of the Intangible Cultural Heritage.
- 2005 Convention for the Protection and Promotion for Diversity of Cultural Expressions.
- 2007 Declaration of Rights of Indigenous Peoples.



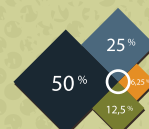
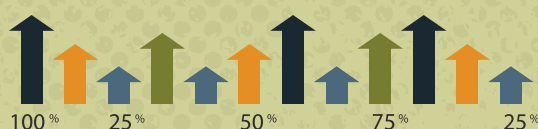
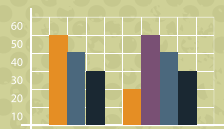
ACTIVITY 5.2.3

ACTIVITY: Research all the agreements and conventions listed above, analyze and prepare a summary for each by the answering the following questions:

- (a) Has Fiji signed the agreement/treaty/convention or not?
- (b) Who are its key partners (if Fiji has signed or proposes to sign) in the agreement/treaty/Convention?

There are also national measures put in place by government to facilitate the development and promotion of the cultural industries in Fiji:

- Fiji Roadmap for Democracy and Sustainable Socio-Economic Development -2009-2014 (RDSSSED).
- Fiji Green Growth Development Framework 2014.
- Fijian Made Label.



• Intellectual Property Rights (IPR) in Fiji.

Intellectual Property Rights refers to legal rights of a person to any creation or idea that results in the production of a good or service. There are different forms of IPR and one of which is Copyright. The Fiji Copyright Act (2009) was passed to protect the rights to original work of a creator of a product. This legislation is relevant to the protection of cultural products from exploitation. A Copyright Amendment Decree was promulgated in 2009 to change a few aspects of the Fiji Copyright Act of 1999.

However, copyright in Fiji is challenged with the increasing piracy (the illegal or unauthorized reproduction, copying, stealing or theft of original works of a creator of an idea. In Fiji, local and international music and video piracy is increasing and a few perpetrators have been successfully prosecuted by law. Those who illegally download or purchase pirated copies of musical CDs or video DVDs do not realize that many original creators use the cultural product created as their main source of living to feed their families and help improve living standards of their communities.

Some national events to promote copyright in Fiji include:

- (a) Young Musso's Acclaim organized by the Fiji Performing Rights Association to promote original music composition.
- (b) Kula Film Festival organized by Film Fiji to empower young people create original films and documentaries on specific issues.
- (c) Fijian crafted promotes authentic production of local crafts branded and sold.

LESSON 5.2.5 CULTURAL INDUSTRIES OPPORTUNITIES

The Jamaican Reggae Music story provides a good understanding of how the cultural industries can contribute effectively to economic development of a country and also improvement of living standards and livelihoods of individuals, families, communities and society.

In terms of economic development, the cultural industry facilitates the following:

- (a) Provide employment opportunities.
- (b) Improve the standard of living.
- (c) Contribute to Gross Domestic Product through exports of products.
- (d) Provides a stable income for many people.
- (e) Contribute to the revitalization of traditional knowledge and skills and cultural practices are retained.

Building of new infrastructure to accommodate performances and exhibitions



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