CAT

Certified Accounting Technicians Examination

Stage: Level 1 L1.5

Subject Title: Economics and the Business Environment

Examination Format Revision Pack

iCPAR

INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS OF RWANDA

Driving Sustainable Performance

BLANK

L1.5 ECONOMICS AND THE BUSINESS ENVIRONMENT

LEVEL 1

EXAMINATION FORMAT REVISION QUESTIONS & SOLUTIONS

NOTES

You are required to answer Question 1. You are also required to answer any **three** out of Questions 2 to 5. (If you provide answers to all of Questions 2 to 5, you must draw a clearly distinguishable line through the answer not to be marked. Otherwise, only the first three answers to hand for Questions 2 to 5 will be marked.)

TIME ALLOWED:
3 hours, plus 10 minutes to read the paper

INSTRUCTIONS:
During the reading time you may write notes on the examination paper but you may not commence writing in your answer book.

Marks for each question are shown. The pass mark required is 50% in total over the whole paper.

Start your answer to each question on a new page.

You are reminded that candidates are expected to pay particular attention to their communication skills and care must be taken regarding the format and literacy of the solutions. The marking system will take into account the content of your answers and the extent to which answers are supported with relevant legislation, case law or examples, where appropriate.

List on the cover of each answer booklet, in the space provided, the number of each question(s) attempted.

Question 1 is allocated 40 marks and each of the other questions are allocated 20 marks.

1. Discuss any **four** of the following:

(i) The Production Possibility Frontier.

(ii) Consumer Surplus.

(iii) The Business Cycle.

(iv) The Balance of Payments.

(v) The Functions of Money. **(4 x 10 marks each)**

(Total : 40 Marks)

2.

(a) Distinguish between a price ceiling and a price floor, using diagrams as appropriate.

(6 marks)

(b) Identify and discuss the advantages and disadvantages of imposing a minimum wage, make reference to the Irish economic situation in your answer.

(6 marks)

(c) Illustrate and explain the impact of the imposition of an indirect tax on market equilibrium, price and quantity.

(8 marks)

(Total : 20 Marks)

3.

(a) Explain the term 'factors of production'.

What are the four standard factors of production?

What are their rewards? **(6 marks)**

(b) Compare and contrast, using diagrams as appropriate, the difference between *Perfect Competition* and *Monopoly*. Explain the pricing decision of each structure.

(10 marks)

(c) Compare and contrast the economist's interpretation of cost and the accountant's interpretation of cost. What is the difference between accounting profit and economic profit?

(4 marks)

(Total : 20 Marks)

4.

(a) Outline the limitations of Gross Domestic Product (GDP) as a measure of economic activity.

(6 marks)

(b) Explain the terms *budget deficit* and *national debt*. **(4 marks)**

(c) Discuss using examples, as appropriate, the case for and against privatisation with reference to the Irish economy or another economy with which you may be familiar.

(10 marks)

(Total : 20 Marks)

5.

(a) Identify and discuss the advantages and disadvantages of fixed and flexible/floating exchange rates.

(6 marks)

(b) The East African Community (EAC) Member States are in the process of developing and one of the aims is a single currency.

A single currency will involve close co-ordination on economic and fiscal policies, and, for those countries initially fulfilling certain conditions, a single monetary policy and a single currency.

Outline the advantages and disadvantages of monetary union.

(6 marks)

(c) Trace the (likely) effects on the Rwandan economy if the *value* of this new currency were to decrease (say 10%) against all other currencies, such as the US Dollar or GB Pound or the Euro?

(8 marks)

(Total : 20 Marks)

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION 1

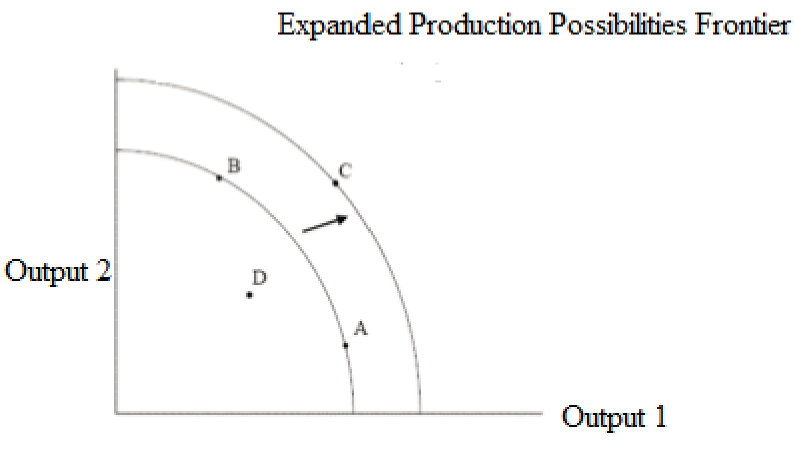
Write a note on **four** of the following:

(i) The Production Possibility Frontier.

Under the field of macroeconomics, the Production Possibility Frontier (PPF) represents the point at which an economy is most efficiently producing its goods and services and, therefore, allocating its resources in the best way possible. If the economy is not producing the quantities indicated by the PPF, resources are being managed inefficiently and the production of society will dwindle. The production possibility frontier shows there are limits to production, so an economy, to achieve efficiency, must decide what combination of goods and services can be produced.

Let's turn to the chart below. Imagine an economy that can produce only wine and cotton. Wine is one curve and cotton the other.

According to the PPF, points A, B and C - all appearing on the curve - represent the most efficient use of resources by the economy. Point D represents an inefficient use of resources, while outside point C represents the goals that the economy cannot attain with its present levels of resources.



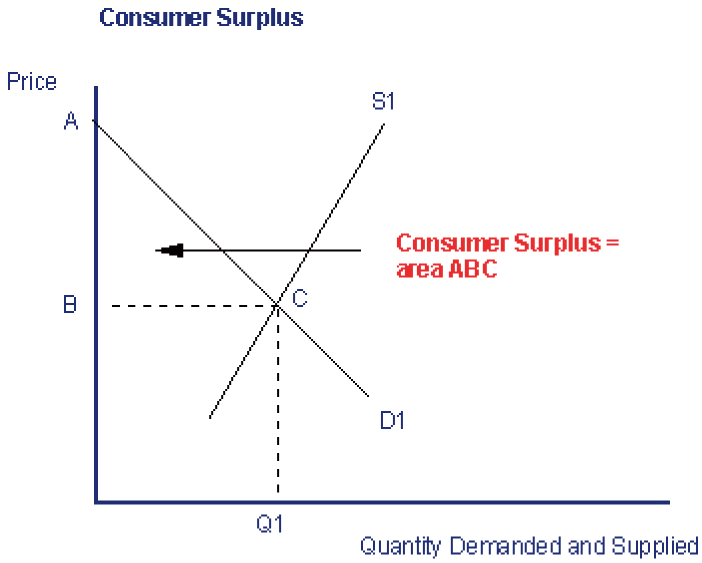
When the PPF shifts outwards, we know there is growth in an economy. Alternatively, when the PPF shifts inwards it indicates that the economy is shrinking as a result of a decline in its most efficient allocation of resources and optimal production capability. A shrinking economy could be a result of a decrease in supplies or a deficiency in technology.

An economy can be producing on the PPF curve only in theory. In reality, economies constantly struggle to reach an optimal production capacity. And because scarcity forces an economy to forgo one choice for another, the slope of the PPF will always be negative; if production of product A increases then production of product B will have to decrease accordingly.

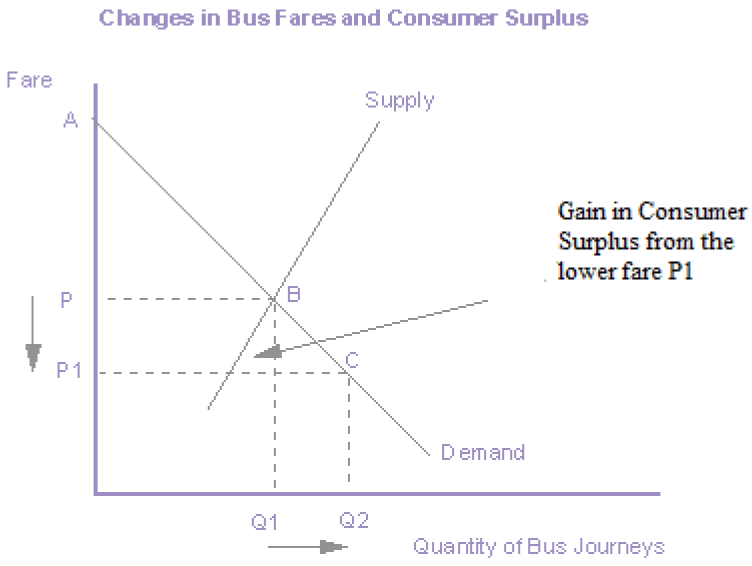
(ii) Consumer Surplus.

An economic measure of consumer satisfaction, which is calculated by analyzing the difference between what consumers are willing to pay for a good or service relative to its market price. A consumer surplus occurs when the consumer is willing to pay more for a given product than the current market price. Consumer surplus measures the welfare that consumers derive from their consumption of goods and services, or the benefits they derive from the exchange of goods. Consumer surplus is the difference between what consumers are willing to pay for a good or service (indicated by the position of the demand curve) and what they actually pay (the market price).

The level of consumer surplus is shown by the area under the demand curve and above the ruling market price



Consider the demand for public transport shown in the diagram below. The initial fare is price P for all passengers and at this price, Q1 journeys are demanded by local users. At price P the level of consumer surplus is shown by the area APB. If the bus company cuts the price to P1, the demand for bus journeys expands and the new level of consumer surplus rises to AP1C. This means that the level of consumer welfare has increased by the area PP1CB.



Consumer surplus = total willingness to pay for a good or service - the total amount consumers actually do pay.

If a zero fare is charged, consumers will demand bus journeys up to the point where the demand curve cuts the X axis. When demand for a product is perfectly elastic, the level of consumer surplus is zero since the price that people pay matches precisely the price they are willing to pay. There must be perfect substitutes in the market for this to be the case.

When demand is perfectly inelastic the amount of consumer surplus is infinite. Demand is invariant to a price change. Whatever the price, the quantity demanded remains the same. Note that both these situations are highly unlikely to exist - the vast majority of demand curves for goods and services are downward sloping. When demand is inelastic, there is a greater potential consumer surplus because there are some buyers willing to pay a high price to continue consuming the product

(iii) The Business Cycle.

The economy tends to experience different trends. These can be categorised as the trade cycle and may feature boom, slump, recession and recovery:

> **BOOM**: A period of fast economic growth. Output is high due to increased demand, unemployment is low. Business confidence may be high leading to increased investment. Consumer confidence may lead to extra spending.
>
> **SLUMP**: A period when output slows down due to a reduction in demand. Confidence may begin to suffer.

RECESSION: A period where economic growth slows down and the level of output may actually decrease. Unemployment is likely to increase. Firms may lose confidence and reduce investment. Individuals may save rather than spend.

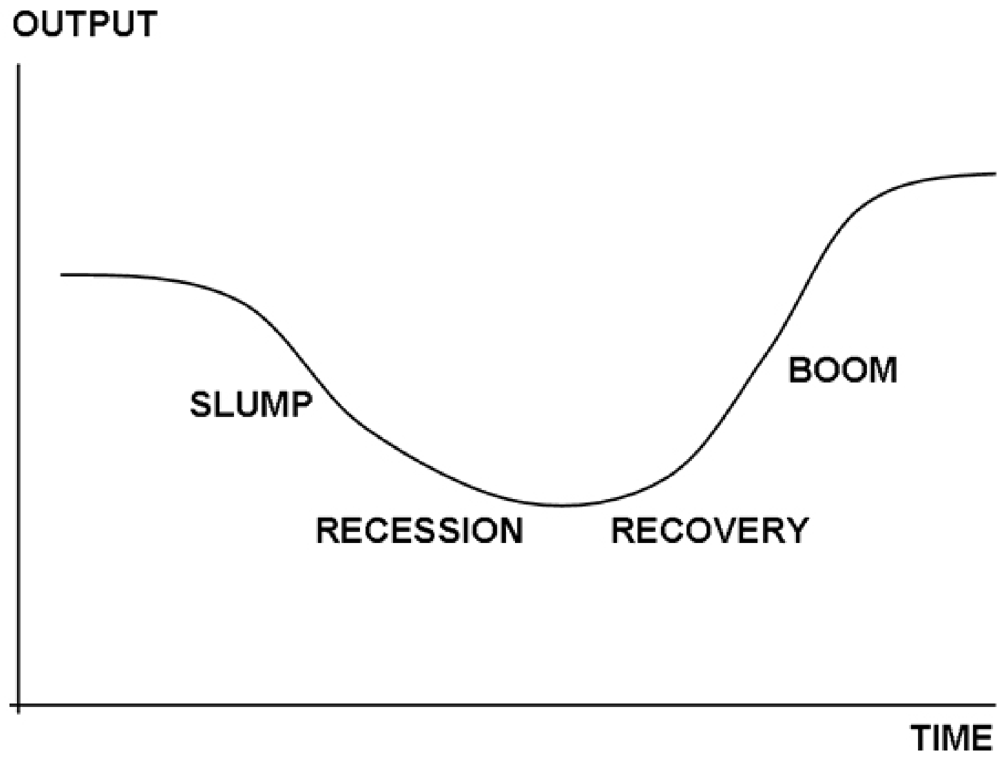
RECOVERY: A period when the economy moves between recession and a boom.

WHAT HAPPENS IN A BOOM?

- Businesses produce more goods.
- Businesses invest in more machinery.
- Consumers spend more money. There is a feel good factor.
- Less money is spent by the Government on unemployment benefits.
- More money is collected by the Government in income tax and VAT.
- Prices tend to increase due to extra demand

WHAT HAPPENS IN A RECESSION?

- Businesses cut back on production.
- Some businesses may go bankrupt.
- Consumers spend less money. Fall in the feel good factor.
- Individuals may lose their jobs.
- More money is spent by the Gov't on unemployment benefits.
- Less money is collected by the Gov't in income tax and VAT.
- Prices start to fall.



(iv) Balance of Payments.

A country's Balance of Payments which is a record of that country's economic transactions with the rest of the world is divided into two principal sections namely the current account and the capital account. The current account relates to transactions relating to the purchase or sale of goods and services so that the current account section is essentially a record of income, as distinct from capital, transactions. That section of the current account which records the import and export of merchandise (goods) is known as the Balance of Trade. The term invisible exports is often applied to the export of services since nothing of a tangible nature leaves the country in return for the money which is received e.g. accountants working in say Kenya on a project or foreigners spending their holidays in Rwanda; similarly the term invisible imports is applied to the purchase by Rwandan businesses of foreign services. It is extremely unlikely that the value of goods and services imported would be exactly equal to the value of goods and services exported so that there will be a surplus if the value of goods and services imported is less than the value of goods and services exported and a deficit if the opposite applies. The Balance of Payments is completed when the capital account section is associated with the current account section. The capital account section is an account of a country's inflow and outflow of capital and transactions of this nature cause a consequent net increase or decrease in the external reserves of the country.

Since the Balance of Payments is a financial statement it is a book-keeping exercise and consequently the totals of the current and capital accounts must balance in the sense that total credits must equal total debits. References to surplus or deficits refer to the current account section of the Balance of Payments or to a change in the level of foreign reserves that we hold.

Give some detail on the current situation in Rwanda in relation to our current (2012) balance of trade.

(v) Functions of Money.

Money is often defined in terms of the three functions or services that it provides. Money serves as a medium of exchange, as a store of value, and as a unit of account.

Medium of exchange: Money's most important function is as a medium of exchange to facilitate transactions. Without money, all transactions would have to be conducted by barter, which involves direct exchange of one good or service for another. The difficulty with a barter system is that in order to obtain a particular good or service from a supplier, one has to possess a good or service of equal value, which the supplier also desires. In other words, in a barter system, exchange can take place only if there is a double coincidence of wants between two transacting parties. The likelihood of a double coincidence of wants, however, is small and makes the exchange of goods and services rather difficult. Money effectively eliminates the double coincidence of wants problem by serving as a medium of exchange that is accepted in all transactions, by all parties, regardless of whether they desire each other’s goods and services.

Store of value: In order to be a medium of exchange, money must hold its value over time; that is, it must be a store of value. If money could not be stored for a period of time and still remain valuable in exchange, it would not solve the double coincidence of the wants problem and therefore would not be adopted as a medium of exchange. As a store of value, money is not unique; many other stores of value exist, such as land, works of art, and even and postage stamps either unused or used for the philatelist. Money may not even be the best store of value because it depreciates with inflation. However, money is more liquid than most other stores of value because as a medium of exchange, it is readily accepted everywhere. Furthermore, money is an easily transported store of value that is available in a number of convenient denominations.

Unit of account: Money also functions as a unit of account, providing a common measure of the value of goods and services being exchanged. Knowing the value or price of a good, in terms of money, enables both the supplier and the purchaser of the good to make decisions about how much of the good to supply and how much of the good to purchase.

(Marks Allocated 4 x 10 marks each)

(Total : 40 Marks)

SOLUTION 2

(a) Distinguish between a price ceiling and a price floor, using diagrams as appropriate.

Price Ceiling

A price ceiling is where the price is not allowed to rise to its equilibrium level. If the price authority considers that the equilibrium price of a good or service is too high, it can set a maximum ceiling price.

This is usually done with the aim of benefitting the consumer.

Insert a diagram – explained **(3 Marks)**

Price Floor

A price floor is the situation where the price is not allowed to decrease below a certain level. It only keeps the price from falling not from rising. If the pricing authority considers that the equilibrium price of a good or service to be too low, it can set a minimum or price floor. This can be done to protect the incomes of producers.

Insert a diagram – with explanation **(3 Marks)**

Marks allocated: (2 x 3 marks)

(6 marks)

(b) Identify and discuss the advantages and disadvantages of imposing a minimum wage, make reference to the Rwanda in your answer.

The minimum wage is the minimum rate a worker can legally be paid (per day or per hour) as opposed to wages that are determined by the forces of supply and demand in a free market. Each country sets its own minimum wage laws and regulations, and many countries have no minimum wage. *(The candidate should enter a reference to the latest decree from the Minister or at least to Law 13/2009 or any that has superseded it)*

Advantages and Disadvantages:

Minimum wages may have the effect of:

- Reducing the instance of low-paid work which may be unfair and exploitative.
- Reducing the dependency of the low-paid on welfare-state benefits which may in turn reduce taxes or allow increases of other government outlays.
- Stimulating economic growth by discouraging labour-intensive industries, thereby encouraging more investment in training and capital.
- Encouraging many of those who would normally take low-wage jobs to stay in (or return to) school and thus to accumulate human capital.

On the other hand, minimum wages may have the effect of:

- Limiting employment of low-wage earners and generally increasing unemployment.
- Raising employment barriers for people with little or no work experience or formal education: if a worker's labour is not worth the minimum, he may not find employment at all.
- Curbing economic growth by increasing the cost of labour.
- Increasing the price of goods and services, since employers pass on employment costs in the form of higher prices. (Opponents of minimum wage often see a negative income tax e.g., as a way to support the lower waged jobs, with the money coming from those who pay taxes, not those who pay for the products including the unemployed).
- Decreasing incentive for some low-skilled workers to gain skills.

The effects of minimum wage laws, both positive and negative, may be increased by 'knock-on effects', with increased wages for workers already earning above the minimum wage.

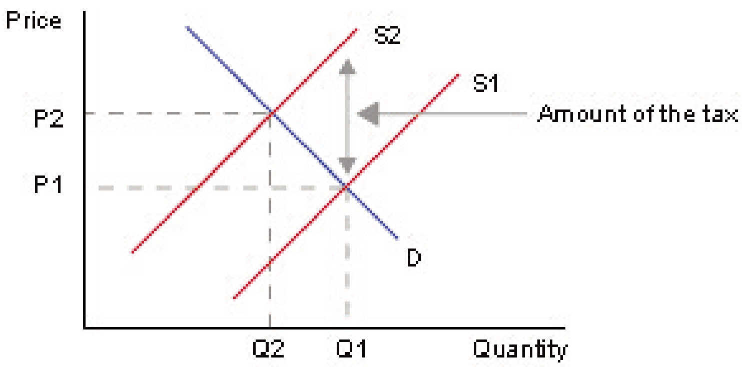
(Marks Allocated 2 x 3 marks each)

(6 marks)

(c) Illustrate and explain the impact of the imposition of an indirect tax on market equilibrium, price and quantity.

There are two main types of indirect tax - a per-unit tax and an ad-valorem tax . A per-unit tax is one where the amount charged is always the same on each unit. Examples of these are the duties on alcohol and cigarettes. An ad-valorem tax, by contrast is one where the tax is charged as a percentage of the value of the good. This is where VAT comes in, as it is always a % of the value of the good – currently it is 18% for those goods or services not exempt or zero rated.

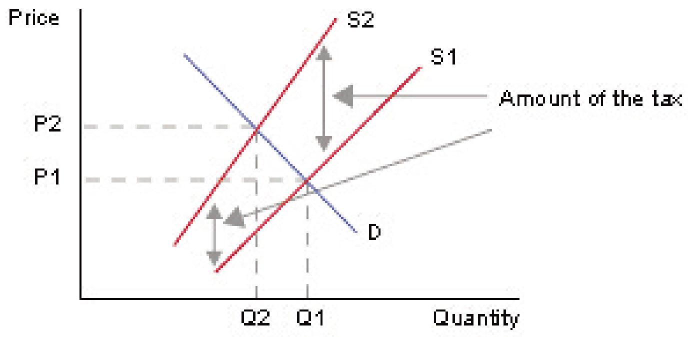
The effect on the market equilibrium will be slightly different for each of these two types of tax. Let's look first at the per-unit tax. This sort of tax will be paid over to the government by the firm and will therefore shift the firm's supply curve. To be willing to supply the same quantity as before, it will now want the price to be higher by the amount of the tax. The tax has therefore shifted the supply curve vertically upwards by the amount of the tax. The impact of this on the market is shown below:



As you can see from the diagram, the equilibrium price has risen and the equilibrium quantity has fallen. The extent to which this happens depends on the elasticity of demand for the good or service.

For an ad-valorem tax, the principles are the same but the effects are slightly different. The tax will still shift the supply curve vertically upwards as the firm will want a higher price to compensate it to supply the same quantity.

However, because the tax is a percentage of the value of the good, it will shift by different amounts according to the price of the good. For example, the VAT on a good costing RWF10,000 will be RWF1,525(18% of RWF8,475 = 1,525), but for a good costing RWF20,000 it will be RWF3,051 (RWF16,949+18% (RWF 3,051) = 20k). The effect of this on the supply curve is shown in the diagram below:



The impact on the equilibrium price and quantity therefore depends on the amount of the tax and the original price level. The elasticity of demand will also be important.

(Marks Allocated 8 marks)

(Total : 20 Marks)

SOLUTION 3

(a) Explain the term 'factors of production'. What are the four standard factors of production? What are their rewards?

Factors of production refer to the resources we have available to produce goods and services. We make a distinction between physical and human resources.

Land

Land includes all of the natural physical resources – for example the ability to exploit fertile farm land, the benefits from a temperate climate or the ability to harness wind and solar power and other forms of renewable energy.

Some nations are richly endowed with natural resources and they specialise in the extraction and production of these resources – for example – the development of the North Sea oil and gas in Britain and Norway or the high productivity of the vast expanse of farm land in Canada and the United States and the oil sands in Alberta, Canada and especially here, in Rwanda, where Cassiterite is extracted for the tin or Wolfram for tungsten

Other countries have a smaller natural factor endowment and may be more reliant on importing these resources. Japan for example is the world's second largest economy but remains heavily dependent on imported oil. China imports much of the iron ore for its foundries.

Labour

Labour is the human input into the production process. It is inevitable that some workers are more productive than others because of the education, training and work experience they have received.

What matters is the size and quality of the workforce. An increase in the size and the quality of the labour force is vital if a country wants to achieve economic growth. In recent years the issue of the migration of labour has become important, can migrant workers help to solve some of the labour shortages that many countries experience? And what of the long-term effects on the countries who suffer a drain or loss of workers through migration?

Capital

To an economist, investment is not the money that people put into the stock market or into bank and building society accounts; but the investment in capital goods that can then be used to produce other consumer goods and services in the future.

- Fixed capital includes machinery, plant and equipment, new technology, factories and other buildings.
- Working capital refers to stocks of finished and semi-finished goods (or components) that will be either consumed in the near future or will be made into finished consumer goods.

Capital inputs and productivity

New items of capital machinery, buildings or technology are generally used to enhance the productivity of labour.

For example, improved technology in farming can vastly increase the productivity of our agricultural sector and allow people to move out of subsistence farming and start producing food for other parts of the economy as well themselves, or people could move away from farming and into jobs in other parts of the economy. Also, investment in information and communication technology can increase the efficiency of workers across many industries.

Infrastructure

Infrastructure is that capital used to support the entire economic system. Examples of infrastructure include the road network, airports & docks, telecommunications e.g. cables and satellites to enable web access. The World Bank regards investing in the infrastructure as an essential pillar for economic growth in developing countries – hence the interest in a railway through Rwanda – more infrastructure

Entrepreneurship

An entrepreneur is an individual who seeks to supply products to a market for a rate of return (i.e. to make a profit).

Entrepreneurs will usually invest their own financial capital in a business (for example their savings) and take on the risks associated with a business investment. The reward to this risk-taking is the profit made from running the business.

Many economists agree that entrepreneurs are in fact a specialised part of the factor input 'labour'.

Renewable resources

Renewable resources are commodities such as solar energy, oxygen, biomass, fish stocks or forestry that are replaceable by new growth providing that the rate of extraction of the resource is less than the natural rate at which the resource renews itself. Some “renewable” resources are in theory inexhaustible, such sunlight or wind. This is becoming an enormously important issue in environmental economics, for example, the issue of the over-extraction of fish stocks and the global risks of permanent water shortages resulting from increasing use of ground water stocks for irrigation, ore extraction processes as well as industrial/office and domestic use. Finite resources cannot be renewed. For example crude oil, coal, natural gas and other items produced from fossil fuels used to make plastics or power motor vehicles, no mechanisms exist replenish them.

Factor Rewards

Factors of production are used to create output to be sold in markets. Each factor used in production can expect some reward.

Factor	Description	Reward
Land	all natural resources (gifts of nature) including fields, mineral wealth, and fishing stocks	The reward for landlords for allowing firms to use their property is rent
Labour	The physical and mental work of people whether by hand, by brain, skilled or unskilled	The reward for workers giving up time to help create products is wages or salaries
Capital	Man made goods used to produce more goods including factories (plant), machines and roads.	The reward for creditors lending money to firms to invest in buildings and capital equipment is interest
Enterprise	An entrepreneur risks financial capital and organises land labour & capital to produce output in the hope of profit	The reward for individuals risking funds and offering products for sale is profit. Unsuccessful firms make losses.

(Marks Allocated: 6 marks)

(b) Compare and contrast using diagrams as appropriate, the difference between Perfect Competition and Monopoly. Clearly explain the pricing decisions of each structure

A Monopoly is a market structure in which there is either only one producer or seller in the market.

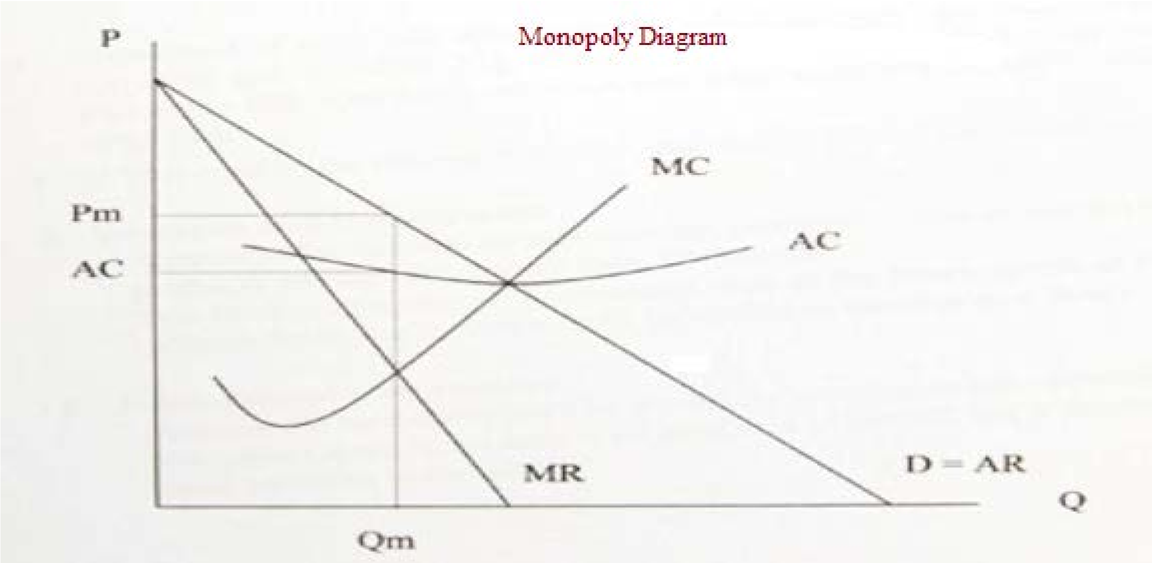
The one firm produces the goods for a particular sector/industry. Entry is typically restricted due to high costs or other barriers, which may be economic, social, or political. Since the firm is the sole supplier there is no distinction between the firm and the industry, so the firms demand curve is also the industries demand curve.

Assumptions of a monopoly are:

1. There is only one firm
2. A single product is produced and there is no close substitute.
3. Information is not freely available to firms interested in entering the industry.
4. There are barriers to entry of new firms.
5. Monopolists are price makers, a negatively shaped demand curve.
6. Often an inefficient producer – waste of scare resources.
7. Make Super Normal Profits.

Monopoly Diagram

Diagram of LR equilibrium of Monopoly.



1. Equilibrium

- Occurs at point Qm where MC = MR and MC is rising and cuts MR from below.

2. Price charge & /Output produced

- The firm produces output Qm and sells it at price Pm on the market

3. Cost of production

- The cost of producing this output shown at point AC.

4. Super Normal Profits (SNP).

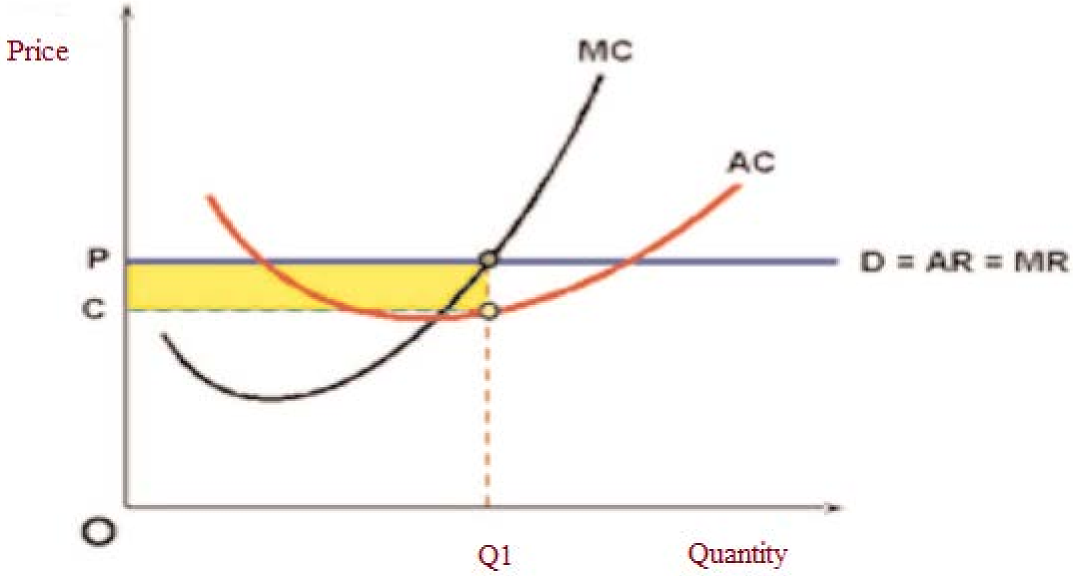
- This firm is earning SNP – represented by the shaded area above.
- They are earning SNP because AR > AC and
- They can continue to earn SNP because barriers to entry exist..

5. Waste of Scarce Resources -

- Because the firm is not producing at the lowest point of the AC curve it is wasting scarce resources.

Marks allocation: (3 for explaining Monopoly,
2 for correctly labelled diagram, 5 for explanation of the diagram)

Under perfect competition, there are many buyers and sellers in the market or industry. The firms are price takers and cannot influence price, as such they must always compete at their maximum level of efficiency. There are no barriers to entry. Firms attempt to maximize profits. In the short run, if firms are making a supernormal profit, new firms enter the market place and reduce profit, as a result of increasing supply and driving the price downwards to a position where all forms in the industry will only make a normal profit, thereby allowing firms to earn only normal profits in the long run. If a firm is making a loss it will exit the industry. Firms are therefore typically maximizing the utilization of resources and producing at the minimum cost–point. In the short-run, it is possible for an individual firm to make a profit in excess of the zero-economic or normal profit. This situation is shown in this diagram, as the price or average revenue, denoted by P, is above the average cost denoted by C .



However, in the long period, positive profit cannot be sustained. The arrival of new firms or expansion of existing firms (if returns to scale are constant) in the market causes the (horizontal) demand curve of each individual firm to shift downward, bringing down at the same time the price, the average revenue and marginal revenue curve. The final outcome is that, in the long run, the firm will make only normal profit (zero economic profit). Its horizontal demand curve will touch its average total cost curve at its lowest point.

(Marks Allocated 2 x 5 marks each)

(10 Marks)

(c) Compare & contrast the economist’s interpretation of cost different from the accountant's interpretation of costs?

What is the difference between accounting profit and economic profit?

Accounting Profits are based on historical information and indicate the difference between revenue (received and due) on the one hand and expenditure paid and owed on the other. An economist sees cost in terms of opportunity cost. In other words the cost in terms of alternatives foregone. Therefore accounting profits will be greater than economic profits.

(Marks Allocated: 4 marks)

(Total : 20 Marks)

SOLUTION 4

(a) Outline and explain the limitations of GDP as a measure of economic activity.

Many economists rely on GDP (Gross Domestic Product) to analyse and compare economies. However, there are several limitations to GDP as with all macroeconomic statistics.

One of the limitations is that 'nominal' GDP does not take into account that there is inflation/deflation. So let's say that there was 10% inflation and the GDP increased 10%. Some could argue that GDP has increased 10% and that is economic growth. However, these people didn't take into account that in fact inflation has caused this increase in GDP or at least negated this increase. So this is one of the limitations of 'nominal' GDP. There is another GDP called 'real' GDP that takes inflation/deflation out of the GDP change and tries to measure the 'true' GDP of an economy.

The second limitation is that GDP does not measure negative externalities. For example, the CO2 emissions produced by economic activity would not be considered in measuring GDP. Also, depletion of some resources is not considered either. So, the limitation of not measuring negative externalities is greatly criticized by ecological economists.

There is one other limitation of GDP. It is that GDP does not measure black markets and illegal economic transactions. For example, if some drug dealer sells RWF100 million of drugs to some country this will not be counted in the GDP. Some people will say that these kinds of economic activities would comprise only a meagre proportion of GDP anyway and not including them is not significant.

In sum, these are some of the limitations of GDP. Despite these limitations, GDP is considered to be one of the best methods of measuring/comparing economies

(Marks Allocated: 6 marks)

(b) Explain the terms *budget deficit* and *national debt.*

National Debt vs. Budget Deficit. Which is the correct term to use? Actually, the terms National Debt and Budget Deficit can be very confusing when it comes to discussing government spending. The terms often get used interchangeably, but they are not at all the same thing. Even among politicians and news reporters, it's not unusual for them to refer to the National Debt when they are really talking about the Budget Deficit, and vice versa.

In a nutshell, the Budget Deficit is the shortfall between what the government spends during a single year compared with what it brings in during the same year. The National Debt, on the other hand, is the accumulation of all the Budget Deficits for every year since the state has been in existence.

Students may also make reference to the current situation in Rwanda.

(Marks Allocated 2 x 2 marks each)

(4 Marks)

(c) Discuss using examples, as appropriate, the case for and against privatisation with reference to the Rwandan economy or another economy with which you may be familiar.

A look at the arguments for and against privatisation.

Privatisation involves selling state owned assets to the private sector. This is often achieved through listing the new private company on the stock market.

Potential Benefits of Privatisation

1. Improved Efficiency.

The main argument for privatisation is that private companies have a profit incentive to cut costs and be more efficient. If you work for a government run industry, managers do not usually share in any profits and all that that implies

However, a private firm is interested in making profit and so it is more likely to cut costs and be efficient. Since privatisation, companies in the UK such as British Telecomm, and British Airways have shown degrees of improved efficiency and higher profitability.

2. Lack of Political Interference.

It is argued governments make poor economic managers. They are motivated by political pressures rather than sound economic and business sense. For example a state enterprise may employ too many workers - inefficient. The government may be reluctant to get rid of the workers because of the negative publicity involved in job losses. Therefore, state owned enterprises often employ too many workers increasing inefficiency.

3. Short Term view.

A government many think only in terms of the next election. Therefore, they may be unwilling to invest in infrastructure improvements which will benefit the organisation/firm in the long term because they are more concerned about projects that are of visible benefit to the electorate <u>before</u> the election.

4. Shareholders

It is argued that a private firm has pressure from shareholders to perform efficiently. If the firm is inefficient then the firm could be subject to a takeover. A state owned firm doesn't have this pressure and so it is easier to be inefficient.

5. Increased Competition.

Often privatisation of state owned monopolies occurs alongside deregulation – i.e. policies to allow more firms to enter the industry and increase the competitiveness of the market. It is this increase in competition that can be the greatest spur to improvements in efficiency. For example, there is now more competition in telecoms and distribution of gas and electricity.

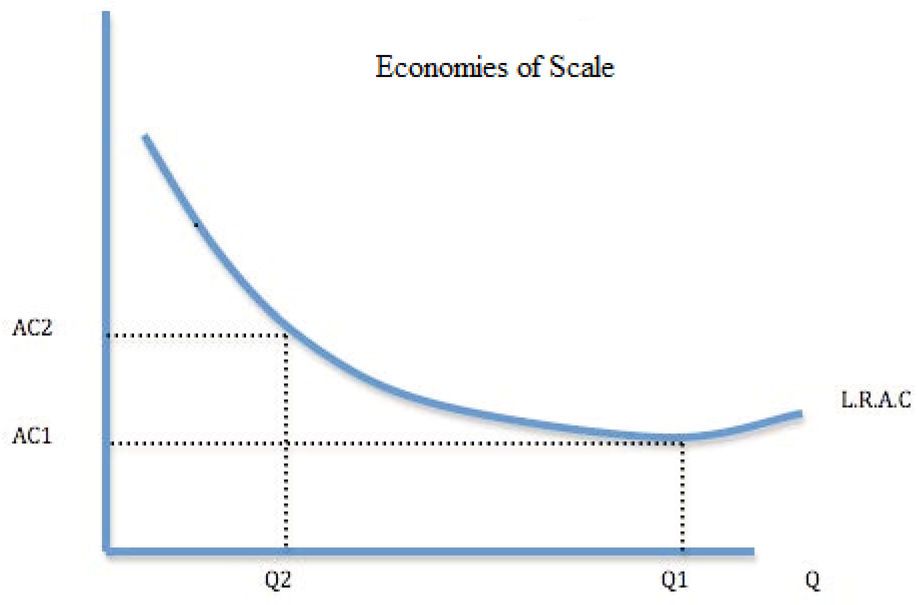
However, privatisation doesn't necessarily increase competition; it depends on the nature of the market. Major utility companies which require extensive and expensive infrastructure, such as electricity suppliers who need power distribution cables and pylons or an extensive underground network, operate in their own regions as effective monopolies.

6. Government will raise revenue from the sale

Selling state owned assets to the private sector raised significant sums for the UK government in the 1980s. However, this is a one off benefit.

Disadvantages of Privatisation

1. Natural Monopoly



A natural monopoly occurs when the most efficient number of firms in an industry is one. For example household water- supply has very significant fixed costs, therefore there is no scope for having competition amongst several firms. Therefore, in this case, privatisation would just create a private monopoly which might seek to set higher prices which exploit consumers. Therefore it is better to have a public monopoly rather than a private monopoly which can exploit the consumer. This happened in the UK regarding water suppliers and now many of the "private" water companies are owned by companies not resident in the United Kingdom; so dividends are lost to the UK citizens.

2. Public Interest

There are many industries which perform an important public service, e.g. health care, education and public transport. In these industries, the profit motive shouldn't be the primary objective of firms or the industry. For example, in the case of health care, it is feared private health care means a greater priority is given to profit rather than patient care. Also, in an industry like health care, arguably we don't need a profit motive to improve standards. When doctors treat patients they are unlikely to try harder if they get a bonus.

3. Government loses out on potential dividends.

Many of the privatised companies in the past in particular in the UK were quite profitable. This means the government misses out on their dividends, which go, instead, to wealthy shareholders which may be a foreign company anyway – see 1 above.

4. Problem of regulating private monopolies.

Privatisation creates private monopolies, such as the water companies. These need regulating to prevent abuse of monopoly power. Therefore, there is still need for government regulation, just as if the organisation was under state ownership.

5. Fragmentation of industries.

In the UK, rail privatisation led to breaking up the rail network into infrastructure and train operating companies. This led to areas where it was unclear who had responsibility. Then a few years ago, the company responsible for operating and maintain the track network was taken back into state ownership.

6. Short-Termism of Firms.

As well as the government being motivated by short term pressures, this is something private firms may do as well. To please shareholders, they may seek to increase short term profits and avoid investing in long term projects.

In summary, the value to be achieved from privatisation depends on the industry in question. An industry like telecoms is a typical industry where the incentive of profit can help increase efficiency. However, if you apply it to industries which are heavily subsidised or funded by the state, regulation by the government can reduce the profit incentive. Additionally, it depends on the quality of regulation. Do regulators make the privatised firms meet certain standards of service and keep prices low?

Finally, one should consider whether the market is contestable and competitive? Creating a private monopoly may harm consumer interests, but if the market is highly competitive, there is greater scope for efficiency savings.

(Marks Allocated: 10 marks)

(Total : 20 Marks)

SOLUTION 5

(a) Identify and discuss the advantages and disadvantages of fixed and flexible/floating exchange rates?

Fixed exchange rates apply when currencies are locked together at a specific rate. This is in contract to flexible rates where currencies can appreciate and depreciate against each other.

Advantages of Fixed Exchange Rates:

- Reduced risk in international trade - By maintaining a fixed rate, buyers and sellers of goods internationally can agree a price and not be subject to the risk of later changes in the exchange rate before contracts are settled. The greater certainty should help encourage investment.
- Introduces discipline in economic management - As the burden or pain of adjustment to equilibrium is thrown onto the domestic economy then governments have a built-in incentive not to follow inflationary policies. If they do, then unemployment and balance of payments problems are certain to result as the economy becomes uncompetitive.
- Fixed rates should eliminate destabilising speculation - Speculation can be very destabilising for an economy and the incentive to speculate is very small when the exchange rate is fixed. Having said that, the UK had to leave the EMU (European Monetary Union) because of speculation. The EMU was a “fixed” rate system operated by the EU before the Euro was adopted.

Disadvantages of the Fixed Exchange Rate:

- No automatic balance of payments adjustment - A floating exchange rate should deal with disequilibrium in the balance of payments without government interference, and with no effect on the domestic economy. If there is a deficit then the currency falls in value making you competitive again. However, with a fixed rate, the problem would have to be solved by a reduction in the level of aggregate demand. As demand drops people consume less imports and also the price level falls making you more competitive.
- Large holdings of foreign exchange reserves required - Fixed exchange rates require a government to hold large scale reserves of foreign currency to maintain the fixed rate - such reserves have an opportunity cost.
- Loss of freedom in your internal policy - The needs of the exchange rate can dominate policy and this may not be best for the economy at that point. Interest rates and other policies may be set for the value of the exchange rate rather than the more important macro objectives of inflation and unemployment.
- Fixed rates are inherently unstable - Countries within a fixed rate mechanism often follow different economic policies, the result of which tends to be differing rates of inflation. What this means is that some countries will have low inflation and be very competitive and others will have high inflation and become very uncompetitive.

The uncompetitive countries will be under severe pressure continually and may, ultimately, have to devalue.

Speculators will know this and thus creates further pressure on that currency and, in turn, government.

Arguments in favour of a Floating Exchange Rate

Automatic balance of payments adjustment - Any balance of payments disequilibrium will tend to be rectified by a change in the exchange rate. For example, if a country has a balance of payments deficit then the currency should depreciate. This is because imports will be greater than exports, meaning the supply of francs, say, on the foreign exchanges will be increasing as importers sell Rwf to pay for the imports. This will drive the value of the franc down. The effect of the depreciation should be to make exports cheaper and imports more expensive, thus increasing demand for our goods abroad and reducing demand for foreign goods in our own country, therefore dealing with the balance of payments problem. Conversely, a balance of payments surplus should be eliminated by an appreciation of the currency.

Freeing internal policy -With a floating exchange rate, balance of payments disequilibrium should be rectified by a change in the external price of the currency. However, with a fixed rate, curing a deficit could involve a general deflationary policy resulting in unpleasant consequences for the whole economy such as unemployment. The floating rate allows governments freedom to pursue their own internal policy objectives such as growth and full employment without external constraints.

Absence of crises - Fixed rates are often characterised by crises as pressure mounts on a currency to devalue or revalue. The fact that, with a floating rate, such changes are automatic should remove the element of crisis from international relations.

Flexibility - The floating rate allows a country to re-adjust more flexibly to external shocks.

Lower foreign exchange reserves - A country with a fixed rate usually has to hold large amounts of foreign currency in order to prepare for a time when they have to defend that fixed rate. These reserves have an opportunity cost.

Disadvantages of the Floating Rate

Uncertainty - The fact that a currency changes in value from day to day introduces instability or uncertainty into trade. Sellers may be unsure of how much money they will receive when they sell abroad or what their price actually is abroad. Of course the rate changing will affect price and thus sales. In a similar way importers never know how much it is going to cost them to import a given amount of foreign goods. This uncertainty can be reduced by hedging the foreign exchange risk on the forward market.

Lack of investment - The uncertainty can lead to a lack of investment internally as well as from abroad.

Speculation - Speculation will tend to be an inherent part of a floating system and it can be damaging and destabilising for the economy, as the speculative flows may often differ from the underlying pattern of trade flows.

Lack of discipline in economic management - As inflation is not “punished” there is a danger that governments will follow inflationary economic policies that then lead to such a level of inflation that problems for the economy result. The presence of an inflation target should help overcome this.

Inflation - The floating exchange rate can be inflationary. Apart from not punishing inflationary economies, which, in itself, encourages further inflation, the float can cause inflation by allowing import prices to rise as the exchange rate falls. This is, undoubtedly, the case for countries such as Rwanda where we are dependent on many imports especially of a technical nature.

(Marks Allocated 2 x 3 marks each)

(6 Marks)

(b) Outline the advantages and disadvantages of monetary Union.

The advantages of monetary union include:

- Removal of exchange rate risk on intra-community trade and therefore no need to incur hedging expenses;
- Removal of transaction costs involved in changing one currency for another;
- Facilitates price-transparency on the single market as ultimately all goods and services will be priced in the same currency;
- Potential savings on foreign currency reserves at Central Banks;
- Single EAC capital markets, with a single system of interest rates;

However, certain disadvantages may exist:

- A single currency requires a single EAC Central Bank, representing a loss of monetary sovereignty at the national level;
- A common monetary policy pursued by the Central Bank any not suit all economies within the EAC;
- Members can no longer devalue their currency in an attempt to restore international competitiveness;
- If the EAC is subject to asymmetric shocks (i.e. shocks that are country specific or disproportionately impacting on a particular region), the ability to adopt a local monetary response (e.g. devaluation) may be critical to member states.

(Marks Allocated: 6 marks)

(c) Trace the (likely) effects on the Rwandan economy if the value of the proposed EAC currency decreased (say 10%) against all other currencies?

(8 marks)

A decrease in the value of the EAC currency would make our exports less expensive in terms of foreign currencies while our imports from outside the EAC would be more expensive. The effect that such a change in the value of the EAC currency would have on our Balance of Trade depends on our price elasticity of demand for imports from outside the EAC and the price elasticity of demand for our exports from non-EAC countries.

We are heavily dependent on imports, so to the extent that these would now be relatively more expensive in EAC terms there would be upward pressure on our rate of inflation. Indigenous suppliers to the domestic market would experience an increase in their cost of imported raw material and petroleum products which would further increase our rate of inflation. Should this increase in the cost of living continue into the long run it is likely to result in higher wage expectations (were that possible!).

The magnitude of the effect on the balance of trade depends on the source of any competition which we may have in non-EAC markets and whether close substitutes for our products are available from outside countries.

The servicing of that portion of our National Debt that is denominated in foreign currencies will be increased. This will have a negative effect on government finances and this will cause increased taxation or some other fiscal measures.

Foreign firms operating in the Rwandan economy will incur a decrease in the value of their repatriated profits.

If the EAC Central bank were to consider itself to be in a position to increase interest rates because of the lack of strength of the currency then any increase would also have a negative impact on economic growth.

(Marks Allocated: 8 marks)

(Total : 20 Marks)

END OF SOLUTIONS

L1.5 ECONOMICS AND THE BUSINESS ENVIRONMENT

<u>LEVEL 1</u>

EXAMINATION FORMAT REVISION QUESTIONS & SOLUTIONS

NOTES

You are required to answer Question 1. You are also required to answer any **three** out of Questions 2 to 5. (If you provide answers to all of Questions 2 to 5, you must draw a clearly distinguishable line through the answer not to be marked. Otherwise, only the first three answers to hand for Questions 2 to 5 will be marked.)

TIME ALLOWED:
3 hours, plus 10 minutes to read the paper

INSTRUCTIONS:
During the reading time you may write notes on the examination paper but you may not commence writing in your answer book.

Marks for each question are shown. The pass mark required is 50% in total over the whole paper.

Start your answer to each question on a new page.

You are reminded that candidates are expected to pay particular attention to their communication skills and care must be taken regarding the format and literacy of the solutions. The marking system will take into account the content of your answers and the extent to which answers are supported with relevant legislation, case law or examples, where appropriate.

List on the cover of each answer booklet, in the space provided, the number of each question(s) attempted.

Question 1 is allocated 40 marks and each of the other questions are allocated 20 marks.

1. You are required to answer **four** of the following:

(a) What are Direct and Indirect taxes and, for each, briefly discuss the arguments in favour of their use.

(b) Discuss briefly The Law of Comparative Advantage in International Trade.

(c) Discuss briefly the advantages and disadvantages of Fixed Exchange rates.

(d) Describe the role of a Central Bank for the EAC.

(e) List and describe the factors that influence the Supply of Labour.

(4 x 10 marks each)

(Total : 40 Marks)

2.

(a) State the Law of Demand, listing two exceptions to this law.

(6 marks)

(b) Show the effect of the following three factors on the Demand Curve for a product sold by a firm. Assume the product follows the law of demand. (Use separate diagrams in each case)

(i) Price of a complimentary good increases

(ii) Consumer income falls

(iii) Price of a substitute good rises **(6 marks)**

(c) Explain, with the aid of a diagram, how the market reaches equilibrium.

(4 marks)

(d) Using a graph, illustrate the likely effect of each of the following two scenarios in a free market for pork.

(i) Food related health scares drives people to seek alternatives.

(ii) Strict regulations (e.g. EAC) are imposed on the suppliers of this food.

(4 marks)

(Total : 20 Marks)

3.

(a) Explain, with the aid of diagrams, the difference between the Long Run and the Short Run time periods in Economics.

(4 marks)

(b) Define what is meant by Economies of Scale and list and outline any 3 factors that would contribute to positive returns to scale (Economies of Scale) for a firm.

(6 marks)

(c) Distinguish between 'Economic Profits' and 'Accounting Profits'.

(2 marks)

(d) Illustrate and explain, using a diagram, the Super Normal Profit earned by a Monopolist in the long run.

(8 marks)

(Total : 20 Marks)

4.

(a) Illustrate, with the aid of a diagram, the circular flow model of an open economy. Label clearly all injections into and withdrawals from the circular flow.

(8 marks)

(b) Explain clearly how each injection and withdrawal in your diagram above can influence the level of economic activity.

(4 marks)

(c) Define and differentiate between GDP and GNP as measures of economic output.

(2 marks)

(d) Briefly describe three measures which a government could take to improve the competitiveness of local/domestic firms in international markets.

(6 marks)

(Total : 20 Marks)

5.

(a) Define and distinguish between Monetary Policy and Fiscal Policy giving examples of how both may be used as policy instruments.

(6 marks)

(b) Outline the key issues associated with a high national debt making reference to the fiscal stance (policy tools) a government may adopt to reduce the national debt. Make reference to Ireland or another economy that you are familiar with, as appropriate.

(6 marks)

(c) Explain how it is possible for the banking sector to create purchasing power and the factors that determine the amount of (or the limits to the amount of) purchasing power that they can create. Make reference to Ireland or another economy that you are familiar with, as appropriate.

(8 marks)

(Total : 20 Marks)

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION 1

(i) Direct and Indirect Taxation.

- Direct taxes – are paid directly to the government exchequer by the individual taxpayer – usually through the with-holding scheme or "pay as you earn". The same is true of corporation tax also. Tax liability cannot be passed onto someone else
- Indirect taxes – include VAT and a range of excise duties on oil, tobacco, alcohol. The burden of an indirect tax can be passed on by the supplier to the final consumer – depending on the price elasticity of demand and supply for the product.

Arguments For Using Indirect Taxation:

- Changes in indirect taxes are more effective in changing the overall pattern of demand for particular goods and services i.e. in changing relative prices and thereby affecting consumer demand (e.g. an increase in the real duty on petrol)
- They are a useful instrument in controlling and correcting for externalities – all governments have moved towards a more frequent use of indirect taxes as a means of making the polluter pay and "internalizing the external costs" of production and consumption
- Indirect taxes are less likely to distort the choices that people have to between work and leisure and therefore have less of a negative effect on work incentives. Higher indirect taxes allow a reduction in direct tax rates (e.g. lower starting rates of income tax)
- Indirect taxes can be changed more easily than direct taxes – this gives economic policy-makers more flexibility when setting fiscal policy. Direct taxes can only be changed once a year at Budget time
- Indirect taxes are less easy to avoid by the final tax-payer who might be unaware of how much indirect tax they are paying
- Indirect taxes provide an incentive to save (and thereby avoid the tax)- a higher level of savings might be used by the economy to finance a higher level of capital investment
- Indirect taxes leave people free to make a choice whereas direct taxes leave people with less of their gross income in their pockets

Arguments Against Using Indirect Taxation

- Many indirect taxes make the distribution of income more unequal (less equitable) because indirect taxes are more regressive than direct taxes
- Higher indirect taxes can cause cost-push inflation which can lead to a rise in inflation expectations
- There is no hard evidence that cutting direct tax rates has much of an incentive effect on people's decisions about whether or not to work. If indirect taxes are too high – this creates an incentive to avoid taxes through "boot-legging" – a good example of this would be attempts to evade the high levels of duty on cigarettes
- Revenue from indirect taxes can be uncertain particularly when inflation is low or there is a recession causing a fall in consumer spending
- There is a potential loss of economic welfare (taxes can create a deadweight loss of consumer and producers surplus)
- Higher indirect taxes affect households on lower incomes who are least able to save in the first place
- Many people are unaware of how much they are paying in indirect taxes – this goes against one of the basic principles of a good tax system – namely that taxes should be transparent

Marks allocated (10 marks)

(ii) The Law of Comparative Advantage in International Trade.

The Law of Comparative Advantage which is known also as the Law of Comparative Cost states that a country should concentrate on the production of those goods in which it has the greater comparative advantage i.e. in the production of which it is relatively more efficient. Thus even though country A may be able to produce each of two goods using less resources than country B requires in order to produce them then it is still advantageous to country A to concentrate on the production of the good at which they are relatively more efficient. Based on this notion countries often import goods which they are capable of producing in their own domestic economy. The concept is analogous to the division of labour at the micro level where factors of production concentrate on those tasks at which they are relatively more efficient and purchase their other requirements. The law concentrates on the gains which are possible from trade when countries concentrate in this manner however the terms of trade or the rate at which the goods are exchanged determine whether or not trade is beneficial to both parties.

Marks allocated (10 marks)

(ii) Advantages and disadvantages of Fixed Exchange rates.

Fixed exchange rates refer to when currencies are locked together at a specific rate. This is in contract to flexible rates where currencies can appreciate and depreciate against each other.

Advantages of Fixed Exchange Rates

- Reduced risk in international trade - By maintaining a fixed rate, buyers and sellers of goods internationally can agree a price and not be subject to the risk of later changes in the exchange rate before contracts are settled. The greater certainty should help encourage investment.
- Introduces discipline in economic management - As the burden or pain of adjustment to equilibrium is thrown onto the domestic economy then governments have a built-in incentive not to follow inflationary policies. If they do, then unemployment and balance of payments problems are certain to result as the economy becomes uncompetitive.
- Fixed rates should eliminate destabilising speculation - Speculation flows can be very destabilising for an economy and the incentive to speculate is very small when the exchange rate is fixed.

Disadvantages of the Fixed Exchange Rate

- No automatic balance of payments adjustment - A floating exchange rate should deal with a disequilibrium in the balance of payments without government interference, and with no effect on the domestic economy. If there is a deficit then the currency falls making you competitive again. However, with a fixed rate, the problem would have to be solved by a reduction in the level of aggregate demand. As demand drops people consume less imports and also the price level falls making you more competitive.
- Large holdings of foreign exchange reserves required - Fixed exchange rates require a government to hold large scale reserves of foreign currency to maintain the fixed rate - such reserves have an opportunity cost.
- Loss of freedom in your internal policy - The needs of the exchange rate can dominate policy and this may not be best for the economy at that point. Interest rates and other policies may be set for the value of the exchange rate rather than the more important macro objectives of inflation and unemployment.
- Fixed rates are inherently unstable - Countries within a fixed rate mechanism often follow different economic policies, the result of which tends to be differing rates of inflation. What this means is that some countries will have low inflation and be very competitive and others will have high inflation and not be very competitive.

The uncompetitive countries will be under severe pressure continually and may, ultimately, have to devalue.

Speculators will know this and thus creates further pressure on that currency and, in turn, government.

Marks allocated (10 marks)

(iv) A Central Bankfor the EAC.

When the single currency for the EAC has been formally adopted, there will be a need for a Community Central Bank.

The principal roles of the Central bank would be as follows:

1. To define and implement the monetary policy for the EAC.
2. To conduct foreign exchange operations.
3. To promote the smooth operation of the financial market payment infrastructure.
4. Prudential supervision and financial stability.
5. To hold and manage the foreign reserves of the participating members of the EAC.
6. Strategic planning, co-ordination and harmonisation of EAC currency.
7. Co-operation with International, EAC and Member bodies.
8. Collection and compilation of financial statistics
9. Advisory functions and statutory reporting

Marks allocated (10 marks)

(v) The Supply of Labour.

The total supply of factors to the economy is as a whole is governed by rather different considerations for example, the size and structure of the population, the proportion of people of working age who actually work or seek work, education and training policy, economic growth in the economy and price – the wage rate.

In particular factors influencing labour supply are given as:

- Society, laws, customs.
- Labour Immobility (restrictions on labour movement)

(i) Between regions and countries.

(ii) Between jobs.

- Barriers to entry to certain trades/professions.
- Lack of freely available information about jobs and wages.
- Trade Union influence on labour supply and wages.

Marks allocated (10 marks)

(Total : 40 Marks)

SOLUTION 2

(a) State the Law of Demand, listing two executions to this law.

Law of Demand refers to the negative relationship between the price of a good and the quantity demanded for the good. As price goes up, demand goes down and vice versa.

Exceptions

Goods affected by expectation; people think the price will rise later on, so will buy more now e.g. fill the car with petrol on the expectation that fuel duty will rise.

Snob goods; bought as a status symbol, the higher the price the more it is considered exclusive and the demand will increase with certain consumers e.g. luxury cars, expensive watches.

Giffen Goods; when incomes are extremely low' the demand for basic necessities may also rise regardless of price e.g. 3rd World countries need for bread and rice.

Marks allocated (6 marks)

(b) Show the effect of the following three factors on the Demand Curve for a product sold by a firm. Assume the product follows the law of demand. (Use separate diagrams in each case)

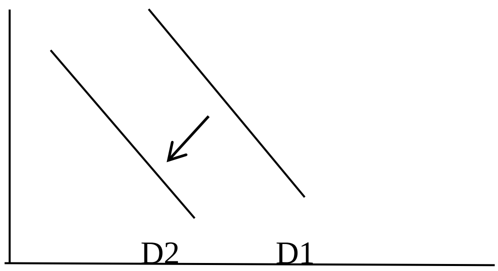
(i) Price of a complimentary good increases

(ii) Consumer income falls

(iii) Price of a substitute good rises

Price of a complimentary good increases:Demand falls (shifts left) as complimentary good is now more expensive

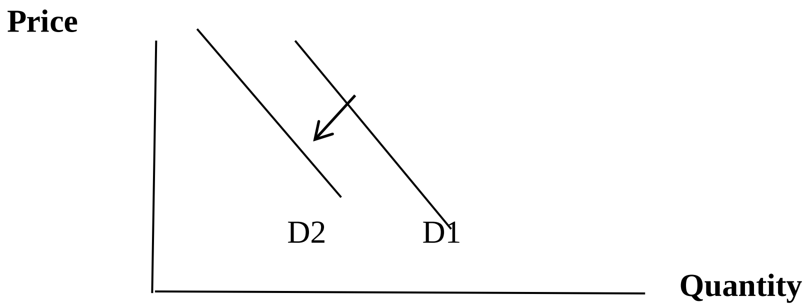
Price



Quantity

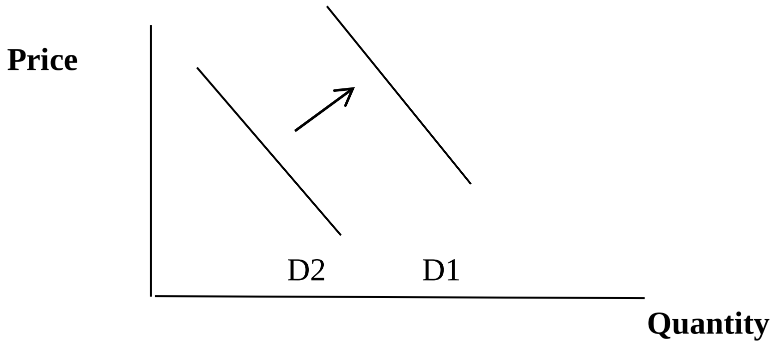
Consummer has less to spend:

Demand falls (shifts left) as the consumer has less income to spend on normal goods.



Price of substitute good rises:

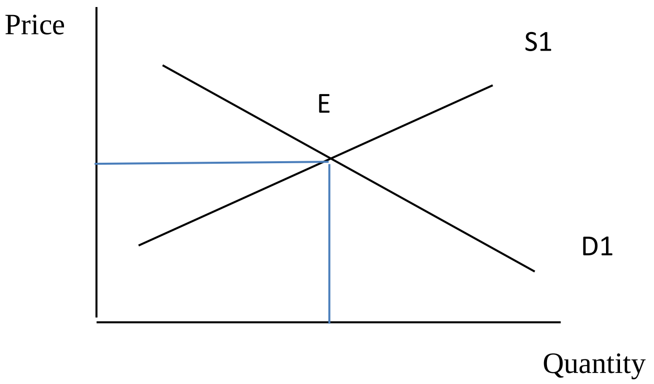
Demand increases as the substitute good is now more expensive than our good.



Marks allocated (3 x 2 = 6 marks)

(c) Explain the term Market Equilibrium and illustrate on a diagram

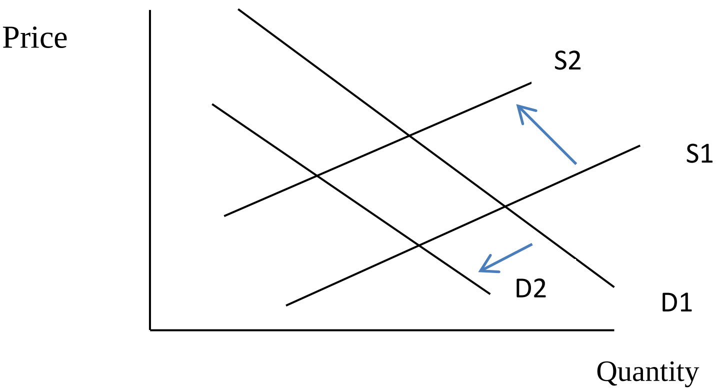
Market Equilibrium is the price, at which demand and supply are equal, when the amount supplied is the amount being demanded.



(d) Using a graph to illustrate the likely effect of each of the two following scenarios in a free market for a particular food.

(i) A food related health scare will drive people to seek alternatives

(ii) Strict regulations will be imposed on the suppliers of the food which caused the scare



As both supply and demand have fallen, the market equilibrium price and supply will also be likely to fall.

Marks allocated (4 marks)

(Total : 20 Marks)

SOLUTION 3

(a) Explain with the aid of diagrams the difference between the Long Run and the Short Run time periods in Economics.

Long Run is defined as that period where all factors of production can change.

Short run is defined as that period of time where only variable factors can change.

Firms must cover average variable costs in the short run and they must cover average of all costs in the long run.

Diagram illustrating the supply decision in the short run and long run.

Marks allocated (4 marks)

(b) Define what is meant by Economies of Scale and list and outline any 3 factors that would contribute to positive returns to scale (economies of scale) for a firm.

Firms can experience both internal and external economies of scale.

Diagram illustrating economies of scale and u-shaped curve.

Internal Economies of Scale are economies or benefits which accrue from the increase in the scale of output of an individual firm and they provide benefits to that firm alone. They are usually classified as:

(1) Technical Economies of Scale.

(2) Marketing Economies of Scale.

(3) Financial Economies of Scale.

External Economies of Scale are benefits which accrue from the growth of an industry and thus may be availed of by all firms in the industry.

Examples are:

(1) Specialised firms establishing to support the industry.

(2) Cost of research being shared among firms.

(3) Higher Education Institutions delivering programs targeted to assist employees.

(4) The establishment of marketing boards and other specialized agencies to assist the industry.

Marks allocated (3 + 3 = 6 marks)

(c) Distinguish between 'economic profits' and 'accounting profits'?

Accounting Profits are based on historical information and indicate the difference between revenue (received and due) on the one hand and expenditure paid and owed on the other. An economist sees cost in terms of opportunity cost i.e. the cost in terms of alternatives foregone namely. Accounting profits are usually greater than economic profits.

Marks allocated (2 marks)

(d) Illustrate and explain, using a diagram, the super normal profit earned by a Monopolist in the long run.

A Monopoly is a market structure in which there is either only one producer or seller in the market. The one firm produces the goods for a particular sector/industry. Entry is typically restricted due to high costs or other barriers, which may be economic, social, or political. Since the firm is the sole supplier there is no distinction between the firm and the industry, so the firms demand curve is also the industries demand curve.

Assumptions of a monopoly are:

1. There is only one firm
2. A single product is produced and there is no close substitute.
3. Information is not freely available to firms interested in entering the industry.
4. There are barriers to entry of new firms.
5. Monopolists are price makers, a negatively shaped demand curve.
6. Inefficient producer – waste of scare resources.
7. Make Super Normal Profits.

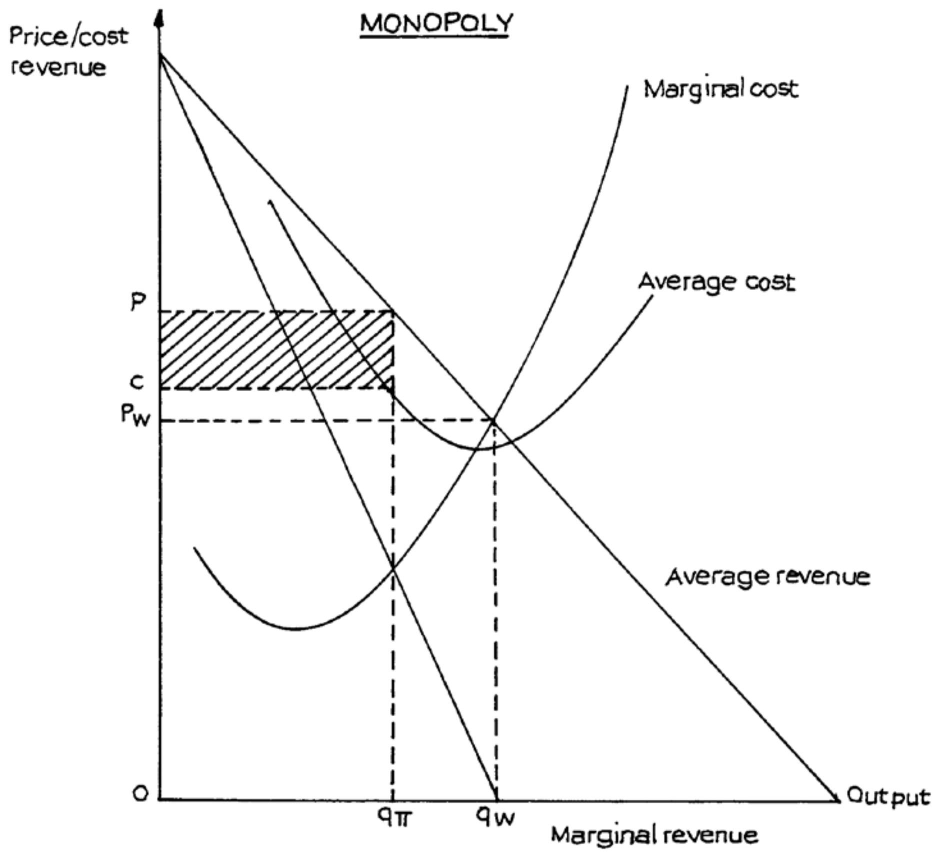


Diagram of LR equilibrium of Monopoly

1. Equilibrium

- Occurs at point Qm where
- MC = MR and MC is rising and cuts MR from below.

2. Price charge & Output produced

- The firm produces output, Qm and sells it at price Pm on the market

3. Cost of production

- The cost of producing this output shown at point AC.

4. Super Normal Profits.

- This firm is earning SNP's – represented by the shaded area above.
- They are earning SNP's because AR > AC and
- They can continue to earn SNP's because barriers to entry exist..

5. Waste of Scarce Resources

- Because the firm is not producing at the lowest point of the AC curve it is wasting scarce resources.

Marks allocation: (3 for explaining Monopoly,

2 for correctly labelled diagram, 3 for explanation of the diagram)

(8 marks)

(Total: 20 Marks)

SOLUTION 4

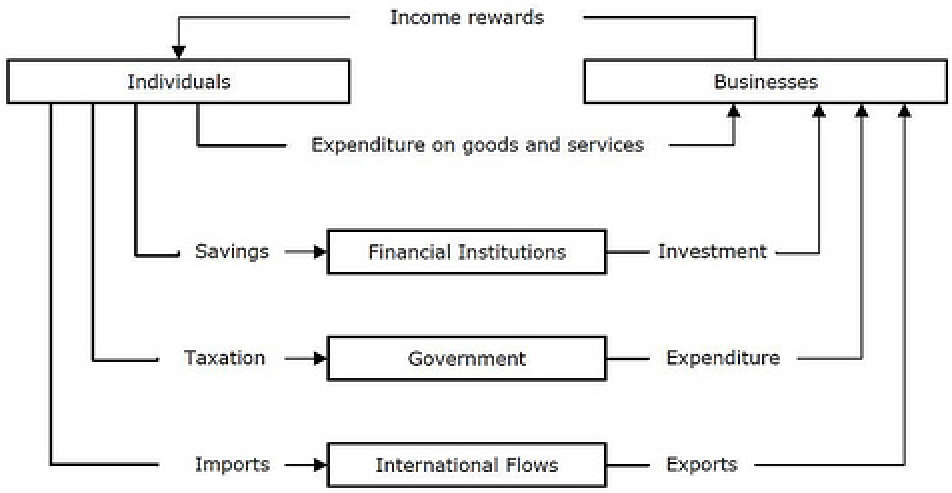
(a) Illustrate with the aid of a diagram the circular flow model of an open economy. Label clearly all injections and leakages into and out of the circular flow.

The circular flow of income diagram, illustrates how income flows through an economy. Firms in order to produce goods and services require command over factors of production; entrepreneurs achieve this command by purchasing or hiring the required factors of production. Households are the consumers of the goods and services and they acquire the money which enables them to purchase the goods and services through selling their labour and any other factors of production which they own. If households spent all of their income in buying the output of domestic firms and if all the revenue of firms accrued to domestic households - in the form of wages, rent, profit and interest - then there would be a continuous non-varying circular flow of income between domestic households and domestic firms.

However, economic life is not as simple as that. Households have many options on how to allocate their income, their income can be spent on domestically produced goods or on imported goods; Alternatively, not all of the income earned is spent; some of their income can be saved or it may be required to pay taxes. Any income which is not channelled back to domestic firms is in effect a withdrawal from the circular flow of income and of itself results in a diminution in the level of activity in the domestic economy. Withdrawals consist of (i) savings, (ii) money spent on buying imported goods and services and (iii) payments of tax. Similarly the income of firms is not derived solely from the spending of domestic households. Domestically produced goods and services are also purchased by (i) the government, (ii) by foreign purchasers of the goods which we export and (iii) by firms who use some of their income to purchase capital goods in the domestic economy as a form of investment. Because government spending, exports and investments increase the level of activity in the domestic economy they are referred to as injections into the circular flow of income.

The withdrawals and injections in the circular flow of income may be related to each other. If people save then banks and other financial institutions will have funds to lend, similarly if tax revenues increase it will be possible (easier) for the government to increase (or maintain) its spending and if our currency is used to buy the produce of foreign firms (our imports) this will provide them with the currency they require in order to buy our exports. The circular flow of income diagram shown below illustrates this analysis. If injections exceed withdrawals the level of expenditure in the domestic economy will rise and consequently there will be growth in the Rwandan economy.

Conversely, if withdrawals exceed injections the level of expenditure in the domestic economy will rise and consequently there will be a decline in growth in the economy.



Marks allocation: (2 for Diagram, 4 for explanation,

2 for reference to the Irish Economy = 8 marks).

(b) Explain clearly how each injection and withdrawal *(in the diagram above)* can influence the level of economic activity.

Discussion on how each injection and withdrawal can influence the level of economic activity.

Marks allocated (2 x 2 = 4 marks)

(c) Define and differentiate between GDP and GNP as measures of economic output.

	GDP	GNP
Definition	An estimated value of the total worth of a country's production and services, calculated over the course on one year.	GDP (+) total capital gains from overseas investment (-) income earned by foreign nationals domestically.
Stand for	Gross Domestic Product	Gross National Product
Calculation	C+I+G+NX	C+I+G+NX+(Net income from abroad)
Explanation	Total value of products & Services produced within the territorial boundary of a country	Total value of Goods and Services produced by all nationals of a country (whether within or outside the country)

Marks allocated (2 x 1 = 2 marks)

(d) Briefly describe three measures which the government could take to improve the competitiveness of local/domestic firms in international markets.

Given below are 8 – the question asks for only 3

1. Reduce the national minimum wage / wage restraint.

Employers would be able to get cheaper labour and therefore reduce costs.

2. Reduce utility charges.

A reduction in costs for electricity, gas, postage, waste charges, professional service charges etc. or any state services provided for firms would help reduce their costs of production.

3. Reduce taxation.

A decrease in indirect taxes such as VAT or duty on fuel or raw materials will automatically reduce costs to firms.

4. Reduce bureaucracy.

Eliminate restrictions and paper work; remove requirements put on businesses by the state and the costs of administrative work would be reduced.

5. Subsidies / grants to firms.

By reducing the rate of employers' CSR, it becomes cheaper to employ labour. By subsidising training costs / export credit insurance, a firm's costs may decrease and make it more competitive. Offer Grants to foster R&D and innovation in firms.

6. Develop the infrastructure.

Lack of good roads and poor comunication such as broadband and poor infrastructure in general increases costs to firms. By improving the infrastructure it would be faster and therefore cheaper to move goods and services around and between countries.

7. Ease credit availability

Continued government action is required to ensure that credit is made available by banks. A firm can continue to exist and so employment is maintained. With the availability of cash they can pay day-to-day expenses and thus avail themselves of discounts, reducing costs.

8. Fund skills development.

The government can fund programmes which help develop skills which are needed by firms. This ensures availability of a skilled workforce which makes operations more efficient and helps reduce the costs. Targeted education funding to meet future skills needs of the growth sectors.

Marks allocated (3 x 2 = 6 marks)

(Total : 20 Marks)

SOLUTION 5

(a) Define and distinguish between Monetary policy and Fiscal Policy, giving examples of how both may be used as policy instruments.

Monetary policy is the process a government, central bank (BNR), or other monetary authority of a country uses to control (i) the supply of money, (ii) availability of money, and (iii) cost of money or rate of interest to attain a set of objectives oriented towards the growth and stability of the economy.

Fiscal policy involves the Government changing the levels of Taxation and Govt Spending in order to influence Aggregate Demand (AD) and therefore the level of economic activity.

(AD is the total level of planned expenditure in an economy (AD = C+ I + G + X – M)

Fiscal policy and Monetary Policy aims to stabilise economic growth, avoiding the boom and bust economic cycle.

Monetary policy is usually carried out by the Central Bank / Monetary authorities and involves:

- Setting base interest rates (e.g. National Bank of Rwanda here or the US Federal Reserve in USA)
- Influencing the supply of money. .

Fiscal Policy is carried out by the government and involves changing:

- Level of government spending
- Taxation

and this influences the level of government borrowing.

In recent decades, monetary policy has become more popular because

- Being set by the Central Bank, it reduces political influence (e.g. desire to have an improving economy before an election)

- Fiscal Policy can have more supply side effects on the wider economy. E.g. to reduce inflation, higher tax/lower government spending would be a withdrawal from the circular flow and would not be popular and the government may be reluctant to purse this. Lower spending could lead to reduced public services and the higher income tax could create disincentives to work.

- Monetarists argue expansionary fiscal policy (larger budget deficit) is likely to cause crowding out – higher government spending reduces private sector spending and higher government borrowing pushes up interest rates. (However, this analysis is disputed)

- Simply targeting inflation is thought to be too narrow.

- Liquidity Trap- In a recession, cutting interest rates may prove insufficient to boost demand because banks don't want to lend or have no money to lend and consumers are too nervous to spend.

- Even quantitative easing – creation of money by BNR - may be ineffective if banks just want to keep the extra money in their balance sheets.

- Government spending directly creates demand in the economy and can provide a kick start to get the economy out of recession. Thus in a deep recession, relying on monetary policy alone, may be insufficient to restore equilibrium in the economy; but central borrowing or taxes would have to be increased

Marks allocated (2 x 3 = 6 marks)

(b) Outline the key issues associated with a high national debt making reference to the fiscal stance (policy tools) a government may adopt to reduce the national debt. Make reference to Rwanda or another economy with which you are familiar, as appropriate.

The cumulative total of outstanding government borrowing is known as national debt. Although the casual relationships are not now very well understood, countries with government debt levels above 90% of GDP, as opposed to those with much lower debt, are much more likely to be associated with:

1. More frequent and severe financial crises,
2. Significantly slower economic growth, and
3. Higher rates of inflation.

Mention should also be made of the cost of servicing a high government debt - it prevents other uses of that money by government and can lead to higher taxes and significantly reduced current spending.

Fiscal Stance: this refers to whether the government is increasing or decreasing Aggregate Demand (AD).

Expansionary (or loose) Fiscal Policy.

- This involves increasing AD, therefore the gov't will increase spending (G) and cut taxes. Lower taxes should lead to increased consumer spending because there is more disposable income(C). This could worsen the gov't budget deficit.

Deflationary (or tight) Fiscal Policy

- This involves decreasing AD, therefore the gov't will cut govt spending (G) and/or increase taxes. Higher taxes will reduce consumer spending (C). This could lead to a reduction in a government budget deficit.

"Fine Tuning" : This involves maintaining a steady rate of economic growth through using fiscal policy. However most countries this have found this difficult to achieve.

Automatic Fiscal Stabilisers

If the economy is growing, people will automatically pay more taxes (VAT and Income tax) and the Government will spend less on social security benefits. The increased T and lower G will act as a check on AD.

In a recession the opposite will occur with tax revenue falling but increased government spending on benefits, this will help increase AD

Discretionary Fiscal Stabilisers

This is a deliberate attempt by the govt to affect AD and stabilise the economy, e.g. in a boom the govt will increase taxes to reduce inflation

Injections (J):

This is an increase of expenditure into the circular flow, it includes gov't spending(G), Exports (X) and Investment (I)

Withdrawals (W):

These are withdrawals from the circular flow - household income that is not spent within the circular flow. It includes:

Net savings (S) + Net Taxes (T) + Net Imports (M)

Note: In Europe and USA, Fiscal Policies were "popular" in the 50s and 60s to stabilise economic cycles. These policies were broadly referred to as 'Keynesian'. In the 1970s and 80s governments tended to prefer monetary policy for influencing the economy.

There are many factors which make successful implementation of fiscal Policy difficult.

Marks allocated (3 + 3 = 6 marks)

(c) Explain how it is possible for the banking sector to create purchasing power and the factors that determine the amount of (or the limits to) the amount of purchasing power that they can create. Make reference to Rwanda or another economy with which you are familiar, as appropriate.

When a bank accepts a deposit and subsequently grants a loan it is not merely transferring purchasing power from lenders to borrowers but rather because of the fractional reserve system it can lend out a multiple of the original deposit and in this way actually create purchasing power. When a bank receives a deposit for €1,000 it doesn't need to keep this deposit entirely in the form of cash. From experience the bank knows that only a percentage of the deposit will be required as cash and the more successful banks are encouraging their customers to use debit cards, credit cards, cheques or any other form of non-cash transfers to lower this percentage . For example let us assume that a bank considers 10% of deposits to be a prudent liquidity ratio, a prudent liquidity ratio is the ratio of deposits which are retained at the disposal of the bank as liquid assets to enable it to satisfy all the demands make on it for cash.

Although more than 10% of balances are operational only approx.10% involve cash transactions because most transactions are conducted without recourse to cash e.g. through the use of cheques. Thus in our present example of the RWF1,000,000 in cash deposited with the bank it need hold only RWF100,000 to provide it with adequate liquidity and consequently RWF900,000 can be lent out. This RWF900k which have been lent out will in the course of fulfilling its money function(s) return to the banking system, the person to whom this loan is granted buys from the local office suppliers a photocopying machine for RWF900k.The office supplier lodges the RWF900k in their bank account in bank B and this bank which also operates a liquidity ratio of 10% seeks to lend out RWF810,000 from the lodgement of RWF900,000 and so this process continues until the repercussions of the original lodgements peter out. The final effect of the initial lodgement of RWF1000,000 would be the creation of RWF10,000,000 of additional purchasing power. This is an example of the money multiplier in operation, in this example with a liquidity ratio of 10% the money multiplier is 10.

In general terms the money multiplier is the inverse of the liquidity ratio. In practice the creation of purchasing power is not as mechanical as the foregoing might suggest, the following factors are also relevant:

- A bank's ability to grant loans is related to the magnitude of itsdeposit base, so it is directly related to theability to generate deposits/savings.
- All of the money may not find its way back into the financial system.
- Attention must also be focussed on the demand for loans. While banks may have the ability to grant loans the general public may not wish to borrow the entire funds which are available. Similarly banks will only be prepared to loan to those who they consider to be a good risk.
- Banks do not have one liquidity ratio, they know from experience that at particular times of the year e.g. for festivals such as Christmas, there will be an increase in the demand for cash so at such time they need to hold a higher ratio of assets in cash form.

- Banks must comply with the regulations of the laws of the land.

However, many text books concentrate on (i) the deposit base, (ii) the liquidity ratio and (iii) the demand for loans as being the salient features in respect of the amount of purchasing power that banks can create.

Marks allocated (6 + 2 = 8 marks)

(Total: 20 Marks)

END OF SOLUTIONS