Sunny's IGCSE/MYP Economics _Part 1.

Sunny's Econon

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Contents

Section 1. The basic economic problem

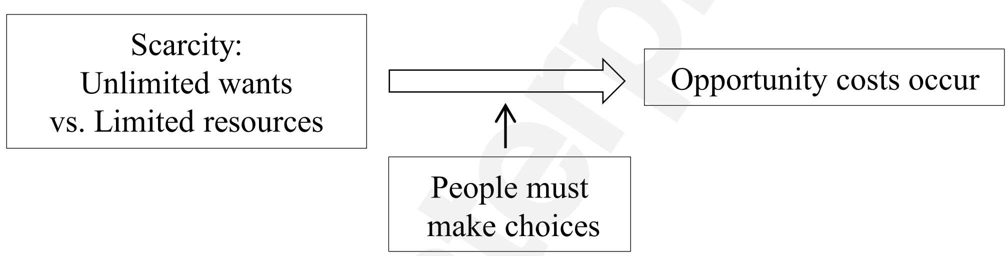
1.1 The nature of the economic problem

1.1.1 Finite resources and unlimited wants

- **Definition and examples of the economic problem in the contexts of: consumers; workers, producers; and governments**.

<u>Economic problem</u>

The economic problem arises because the people that make up society have unlimited wants and needs, while society only has access to a finite resource base. As a result, we cannot have everything we want, and so we have to make choices. Making a choice involves a sacrifice(= opportunity cost).



<u>In the contexts of: consumers; workers; producers; and governments</u>

The fact that people have to choose which products to buy, what jobs to do, and which products to produce shows that there are insufficient resources.

- As consumers, we cannot have everything we want. We have limited incomes.
- Workers have to make choices about what jobs they do. Some teachers may carry out other work in the evening, but when they are teaching they are not working as writers! Time is in limited supply.
- Producers have to decide what to make. Farmers can not grow rice and wheat on the same land. They have to select one crop as land is scarce.
- The government has to decide how to spend tax revenue. Deciding to build a new hospital may mean that it cannot build a new school.

1.1.2 Economic and free goods

- **The difference between economic goods and free goods.**

A free good is one which is so abundantly available that no sacrifice has to be made to supply or use. A free goods have no opportunity cost because no resources are required to produce them.

An economic good is a good or resource that is scarce in comparison to the demand for that good or resource. Therefore, to acquire an economic good, a sacrifice must be made. Economic goods require factors of production to produce them, resulting in an opportunity cost.

1.2 The factors of production

1.2.1 Definitions of the factors of production and their rewards

- **Definitions and examples of land, labour, capital and enterprise. Examples of the nature of each factor of production.**

Factors of production(resources = input) are the land, labour, capital and enterprise factors that are combined to produce goods and services.

① Land(→ Rent): This relates to natural resources, such as land for property, soil, lakes, rivers, ponds and forests. It also includes mineral deposits below the earth, such are iron ore.

② Labour(→ Wages and salaries): This relates to all of the human resources used to produce goods and services. It also includes the specialised skills that the workers will use.

③ Capital(→ Interest): These factors include any man-made items used in the production process. It includes, for example, offices, factories, machinery, railways and tools.

- Capital goods: humanmade goods used in production.
- Consumer goods: goods and services purchased by households for their own satisfaction.

④ Enterprise(→ Profit): Enterprise is the willingness and ability to bear uncertain risks and to make decisions in a business. Entrepreneurs are the people who organise the other factors of production and who crucially bear the risk of losing their money if their business fails. Entrepreneurs decide what to produce by taking into account consumer demand and how to produce it.

Q: Define a capital good

1.2.2 Mobility of the factors of production

- **The influences on the mobility of the various factors.**

Factor mobility measures the extent to which factor inputs such as land, labour and capital can easily switch between alternative uses with now loss of efficiency.

There are two types of immobility:

- Geographical mobility refers to the willingness and ability of a person to relocate from one area to another for employment purposes.
- Occupational mobility refers to the ease with which a person is able to change between jobs.

① Mobility of land

Most land is occupationally mobile.

Some types of land are geographically immobile.

② The mobility of labour

The mobility of labour varies.

The causes of geographical immobility include:

- Differences in the price and availability of housing in different areas and countries
- Family ties
- Differences in educational systems in different areas and countries
- Lack of information
- Restrictions on the movement of workers(visa)

The causes of occupational immobility include:

- Lack of information (vacancies in other types of jobs)
- Lack of appropriate skills and qualifications

Q: Analyse the influences on the mobility of workers

③ The mobility of capital

The geographical and occupational mobility of capital varies according to the type of capital goods.

④ The mobility of enterprise

Enterprise moves when the people who carry out the functions move. These people are called entrepreneurs. The mobility of enterprise depends on the mobility of entrepreneurs. Enterprise is the most mobile factor of production.

1.2.3 Quantity and quality of the factors of production

- **The causes of changes in the quantity and quality of the various factors.**

The quantity and quality of factors of production will change if there is a change in the demand for and/ or supply of land, labour, capital or enterprise. Possible changes include the following:

① The quantity/quality of land

- The quantity of land: The amount of physical land in existence does not change much with time.
- The quality of land: Fertilisers can be applied to fields to increase the fertility of the land.

② The quantity/quality of labour

- The quantity of labor
  - The size of the population
  - The age structure of the population
  - The retirement age
  - The school leaving age
  - Attitude to working women.
- The quality of labour: The quality of labour can be improved as a result of better education, better training, more experience and better healthcare.

③ The quantity/quality of capital

- The quantity of capital: The quantity of capital is influenced by investment and tends to increase with time.
- The quality of capital: Advances in technology enable capital goods to produce a higher output and a better quality output.

④ The quantity/quality of enterprise

- The quantity of enterprise: The quantity of enterprise will increase if there are more entrepreneurs. A good education system, including university degree courses in economics and business studies, may help to develop entrepreneurs in an economy.
- The quality of enterprise: The quality of enterprise can be improved if entrepreneurs receive better education, better training, better healthcare and gain more experience.

1.3 Opportunity cost

1.3.1 Definition of opportunity cost

- **Definition and examples of opportunity cost in different contexts.**

Scarcity:
Unlimited wants
vs. Limited resources

→ Opportunity costs occur

People must
make choices

The opportunity cost of choosing to buy a particular product or to carry out a particular economic action is the next best alternative that is given up. The opportunity cost is the sacrifice that is made. In simple terms, opportunity cost can be defined as the cost of a missed opportunity.

1.3.2 The influence of opportunity cost on decision making

- **Decisions made by consumers, workers, producers and governments when allocating their resources.**

① Opportunity cost and consumers

The opportunity cost of making any decision about consumption is the next best alternative that is sacrificed.

② Opportunity cost and workers

Workers provide labour to enable production to take place. A key decision is how much labour time to provide in exchange for a wage. There are two contrasting effects that a worker will consider. As wages increase, the opportunity cost of leisure will increase, and so we would expect workers to work longer hours. However, in most countries in the world labourers are choosing to work shorter hours, and this is because as wages increase, people will consume more of the things they enjoy, including leisure.

vs. Workers should make choices about jobs. (ex. Teachers and writers)

③ Opportunity cost and producers

Producers need to make decisions about which products will bring them the greatest benefits in terms of allowing them to make the most money. These decisions include:

- What to produce?
- Where to produce them?
- What resources are needed?

④ Opportunity cost and the government

Government has to carefully consider its expenditure of tax revenue on various things. If it decides to spend more on education, the opportunity cost involved may be a reduced expenditure on healthcare.

Problem solving

1. What is the purchase of a consumer good?
A. A farm owner buys a table.
B. A farm owner buys land.
C. A farm owner buys fertiliser for their trees.
D. A farm owner buys some farming equipment.

2. What is the meaning of the factors of production?
A. to make goods and services to fulfil wants and needs
B. to provide an equal distribution of income
C. to provide tax for the government
D. to reduce external costs

3. What is a factor of production capital for an airline?
A. the aircraft owned by the airline
B. the money in the bank
C. the pilots
D. the shares of the airline

4. What is the economic problem facing all countries?
A. climate change and global warming
B. unemployed resources
C. unequal distribution of income and wealth
D. unlimited wants in relation to limited resources

5. Natural sunlight is classified as a free good. Why?
A. Sunlight is a gift of nature.
B. Sunlight is a renewable resource.
C. There is no opportunity cost of using sunlight.
D. Unlimited amounts of sunlight can be consumed.

6. A girl decides to buy a ticket for a movie instead of buying a new skirt. What is the opportunity cost of buying the ticket?

A. the movie

B. the price of the ticket

C. the skirt

D. the time spent purchasing the ticket

7. A farmer reduces the land used to grow rice from 80 hectares to 60 hectares and increases the use of the land for growing sweet potatoes from 80 to 100 hectares. What is the opportunity cost of this change?

A. The output from 20 hectares used for growing sweet potatoes.

B. The output from 20 hectares used for growing rice.

C. The output from 60 hectares used for growing rice.

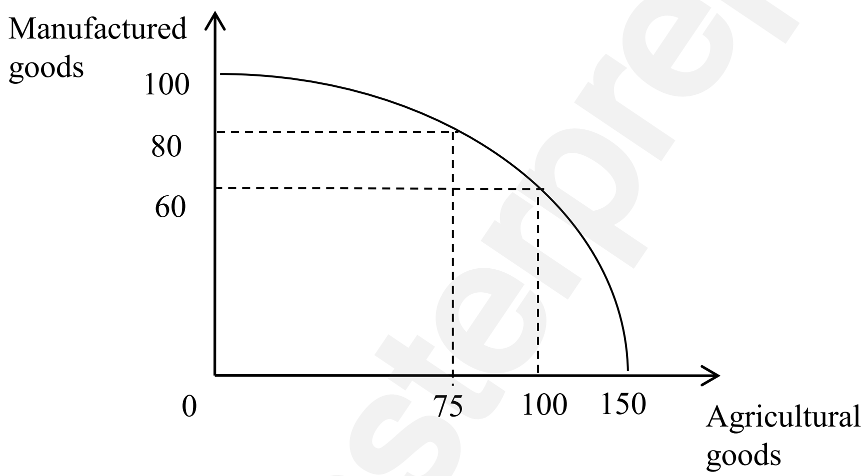
D. The output from 80 hectares used for growing sweet potatoes.

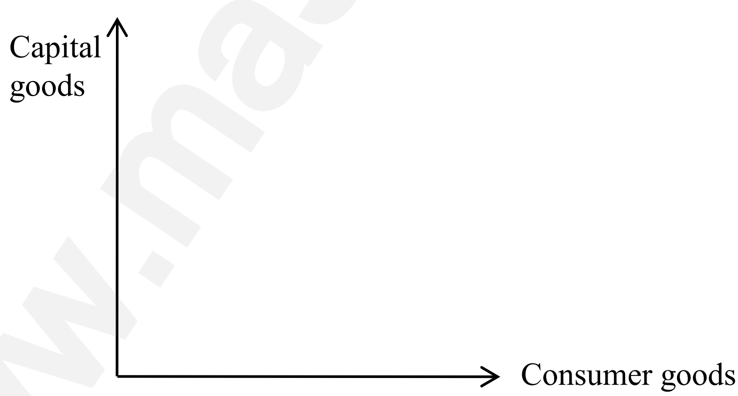
1.4 Production possibility curve diagrams (PPC)

1.4.1 Definition of PPC

- **Definition, drawing and interpretation of appropriate diagrams.**

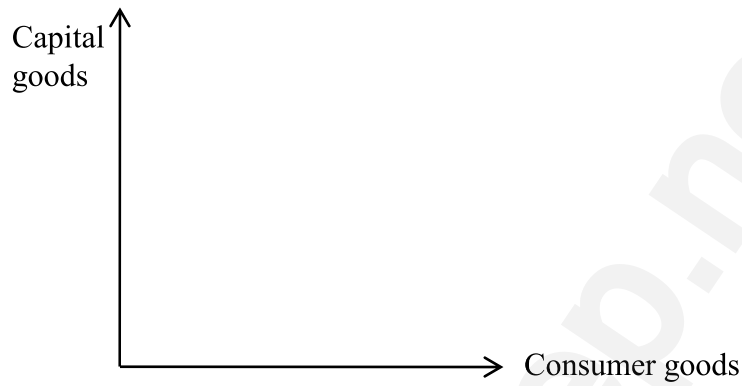
A production possibility curve is also known as a production possibility frontier or a production possibility boundary. It shows the maximum output of two types of products, and combinations of those products that can be produced with the existing quantity and quality of resources and technology.





1.4.2 Points under, on and beyond a PPC

- **The significance of the location of production points.**

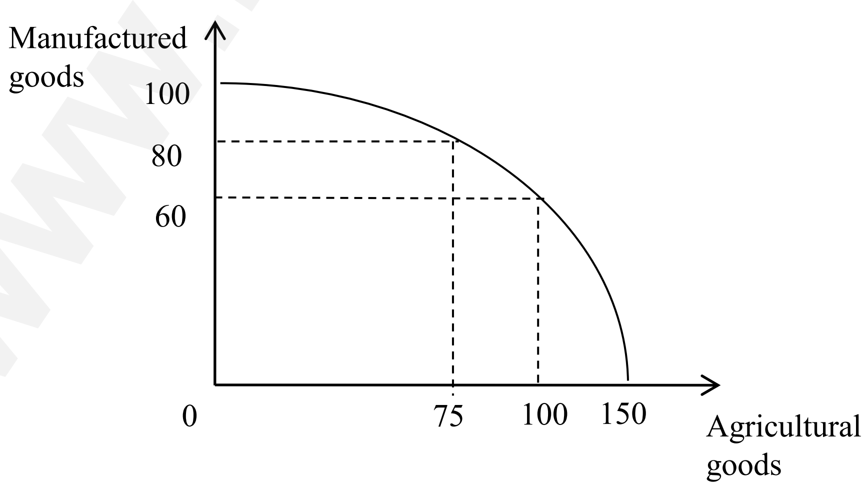


- Any point inside the curve, such as point X, means there is not full use of resources. Point X shows output is being produced where there are unemployed resources.
- A point anywhere on the curve, such as point Y, means that maximum use is being made of resources. This is an efficient output.
- There are not enough resources to produce outside the limit set by the PPC. So a point such as Z is not currently attainable.

1.4.3 Movements along a PPC

- **Movements along a PPC and opportunity cost.**

A movement along a PPC shows that resources are being reallocated. It also shows the opportunity cost of that decision. A production possibility curve illustrates the choices that can be made about production.



1.4.4 Shifts in a PPC

- **The causes and consequences of shifts in a PPC in terms of an economy's growth.**

The production possibility curve will shift to the right as a result of economies becoming more efficient, leading to economic growth.

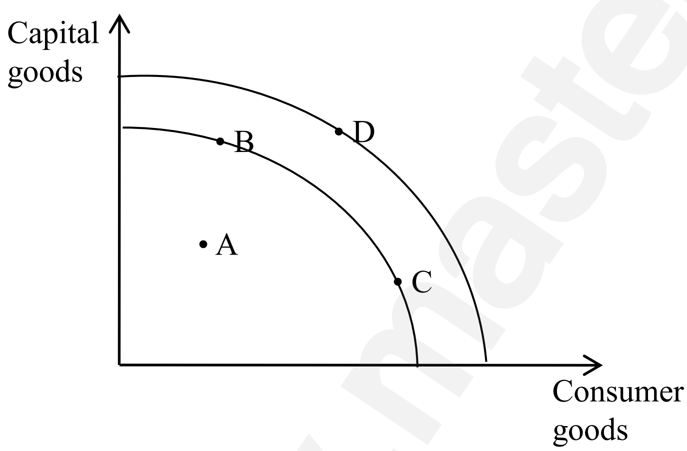
If the available resources for all goods and services within the economy increase then more goods and services can be produced with these newly available resources.

<u>Two factors that cause the PPF to shift = The factors that cause economic growth</u>

- The available resources could rise.
- The quality of the resources could rise.
- The state of technological knowledge could (and often does) improve.

= 1. Change in quantity of resources

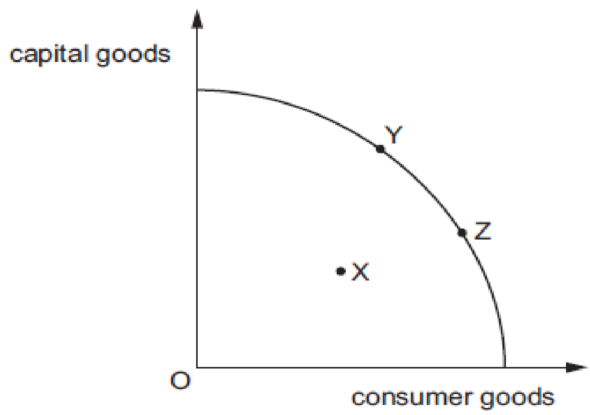
2. Change in quality of resources through technological advance and increases in productivity



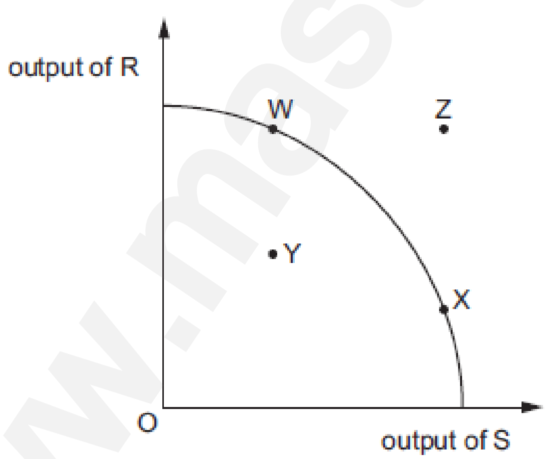
- A → B : Economic growth (   )
  Opportunity costs (   )
- B → C :Economic growth (   )
  Opportunity costs (   )
  * B vs. C
- B → D : Economic growth (   )
  Opportunity costs (   )

Q: Analyse, using a production possibility curve (PPC) diagram, the effect of a decrease in population size on an economy

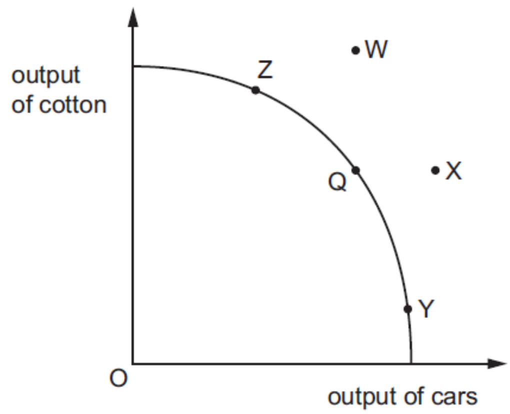
Problem solving



1. Which statement is correct?
A. A movement from X to Y shows a decrease in efficiency in the economy.
B. A movement from X to Z shows a discovery of new resources in the economy.
C. A movement from Y to Z shows resources are being diverted from capital goods to consumer goods.
D. A movement from Z to Y shows an increase in efficiency in the economy.



2. Which change on the diagram could represent an increase in unemployment?
A. W to X
B. W to Y
C. Y to X
D. Y to Z



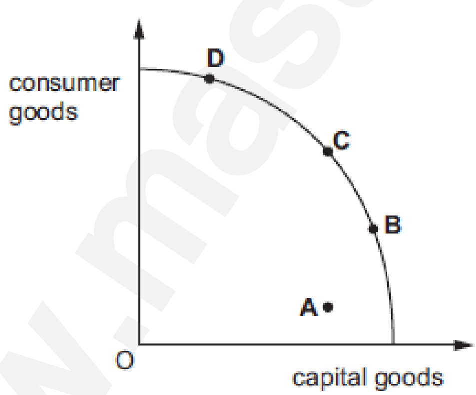
3. The economy is at point Q. There is improved technology that can only be used in the production of cars. How would this be represented on this diagram?

A. by a movement from Q to W

B. by a movement from Q to X

C. by a movement from Q to Y

D. by a movement from Q to Z



4. At which point will the economy show the highest potential for sustained long run economic growth?

Section 2. The allocation of resources

2.1 Microeconomics and macroeconomics

2.1.1 Microeconomics
2.1.2 Macroeconomics

- **The difference between microeconomics and macroeconomics and the decision makers involved in each.**

Economics is divided into microeconomics and macroeconomics. As their names suggest, microeconomics is concerned with the small scale and macroeconomics with the large scale.

Microeconomics is the area of economics that is concerned with the choices made by individuals and firms within a market. It looks at how scarce resources are allocated between these individuals and firms.

- Consumers make decisions about what they buy and how much of the goods and services that are available to consume. Consumers will generate the demand for goods and services. This will determine what is produced.
- Firms will make decisions about what they are going to produce. They are going to make decisions about what resources they buy and use. They also make decisions about how much they pay their workers. This will influence the level of disposable income workers will have, which will affect how much they consume.

Macroeconomics is the area of economics that is concerned with the distribution of resources across the economy as a whole.

Examples:

- the level of inflation (rate at which prices are changing)
- the growth of the economy (as measured by the total level of output or incomes)
- changes in employment and unemployment
- the total level of exports and imports

Q: Define macroeconomics

2.2 The role of markets in allocating resources

2.2.1 Market system
2.2.2 Introduction to the price mechanism
2.2.3 Key resources allocation decisions

- **How a market system works; including buyers, sellers, allocation of scarce resources, market equilibrium, and market disequilibrium.**
- **How the price mechanism provides answers to these key allocation questions.**
- **Establishing that the economic problem creates three key questions about determining resource allocation - what to produce, how, and for whom.**

A market is any situation in which buyers and sellers interact with one another. The market brings together buyers and sellers.

Three fundamental economic questions:

① What to produce? : A decision has to be made as to how the economy's resources are to be allocated.

② How to produce it? : Once this decision has been taken, an economy has to decide on how the products are to be produced.

③ For whom to produce: Because as many goods and services cannot be produced as are required to satisfy the needs of everyone, a decision has to be reached as to how the products should be distributed.

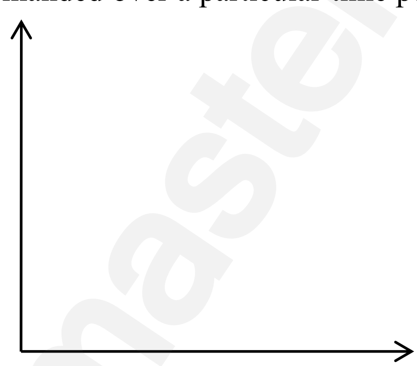
2.3 Demand

2.3.1 Definition of demand
2.3.2 Price, demand, and quantity → Law of demand
2.3.3 Individual and market demand
2.3.4 Conditions of demand

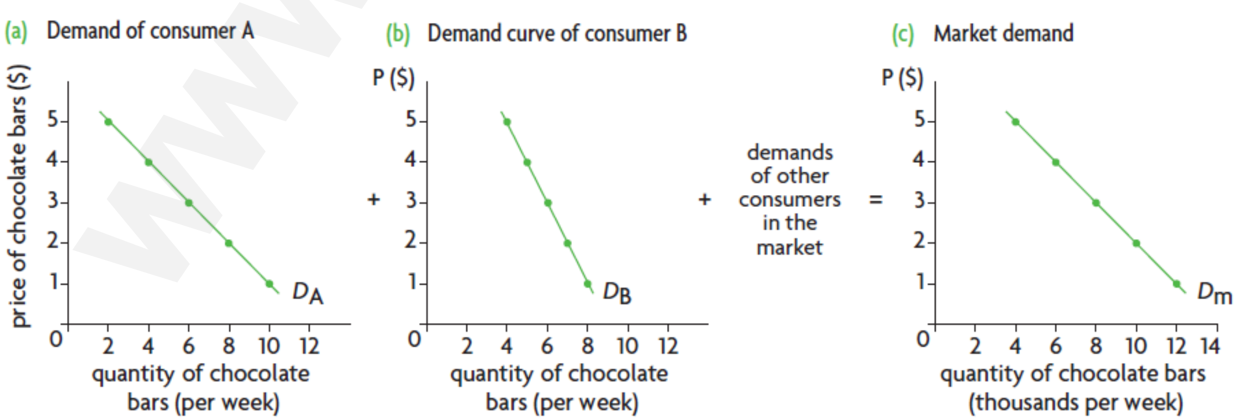
- **Definition, drawing and interpretation of appropriate diagrams.**
- **The link between individual and market demand in terms of aggregation.**

Demand is the willingness and ability to buy a product. Demand and price are inversely related . This means demand will rise as price falls and fall as price rises. A higher price will mean that fewer people will be able to afford the product. They will also be less willing to buy it and will be more likely to switch to rival products. So, as price rises, the willingness and ability to buy a product falls.

According to the law of demand, there is a negative causal relationship between the price of a good and its quantity demanded over a particular time period, ceteris paribus.



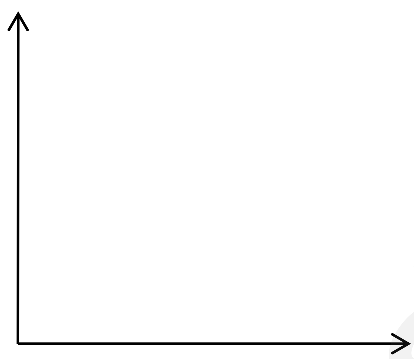
Market demand is the total demand for a product at different prices. It is found by adding up each individual's demand at different prices.

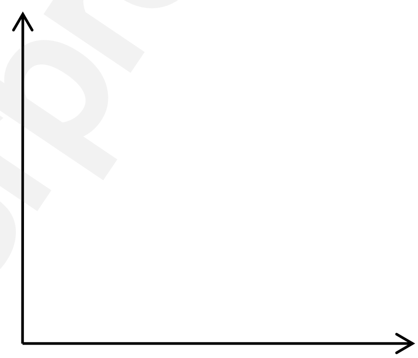


- **Law of demand(Movement): A demand curve to be drawn and used to illustrate movements along a demand curve with appropriate terminology, for example extensions and contractions in demand.**
- **Conditions of demand(Shift):The causes of shifts in a demand curve with appropriate terminology, for example increase and decrease in demand.**

<u>Movement along a demand curve (Price vs. Quantity Demanded → Law of demand)</u>

A demand curve shows the relationship between demand and price, all other factors remaining the same. When the price of a good rises or falls there is a movement along the curve. The movement is down the curve (contraction = decrease in quantity demanded) for a rise in price, and up the curve (expansion=extension = increase in quantity demanded) for a fall in price.





Conditions of demand: Shifts in a demand curve (Non-price determinants)

Price is not the only influence on demand. There are a range of causes for changes in demand even if price is unchanged. These reasons are sometimes known as the conditions of demand.

An increase in demand is shown by a shift to the right of the demand curve. At any given price, quantity demanded increases

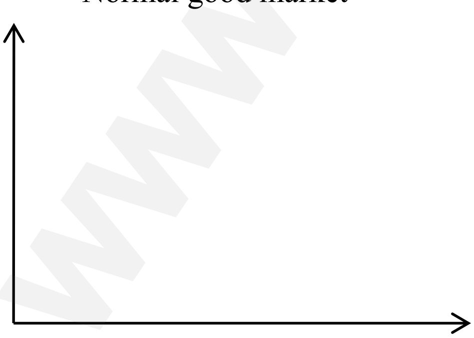
A decrease in demand is shown by a shift to the left of the demand curve. At any given price, quantity demanded decreases

Causes of changes in demand (= Non-price determinants of demand)

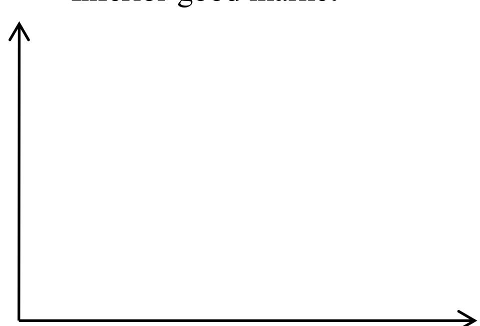
① Change in income

- Normal good: A good for which the demand increases as consumer income increases, and for which demand decreases as consumer income decreases. → Positive relationship between income and demand
- Inferior good: A good for which the demand decreases as consumer income increases, and for which demand increases as consumer income decreases. → Negative relationship between income and demand

Normal good market



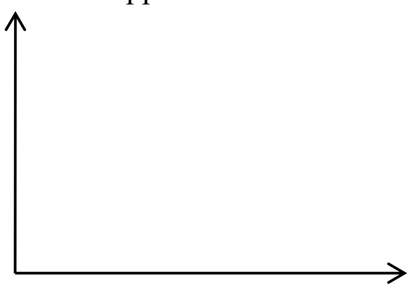
Inferior good market



② Change in prices of related goods

- Substitute goods are products that can be used in place of another. Because they are so similar, an increase in the price of one may lead consumers to switch consumption to the substitute. A substitute good is one for which demand will increase when the price of another good increases.

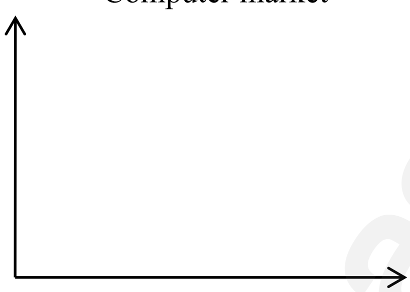
Apple market



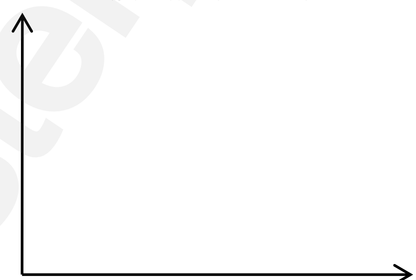
Orange market

- Complement goods are products that is used together with another product, so the demand for one is decreased by the price increases of the other.

Computer market



Software market



③ Advertising campaigns

④ Changes in population
- Number of people in the country
- ageing population
- birth rate

⑤ Changes in taste and fashion

Q: Define a substitute and give an example

2.4 Supply

2.4.1 Definition of supply
2.4.2 Price, supply and quantity → Law of supply
2.4.3 Individual and market supply
2.4.4 Conditions of supply

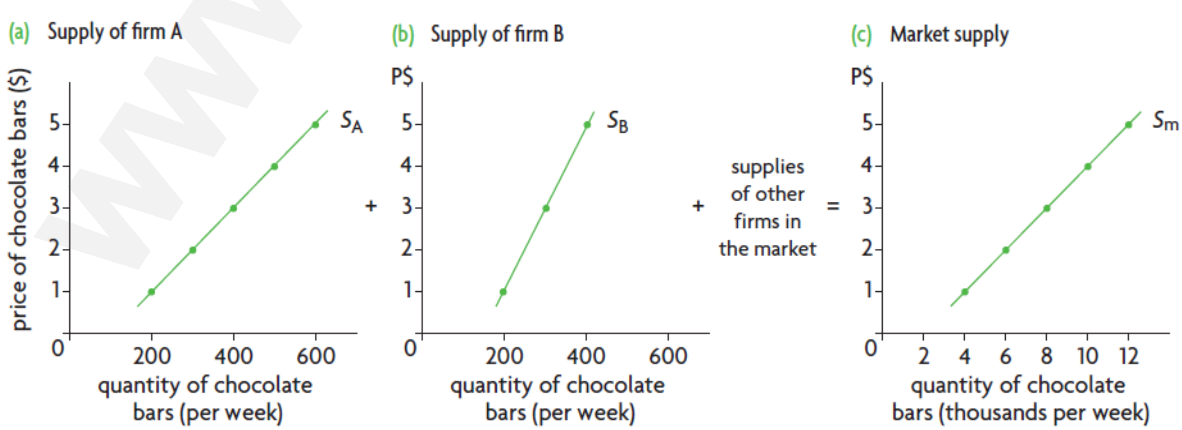
- **Definition, drawing and interpretation of appropriate diagrams.**
- **The link between individual and market supply in terms of aggregation.**

Supply is the willingness and ability to sell a product. Supply is directly related to price. A rise in price will lead to a rise in supply. Firms will be more willing to supply the product, as they are likely to earn higher profits. They will also be able to supply more as the higher price will make it easier for them to cover the costs of production.

According to the law of supply, there is a positive causal relationship between the quantity of a good supplied over a particular time period and its price, ceteris paribus: when the price of a good rises, the quantity supplied of the good also rises, and when the price falls, the quantity supplied falls as well, ceteris paribus.

Q: Define supply

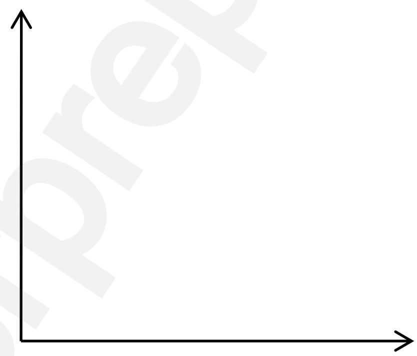
Market supply is the total supply of a product supplied by all the firms in the industry. Market supply is calculated in adding up quantities that would be supplied by each firm at each price.



- **Law of supply (Movement): A supply curve to be drawn and used to illustrate movements along a supply curve with appropriate terminology, for example extensions and contractions in supply.**
- **Conditions of supply (Shift): The causes of shifts in a supply curve with appropriate terminology, for example increase and decrease in supply.**

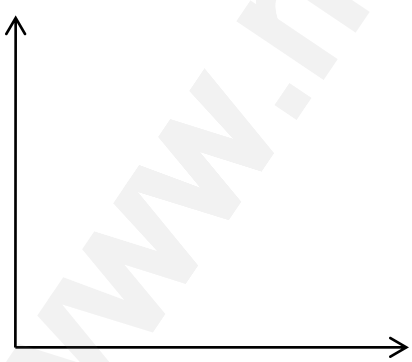
<u>Movement along a supply curve (Price vs. Quantity Supplied)</u>

A change in price of the product will cause an extension in supply(= expansion in supply = an increase in the quantity supplied) or a contraction in supply (= a decrease in the quantity supplied).

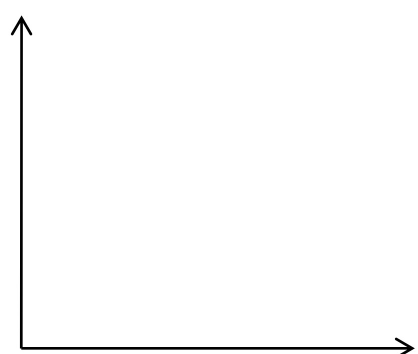


<u>Conditions of supply: Shifts in a supply curve (Non-price determinants)</u>

A change in supply occurs when the conditions facing suppliers alter. In such a situation, a different quantity will be offered for sale at each price. While a change in the price of the product itself causes a movement along the supply curve, a change in supply conditions causes the supply curve to shift.



An increase in supply is illustrated by a shift to the right. At each and every price, quantity supplied increases.



A decrease in supply is illustrated by a shift to the left. At each and every price, quantity supplied decreases.

Causes of changes in supply

① Changes in the costs of production

- Transporting goods, wages, energy costs, raw materials and so on
- A change in their productivity: A rise in the productivity of a factor of production will reduce unit cost.

② Improvements in technology

Since improvements in technology raise the productivity of capital, reduce costs of production and result in an increase in supply. It has become much cheaper to produce a range of products due to the availability of more efficient capital goods and methods of production.

③ Taxes

Direct taxes on firms, including corporation tax, and indirect taxes, such as VAT and excise duty, are effectively a cost that firms have to pay. A rise in the rate of an existing tax or the imposition of a new tax, will make it more expensive to supply a product and hence will reduce supply. In contrast, a cut in a tax or its removal will increase supply.

④ Subsidies

A subsidy given to the producers provides a financial incentive for them to supply more. As a result, the granting of a subsidy will cause an increase in supply whilst the removal of a subsidy will cause a decrease in supply.

⑤ Weather conditions and health of livestock and crops

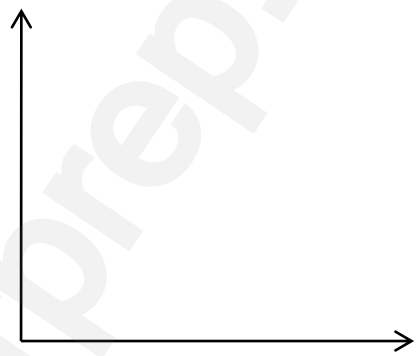
⑥ Prices of other products

Firms often produce a range of products. If one product becomes more popular, its price will rise and supply will extend. In order to produce more of this product, the firm may divert the resources from the production of other products. The prices of these other products have not changed but the firm will now supply less at each and every price. For example, if a farmer cultivates corn and wheat, a rise in the price and profitability of corn is likely to result in the farmer growing more corn and a corresponding decrease in the supply of wheat.

→ Competitive supply

Corn market

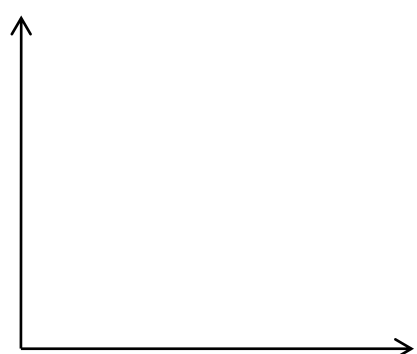
Wheat market



Besides the products being supplied in a competitive environment, they can also be jointly supplied. This means that one product is automatically made when another product is produced, that is one product is a by-product of the other one. For example, when more beef is produced, more leather will be available. In the case of products which are jointly supplied, a rise in the price of one product will cause an extension in supply of the other product. Firms make more of one product because its price has risen. The supply of the other product will increase automatically. More is produced, not because it has risen in price but because the price of a related product has risen. → Joint supply

Leather market

Beef market



⑦ Disasters and wars

⑧ Discoveries and depletions of commodities (ex. coal, gold and oil)

2.5 Price determination

2.5.1 Market equilibrium

- **Definition, drawing and interpretation of demand and supply schedules and curves used to establish equilibrium price and sales in a market.**

Equilibrium price is also sometimes referred to as the market clearing price. This is because it is the price where demand and supply are equal, and so there are no shortages or surpluses of the product.(at which quantity demanded is equal to the quantity supplied in a market)

Demand and supply schedules: Potato chips		
Price of potato chips(P)/$	Quantity of potato chips demanded per week (Q_D)/Thousands	Quantity of potato chips supplied per week (Qs)/Thousands
2.50	5	25
2.00	10	20
1.50	15	15
1.00	20	10
0.50	25	5

2.5.2 Market disequilibrium (movement)

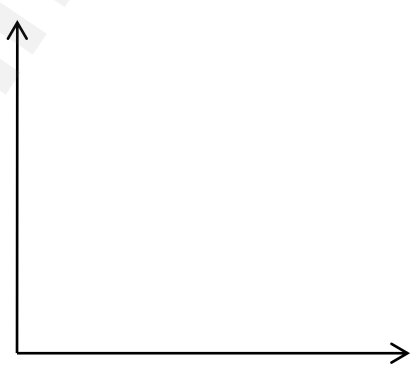
- **Definition, drawing and interpretation of demand and supply schedules and curves used to identify disequilibrium prices and shortages (demand exceeding supply) and surpluses (supply exceeding demand).**

- Excess supply → Surpluses

  Market forces move price towards the equilibrium. If a firm sets the price above the equilibrium level, it will not sell all of the products it offers for sale - there will be a surplus (excess supply). To ensure the firm sells all of the products it wants to, it will lower price until the market clears, with the quantity demanded equaling the quantity supplied.

- Excess demand → Shortages

  Market forces will also move the price, if it is initially set below the equilibrium level. In this case, there will initially be a shortage of the product with demand exceeding supply (excess demand). Some consumers anxious to buy the product will be willing to pay a higher price and suppliers recognising this excess demand will raise the price.



In most free market, surpluses and shortages are only temporary because prices eventually move toward their equilibrium levels (market-clearing, equilibrium price). Thus, in market economies, prices are the mechanism for rationing scarce resources.

Q: Explain how market forces would respond to a shortage of drinking water

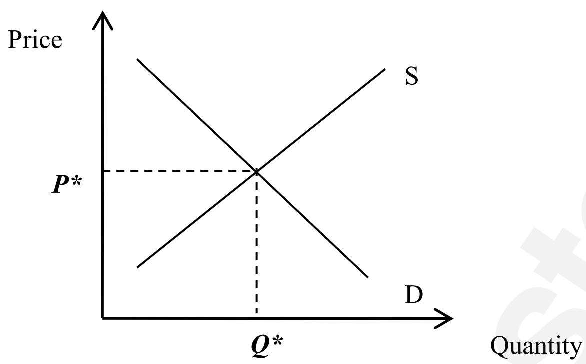
2.6 Price changes _ New equilibrium

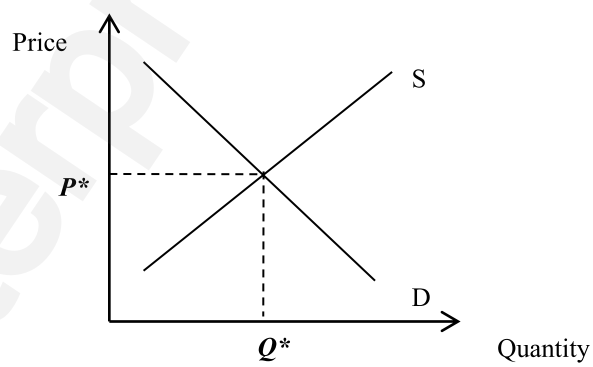
2.6.1 Causes of price changes
2.6.2 Consequences of price changes

- **Changing market conditions as causes of price changes.**
- **Demand and supply diagrams to be used to illustrate these changes in market conditions and their consequences for equilibrium price and sales.**

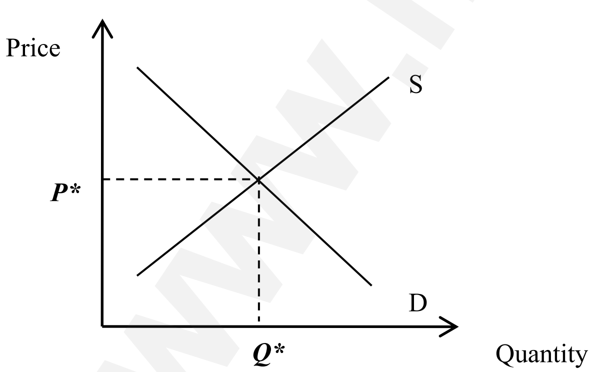
Price changes when the market conditions of demand and supply change.

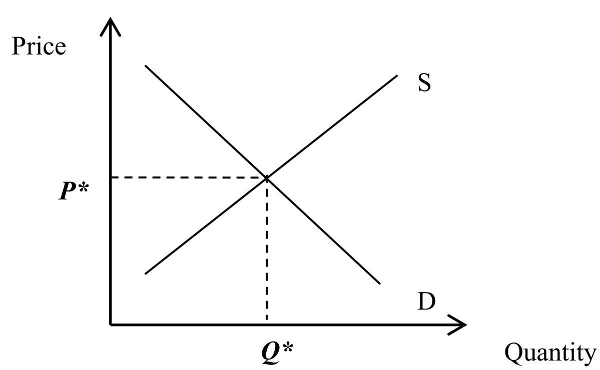
- Change in Demand





- Change in Supply

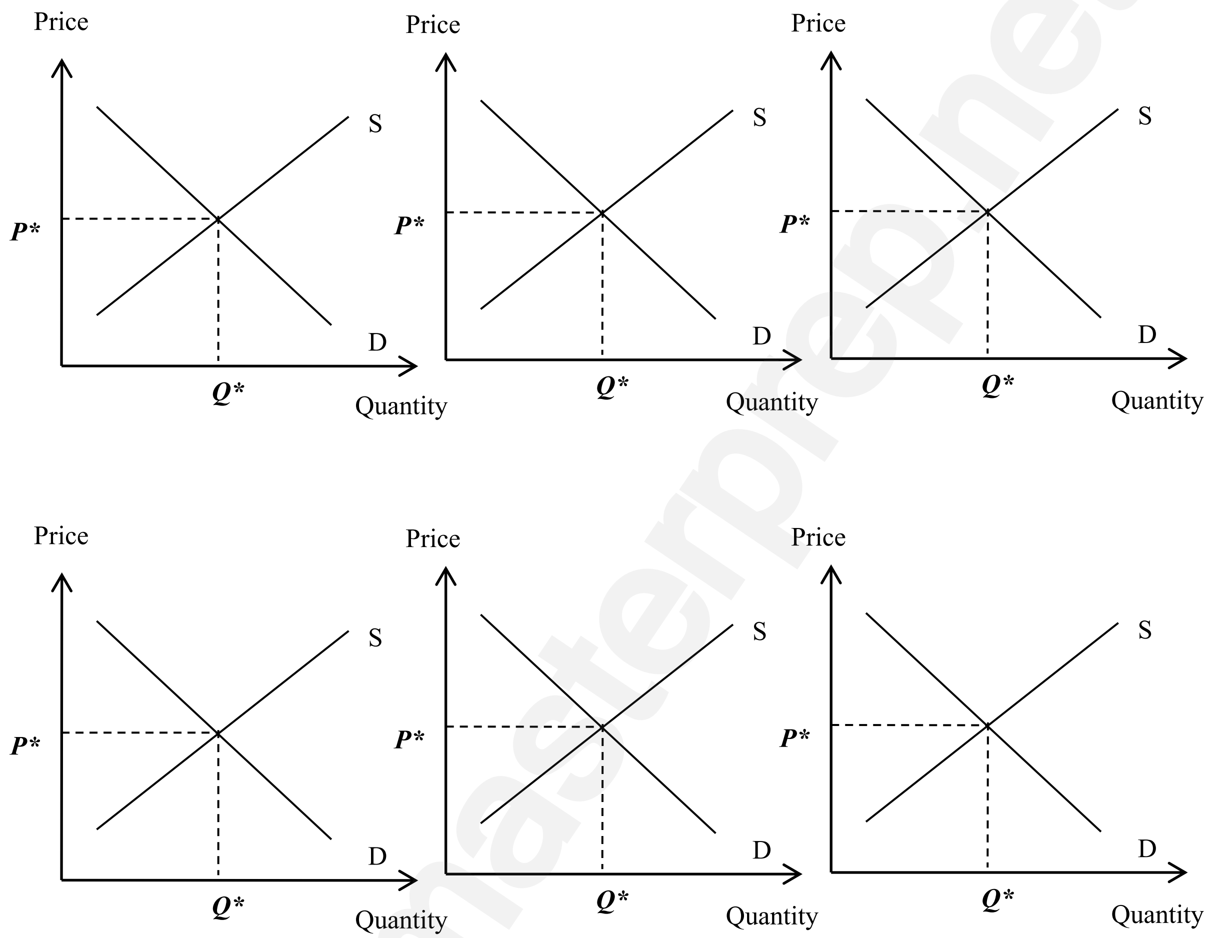




Q: Analyse, using a demand and supply diagram, how a subsidy given to producers could affect the market for electric cars

- Double shift of supply and demand

In this case, the impact on the market will depend not only on the direction of the changes, but also on the size of the changes.



Problem Solving

1. The table shows the demand schedule for a good at different prices.

price $	quantity demanded
8	200
10	160
12	120
14	60

The current market price for the good is $10. If a price increases by 40%, what will be the change in the quantity demanded?

A. – 60

B. – 100

C. +120

D. +200

2. What is equilibrium in a market?

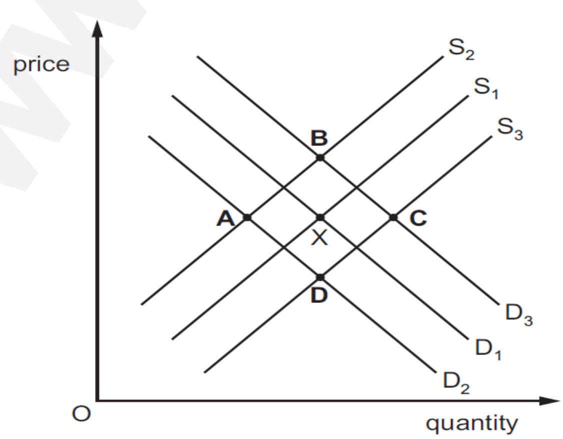
A. where products offered for sale equal consumer demand

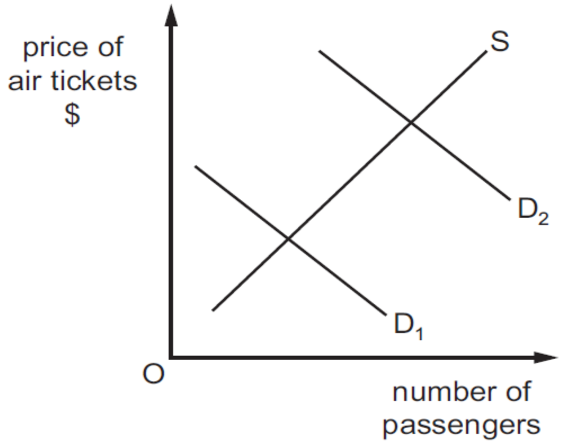
B. where profit is at the maximum level

C. where the quantity of inputs is equal to the quantity of output

D. where total costs equal total revenue

3. The diagram shows the market of clothing with an initial equilibrium of X. What will be the new equilibrium if there is a successful advertising campaign by a rival firm and a decrease in workers' wages?





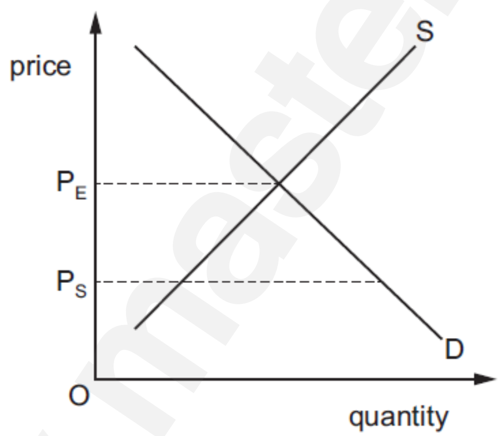
4. What could cause a shift of the demand curve from D_1 to D_2?

A. an increase in production costs

B. an increase in technology

C. an increase in incomes

D. an increase in worldwide terrorism



5. If the price of a product moves from P_S to P_E, what is the reason for this movement in price?

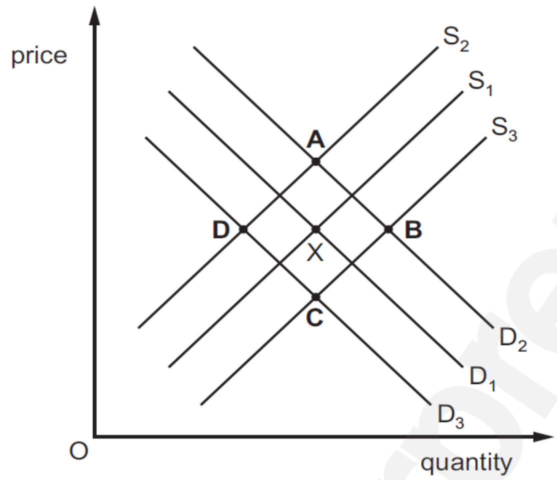
A. Demand for the product will increase.

B. No more of the product can be supplied.

C. Some consumers are willing to pay higher prices.

D. Suppliers are facing rising costs.

6. The original equilibrium is X. What will be the new equilibrium if the economy experiences sustained economic growth and the government reduces planning controls on the building of new school?



2.7 Price elasticity of demand (PED)

2.7.1 Definition of PED
2.7.2 Calculation of PED

- **Definition and Calculation of PED using the formula and interpreting the significance of the result. Drawing and interpretation of demand curve diagrams to show different PED.**

Price elasticity of demand (PED) measures the extent to which the quantity demanded changes when the price of the product changes. The formula used to calculate it is:

$$\text{Price elasticity of demand (PED)} = \left| \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}} \right|$$

Change in Price	Change in Quantity	PED (Before and after method)	Degree of price elasticity of demand
\$20→\$30	100 → 20		
\$20→\$30	100 → 50		
\$20→\$30	100 → 70		

<u>Interpretation of PED</u>

① Negative sign: This tell us that there is an inverse relationship between the quantity demanded and price.

② Size of the figure: This indicates the extent by which demand will extend or contract when price changes. A figure of -2, for example, indicates that a 1% change in price will cause a 2% change in quantity demanded.

Q: State the formula used to calculate PED.

Degree of PED

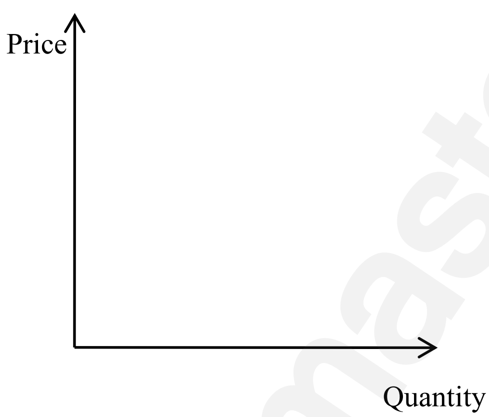
① |PED| >1 : Elastic demand occurs when a change in price results in a greater percentage change in quantity demanded, giving a PED figure (ignoring the sign) of more than 1, but less than infinity.

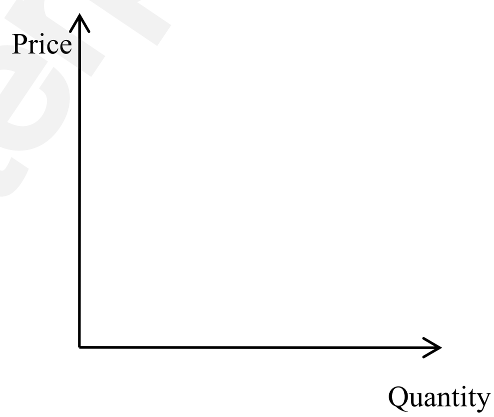
② |PED| < 1: Inelastic demand is when the quantity demanded changes by a smaller change than the price and the PED is less than 1, but greater than zero.

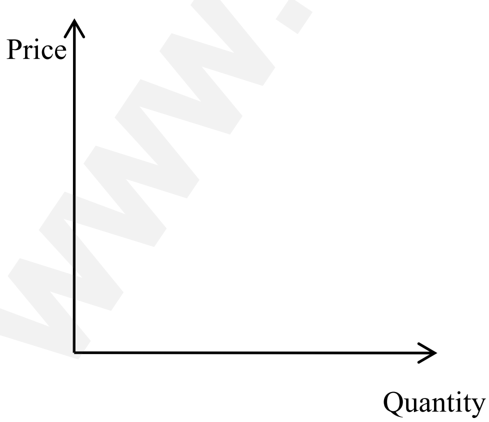
③ |PED| = ∞ : Perfectly elastic demand occurs when a change in price causes a complete change in the quantity demanded. For example, if one of the many wheat farmers raises his price, he may lose all of his sales with buyers switching to rival farmers. In this case, PED is infinity and is represented by a horizontal straight line.

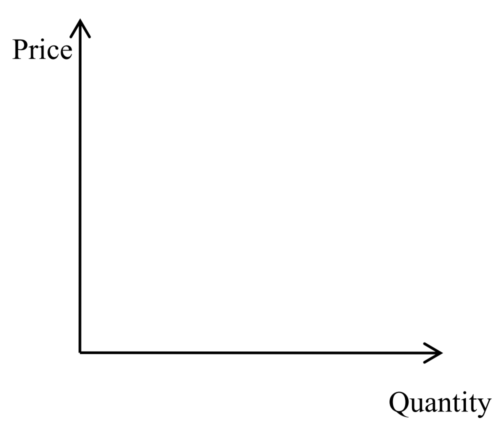
④ |PED| = 0 : Perfectly inelastic demand is when the quantity demanded does not change when price changes. Consumers buy the same quantity despite the alteration in price and PED is zero.

⑤ |PED| = 1: Unit elasticity of demand is found when a percentage change in price results in an equal percentage change in quantity demanded, giving a PED of one (unity).









2.7.3 Determinants of PED

- **The key influences on whether demand is elastic or inelastic.**

① The availability of substitutes of a similar quality and price

If a product does have a close substitute, it is likely to have elastic demand. In this case, a rise in price will be likely to cause a significant fall in the quantity demanded as consumers will switch to the substitute. However, if there is no close substitute available, demand will probably be inelastic. The quantity demanded will not fall much in response to a rise in price because there is no suitable alternative to switch over to.

② Proportion of income spent on the product

If the purchase of a product takes up a small proportion of people's income, demand is likely to be inelastic. In contrast, products which take up a large proportion of people's income to be bought, tend to have elastic demand.

③ Whether the product is a necessity or a luxury

Luxury products usually have elastic demand. They do not have to be purchased, so a rise in price may result in a greater percentage fall in quantity demanded. If their prices fall, however, the quantity demanded is likely to rise by a greater percentage as more of the population can afford to buy them now. In contrast to luxuries, necessities such as rices tend to have inelastic demand. People cannot cut back significantly on their use, even if their prices rise.

④ Whether the product is addictive or not

People also find it difficult to cut back on their purchases of products which are addictive, such as cigarettes and coffee. This means that such products have inelastic demand.

⑤ Whether its purchase can be postponed

If the purchase of a product can be delayed, demand tends to be elastic. A rise in price will result in a greater percentage fall in the quantity demanded as people will postpone the purchase of the product, hoping that its price will drop back in the future.

⑥ Time

Demand becomes more elastic, if the time period under consideration is long. This is because it gives consumers more time to switch their purchases. In the short term if the price of a product rises, customers may not have enough time to find alternatives and if it falls, new customers will not have sufficient time to notice the change in price and switch away from rival products.

Q: Explain two influences on whether demand for a product is price-elastic or price-inelastic

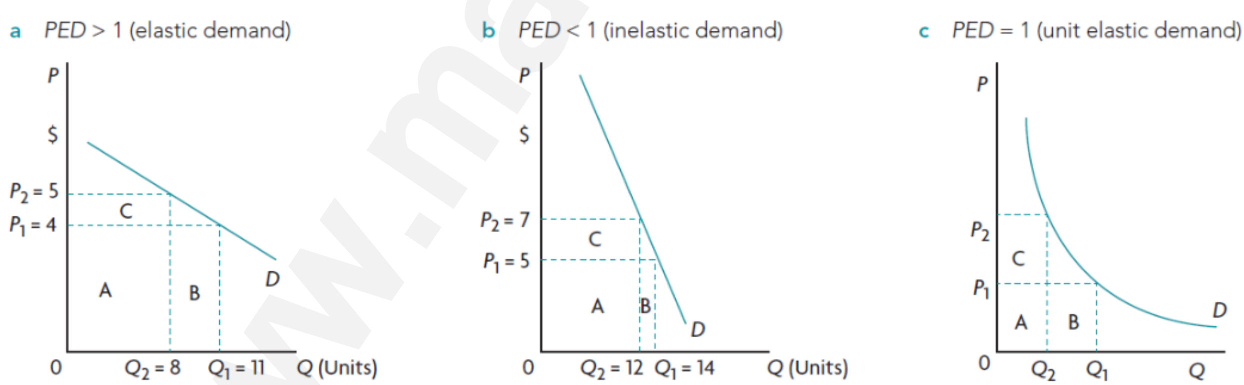
2.7.4 PED and total spending on a product/revenue

- **The relationship between PED and total spending on a product/revenue, both in a diagram and as a calculation.**

Total revenue (TR) = Price(P) * Quantity demanded(Qd)

	PED > 1	PED =1	PED < 1
Price rises			
	Quantity effect > Price effect	Quantity effect = Price effect	Quantity effect < Price effect

- When demand is inelastic, a change in price will cause total revenue (and total spending) to move in the same direction. So a rise in price will cause total revenue to rise.
- When demand is perfectly inelastic, a change in price will not only cause revenue to move in the same direction, but also by the same percentage.
- When demand is elastic, a change in price results in total revenue moving in the opposite direction. In this case, a rise in the price will cause total revenue to fall.
- In the case of perfectly elastic demand, a rise in price will cause demand to fall to zero.
- In the case of unit elasticity of demand, price and the quantity demanded change by the same percentage and so total revenue remains unchanged.



Ex) P =$10, Qd = 50 → P = $12, Qd = 50
Calculate total revenue ?

And the what is the degree of PED?

Q: Analyse how price elasticity of demand for a product influences the revenue a firm receives.

2.7.5 Significance of PED

- **The implications for decision making by consumers, producers and government.**

Consumers

Consumers are more likely to benefit from lower prices and higher quality when demand is elastic. This is because producers would be reluctant to raise price as demand would contract by a greater percentage and revenue would fall. The quality may also be high if the elastic demand is the result of the existence of close substitutes. In this case, a producer may have to provide a good quality product to remain competitive.

Producers

Price elasticity of demand will help to determine pricing strategies. A producer in considering whether to cut the price of a product will need to know the extent of any rise in demand. If demand is going to rise by only a relatively small amount, it may not pay to reduce the price. A producer may try to make the firm 's product more distinctive. This would discourage consumers switching to other firms' products as they would not be seen as such close substitutes. It would make demand for the firm's product more price inelastic and would give the producer more power to raise price.

Q: Analyse how a change in the PED for its products may benefit a firm.

Government

Knowing the level of demand at a given elasticity will help the government to determine the level of tax that should be charged for a given product. Products which are price inelastic are usually heavily taxed because the government knows that an increase in taxes would not affect demand, generating higher than normal tax revenues for the government.

For example, cigarettes and alcohol are known to have very bad effects on people's health. However, they are also addictive; meaning that they are price inelastic. Therefore, the government collects high taxes on these goods to provide better health facilities to deal with the effects. A key consideration for governments is to know the effect of raising taxes on particular goods. If goods are taxed and consumers still buy them then the goods have price inelastic demand. This will raise tax revenue for the government without harming demand. However if the tax on goods or services causes demand to drop considerably then the goods have price elastic demand. This will cause both tax revenue to fall and a fall in the sales of the goods and services in the market.

2.8 Price elasticity of supply (PES)

2.8.1 Definition of PES
2.8.2 Calculation of PES

- **Definition and calculation of PES using the formula and interpreting the significance of the result. Drawing and interpretation of supply curve diagrams to show different PES.**

Price elasticity of supply is measured by the percentage change in quantity supplied divided by the percentage change in price, or the responsiveness of the quantity supplied to changes in price.

$$\text{Price elasticity of supply (PES)} = \left| \frac{\text{Percentage change in quantity supplied}}{\text{Percentage change in price}} \right|$$

For example, the quantity supplied may rise from 100 to 130 as a result of price increasing from $10 to $12.

$$\frac{\text{Change in supply}}{\text{Original quantity supplied}} * 100$$

$$\frac{\text{Change in Price}}{\text{Original Price}} * 100$$

<u>Interpretation of PES</u>

① Positive figure : This tell us that there is an direct relationship between the quantity supplied and price.

② Size of the figure: The figure indicates the degree of responsiveness of the quantity supplied to a change in price. The higher the figure, the more responsive supply is. A PES of 2.6, for example, means that a 1 % rise in price will cause a 2.6% extension in supply.

Degree of PES

① PES >1 : Elastic supply is when the percentage change in quantity supplied is greater than the percentage change in price. The higher the figure, the more elastic supply is. Elastic supply would touch the vertical axis.

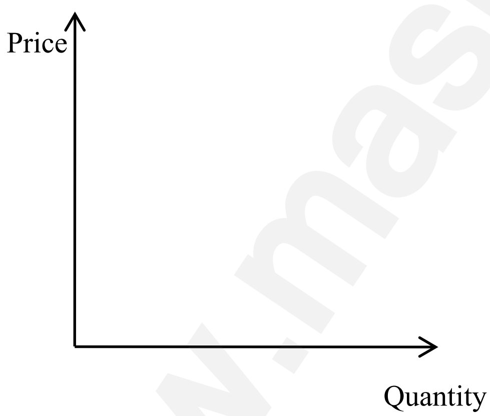
② PES < 1: Inelastic supply is when the percentage change in quantity supplied is less than the percentage change in price and so PES is less than 1, but greater than zero. A PES of 0.2 would mean that supply is more inelastic than that for a PES of 0.7. The inelastic supply curve is steep, and would touch the horizontal axis.

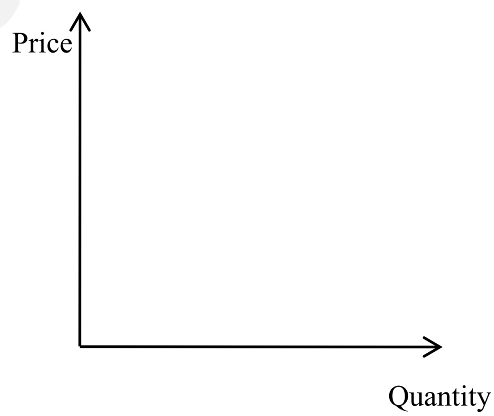
③ PES = 0 : Perfectly inelastic supply is when the quantity supplied does not alter with price changes and PES is zero. If, for example, more people are demanding to see a film at a particular cinema, ticket prices may rise. However, it is unlikely to increase the seating capacity in the short run.

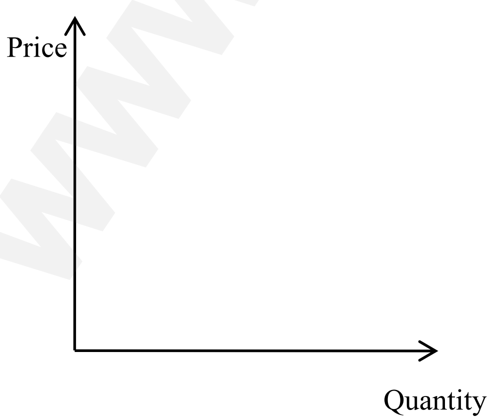
④ PES = ∞ : Perfectly elastic supply is when a change in price will cause an infinite change in supply, giving a PES of infinity. In this case, firms would supply whatever quantity people want to buy at the given price.

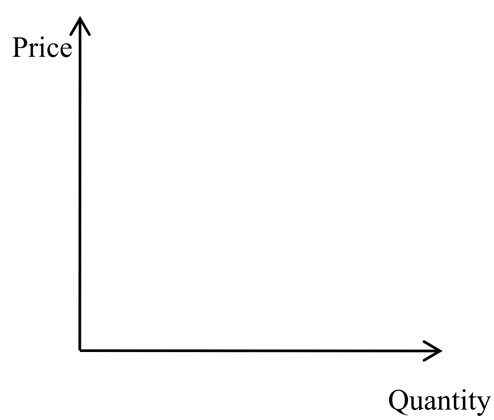
⑤ PES = 1 : Unit PES occurs when a given percentage change in price causes an equal percentage change in supply. Unit PES is illustrated by any straight line that goes through the origin.

Q: Define perfectly inelastic supply









2.8.3 Determinants of PES

- **The key influences on whether supply is elastic or inelastic.**

① The time taken to produce it

If the price of a product is rising steeply in a market then a firm will try to take advantage of this and sell more. However, it will take time to produce the extra quantities of goods and services and in the short term they will not be able to produce certain goods in the time available. In these cases, these products are supply price inelastic.

② The cost of altering its supply

If the product can be made quickly, the cost of altering its supply is low. In this case, PES is elastic. In contrast, if it takes a long time to make a product, it is expensive to change production. (perhaps because firms are working at full capacity). This causes PES to be inelastic. Advances in technology, by reducing the production period and lowering costs of production, make the supply more elastic.

③ The feasibility of storing it

If it can be stored, the quantity supplied can be adjusted relatively easily in the event of a price change. In such a case, a rise in price will result in a greater percentage change in supply. This is because firms can alter the amount they offer for sale by making more, using up spare capacity, shifting resources and employing more resources, and by drawing on stocks. If the price falls, firms will cut back on production, remove some products from the market and place them in storage. Again, if the product cannot be stored, it will be more difficult to adjust its supply in response to a change in price. As a result, supply will be inelastic.

④ Spare Capacity

In order to produce more goods and services quickly firms may have to have space capacity or spare raw materials which are not being used. If the firm has these in place then they are supply price inelastic.

Q: Explain two reasons why manufactured goods are usually in more price-elastic supply than agricultural goods.

2.8.4 Significance of PES

- **The implications for decision making by consumers, producers and government.**

<u>Consumers</u>

Consumers benefit from supply being elastic. This is because it means that supply is responsive to consumer demand. If demand increases, price will rise. If supply is elastic, the quantity supplied will rise by a greater percentage than the change in price. Sales may rise significantly without there being a large increase in price.

<u>Producers</u>

Producers want their supply to be as elastic as possible. Their profits will be higher, the quicker and more fully they can adjust their supply in response to changes in demand and hence price.

<u>Governments</u>

If governments want to encourage the output and consumption of a product they are likely to be more successful giving a subsidy to producers if supply is elastic. Governments use a variety of policy measures to promote flexibility in production, for example a number of governments have changed the law making it easier for firms to hire and fire labour.

Problem Solving

1.Following a 10% increase in the price, supplies increase by 15%. What is the price elasticity of supply (PES) ?

A. 0.33

B. 0.66

C. 1.50

D. 2.0

2. The price rose by 5% and the quantity demanded fell by 4%. What was the price elasticity of demand ?

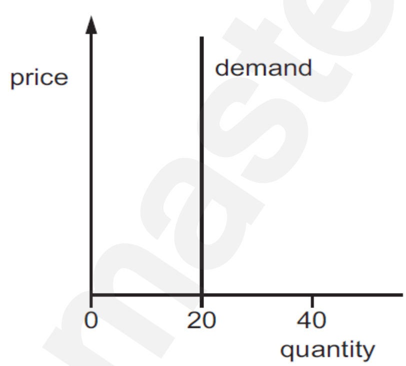
A. –0.4

B. –0.8

C. –1.25

D. –2.0

3. What can be concluded from the demand curve shown in the diagram?



A. Price increases will raise the producers' revenue.

B. Producers cannot respond to a price rise.

C. The product has many substitutes.

D. There are 20 people able to buy the product.

4. After the price increase by 40%, the revenue of a producer falls by 10%. What is the price elasticity of demand (PED)?

A. elastic

B. inelastic

C. perfectly elastic

D. unit elastic

5. Price elasticity of demand is – 0.5. What happens to the demand for a product if its price falls from $1 to $0.80?

A. It decreases by 10%.

B. It decreases by 20%.

C. It increases by 10%.

D. It increases by 20%.

price per kg (US$)	quantity demanded (kg)	quantity supplied (kg)
10	50	10
20	40	20
30	30	30
40	20	40

6. When the price increases from US$20 to US$30 per kg, what is the price elasticity of demand (PED)?

A. 0.25

B. 0.5

C. 1.0

D. 2.0

2.9 Market economic system

2.9.1 Definition of market economic system

In a market economy goods and services are freely exchanged and prices are decided by individual suppliers. Buying and selling decisions are made by buyers and sellers. Prices act as a guide.

2.9.2 Advantages and disadvantages of the market economic system

- **Including the roles of the private sector (firms and consumers) and the public sector (government) in a market economy.**
- **Including examples of how it works in a variety of different countries.**

- The private sector covers business organisations which are owned by shareholders or individuals. These organisations respond to changes in market forces and are profit motivated.

- The public sector is controlled by the government. It covers government-run services and state-owned enterprises (SOEs), also called nationalised industries.

※ Different economic systems

① Planned economic system (= centrally planned, command or collectivist economy): It is an economy in which the state (government) makes the decisions about what to produce, how to produce it and who receives it.

② Market economic system (= market economy = free enterprise economy): In a market economy goods and services are freely exchanged and prices are decided by individual suppliers and consumers. Buying and selling decisions are made by buyers and sellers. Prices act as a guide.

③ Mixed economic system: In most countries, decisions are made by a combination of government decision-making and the market. This is a mixed economy.

Advantages of the market system

- Resources are allocated to meet the actual level of demand: businesses can more accurately predict what the level of demand will be than the government. Therefore, supply can be provided at the right level.
- Providing plenty of choice: as businesses are competition with each other to attract new customers they will continuously improve the quality and availability of products for the consumer.
- Keeping prices down: as businesses are competition to attract customers they will lower their prices in order to remain competitive.
- Encourages innovation: in order to improve the quality of the goods and services and remain competitive, businesses will be more prepared to put more money into the development of newer, better products.

Disadvantages of the market system

- Factors of production will only be used if it is profitable to do so: if certain resources can be obtained more cheaply elsewhere or replaced then they will not be used. For example, the UK imports all of its coal because it is cheaper than mining it themselves.
- The free market can fail to provide certain goods or services: public goods and merit goods are often under-produced because there is usually no demand if the customer has to pay for them.
- The free market may encourage the production of harmful goods: some goods, such as alcohol, cigarettes or gambling, are seen as simply products by firms and will be produced. However, society knows they are harmful and may not want them to be produced.
- The market system provides more products to those with more money: firms will sell to whoever is willing to pay the highest price and buy more. This will mean that some people will not have access to certain goods and services. In extreme cases this creates poverty.

Q: Discuss whether or not the operation of a market economic system is harmful to an economy.

2.10 Market failure

2.10.1 Definition of market failure

Market failure occurs when market forces fail to produce the products that consumers demand, in the right quantities and at the lowest possible cost. In other words, market failure arises when markets are inefficient. → shortages(under-produced), surpluses(over-produced), and high prices.

2.10.2 Causes of market failure

Markets fail if they are inefficient. This can be because of the following reasons:

- They fail to provide the type of goods and services consumers want or need.
- They fail to provide the correct quantities of the goods and services required.
- They fail to produce goods and services at acceptably low prices.

If left to market forces, some products may be under-produced, some over-produced and some may not be produced at all. Prices may be high due to lack of competitive pressure and difficulties in lowering the costs. A lack of investment and reduction in expenditure on research and development, can also slow down the improvement in products.

2.10.3 Consequences of market failure

- **The key terms associated with market failure: public good, merit good, demerit good, social benefits, external benefits, private benefits, social costs, external costs, private costs.**
- **With respect to public goods, merit and demerit goods, external costs and external benefits, abuse of monopoly power and factor immobility.**
- **Examples of market failure with respect to these areas only.**
- **The implications of misallocation of resources in respect of the over-consumption of demerit goods and goods with external costs, and the under-consumption of merit goods and goods with external benefits.**

* **Note: demand and supply diagrams relating to market failure are not required.**

① Public goods

Private good is a product which is both rival and excludable.

- Excludability : The property of a good whereby a person can be prevented from using it
- Rivalry in consumption: The property of a good whereby one person's use diminishes other people's use

Public good is a product which is non-excludable and non-rival.

- Non-excludability: It is not possible to exclude non-payers from taking advantage of the benefits of products such as national defence. If these public goods are provided for some people, others can consume them without paying for them. Those who do take advantage in this way are called free riders.
- Non-rivalry: This means that consumption of the product by one more person does not reduce someone else's ability to consume it. For example, one more person walking down a lit street does not reduce the benefit that other people receive from the street lights.

The main problem that occurs in the free market is that public goods may not be produced at all. This is usually caused by one of two things:

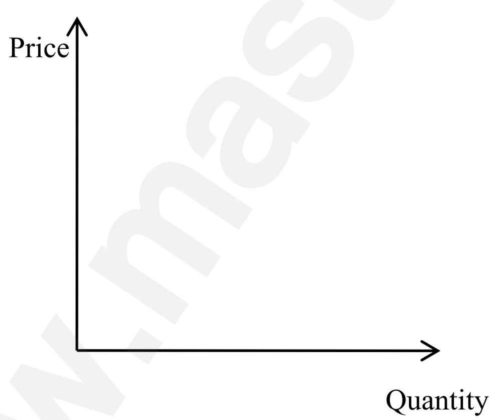
- The Free Rider problem – this is where one consumer will not want to pay for the goods but will still want to benefit from them and so will wait to benefit from them as a result of another consumer paying for the goods. Therefore, the resources are not being consumed (utilised) in the best possible way.
- The Profit Motive – this is where firms will not provide certain goods and services because they do not believe that they will benefit from the production of these goods.

* Externality

The consumption and production of some products may affect people who are not involved in their consumption or production directly (those indirectly affected are often referred to as third parties).

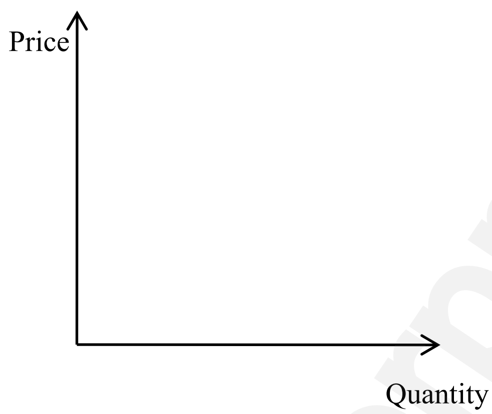
- Third parties: those not directly involved in producing or consuming a product.
- Social benefits: the total benefits to a society of an economic activity.
- Social costs: the total costs to a society of an economic activity.
- Private benefits: benefits directly gained by individuals through taking a particular action.
- Private costs: costs incurred by an individual in taking a particular action.
- External costs: when producing or consuming a good or service imposes a cost upon a third party.
- External benefits: when producing or consuming a good or service a benefit to a third party.
- Socially optimum output: the level of output where social cost equals social benefit and society's welfare is maximised.

Q: Define external costs. [2]



② Merit goods (Positive externality)

Merit goods are products that are more beneficial to the consumers than they themselves realise, and they have benefits for those who are not involved in their consumption directly(= third-party), that is external benefits. This failure of the consumers to acknowledge the true value to themselves, and to others, means that these products would be under-consumed and hence under-produced, if left to market forces.



Positive Externality: Private Benefits + External benefits = Social Benefits

Healthcare is an example of a merit good. For instance, some people may not recognise the importance of regular medical check-ups and/or visiting a doctor. The associated external benefits may include higher output as a result of workers having less time off work (hence being more productive) and prevention of spread of diseases.

Government measures to solve

A government could

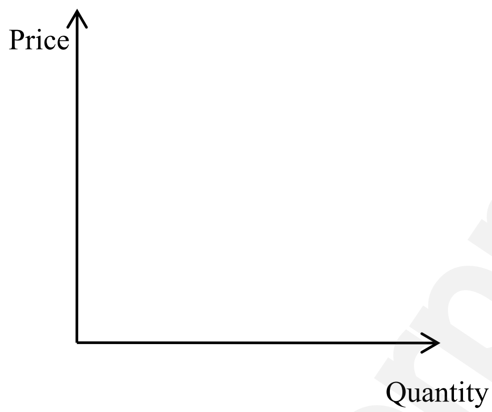
- provide information on the benefits of consuming the products
- grant subsidies

Q: Explain two reasons why education is a merit good.

Q: Explain two external benefits that can arise from education.

③ Demerit goods(Negative externality)

Demerit goods are more harmful to consumers than they realise and they generate external costs. For example, cigarettes are a demerit good. Some people do not fully realise the damage smoking inflicts on their health. Their smoking also imposes costs on people around them(third-party) by polluting the air, causing a number of them to develop cancer through passive smoking and generating litter. Demerit goods are over-consumed and hence over-produced.



Negative externality of consumption: Private benefits – External costs = Social benefit

Negative Externality of production(pollutants): Private costs + External costs = Social costs

Government measures to solve

A government could

- raise prices by imposing a tax on demerit goods
- provide information about harmful effects
- ban consumption (a ban on smoking in public places)
- sponsor health campaigns or advertise, placing harmful effects

Q: Define demerit good.

Q: Explain two ways a government could reduce external costs.

④ Abuse of monopoly power

Monopoly is a market structure where there is only one supplier of a good or service, with the power to affect market supply and prices.

Single supplier: a monopolist is the sole supplier of a product in a market. This is due to the lack of substitute products caused by barriers to entry into the market.

High barriers to entry: These obstacles effectively prevent other firms from entering the market.

Price-maker: the monopolist has significant market power as it controls enough of the market supply to be able to charge higher prices and yet produce lower output than would be the case if it faced competition.

The existence of a monopoly market can also cause market failure. Monopolies cause markets to fail because there is no effective competition. Without government control, certain private sector firms could grow to become monopolies and exploit their market power by charging higher prices or reducing supply. In general, profit-maximizing monopolist lack incentives to be competitive, so create inefficiencies in the market.

⑤ Factor Immobility

To achieve allocative efficiency, it is necessary for resources to move from producing products that are decreasing in demand towards those which are experiencing an increase in demand. This requires resources to be both occupationally and geographically mobile.

In practice, some resources may be immobile.

The main measures a government can take to promote occupational mobility of labour are to improve education and to provide training in the new skills needed. Also, governments can provide investment grants to make it easier for firms to change the use of land and buildings. Geographical mobility of workers can be encouraged by making it easier for them to buy or rent housing in areas where demand for labour is high. This might be achieved by construction of more houses in such areas or by the government providing financial help for those workers who move to these locations.

Q: Identify two reasons why market failure may occur.

Problem Solving

1. Why may market economy fail to achieve the efficient use of scarce resources?
A. Consumers may lack information about which good to buy.
B. Demerit goods are underconsumed.
C. Public goods are overconsumed.
D. Most resources are owned by the government.

2. Why are demerit goods overproduced?
A. clear product information
B. high external costs
C. high product taxes
D. low customer demand

3. Japan has built a new railway in Vietnam. Vietnam must repay the cost of the railway to Japan. Journey time has been reduced significantly but fares have increased and farmers have lost agricultural land along the new line. Who bears the external costs of this operation?
A. Japan who built the new railway
B. farmers who have lost agricultural land
C. Vietnam who must repay the cost to Japan
D. passengers who pay the higher fare

4. The government wants to reduce smoking population. Which policy would be recommended?
A. increasing a subsidy on cigarettes
B. increasing income tax
C. increasing interest rates
D. increasing the indirect tax on cigarettes

5.

	$ million
private benefits	250
external benefits	325
private costs	200
external costs	150

What is the difference between the social benefits and social costs of building the dam?
A. $25 million B. $50 million C. $175 million D. $225 million

2.11 Mixed economic system

2.11.1 Definition of the mixed economic system

Governments intervene in a mixed economic system. A mixed economic system has a combination of the features of a planned and a market economic system.

Some firms are privately owned (in the private sector) and some are government owned (in the public sector). Some prices are determined by the market forces of demand and supply, and some are set by the government. In this type of economic system, both consumers and the government influence what is produced.

- Public sector: Firms owned and operated by the government
- Private sector: Businesses owned and operated by private individuals

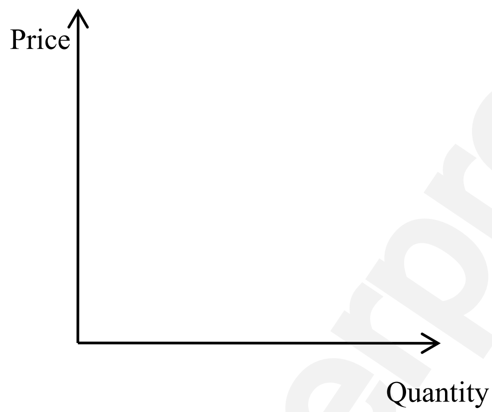
2.11.2 Government intervention to address market failure

- **Definitions, drawing and interpretation of appropriate diagrams showing the effects of three government microeconomic policy measures: maximum and minimum prices in product and labour markets; indirect taxation; and subsidies.**
- **Definition only of government microeconomic policy measures: regulation; privatisation and nationalisation; and direct provision of goods.**
- **The effectiveness of government intervention in overcoming the drawbacks of a market economic system.**

① Maximum prices (Price ceilings)

Maximum prices: The maximum price at which firms can sell goods or services, which is enforced by government.

A government may limit firms' ability to set their own prices by imposing price controls. A government may set a maximum ceiling on the price in order to enable the poor to afford basic necessities. To have any impact, a maximum price has to be set below the equilibrium price.



Some people will now be able to purchase the product at a lower price. The problem is, however, that a shortage will be created as at this lower price the quantity demanded exceeds the quantity supplied. To prevent the development of an illegal market in the product, some method of its allocation will have to be introduced. This might be through queuing, rationing or even a lottery.

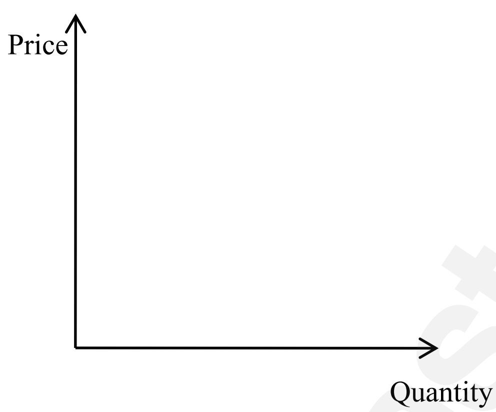
Examples)
- Basic foodstuffs
- Rents on housing for those on low income
- Utilities(eg. Gas, electricity, water)
- Public transport

Q: Discuss whether or not a government should impose a maximum price on food.

② Minimum prices(Price floors)

Minimum prices: The minimum price at which firms can sell goods or services, which is enforced by government.

To encourage production of a product a government may set a minimum price. This is a price floor, as it represents the lowest price producers are allowed to charge. To have an impact on a market, this will have to be set above the equilibrium price. This time the problem created is a surplus, with the quantity supplied being greater than the quantity demanded. To prevent the price being driven down, the surplus will have to be bought up by the government or some other official body.



Labor market

A minimum price may also be set on the price of labour in the form of a minimum wage. Workers could be offered a wage rate higher than the market rate to create incentives to work or to enable them to earn a liveable minimum wage.

Examples)

- Agricultural products
- To stop monopiles or other lager business from setting prices so low that it would force smaller competitors out of the market
- Minimum wages

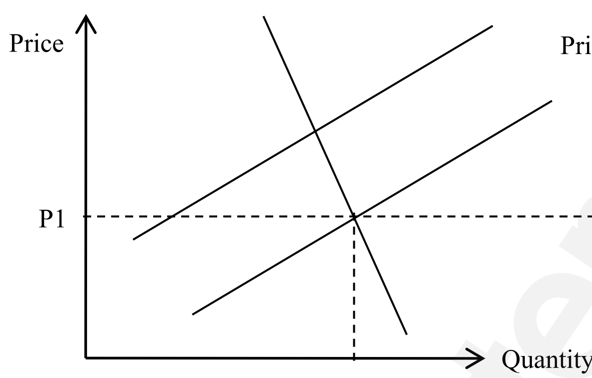
③ Indirect taxation: to address market failure

Indirect taxation: taxes which are place on goods and services → increase in the production costs → Decrease in supply curve

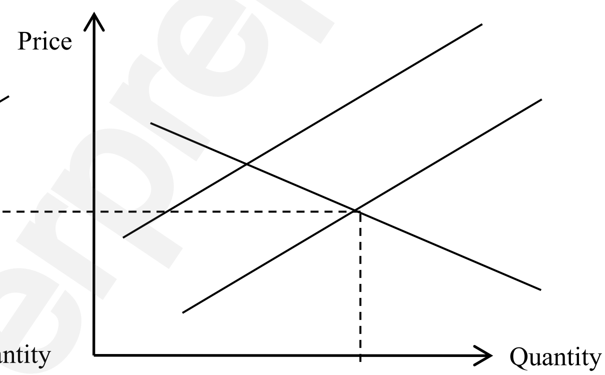
※ Direct taxation: taxes which are placed on income

The government puts indirect taxes onto demerit goods to dissuade people from buying them.

When demand curve is inelastic
Ex. cigarettes



When demand curve is elastic



If government imposes indirect taxes on cigarettes,

→ the supply curve will shift to the left from S1 to S2

→ price increases from P1 to P2 and the quantity of cigarettes demanded decreases from Q1 to Q2.

But the demand for cigarettes tends to be price inelastic

→ The percentage decrease in quantity demanded is less than the percentage increase in price

→ So, the tax has to be very high to have any impact on reducing the consumption of cigarettes.

If the government's aim is to discourage the consumption of a product (in particular a demerit good) it will be more successful if demand is elastic. This is one of the problems in using taxation to discourage smoking, as demand for tobacco products is inelastic.

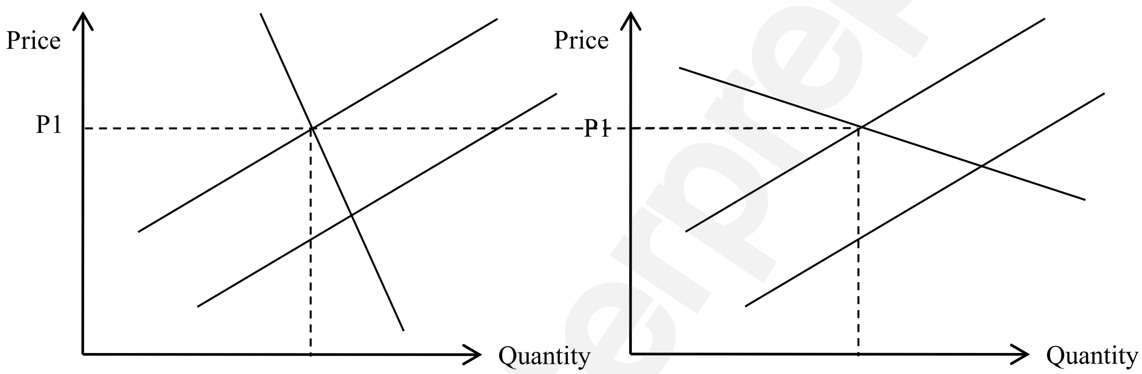
④ Subsidies: to address market failure

Subsidies: Government payments to firms which produce goods that would be under-consumed in the free market. → lower the costs of production of the firms which produce → Increase in supply

The government grants subsidies to firms which produce merit goods.

When demand curve is inelastic

When demand curve is elastic



If government grants subsides,

→ the supply curve will shift to the right from S1 to S2

→ price decreases from P1 to P2 and the quantity of demanded increases from Q1 to Q2.

The effect of a subsidy given to producers is influenced by the size of the subsidy and the price elasticity of demand. If demand is inelastic, a subsidy will have more impact on the price and less on the quantity sold. If demand is elastic, a subsidy will have more impact on the quantity sold and less on the price. In this case, the producers can keep more of the subsidy. In deciding whether to grant a subsidy, a government has to consider the opportunity cost as the money which could have been used for another purpose.

Q: Explain how a subsidy can correct market failure.

④ Regulation

Government regulation: Regulations are government laws, statutes or rules that are imposed to control the purchases, sale or manufacture of demerit goods.

For example, a government may pass a law banning the sale of cigarettes to children. It may also require firms to ensure that the products produced by them meet certain standards and that they allow their workers a specified number of regular holidays. In addition, it may place restrictions on timing for opening/closing of shops and control the routes that buses must follow.

Advantages

- Consumption of the good or services may be reduced.
- Awareness of the negative impacts of demerit goods(such as drinking and driving) can help to change the behavior of people in the long term.
- Awareness of the positive impacts of consuming merit goods(such as education) is raised.

Disadvantages

- Restrictions cause underground(illegal) markets to provide the good or services, often at a very high price. (Shadow/black market)
- The government has no control over the quality of the goods produced in underground market, which in some cases can be dangerous for consumption.
- People break the rules.
- The fine or punishment for ignoring the rules and regulations must be enforced and set sufficiently high to discourage consumption of the good or service.

⑤ Privatisaion

Privatisation: the transfer of the ownership of assets from the public sector to the private sector.

Privatisation argue that private sector firms are likely to produce the products desired by consumers, at a low cost and offer them at low prices. This is because market forces provide an incentive for firms to be efficient in the form of profit and a threat of bankruptcy if they are inefficient. Besides low prices and high quality, privatisation may result in greater choice.

<u>Advantages</u>

- The ability to earn one-off privatization proceeds from the sale of state-owned assets → revenue for government
- Privatisation helps to reduce government debt in three ways:
  - The government no longer has to maintain the operation of state-owned enterprises
  - It earns revenues from the sale of the privatized bushiness
  - The private sector firm pays corporate taxes.
- It also reduces costs to taxpayers, who no long have to pay to finance the operations of the business
- Private sector businesses have the incentive to improve efficiency, as they need to remain competitive. This can also promote an enterprising culture of risk-taking and innovation.

<u>Disadvantages</u>

- The process creates a private sector monopoly, which is not always a positive outcome for customers, who will face higher prices.
- To protect the public interest, privatization may still require government regulation and intervention.
- There is a trade-off(opportunity cost) as state-owned enterprises can provide social benefits, such as education, housing, postal services and public transport.

Q: Define privatisation.

⑥ Nationalisation and Direct provision

Government often choose to provide public goods and merit goods to prevent the market failure they cause.

Nationalisation: the purchase of private sector assets by the government

The selling of private firms to the public sector can correct market failure because of a number of factors:

- The business could be a natural monopoly. As such, fixed costs would be so high that several businesses would not be able to pay them and remain competitive. Therefore, it is better for one provider to produce the good on large scale to get a lower average fixed costs.
  ※ Natural monopoly: An industry with high fixed costs, usually because of complex infrastructure, which act as a barrier to entry for other firms in the market.

- The profits of nationalized industries can be shared with the taxpayers.

- It can provide jobs for the population. This increase the disposable income of that population, allowing them to have effective demand. This increases their ability to buy goods and services and improves their standard of living.

Summary: Correcting market failures through government strategies

To reduce external costs:

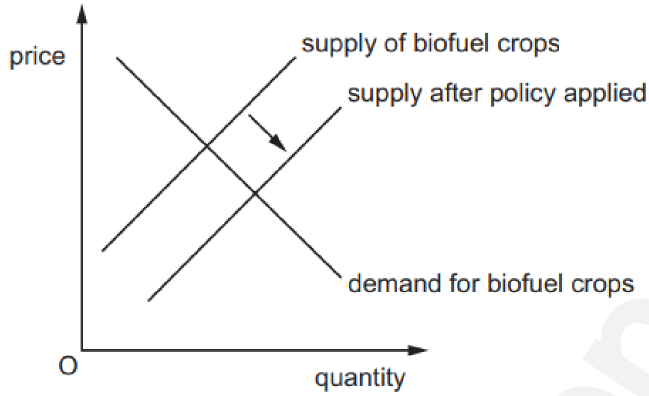
- Increase indirect taxes on products that are considered harmful to raise their prices and discourage their consumption e.g. taxes on cigarettes
- Use regulations and fines to discourage the production or consumption of products or activities that are harmful e.g. smoking bans, legal limits on air and water pollutants

To increase external benefits

- Ensure public sector provision of socially and economically desirable goods and serves, e.g. providing education, public parks
- Provide subsidies to private sector firms to reduce the costs of activities and products that have external benefits, e.g. subsidies for recycling, renewable energy
- Use regulations to encourage firms to change their production methods, e.g. health and safety regulations, animal welfare laws

Problem solving

1.



Which policy does the government use to increase supply and what effect does it have on the market?

	policy	effect
A	subsidy	increases supply
B	subsidy	lowers quantity demanded
C	tax	decreases demand
D	tax	increases supply costs

2. If a government decreases the tax on all goods produced, what would happen?

A. a decrease in exports

B. an increase in imports

C. an increase in production

D. a worsening of the balance of trade in goods

3. Which does a mixed economy indicate?

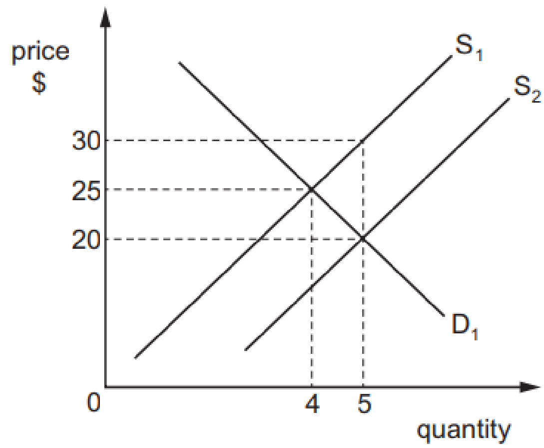
A. Economic activity is controlled entirely by the private sector.

B. Individual choices are unaffected by government actions.

C. Services are provided by both private and public sectors.

D. The government carries out all planning and decision making.

4.



What is the total cost of the subsidy to the government?

A. $40 B. $50 C. $100 D. $150

Section 3. Microeconomic decision makers

3.1 Money and banking

3.1.1 Money

- **The forms, functions and characteristics of money.**

Money: Anything that is generally accepted as a means of payment for goods and services.

<u>The functions of money:</u>

① Medium of exchange: Money allows people to buy and sell products. Products are exchanged for money and that money is used to buy other products.

② Store of value: Money can be saved. money holds its value fairly well unless there is a situation of accelerating inflation. As the general price level in the economy rises, so the internal value of a unit of currency decreases.

③ Unit of account: Prices are expressed in monetary terms. This function of acting as a unit of account, or measure of value (as it is sometimes called), enables buyers and sellers to agree on what items are worth, relative to each other.

④ Standard of deferred payments: This means that money allows people to borrow and lend. Someone who wants to buy something now can get it by borrowing money from someone who does not want to use it now.

Q: State two functions of money, other than a store of value.

<u>The characteristics of money</u>

To act as money, an item does not need to have intrinsic value. This means that it does not have to be worth something in its own right. For example, both silver and bank notes can act as money, but whereas silver is wanted for a variety of purposes, bank notes have no intrinsic value.

① Acceptability: Money should be generally acceptable. Everyone must be willing to take the units as a form of payment.

② Scarcity: It must be difficult to get hold of.

③ Durability: It must be difficult to damage.

④ Divisibility: It must be possible to break it into smaller (identical) units.

⑤ Portability: It must be easy to transport.

⑥ Uniformity: Every single unit must be identical. Every bank note or coin of the same value should be exactly the same.

3.1.2 Banking

- **The role and importance of central banks and commercial banks for government, producers and consumers.**

Central banks

Central Banks: A government body which maintains the stability of the national currency and money supply on behalf of the government.

Role and importance of a central bank

① Issuing new banknotes and coins: The central bank operates the system for providing the country with banknotes and coins, known as the Mint.

② Supervising the banking system: The central bank is responsible for making sure that commercial street banks are treating customers fairly and following the financial services rules. In addition, central bank is also the 'lender of last resort'. It will lend money to the banks if they are about to go out of business.

③ Manage the level of national debt: The role of the central bank is to be the government's banker.

④ Manage government spending: Most government spending is done by the Treasury. The central bank reviews how much spending the treasury is able to undertake and deals with borrowing from other countries. It can also restrict how much the Treasury can spend and how much they can borrow.

⑤ Making changes to the money supply: If money is constantly printed because people need more of it, it loses value because it loses the element of scarcity. Therefore the central bank will restrict the availability of bank notes. Commercial banks have to return certain quantities of bank-notes and coins over a certain period of time.

⑥ Implements the monetary policy: The prime aim of this is to keep inflation low and steady. This involves controlling the money supply and influencing interest rates throughout the economy, by changing the interest rate it charges on its loans. The government may instruct the central bank to increase or decrease the money supply.

Q: State two functions, other than issuing banknotes and coins, of a central bank.

<u>Commercial banks</u>

Commercial banks: A business organisation that offers financial products, such as loans, savings and bank accounts (seek to make a profit).

<u>The role of a commercial bank</u>

① To keep money safe: people deposit money in bank accounts because it is more secure than in their own homes.

② Lending: Many people and businesses need to borrow money over a period of time because they cannot earn enough on their own and they need more expensive products (such as a car).

③ Providing a means of making payment: Sometimes people cannot pay bills by cash, often because they do not have enough cash available or it is not feasible to carry enough cash to make a purchase. Therefore, banks offer services such as cheques, banker's drafts and debit cards to make large payments.

④ Provide foreign currency: Banks will often provide foreign currency when people who travel abroad.

Q: State two functions of a commercial bank.

3.2 Households

3.2.1 Influences on spending, saving and borrowing

- **Including income, the rate of interest and confidence between different households and over time.**

① Spending

People will consume goods and services that provide them with the most satisfaction (= utility).

Factors affecting spending

- Disposable income: Disposable income is the amount of income a person has available to spend on goods and services after compulsory deductions such as income tax. There is a positive relationship between the level of spending and the income earned — that is, higher levels of disposable income usually lead to higher spending and higher savings.
- Confidence: If people feel more optimistic about their future career prospects and income, they are likely to spend more. In contrast, if they become pessimistic about economic prospects they will tend to spend less.
- Interest rate: Expenditure may also fall if the rate of interest rises. This is because, it will make borrowing more expensive, encourage saving and reduce the amount spent by people who have borrowed in the past.
- Inflation: Rising prices cause a loss of spending power, causing spending to fall.

② Saving

Factors affecting spending

- Income: As with consumption, the main influence on saving is disposable income. As disposable income rises, the total amount saved and the proportion saved (the savings ratio) increases.
- Wealth: The wealthier people are, the easier they will find it to save.
- Interest rates: As interest rates rise borrowing becomes more expensive and therefore the demand for loans falls, which leads to less consumer spending. The increased interest rate means higher interest income for savers.
- Age: Generally, people over 25 are more likely to save as they have regular income. The young and the old tend to save less than middle-aged people. The old, especially the very old, draw on their savings to ensure a reasonable living standard during retirement.
- Confidence: If people and firms have confidence in the economy, the level of savings will usually fall as people spend money more willingly.

Q. Analyse the influences on spending

③ Borrowing

Factors affecting borrowing

- Interest rates: the higher the level of interest, the more expensive borrowing is. Hence, there is a negative correlation between the level of interest rates and the amount of borrowing in the economy.
- Confidence levels: firms and individuals will tend to borrow more if confidence in the economy is high. For example, firms will borrow to invest in long-term capital projects if they believe economic prospects are good.
- Availability of funds: The central bank of a country controls the amount of funds which are available for borrowing.
- Credit cards: Credit allows individuals and firms to purchase goods and services with deferred payment. If people or firms can use easily credit card, borrowing will increase.
- Wealth: The wealth of a person may affect their level of borrowing as a bank will be more willing to lend money to wealthier individuals or highly profitable firms. This is because they have valuable assets and so are more likely to repay the loan, whereas less wealthy customers have a higher risk of defaulting on the loan (being unable to repay their borrowing).

Q. Identify two factors that affect borrowing in an economy

3.3 Workers

3.3.1 Factors affecting an individual’s choice of occupation: Wage and non-wage factors.

There is a wide range of factors that may influence a person's choice of jobs.

- Wage factors: Any factor related to direct payment to the individual by the organisation.
- Non-wage factors: Any factor that does not involve the direct payment of money to individuals but still provides some form of benefit.

Wage factors

- Basic pay: Generally, the higher basic pay on offer, the more a person would want to do the job.
- Bonuses: A bonus is an extra payment. Bonuses can provide an incentive for workers to produce both a high and a good quality output or to stay with a firm.
- Overtime pay: Overtime pay may be paid to the workers who work in excess of the standard working week. It is usually paid at a higher rate.
- Commission: Commission is often paid to the sales people. It involves them receiving a proportion of the value of the sales they make. Sometimes, this is in addition to a standard wage and sometimes it makes up their total payment.

Non-wage factors

- Geographical location
- Working hours
- Working conditions
- Job satisfaction
- Holiday entitlement
- Pension provision: Jobs that have a company pension scheme and one that offers a good pension on retirement are an attractive prospect.
- Fringe benefits: Fringe benefits are the extra benefits provided to workers by their employers. These may include free or subsidised meals, health schemes, and social and leisure facilities.

3.3.2 Wage determination

- **The influences of demand and supply, relative bargaining power and government policy, including minimum wage.**

① The Demand for labor

- Demand for labour: The number of workers that firms are willing and able to hire at a given wage rate.

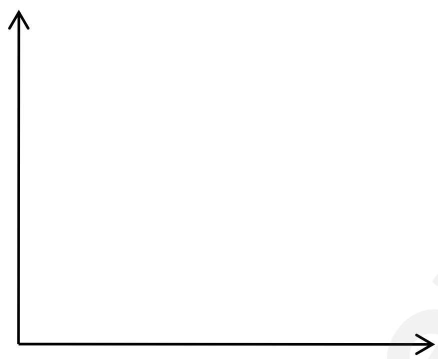
The demand for labour (D_L) curve is downward sloping. The wage rate is the price of labour. When the wage rate falls from W1 to W2, the number of workers employed increases from Q1 to Q2. This is because firms (employers) can afford to hire more workers when the wage rate is lower.

<u>Factors affecting the demand for labor</u>

- The level of total demand in the economy: During a boom or period of economic growth, the demand for goods and services, and therefore the demand for labour to produce them, is higher than during a recession or period of declining growth.
- An increase in the productivity of labour (output per worker over a period of time): The demand for workers increases as their productivity increases through training and changes to production methods.
- The cost of labour as compared with the cost of machinery and technology that could replace the labour: Although technology and machinery are expensive to purchase in the short run, they can save money for the business in the long run. For example, many firms have replaced security guards with security cameras.

② The supply for labour

Supply of labour: People who are of working age and who are willing and able to work.



The supply curve for labour is upward sloping. If the wage rate in an industry increases from W1 to W2 the number of workers willing to work will increase from Q1 to Q2 because workers are attracted by higher wages.

<u>Factors affecting the supply for labor</u>

- The size of the population: The number of people within the economy will affect how many workers there are available.
- The labour participation rate: This is the proportion of the population that are of working age and in employment.
- The tax and benefit levels: If the tax levels are very high then workers may be put off being employed because they will have to pay a large proportion of their wage to the government. Likewise if the benefits (welfare) payments are high then employees will not bother to go out to work as they will make more money in welfare payments.
- Immigration and emigration: The number of people who enter an economy (immigration) and the number of people who leave it (emigration) will affect the available supply of potential workers in that economy.

<u>Labor market</u>

③ Relative Bargaining Power

Bargaining Power: The ability of a group (e.g. an employer or an employee) to an exert influence on another.

The ability of workers to achieve higher wages depends partly on their ability to negotiate and bargain with their employers. This is affected by several factors:

- Trade unions: In general, trade unions will use their bargaining strength to negotiate on behalf of their members. The more united the trade union and the larger its membership, the more successful it is likely to be in negotiating with employer representatives.
- Age and experience: Inexperienced workers, such as graduates in their first year of work, will earn less than highly experienced workers. Workers can negotiate higher salaries and wages if they have a greater degree of experience. However, in general a person's earnings potential declines after the age of 60.
- Level of education: A person's level of education tends to affect their earnings and their ability to negotiate higher wages.

④ Government policy, including minimum wage

Minimum wage: This is the lowest amount a firm can pay its workers as set by the government.

If the government introduces an national minimum wage which is above the equilibrium wage at W2 then the quantity of labour supplied to the market increases from Q1 to Q2 as more workers are prepared to work for a higher wage rate. However, the quantity of labour demanded falls from Q1 to Q3 because firms (employers) are less able or willing to pay as many workers at a higher wage rate. As the quantity of labour supplied is greater than the quantity demanded, there is a surplus of labour at a wage rate of W2→ unemployment.

<u>Advantages of a national minimum wage</u>

- Workers receive a fair (or 'liveable') wage for an hour's work and are not exploited by employers.
- Unemployed people may have an incentive to work as the wage rate may be more attractive than relying on welfare payments.
- Low income earners may have more money to spend and this may increase consumption in the economy.

<u>Disadvantages of a minimum wage</u>

- Workers who earn more than the minimum wage may request a higher wage rate to maintain the wage differential between them and workers who earn less than they do. For example, when cleaners in an office receive a pay rise as a result of an increase in the minimum wage, other office staff may ask for a wage increase to maintain the difference between their wages and those of the cleaners. This causes an even larger increase in the cost of labour for firms.
- Unemployment in the economy may increase because firms face higher wage bills and reduce their demand for labour. Firms may purchase machinery and equipment to reduce the number of workers required.

3.3.3 Reasons for differences in earnings

- **How changes in demand and supply, relative bargaining strengths, discrimination and government policy can all influence differences in earnings between workers whether they are: skilled/unskilled; primary/secondary/tertiary; male/female; private sector/public sector.**
- **Definition, drawing and interpretation of diagrams that illustrate the effects of changes in demand and supply in the labour market.**

① Differences in skill levels

In general, skilled workers earn more than unskilled workers due to their relatively high demand and low supply. More skilled workers are in high demand because their skills are used to meet a specific need. However, because of the time needed to train (and the costs involved) the supply is usually more limited. Therefore, skilled workers are wage price inelastic.

② Differences in bargaining power

Workers in the primary sector industries of agriculture, fishing and forestry tend to earn the lowest wages in the economy, as much of their work is unskilled. In addition, the output of these industries, such as fish and food products, has a low sales value. Therefore, workers in the primary sector would have low bargaining power to ask employers for higher wages.

③ Differences in Gender

Why do women earn less than men?

- There are more women in part-time work than men, so their earnings are lower on average.
- Women take career breaks to have children and therefore miss out on promotional opportunities.
- Women may face discrimination at work.
- Women may accept low-paid and part-time jobs as hours are flexible and can fit in with childcare arrangements.

④ Differences in Private/Public Sector

In many countries, salaries in the public sector are typically less than those which can be earned in the private sector, but jobs are more secure and are often accompanied by a pension in retirement. Therefore, private sector jobs typically have higher earning potential as private individuals and firms strive for profit maximisation. However, this often comes with more risk as jobs are less secure in the private sector and workers often have to save up for their own pensions in retirement.

Q: Explain two reasons why workers in the tertiary sector may be paid more than workers in the primary sector.

Q: Analyse why skilled workers are usually paid more than unskilled workers.

3.3.4 Division of labour/specialization: Advantages and disadvantages for workers, firms and the economy.

Specialisation: Concentrating on one or a small range of activities so as to become highly skilled at them.

Division of Labour: The assignment of different parts of a manufacturing process or task to different people in order to improve efficiency.

<u>Advantages</u>

- Increase in skill: by doing something repeatedly the employee becomes more skilled. The skilled employee becomes more productive, producing higher or more valuable output per hour worked.
- Time saving: it takes time to change from one task to another. Specialisation helps to eliminate this.
- Specialisation in 'best lines': Division of labour makes it possible for people to concentrate on what they do best.
- Use of supporting technology: Specialists can draw on technologies that make their work easier and enhance their skills.
- Higher earnings: An individual who becomes good at their specialism should be in a stronger position to secure higher earnings.

<u>Disadvantages</u>

- Dependency: Because of specialisation many individuals, groups and processes become dependent on each other. If the person or machine at the previous stage to you is slow, unreliable or inefficient in some other way, your own work will suffer.
- Unemployment: Specialisation in a specific task or job can be harmful if the economy no longer requires that specialism. The individual may find it difficult to find work elsewhere.
- Frustration and boredom: If the work that people have to do is unimaginative and repetitive they may not enjoy work.
- Over-concentration: By concentrating on specialist skills individuals may not develop other abilities. Their work may require so much focus on particular skills that they may not be able, or have the time, to develop other useful general skills.

Q:_Analyse how firms can benefit from specialisation.

Q: Analyse the advantages for firms of using division of labour.

Q: Explain two disadvantages a worker could experience from specialising.

3.4 Trade unions

3.4.1 Definition of a trade union

Trade Unions is an organisation which aims to protect the interests of its worker members.

3.4.2 The role of trade unions in the economy

- **Including engaging in collective bargaining on wages, working hours and working conditions; protecting employment; and influencing government policy.**

<u>The role of a trade union includes:</u>

- Defending employee rights and jobs
- Improving working conditions
- Improving pay and other benefits
- Improving sick pay and pensions
- Improving employee involvement in decision making
- Developing and improving employee skills

Collective Bargaining is negotiations that take place between trade unions and employers over improvements in wages and other non-wage benefits for employees.

<u>Factors affecting the strength of a trade union</u>

- A high level of economic activity: If output and income in a country are increasing, most industries are likely to be doing well, and so should be able to improve the pay and conditions of workers. When output reaches high levels and most people who want to work are employed, firms will be competing for workers. To retain their existing workers and to recruit more workers, firms are likely to be more willing to agree to union requests for higher pay and better working conditions.
- A high number of members: The more members a union has, the more funds it is likely to have to finance its activities. Also, the employers will find it difficult to replace union labour by non-union labour in such a scenario.
- A high level of skill: Unions representing skilled workers are in a relatively strong position, as it can be difficult to replace their workers with other skilled workers and expensive to train unskilled workers.
- A consistent demand for the product produced by the workers: Unions that represent workers making goods and services that are essential to consumers are in a strong position to bargain.
- Favourable government legislation: A union will be in a stronger position if laws allow trade unions to take industrial action.

3.4.3 The advantages and disadvantages of trade union activity

- **Factors influencing the strength of trade union from the viewpoint of workers, firms and the government.**

<u>Benefits of trade union membership to individuals</u>

- Being part of a group gives the employee more power to bargain for better conditions (known as collective bargaining).
- Improvement in conditions (such as sickness benefits, holiday entitlement, pay increases).
- The trade unions will deal with employee grievances with the employer.
- Employee morale and motivation may be improved if they know that their interests are being protected by a union.

<u>Drawbacks of trade union membership to individuals</u>

- If the employee takes part in industrial action because of the union the employer can refuse to pay the employee's salary.
- The union may not represent the views of individual employees.
- By law, in many countries, employers are allowed to protect their business interests. Therefore the employer can replace the employee if they need to.
- Employees have to pay to be a member of a trade union.

<u>The impact of trade unions upon the economy include:</u>

- They can help determine wages: Where unions are strong they are able to push wages up, increasing costs and affecting the level of supply in the economy.
- Employees become more involved in business decision making: This takes the focus away from what the consumers want and focus on the employees wants and needs. This can affect the level of demand.
- Productivity effects: If the union is successful employees will become more productive because getting their needs met will motivate them. However, if the union sets working conditions that are restricting how much work the employees can do, therefore making them less productive. In addition, they often call strikes, which can lead to increased disruption.
- Unemployment can increase: Unions can increase unemployment because they can prevent recruitment and selection in order to protect their jobs of their members.

Problem Solving(3.1~3.4)

1. What is an advantage of division of labour?
A. high labour turnover
B. increased mechanisation
C. movement of labour between tasks
D. need for quality control

2. Which would increase the level of borrowing by a household

	influence 1	influence 2
A	becoming pensioners	higher rate of inflation
B	greater wealth	lower consumer confidence
C	higher consumer confidence	lower rate of interest
D	higher rate of interest	greater availability of credit

3. People's income decreases. How is the proportion spent on food and leisure likely to change?

	food	leisure
A	decrease	decrease
B	decrease	increase
C	increase	decrease
D	increase	increase

4. What would cause a person to increase their savings?
A. a decision to plan for retirement
B. a fall in income
C. a fall in interest rates
D. a reduction in tax-free saving schemes

5. What is the reason that specialisation increases the productivity of employees?
A. Average cost of production increases.
B. Staff turnover is high.
C. Time is saved by not moving between tasks.
D. Workers lose interest in their job.

6. What is the advantage of coins that make them more suitable than banknotes to act as money?
A. They are more divisible.
B. They are more durable.
C. They are more portable.
D. They are more recognisable.

7. The table shows how three people (X, Y and Z) spend their income.

	person X	person Y	person Z
food, clothing and housing	30%	25%	50%
entertainment and leisure	35%	35%	25%
luxury goods	35%	40%	25%

what is the order of income, from lowest income to highest income?
A. Y → X → Z
B. Y → Z → X
C. Z → X → Y
D. Z → Y → X

8. What is not a function of a trade union?
A. agreeing the minimum number to be employed on a particular job
B. deciding on the level of a national minimum wage
C. negotiating working hours and conditions of work
D. providing legal advice on unfair dismissal

9. Why are women, on average, paid less than men?
A. Women may be less able than men.
B. Women are not eligible for government jobs.
C. Women may not work as hard as men.
D. Women often face discrimination in the workplace.

10. When would wages rise?
A. in those where a worker is paid weekly
B. in those where a worker needs less training
C. in those where there is an excess demand for labour
D. in those where work becomes less dangerous

11. What is a characteristic of money and a function of money?

	characteristic	function
A	acceptability	medium of exchange
B	cash	measure of value
C	divisibility	portability
D	store of value	bank deposit

3.5 Firms

3.5.1 Classification of firms

- **In terms of primary/secondary/tertiary sectors and private/public sector, and the relative size of firms.**
- **Note: Detailed knowledge of different types of structure of a firm is not required.**

Firms vs. Industries : Industries consist of firms producing the same product.

Primary/secondary/tertiary sectors

- The primary sector is the first stage of production. It includes industries, such as agriculture, coal mining and forestry, involved in the extraction and collection of raw materials.
- The secondary sector is involved with the processing of raw materials into semi-finished and finished goods - both capital and consumer goods. It covers manufacturing and construction.
- The third stage of production is called the tertiary sector. Industries producing services such as banking, insurance and tourism, come into this sector.

The primary, secondary and tertiary sectors of an economy are interdependent (they depend on each other). This is because a firm cannot operate without using goods and services from all three sectors of industry to make and sell its goods or services to the final customer. Firms in the three sectors are linked through a process known as the chain of production.

Q. State two sectors, other than the primary sector, in an economy.

Private/public sector

- Private Sector: Economic activity of private individuals and firms
- Public Sector: Organisations are wholly owned by the government and are therefore funded through tax revenues.

The relative size of firms

There are four main ways in which a business' size can be measured:

- Number of employees
- Value of output: determined by value of sales in a year
- Market share: determined by the percentage of the market the business is responsible for
- Value of capital employed: determined by the value of what the business owns.

3.5.2 Small firms

- **The advantages and disadvantages of small firms, the challenges facing small firms and reasons for their existence.**

The advantages of small firms

- Some are new businesses that have just set up. In the early days it pays to be small.
- Small businesses can supply a local market. A small business finds out what local customers want and the level of service they require. Small businesses are likely to know their customers on a more personal level and this can lead to better relationships.
- Small businesses provide essential components and supplies for larger businesses. This enables the larger businesses to focus on what they do best. For example, small businesses might provide advertising, marketing and packaging support for larger businesses, or make sub-assemblies for a larger company.
- The sole trader is the only owner of a firm and therefore receives all of the profits made by the business. This gives them an incentive to work hard to become successful.
- Being your own boss can have some advantages, not having to take orders from others, having flexibility in decision making (such as dictating your working hours), and enjoying higher self-esteem from being successful.
- Smaller firms are easier to manage and control. Larger firms can suffer from diseconomies of scale due to coordination problems.

The disadvantages of small firms

- Small firms have limited start-up capital, which makes it difficult for them to raise finance to establish the business.
- Statistically, small firms have the largest risk of business failure. Even the successful ones usually face intense competition due to the vast number of small firms that exist. In addition, the presence of larger and more established businesses often poses a huge threat to the survival of smaller firms.
- The success of small firms very much depends on the abilities and commitment of the owners. Sole traders often have to do their own financial accounts, marketing and management of human resources. They are unlikely to be equally effective in the different roles and having to do all these tasks adds to the workload, stress and challenges in running a small firm.
- Small firms often suffer from a lack of continuity. The running of the business can be jeopardised if the owner is not there, maybe due to going on holiday, or due to illness.
- As they are unable to exploit the benefits of large-scale production, small firms have higher unit costs of production. Subsequently, their prices tend to be less competitive than those of larger competitors (which benefit from economies of scale). This can reduce the competitiveness and profits of smaller firms.

Q: Explain two challenges facing small firms.

3.5.3 Causes and forms of the growth of firms

- **Internal growth, for example increased market share.**
- **External growth, for example mergers.**

There are two ways a firm can increase in size.

One is called internal growth. This is also sometimes referred to as natural or organic growth. It involves a firm increasing the market for its current products or diversifying into other products. This type of growth may occur through increasing the size of existing plants or by opening new ones.

The other way through which a firm can grow is through external growth. This involves the firm joining with another firm/ firms to form one firm through a merger or a takeover. The three main types of merger are a horizontal merger, a vertical merger and a conglomerate merger. External growth allows a firm to increase its size more quickly than internal growth. With internal growth, however, there is more control over the size of the firm . There is a risk that external growth may take a firm past its optimum size.

3.5.4 Mergers

- **Examples, advantages and disadvantages of different types of mergers: horizontal, vertical, and conglomerate.**

① Horizontal merger

A horizontal merger is the merger of two firms at the same stage of production, producing the same product, for example, the merger of two car producers or two TV companies.

Advantages of horizontal merger

- Higher market share
- Gaining skilled employees from each other
- Operating with fewer employees (as there is no need to hire two finance departments, for example), so this may reduce costs of production.
- Taking advantage of economies of scale

Disadvantages of horizontal integration

- There may be a duplication of resources, so some workers may lose their jobs. Job losses can cause anxiety, demotivate staff and lead to a fall in productivity.
- The newly formed, larger firm may face increasing costs arising from diseconomies of scale.
- The new firm may suffer from culture clashes between the merged businesses. Initially, this may cause communication and organisational problems for the firm.

② Vertical merger

A vertical merger occurs when a firm merges with another firm involved with the production of the same product, but at a different stage of production.

Vertical merger backwards occur when a firm from the secondary sector merges with a firm from the primary sector, or when a firm from the tertiary industry merges with a firm operating in the secondary or primary sector.

Vertical merger forwards occur when a firm from the primary sector of industry merges with a firm in the secondary or tertiary sector, or when a firm from the secondary sector merges with a firm operating in the tertiary sector.

Advantages of vertical merger

- The firm in the secondary sector has control over the quality of raw materials with which it is supplied.
- The price of raw materials fall as the manufacturer does not have to pay another (external) firm for the raw materials.
- The merger gives an assured outlet for their product.
- The profit margin made by the retailer is absorbed by the expanded business.
- Information about consumer needs and preferences can now be obtained directly by the manufacturer.

Disadvantages of vertical merger

- Transport costs increase for the integrated firm as raw materials were previously delivered by external suppliers who bore the costs.
- There will be a very high cost to the firm of investing in the other business.
- The firm's manager would have little or no knowledge about how the sector would operate, leading to inefficiency.
- The costs of running a retailer or supplier may be higher than that of a manufacturer (such as operating a retailer in the middle of a large city).

③ Conglomerate merger

A conglomerate merger involves the merger of two firms making different products.

Advantages of conglomerate merger

The main motive behind a conglomerate merger is diversification. Diversification spreads risks because the conglomerate has a number of businesses in different sectors of industry. A failing business in the group may be protected by the successful businesses within the group's larger portfolio.

Disadvantages of conglomerate merger

However, the conglomerate may become too diverse and this may cause problems in the management of capital and human resources. If a segment of the diversified firm is under-performing, then it may drain resources from other areas of the conglomerate business.

Q: Explain two advantages banknotes have as a form of money.

3.5.5 Economies and diseconomies of scale

- **How internal and external economies and diseconomies of scale can affect a firm/industry as the scale of production changes**

Economies of scale are the advantages, in the form of lower long run average costs (LRAC), of producing on a larger scale.

Diseconomies of scale arise when a firm gets too large, so its average costs of production start to rise as output increases.

① Internal economies of scale

Internal economies of scale are cost savings that arise from within the business as it grows.

- Purchasing (bulk-buying) economies of scale occur when the cost of raw materials, components or finished goods falls when they are bought in large quantities.
- Technical economies of scale occur when large firms purchase expensive pieces of machinery and automated equipment for the production process. Large firms also produce in large quantities and therefore the high initial cost of the machinery and equipment can be spread across the high quantity of output.
- Financial economies of scale occur as large firms are able to borrow money from banks more easily than small.
- Managerial economies of scale occur if large firms have the resources to employ specialist managers to undertake functions within the firm.
- Risk-bearing economies of scale occur as very large firms, such as conglomerates, produce a range of products and operate in many locations. This diversity spreads risks.
- Research and development (R& D) economies of scale occur if large firms are able to fund R& D and therefore can be innovative and create products that enable them to be market leaders.
- Marketing economies of scale occur as large firms tend to have large advertising budgets, so can spend large amounts of money on promoting their products.

② External economies of scale

External economies of scale are economies of scale that arise from factors outside of the firm.

- Proximity to related firms
- Availability of skilled labour
- Reputation of the geographical area: this provides all firms in the industry with free publicity and exposure. For example, Silicon Valley in California has a worldwide reputation as an area for software creation and the development of information technology systems. Hence, a large number of suitably qualified and skilled workers flock to the area.
- Access to transportation networks- manufacturing firms benefit from being located near to major road networks, ports and cargo facilities. A café or restaurant benefits from being close to other shops, public transport links and parking facilities.

③ Internal diseconomies of scale

Growing beyond a certain output can cause a firm's average costs to rise. This is because a firm may encounter a number of problems including:

- Difficulties controlling the firm. It can be hard for those managing a large firm to supervise everything that is happening in the business. Management becomes more complex.
- Communication problems. It can be difficult to ensure that everyone in a large firm has full knowledge about their duties and available opportunities, such as training etc. Also, they may not get the opportunity to effectively communicate their views and ideas to the management team.
- Poor industrial relations. Large firms may be at a greater risk from a lack of motivation of workers, strikes and other industrial action. This is because workers may have less sense of belonging, longer time may be required to solve problems and more conflicts may arise due to the presence of diverse opinions.

④ External diseconomies of scale

Just as a firm can grow too large, so can an industry. With more and larger firms in an area, there will be an increase in transport with more vehicles bringing in workers and raw materials, and taking out workers and finished products. This may cause congestion, increased journey times, higher transport costs for firms and possibly reduced workers' productivity. The growth of an industry may also result in increased competition for resources, pushing up the price of key sites, capital equipment and labour.

Q: Explain, giving examples, the difference between an internal economy of scale and an external economy of scale

3.6 Firms and production

3.6.1 Demand for factors of production

- **Influences to include demand for the product, the price of different factors of production, their availability and their productivity.**

Factors of production are the elements needed by a business to produce goods and services.

There are several factors that will determine the demand a firm will have for its factors of production:

① The demand for the product

The demand for factors of production is derived demand, i.e. As the demand for products increases, the demands for the resources used to make them also increases.

② The price of different factors of production

When factors of production are substitutes, a rise in the productivity, or a fall in the cost of one of them, may result in a change in the combination of resources being employed. A fall in the price of capital goods, for example, might lead to the replacement of some workers with machines.

In other cases, where factors of production are complements, a fall in the price of one, or a rise in its productivity, may increase the employment of all factors in a firm. For example, a fall in the price of aircraft may make it possible for an airline to fly to more destinations. If so, they will also employ more pilots, more cabin crew and obtain more takeoff and landing slots at airports.

③ The availability of factors of production

④ The quality (productivity) of factors of production

When factors of production become more productive, the demand for them is likely to increase. For example, when machinery becomes more technologically efficient, the demand for it is likely to increase.

3.6.2 Labour-intensive and capital-intensive production

- **The reasons for adopting the different forms of production and their advantages and disadvantages.**

<u>Labour-intensive production</u>

In labour-intensive industries, the cost of labour is proportionately higher than the cost of other factors of production.

<u>Advantages</u>

- Staff (labour), unlike machinery can be used flexibly to meet changing levels of consumer demand, e.g. temporary workers.
- Can provide a 'personal touch' and be more in-tune with customer needs and wants.
- Labour can provide feedback that provides ideas for continuous improvement. Workers can adapt to introduce new ideas.

<u>Disadvantages</u>

- Relatively expensive in the long-term when compared to machinery – higher per unit costs due to lower levels of productivity.
- Relatively inefficient and inconsistent levels of effort.
- Labour relation problems, e.g. may go on strike.
- Problems in personal life could easily affect the performance at work

<u>Capital-intensive production</u>

In capital-intensive industries, the cost of capital resources is proportionately higher than the cost of other factors of production.

<u>Advantages</u>

- Reduces human error – more accurate production.
- Greater speed (efficiency) and uniform effort / output.
- Technical economies of scale – increased efficiency which could reduce average cost.
- No problems with labour shortages/planning labour.

<u>Disadvantages</u>

- Initial high costs of investment and possible training costs.
- Lack of flexibility in responding to a change in demand.
- Machinery lacks initiative, e.g. it is unlikely to be innovative, provide ideas on how to improve production or take on extra responsibilities.

3.6.3 Production and productivity

- **The difference between, and influences on, production and productivity.**

Productivity is a measure of the degree of efficiency in the use of factors inputs in the production process. It takes an average measure of this efficiency, such as output per worker, sales revenue per person, or output per machine hour.

By contrast, production refers to the total output of goods and services in the production process. Production can be increased either by using more factor inputs or by raising the productivity of existing factors of production

As economies develop, both production and productivity tend to increase due to advances in technology and improvements in education. These developments can result in productivity rising so much that total output can increase while the number of working hours declines.

Influences on productivity

- Investment: This is the expenditure on physical capital such as machinery, equipment and buildings.
- Innovation: This refers to the commercialisation of new ideas and products. Innovations have increased the speed of work, improved communications and enhanced organisation at work. Thus, innovation can boost productivity.
- Human capital: The productivity of labour is determined by the quantity and quality of labour. Human capital can be increased by improving the skills and experience of the labour force. Education and training, for example, enhance the human capital (skills and experiences of the workforce) in the economy, thus helping to increase productivity.
- Entrepreneurship: Entrepreneurs take risks in the production process in the pursuit of profit. They plan and organise the various factors of production in the production process. Productivity depends on the drive (motivation) of entrepreneurs, such as their willingness and ability to exploit new business opportunities.
- Competition: Rivalry creates an incentive for firms to be more productive. Without competition, firms might lack the incentive to be efficient or innovative. By contrast, competition forces firms to be more efficient, thus helping to boost the economy's overall productivity.

Problem Solving(3.5~3.6)

1. What would lead to internal diseconomies of scale?
A. a fall in demand for the products produced by the firm
B. a merger with another firm that results in slower decision-making
C. spending more on research and development to create new products
D. the lack of skilled labour in the geographical area where the firm is based

2. Firm X supplies timbers and decides to merge with firm Y that also supplies timbers. Which form of merger has occurred?
A. backward vertical
B. conglomerate
C. forward vertical
D. horizontal

3. A large bakery buys a flour mill. Which kind of merger(=integration) is this?
A. conglomerate
B. horizontal
C. vertical backwards
D. vertical forwards

4. Who owns a public sector?
A. individuals
B. shareholders
C. specialist managers
D. the government

5. Why is usually the energy supply industry dominated by very big firms?
A. Government controls prevent the exploitation of consumers.
B. High fixed capital costs exist.
C. Labour-intensive production techniques are used.
D. Non-price advertising increases competition.

6. What is the meaning of diseconomies of scale?
A. the decrease in average revenue as output increases
B. the decrease in fixed cost as output increases
C. the increase in average total costs as output increases
D. the increase in total costs as output increases

7. What is a technical economy of scale?
A. Banks provide loans at a lower interest rate to bigger firms.
B. Bigger firms hire more workers.
C. Firms obtain discounts when buying in bulk.
D. Machines are used closer to their full capacity.

8. Which condition would increase the demand for labour?
A. When the demand for the industry's product increases.
B. When the level of immigration into the country increases.
C. When the level of qualifications needed to work in the industry decreases.
D. When the level of wages paid in the industry increases.

9. If the wage of labour in a firm increases, what would happen on the production process?
A. Capital replaces labour immediately.
B. Capital replaces labour in the long run.
C. Labour replaces capital immediately.
D. Labour replaces capital in the long run.

10. What would improve labour productivity in an industry?
A. an increase in capital investment
B. an increase in income tax rates
C. an increase in the demand for the industry's product
D. an increase in the number of firms in the industry

11. Which characteristic can explain the difference between capital-intensive production and labour-intensive production?
A. the market structure of the production process
B. the output that the production process creates
C. the resources on which the production relies
D. the size of the firm that uses the production process

3.7 Firms' costs, revenue and objectives

3.7.1 Definition of costs of production

3.7.2 Calculation of costs of production

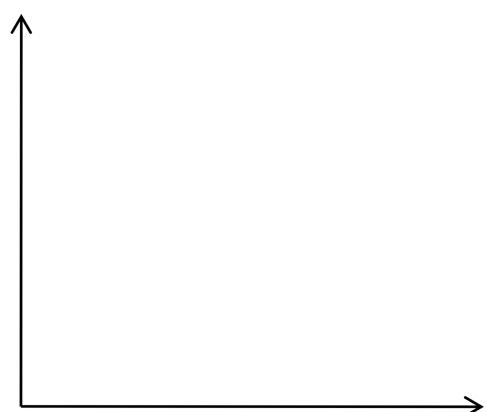
- **Total cost (TC), average total cost (ATC), fixed cost (FC), variable cost (VC), average fixed cost (AFC), average variable cost (AVC).**
- **Note: marginal cost not required.**
- **Calculation of TC, ATC, FC, VC, AFC and AVC.**
- **Definition, drawing and interpretation of diagrams that show how changes in output affect costs of production.**

Total cost (TC) is the total cost of producing a given output. The more the output is produced, the higher the total cost of production. Producing more units requires the use of more resources.

- Fixed costs are the costs of production that have to be paid regardless of how much a firm produces or sells. Examples are rents and interests on money borrowed.
- Variable costs (VC) are costs of production that change when the level of output changes. Examples are the costs of raw materials or component parts.

→ TC = TFC +TVC

Number of output	Total Fixed Cost (TFC)	Total Variable Cost (TVC)	Total Cost (TC)
0	10	0	10
1	10	5	
2	10	8	
3	10	9	19
4	10	11	21
5	10	15	25



Average total cost (ATC) is also referred to as average cost (AC), or unit cost, and is given as total cost divided by output.

- Average fixed cost (AFC) is the fixed cost per unit. As a firm produces more output, its fixed costs are divided by a greater quantity (of output), so AFC continually declines.
  → AFC= TFC/Q
- Average variable cost (AVC) is the variable cost of production per unit of output. It is calculated by dividing variable cost by the number of units produced. → AVC = TVC/Q

→ ATC = AFC + AVC

Number of output	**Total Fixed Cost (TFC)**	**Total Variable Cost (TVC)**	**Total Cost (TC)**	**Average Fixed Cost (AFC)**	**Average Variable Cost (AVC)**	**Average Total Cost (ATC)**
0	10	0	10	-	-	-
1	10	5	15			
2	10	8	18			
3	10	9	19	3.3	3	6.3
4	10	11	21	2.5	2.8	5.3
5	10	15	25	2	3	5

3.7.3 Definition of revenue

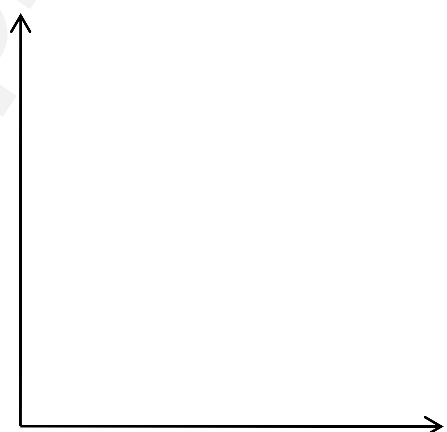
3.7.4 Calculation of revenue

- **Total revenue (TR) and average revenue (AR).**
- **Note: marginal revenue is not required.**
- **Calculation of TR and AR.**
- **The influence of sales on revenue.**

Revenue is the sum of money that a business receives from making sales.
→ Total revenue = Price * Quantity of goods sold

Average revenue is the price received from the sale of a good or service.
→ Average revenue = TR/Q

Quantity (Q)	Price (P)	Total Revenue (TR=P*Q)	Average Revenue (AR=TR/Q)
1	$6	$6	$6
2	$6		
3	$6		
4	$6	$24	$6
5	$6	$30	$6
6	$6	$36	$6
7	$6	$42	$6
8	$6	$48	$6



3.7.5 Objectives of firms

- **Survival, social welfare, profit-maximisation and growth.**

① Profit-maximisation

Profit maximisation is the main goal of most private sector firms. Profit is maximised when the positive difference between a firm's sales revenue and its cost of production is at its greatest.

② Survival

When firms are started, their initial objective may be just to survive in what may be a very competitive market. A firm may be content to just cover its costs until it can become better known. During difficult times when demand is falling, even large firms may have survival as their key objective. They will try to stay in the market in the hope that conditions will improve.

③ Social welfare

Social welfare refers to business activity with concerns for the quality of life of those in society. Such objectives focus on what is considered to be socially responsible. Socially responsible businesses strive to improve the treatment of workers, customers, shareholders and the natural environment. Pursuing social welfare as a business objective can help to improve how the general public perceives the organisation. A bad image can turn suppliers and customers against the firm's products and services.

④ Growth

Growth refers to increasing the size of a business. It usually means aiming to increase the firm's sales revenues and its market share (its proportion of the industry's total sales revenue). An increase in sales revenue will, other things being equal, lead to greater market share for the firm.

Q: Explain two challenges facing small firms.

3.8 Market structure

Market structure is a term for the conditions which exist in a market. There are a number of categories of market structure from very competitive to a monopoly which does not face any direct competition.

3.8.1 Competitive markets

- **The effect of having a high number of firms on price, quality, choice, profit.**
- **Note: the theory of perfect and imperfect competition and diagrams are not required.**

The main characteristics of firms operating in competitive markets is that there are many firms in the industry, none of which has any significant market power to influence market demand or market supply.

<u>The effect of having a high number of firms on</u>

- Price : firms in competitive markets are said to be price-takers. This means that the price they charge is determined by the market forces of demand and supply rather than the firms setting their own prices.
- Quality : in some highly competitive markets, firms produce or sell homogeneous products. This means the products being sold are identical, such as bananas or strawberries being sold in fresh fruit markets. These firms do not focus on quality as a form of product differentiation. (perfect competition)
- Choice : in other competitive markets, firms focus on producing differentiated products rather than homogeneous ones. For example, firms may use branding, different product designs, colours and quality to differentiate their products. (monopolistic competition)
- Profit : both buyers and sellers have easy access to information about the product and the prices being charged by competitors. In addition, as there are many rivals in the industry, profits will be relatively low for each firm in the market.

3.8.2 Monopoly markets

- **Characteristics, advantages and disadvantages of monopoly.**
- **Note: diagrams are not required.**

Monopoly is a market structure where there is only one supplier of a good or service, with the power to affect market supply and prices.

<u>Characteristics of a monopoly</u>

- The firm is the industry. It has a 100% share of the market.
- There are high barriers to entry and exit, making it difficult for other firms to enter the market.
- A monopoly is a price maker. Its output is the industry's output and so changes in its supply affect the market price.

<u>Advantages</u>

- As monopolists control market supply, they operate on a very large scale, thus benefiting from huge economies of scale — that is, lower average costs of production as output increases.
- Monopolists have the financial resources to invest in innovation. Research and development expenditure can help to generate new ideas, products and production processes. Innovation can therefore act as a source of profit and improve the productive capacity of the economy.
- Some monopolies can eliminate wasteful competition.

<u>Disadvantages</u>

- Private sector monopolies can be inefficient in terms of resource allocation. In their pursuit of profit maximisation, monopolists can restrict the output of a product and/ or charge a higher price for it. This creates a loss in the welfare of consumers.
- As there are no substitutes for the products supplied by monopolists, demand is price inelastic. As monopolists are price makers, they can charge higher prices to maximise profit from this relatively low PED.
- High barriers to entry prevent new firms from setting up in the market. This limits the degree of competition and ensures monopolists can continue to charge relatively high prices.
- Monopolists may have less incentive to innovate than firms in competitive markets.

Problem solving

1. What happens to the lines showing the total variable cost and total cost as output increases?
A. They merge to become one curve.
B. They move closer together.
C. They move further apart.
D. They remain a constant distance apart.

2. A firm has fixed costs of $1000.

output (units)	1	2	3	4
variable cost ($)	100	190	270	350

If the price of goods are $500, what is the profit of the sale of 4 units?
A. $650
B. $1000
C. $1650
D. $2000

3.

output (units)	total costs ($)
0	50 000
1 000	100 000
5 000	400 000
10 000	600 000

What is the average fixed cost when a firm produce 10,000 units?
A. $5
B. $6
C. $55
D. $60

4. At which level of output is average total cost lowest?

	output (tonnes)	total fixed cost ($)	total variable cost ($)
A	100	1200	1200
B	200	1200	2000
C	300	1200	2700
D	400	1200	3600

5. At which level of output does the firm maximise profits?

	total output of pairs of shoes	total cost ($)	total revenue ($)
A	100	1000	1300
B	200	1800	2200
C	300	2700	3000
D	400	3200	3400

6.

output	total fixed cost $	total variable cost $
100	1000	1000
200	1000	1500
300	1000	2000
400	1000	2500

What would occur as output increases?

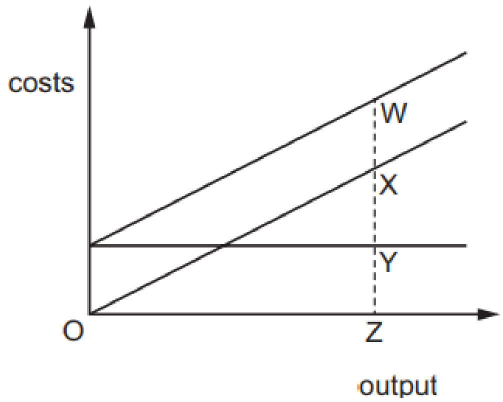
A. Average fixed cost falls.

B. Average fixed cost rises.

C. Average variable cost remains constant.

D. Average variable cost rises.

7.



Which distance is the firm's fixed costs?

A. WX

B. WY

C. XY

D. XZ

8. What is the condition when a firm maximises its profits?

A. when it excludes a rival supplier from the market

B. when it produces where average cost and average revenue are equal

C. when it sells as many products in as many different markets as it can

D. when the difference between total cost and total revenue is greatest

9. Average revenue is $10 and a firm sells 2000 units. What is the firm's total revenue and the price of the product?

	total revenue ($)	price ($)
A	10	10
B	2000	200
C	20000	10
D	20000	200

10. Which is usually found in a monopoly?

A. many buyers and many sellers

B. many buyers and single seller

C. single buyer and many sellers

D. single buyer and single seller

Sunny's IGCSE/MYP Economics _Part 2.

Sunny's Econ

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Contents

Section 4. Government and the macroeconomy

4.1 The role of government

4.1.1 The role of government

- **Locally, nationally and internationally.**

A government plays a larger role in an economy operating a mixed economic system than one operating a more market based economic system.

Role of the government locally: The central or federal government collects taxes which it uses to fund local services such as public and merit goods in the local area.

Role of the government nationally: The central government makes decisions about how to achieve its macroeconomic aims: economic growth, stable price levels, low unemployment, a healthy balance of payments and redistribution of income and wealth. It does this by seeking to use appropriate macroeconomic policies:

- Fiscal policy: the government uses different levels of taxation and government spending to achieve macroeconomic objectives.
- Monetary policy: the government changes the level of money supplied to the economy to achieve macroeconomic objectives.
- Supply-Side Policy: the government changes the economic capacity of the economy to achieve its macroeconomic objectives
- Policies to protect the environment

Role of the government internationally: The role of government also involves an international dimension as modern economies need to trade with other countries. There will be some countries with which the country does not have free trade, so tariffs and quotas may be imposed on goods traded.

4.2 The macroeconomic aims of government

4.2.1 The macroeconomic aims of government

- **Economic growth, full employment/low unemployment, stable prices/low inflation, balance of payments stability, redistribution of income.**
- **Reasons behind the choice of aims and the criteria that governments set for each aim.**

The main government aims for the economy are

① Economic growth

② Full employment/Low unemployment

③ Stable prices/low inflation

④ Balance of payments stability

⑤ Redistribution of income

A government can operate a range of policy measures to achieve these aims and it is judged on their success or otherwise. Performance of the economy, however, is influenced not just by government policies. In a market that is becoming increasingly global, one economy's macroeconomic performance is being affected more and more by the dynamics of other economies.

① Economic growth

Economic growth refers to the increase in the value of goods and services produced in an economy over time. Such an increase can be achieved as a result of a rise in the quantity and/or quality of factors of production.

Governments want to achieve economic growth because producing more goods and services can raise people's living standards. Economic growth can indeed transform people's lives and enable them to live longer because of better nutrition, housing and healthcare.

Economic growth can also help a government achieve its other economic aims. As output increases, employment is likely to rise. If output increases to match higher demand, upward pressure on the price level can be avoided. A country's trade position may be improved if some of the extra output is exported. Some of the poor may gain jobs and some may be helped by the extra tax revenue generated.

The determinant of a country's possible economic growth rate is its level of output, in relation to its current maximum possible output and its growth in productive capacity.

② Full employment/Low unemployment

Most governments try to achieve as low a level and rate of unemployment as possible. This is sometimes expressed as full employment. Those people who are willing and able to work at the going wage rate can find employment.

Unemployment is a waste of resources . Those unemployed can suffer a number of disadvantages including low income and government tax revenue may have to be spent supporting the unemployed.

Most governments and economists think that it is not possible to achieve 0% unemployment. This is because they think that even in a strong economy with demand for labour equalling the supply of labour, there will always be some workers changing jobs and being unemployed for short periods. As a result, governments aim for a low rate of unemployment.

③ Stable prices/low inflation

Price stability means that the price level in the economy is not changing significantly over time. Inflation rate is the percentage rise in the price level of goods and services overtime.

Governments aim for price stability because it ensures greater economic certainty and prevents the country's products from losing international competitiveness. If firms, households and workers have an idea about future level of prices, they can plan with greater confidence.

Government aim to keep inflation low and stable. An average increase in price level of price in an economy between 1% and 3% is acceptable for most government.

④ Balance of payments stability

The balance of payments refers to flows of money into and out of a country. An important component of the balance of payments is the current account which records revenue received from selling exports and its expenditure on imports.

While governments usually aim for export revenue to equal import expenditure, they may not be concerned if there is a surplus of export revenue over import expenditure or a deficit of export revenue, provided this is of a small amount or if it lasts a short period of time.

Trade balance = export revenue – import expenditure

⑤ Redistribution of income

Redistribution of income refers to the transfer of income and wealth between individuals within an economy. A government may seek to redistribute income from the rich to the poor. Governments redistribute income by taxing and spending. The rich are taxed more than the poor. Some of the money raised is spent directly on the poor by means of benefits such as housing benefit and unemployment benefit. Other forms of government expenditure, such as that on education and health, particularly benefit the poor.

Inequality of income and wealth may mean that some people are experiencing poverty. Governments try to reduce poverty because of the hardships it causes. Inequality can grow without government intervention. The rich tend to marry the rich and benefit from better education and have more opportunity to save. A significant gap between the rich and the poor can also cause social unrest as the poor may feel a sense of social injustice.

4.2.2 Possible conflicts between macroeconomic aims

- **Possible conflicts between aims: full employment versus stable prices; economic growth versus balance of payments stability; and full employment versus balance of payments stability.**

As it is not possible simultaneously to achieve all macroeconomic objectives, there is said to be a trade-off or conflict between these targets.

- Economic growth versus low inflation: If an economy grows due to excessive consumer demand, this will force prices to increase, thus creating inflation in the economy. Similarly, the government might choose to deflate the economy to control inflation, but this limits the ability to achieve economic growth.

- Low unemployment (or full employment) versus inflation: In theory, there is an inverse relationship between the level of unemployment and the rate of inflation.

- Economic growth versus a balance of payments equilibrium: Consumer spending and business investments tend to be high during an economic boom. However, if this is fuelled by a significant rise in spending on imports relative to exports, this leads to a worsening trade deficit on the country's balance of payments.

- Economic growth versus the redistribution of income and wealth: As an economy grows, there tends to be a widening income and wealth gap between the rich and the poor.

Q: Discuss whether or not a government can reduce unemployment without increasing inflation.

Q: Analyse how economic growth conflicts with balance of payments stability.

4.3 Fiscal policy

4.3.1 Definition of the government budget

The government budget is the government's financial plans in terms of planned revenues and expenditure(=government spending).

Government budget = Tax revenue – government spending

A budget deficit is when the government's spending, also sometimes called public expenditure, is higher than its revenue. In this case, the government will have to borrow to finance some of its spending. (national debt) In contrast, a budget surplus occurs when government revenue is greater than government spending. A balanced budget is when government spending and revenue are equal.

4.3.2 Reasons for government spending

- **The main areas of government spending and the reasons for and effects of spending in these areas.**

- To influence economic activity: A government may, for example, increase its spending in order to increase aggregate demand in the hope that the higher aggregate demand will stimulate higher output and so result in economic growth.
- To reduce market failure: Governments spend on public goods as this would not be financed by the private sector. They spend on merit goods as market forces would not al locate sufficient resources to their production.
- To promote equity: Governments provide benefits and products to vulnerable groups and the unemployed. For example, some governments provide state pensions to the retired, subsidised housing for the poor and free education to children .
- To pay interest on national debt: If a government has borrowed in the past to finance a gap between its spending and its tax revenue, it will have to pay interest on the loans.

4.3.3 Reasons for taxation

- **Taxation as the main source of government revenue and the reasons for levying taxation.**

Tax revenue is the main source of government revenue.

- To redistribute income from the rich to the poor.
- To discourage the consumption of demerit goods (ex. cigarettes and alcohol)
- To raise the costs of firms that impose costs on others by, for example, causing pollution.
- To discourage the consumption of imports and hence protect domestic industries: By placing tariffs on rival imported products, the country's inhabitants may buy less foreign and more domestic products.
- To influence economic activity. As with government spending, changes in taxation can be used to change aggregate demand. If an economy is experiencing rising unemployment, its government may cut taxes to stimulate an increase in consumption and investment.

4.3.4 Classification of taxes

- **Examples of the different classifications of tax; progressive, regressive, proportional; and direct, indirect.**

Taxes are either direct or indirect and progressive, proportional or regressive.

- Direct taxes are taxes levied on a person's or a firm's income or wealth such as income taxes, corporate taxes.
- Indirect tax are imposed on expenditure on goods and services such as sales taxes, value added tax(VAT). For example, most of the tax that governments impose on petrol is passed on by petrol companies to the customers in the form of higher price.

- A progressive tax is one which takes a higher percentage of the income or wealth of the rich. As taxable income or wealth rises, so does the rate of taxation. Ex. Income taxes
- In the case of a proportional tax, the percentage paid in tax stays the same as income or wealth change.
- With a regressive tax, the percentage paid in tax falls as income or wealth rises. So in this case, people with higher incomes pay a smaller percentage of their income in tax than the poor do. Ex. Sales taxes

4.3.5 Principles of taxation

- **The qualities of a good tax.**

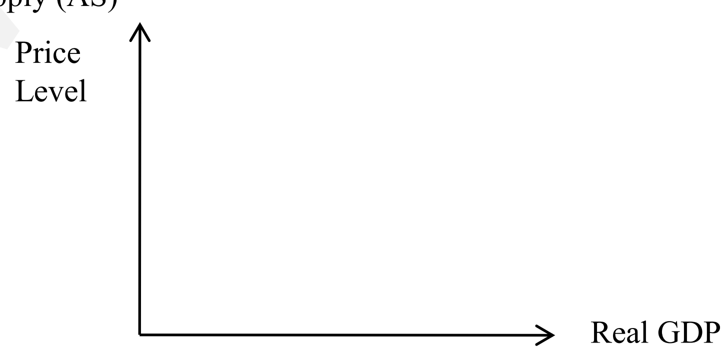
- Equity: This means fairness in the sense that the amount of tax people and firm s have to pay, should be based on their ability to pay. A rich person has a greater ability to pay tax than a poor person.
- Certainty: A tax should be easy to understand, and households and firms should be able to calculate the amount of tax required to be paid by them.
- Convenience: A tax should be easy to pay.
- Economy: The cost of collecting a tax should be considerably less than the revenue it generates.
- Flexibility: It should be possible to change the tax if economic activity changes or government aims change.
- Efficiency: A tax should improve the performance of markets or at least not significantly reduce the efficiency of markets.

Q: Identify two qualities of a good tax.

※ Aggregate demand(AD) = consumption +investment + government spending + net export

- Consumption expenditure (C) : This refers to the total spending on goods and services by individuals and households in an economy.
- Investment expenditure (I) : This refers to the capital expenditure of firms which is used to further production and expand the economy's productive capacity.
- Government expenditure (G) : This is the total consumption and investment expenditure of the government.
- Export earnings (X) :This measures the monetary value of all exports sold to foreign buyers.
- Import expenditure (M) – This measures the monetary value of the payments made for all imports. The spending on these items means that money leaves the domestic economy, so this must be deducted from its calculation of GDP. The difference between the value of a country's exports and imports (X − M) is called net exports.

※ Aggregate supply (AS)



4.3.6 Definition of fiscal policy

Fiscal Policy: The use of government spending and taxation to influence both the pattern of economic activity and also the level and growth of aggregate demand, output and employment.

4.3.7 Fiscal policy measures

- **The tax and spending changes, in the form of fiscal policy, that cause budget balance or imbalance.**
- **Including calculations of the size of a budget deficit or surplus.**

4.3.8 Effects of fiscal policy on government macroeconomic aims

- **How fiscal policy measures may enable the government to achieve its macroeconomic aims.**
- **Note: aggregate demand and aggregate supply are not required**

① Expansionary fiscal policy _ Recession(High unemployment)

Expansionary fiscal policy is used to stimulate the economy, by increasing government spending and/ or lowering taxes. If a government wants to raise aggregate (total) demand in order to increase economic growth and employment, it will increase its expenditure and/or cut taxation by lowering tax rates, reducing the items taxed or raising tax thresholds.

② Contractionary fiscal policy _ Expansion (High inflation)

Contractionary fiscal policy is used to reduce the level of economic activity by decreasing government spending and/ or raising taxes. Contractionary fiscal policies are used to reduce inflationary pressures during an economic boom.

Problem solving (4.3)

1. A government's revenue increased to $3 trillion. Its expenditure was decreased to $4 trillion. What can be concluded?

	state of budget	government *policy aim*
A	deficit	increase deficit
B	deficit	reduce deficit
C	surplus	increase surplus
D	surplus	reduce surplus

sources of revenue	$ billions
sale of government assets	100
sales tax	300
tariffs on imports	50
tax on employment income	500
tax on inherited wealth	50
tax on company profits	100

2. What is the total amount of tax revenue caused by direct taxes? B

A. $600 billion

B. $650 billion

C. $950 billion

D. $1100 billion

3. What is a government's budget?

A. the balance of government revenue and government expenditure

B. the balance of export revenue and import expenditure

C. the difference between investment and saving

D. the difference between social benefits and social costs of production

4. Tax is imposed at 2% on all wages earned to pay for basic medical provision. How could this tax be described?

A. direct and proportional

B. direct and regressive

C. indirect and proportional

D. indirect and regressive

5.

disposable income ($)	10 000	20 000	30 000	40 000
tax ($)	0	2000	4000	6000

What kind of tax is shown?

A. corporation tax

B. indirect tax

C. progressive tax

D. regressive tax

6. What is the balanced budget?

A. when direct taxes and indirect taxes are equal

B. when exports and imports are equal

C. when government spending and government revenue are equal

D. when the demand for money and the supply of money are equal

7. Which of the following best explains the role of fiscal policy?

A. government decisions on money supply and interest rates taken to influence total demand

B. government decisions on spending and taxation designed to influence total demand

C. government measures designed to influence total supply in the economy

D. government regulation of the foreign exchange rate to influence imports

8. An economy has a high rate of inflation. To deal with this problem, government increases income tax. What is the most likely reason for this increase?

A. to discourage the consumption of harmful goods

B. to raise money for government spending

C. to redistribute income

D. to reduce total demand

9. A country is experiencing unemployment. The goals of government is to increase employment and reduce income inequality. Which fiscal policy are most likely to achieve these goals?

	income tax	benefits for the poor
A	decrease the highest tax rate	decrease
B	increase the highest tax rate	decrease
C	decrease the lowest tax rate	increase
D	increase the lowest tax rate	increase

4.4 Monetary policy

4.4.1 Definition of money supply and monetary policy

Money supply is the amount of money in the economy at a particular point in time. Ex. coins, banknotes, bank deposits and central bank reserves.

Monetary policy covers decisions on the money supply, the rate of interest and the exchange rate. Monetary policy influences the supply and/or price of money. The aim of monetary policy is to influence aggregate demand. In most countries monetary policy measures are carried out by central banks on behalf of governments.

4.4.2 Monetary policy measures

- **Changes in interest rates, money supply and foreign exchange rates.**

4.4.3 Effects of monetary policy on government macroeconomic aims

- **How monetary policy measures may enable the government to achieve its macroeconomic aims**

① Expansionary monetary policy _ Recession(High unemployment)

When the economy is experiencing a recession, a central bank decides to increase the money supply, decreasing interest rate. The drop in the rate of interest means a lower costs of borrowing; therefore, consumers and firms are likely to borrow more and spend more, so that consumption spending and investment spending increase. The effect is to increase AD.

② Contractionary monetary policy _ Expansion (High inflation)

When the economy is experiencing a inflation, a central bank decides to decrease the money supply, increasing interest rate. The rise in the rate of interest means a higher costs of borrowing; therefore, consumers and firms are likely to borrow less and spend less, so that consumption spending and investment spending decrease. The effect is to decrease AD.

Q: Analyse how a rise in the interest rate could cause a recession.

Q: Analyse how a central bank could reduce inflation.

Problem solving (4.4)

1. Government increased interest rates to control inflation. Why might this policy be effective?
A. Consumers may save more.
B. Government spending may increase.
C. Investment may be encouraged.
D. The exchange rate may fall.

2. A central bank uses expansionary monetary policy. What does the government decrease?
A. bank lending
B. interest rates
C. the budget deficit
D. the money supply

3. What is the meaning of money supply?
A. the total quantity of foreign currency available within the economy
B. the total quantity of money available within the economy
C. the total quantity of money issued by the central bank
D. the total quantity of money within commercial banks

4. A country is experiencing rapidly increasing inflation. What is an example of a monetary policy tool to correct this problem?
A. increasing income tax
B. increasing interest rates
C. introducing maximum prices for some products
D. subsidising key industries

	2014	2018
rate of unemployment (%)	3	10
rate of real GDP growth (%)	4	–2

5. Which policy mixes would be most effective in returning the economy to the 2014?
A. a decrease in direct taxes and an increase in the rate of interest
B. a decrease in government expenditure and an increase in the rate of interest
C. an increase in direct taxes and a decrease in the rate of interest
D. an increase in government expenditure and a decrease in the rate of interest

4.5 Supply-side policy

4.5.1 Definition of supply-side policy

Supply-side policy measures are designed to increase aggregate supply and hence increase productive potential. Such policy measures seek to increase the quantity and quality of resources, and raise the efficiency of product and factor markets.

4.5.2 Supply-side policy measures

- **Possible supply-side policy measures include education and training, labour market reforms, lower direct taxes, deregulation, improving incentives to work and invest, and privatisation.**

① Education and training

Improving education and training is designed to increase the skills of workers. If successful, this would make workers more productive. Higher labour productivity can reduce costs of production and raise the quality of the products produced. Both effects can result in the country's firms being able to sell more and so is likely to encourage them to expand.

② Labour market reforms

Labour market reforms are designed to make labour markets work more efficiently. The intention is to increase the quality, quantity and flexibility of labour. Making it easier for employers to hire and fire workers is one way that some governments seek to increase the efficiency of labour markets. This is likely to make it easier for firms to adjust their supply to changing market conditions.

③ Lower direct taxes and improving incentives to work and invest

The intention behind cutting direct taxes is to increase the incentive to work and invest. Reducing income tax rates will increase the reward from working, especially if combined with a cut in unemployment benefit. Such measures may make the unemployed search for work more actively and may increase the labour force by encouraging more people to seek employment.

④ Deregulation

Deregulation is the reduction, or elimination, of rules and regulations that have been enforced by laws. The intentions behind deregulation are to remove barriers to entry to markets and to reduce the costs of complying with the rules and regulations. It w ill also reduce the cost to the government of regulating the industries and occupations affected . If deregulation does increase competition, it may increase efficiency and so lower costs of production and prices.

⑤ Privatisation

Privatisation seeks to increase competition and efficiency by increasing the role of market forces. Moving industries into the private sector may put more pressure on them and provide them with a greater incentive to respond to changes in consumer demand, and to provide them with high quality products at low prices.

4.5.3 Effects of supply-side policy measures on government macroeconomic aims

- **How supply-side policy measures may enable the government to achieve its macroeconomic aims.**

In the long run, all the government's macroeconomic aims have the potential to benefit from supply-side policy. Increasing aggregate supply enables an economy to continue to grow in a non-inflationary way. Increasing productive potential and efficiency can improve an economy's balance of payments position. Producing better quality, and cheaper, products can increase exports and reduce imports.

In the case of some supply-side policy measures there is a time lag involved. For example, it can take some time before the effects of improved education and privatisation are experienced. In addition, some supply-side measures can be expensive.

Q: Discuss whether or not supply-side policy measures can reduce unemployment.

4.6 Economic growth

4.6.1 Definition of economic growth

Economic Growth is the increase in the level of national output (i.e. the annual percentage change in GDP).

Gross Domestic Product(GDP) is the total value of output produced in an economy. There are three methods of measuring this output. These are - the output, income and expenditure methods.

GDP = C + I + G +(X-M) = Aggregate demand(AD)

Q: Define economic growth.

4.6.2 Measurement of economic growth

- **Real Gross Domestic Product (GDP) and how it can be used to measure economic growth. GDP per head (capita).**

Gross Domestic Product (GDP) is one of the core measurements in determining the economic health of a country. There are two different types of GDP: real GDP and nominal GDP.

- Nominal gross domestic product, is a measure of the value of all final goods and services produced within a country's borders at current market prices.
- Real gross domestic product, or real GDP, is a measure of a country's output in terms of the value of its goods and services, its investments, its government spending, and its exports. Real GDP takes nominal GDP and adjusts for inflation or deflation by comparing and converting prices to a base year's prices. By adjusting for price changes, the final number won't reflect false increases or decreases in GDP due to fluctuation in prices, and it is a more accurate representation of a country's economic activity.

- Real GDP per capita is a measure of the average income per person. If real GDP grows but the population increases at a faster rate then average income per head will fall. To find out what is happening to people's living standards, economists calculate real GDP per head, which is also referred to as real GDP per capita. It is found by dividing real GDP by population.

4.6.3 Causes and consequences of recession

- **Meaning of recession and how a recession moves the economy within its PPC.**

A recession occurs when real GDP declines over a period of six months or more. This time period is also sometimes referred to as two successive quarters. It is a period of negative output with less being produced than in the previous period.

Causes of a recession

Just as economic growth can be caused by an increase in aggregate demand and/or an increase in aggregate supply, a recession is caused by a decrease in aggregate demand and/ or a decrease in aggregate supply.

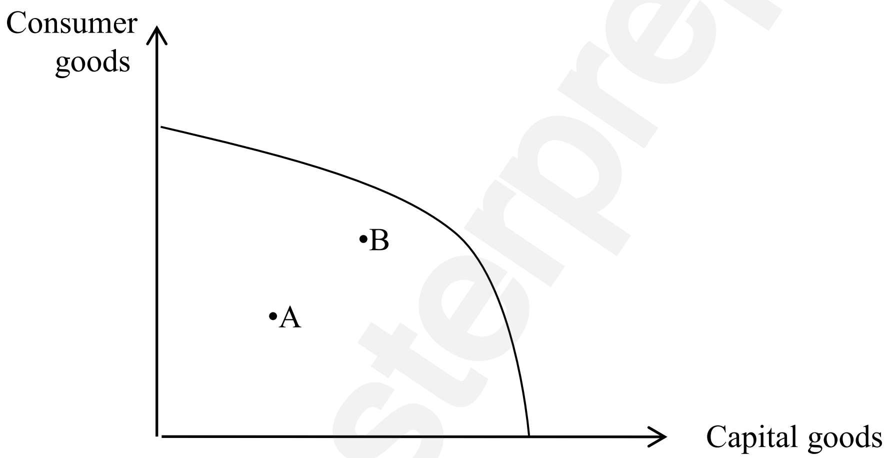
Consequences of a recession

- With lower output, unemployment is likely to rise.
- The reduction in output and incomes will be expected to lower living standards.
- Investment, including from foreign multinational companies, is likely to be discouraged which will endanger future economic growth.
- Tax revenue will decline while government spending on benefits may be increased. This would increase any budget deficit or reduce any budget surplus.
- The effect on the price level will depend on whether the recession has been caused by a decrease in aggregate demand or a decrease in aggregate supply. If it is due to a decrease in aggregate demand, it would be expected that t he price level would fall. If, on the other hand, it was caused by a decrease in aggregate supply, it would be anticipated t hat it would be accompanied by inflation.

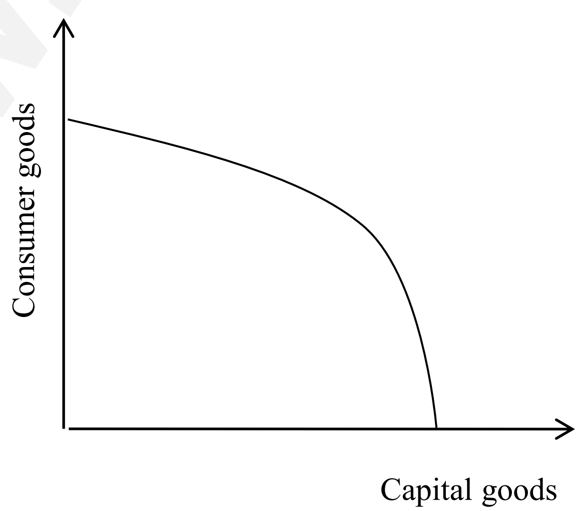
4.6.4 Causes of economic growth

- **How changes in total demand may increase the utilisation of resources and GDP – resulting in a movement from inside toward the PPC: Short-run economic growth**
- **How economic growth shifts the economy's PPC to the right and is caused by changes in investment, technology, and the quantity and quality of the factors of production: Long-run economic growth**

- Short-run economic growth: In the short run, an increase in aggregate demand may stimulate a rise in output if the economy has unused resources . For example, a rise in consumption resulting from increased consumer confidence, or a cut in income tax, may encourage firms to increase their output. This would cause a movement from inside toward the production possibility curve.



- Long-run economic growth: In the long run, an economy can continue to experience economic growth only if the quantity or quality of resources increases. The quantity of resources may rise as a result of, for example, an increase in net investment or the size of the labour force. The quality of resources may increase due to an improvement in education and training and advances in technology. In this case, there would be a shift to the right of the PPC.



4.6.5 Consequences of economic growth

- **The costs and benefits of economic growth in the context of different economies.**

Advantages of Economic Growth

- Improved standards of living: Economic growth tends to lead to a higher standard of living for the average person. Higher income levels in a country enable people to spend more money to meet their needs and wants. This helps to eliminate absolute poverty in the country.

- Employment: Economic growth leads to higher levels of employment in the economy. This helps to raise consumption and encourages further investment in capital, helping to sustain economic growth.

- Tax revenues: Economic growth is associated with higher levels of spending in the economy. This generates more tax revenues for the government. For example, the government can collect more from sales taxes (on consumption), corporation tax (on the profits of firms) and import taxes. Hence, there are more funds for the government to use to sustain the growth of the economy.

Disadvantages of Economic Growth

- Environmental consequences: High rates of economic growth can create negative externalities such as pollution, congestion, climate change and land erosion. Such environmental impacts can damage the wellbeing of people and their quality of life in the long run.

- The risk of inflation: If the economy grows due to excessive demand in the economy, there is the danger of demand-pull inflation. This can lead to prices of goods and services rising to unstable levels, with negative consequences on the economy such as a decline in the country's international competitiveness

- Inequalities in income and wealth: Although a country might experience economic growth, not everyone will benefit in the same way. Economic growth often creates greater disparities in the distribution of income and wealth – the rich get richer and the poor get relatively poorer, creating a widening gap between rich and poor.

- Resource depletion: Economic growth often involves using up the world's scarce resources at rates that are not sustainable. For example, deforestation and overfishing have led to problems in the ecosystem.

4.6.6 Policies to promote economic growth

- **The range of policies available to promote economic growth and how effective they might be.**

A government may use expansionary fiscal and/or monetary policy to promote economic growth. A reduction in income tax rates or a cut in the rate of interest, for example, would be expected to increase consumer expenditure and investment. The resulting rise in aggregate demand is likely to encourage firms to increase their output. They will be able to do this as they will be able to take on unemployed workers and buy more capital equipment to expand their production.

As aggregate demand tends to increase over time, it means that without any change in aggregate supply, the maximum level of output will be reached. So, in the long run, an economy can continue to increase the output it produces only if it gets more resources or higher quality resources. This means that to help achieve long run economic growth, a government needs to use both demand-side and supply-side policy measures. To increase productive potential, for example, a government may seek to improve education and training. If successful, this measure will raise labour productivity and so productive capacity. There is, of course, no guarantee that supply-side policy measures will work.

Q: Analyse how higher government spending could increase economic growth.

Q: Analyse how a rise in investment could increase a country's economic growth rate.

Q: Analyse how education and subsidies can increase a country's economic growth rate.

Problem solving(4.6)

1. Economic growth can be explained as
A. a reduction in a country's rate of inflation.
B. an increase in a country's exports.
C. an increase in a country's population.
D. an increase in a country's productive capacity.

2. Country X had an increase in its real gross domestic product of 4.8%. What must this mean?
A. Living standards increased by 4.8%.
B. Total consumer income increased by 4.8%.
C. Total output of all goods and services adjusted for inflation increased by 4.8%.
D. Total output of manufactured goods adjusted for inflation increased by 4.8%.

3.What may lead to economic growth?
A. higher imports
B. higher levels of resources
C. higher taxation
D. higher unemployment

quarter 1 ($bn)	quarter 2 ($bn)	quarter 3 ($bn)	quarter 4 ($bn)
100	101	99	98

4. During which quarters does the country experience a recession?
A. quarters 1 and 2
B. quarters 2 and 3
C. quarters 3 and 4
D. the entire period

4.7 Employment and unemployment

4.7.1 Definition of employment, unemployment and full employment

- People are in employment if they are paid employees or self-employed.
- People are unemployed if they are willing and able to work, but cannot find a job.
- The labour force consists of both the employed and the unemployed - these two groups make up the country's available workers.
- Full employment is the condition in which virtually all who are able and willing to work are employed.

4.7.2 Changing patterns and level of employment

- **The nature and causes of changes in the pattern of employment, for example increase in proportion of workers employed in the tertiary sector and formal economy as an economy develops; a greater proportion of women in the labour force due to changes in social attitudes; decline in the proportion employed in the public sector as a country moves towards a market economy.**

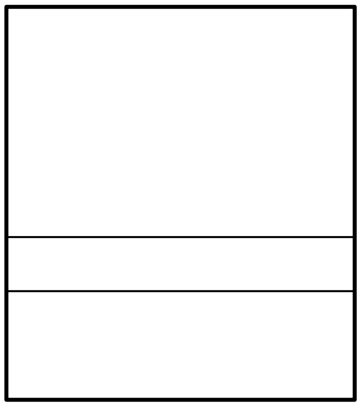
- Employment by sector: As economies become more developed, people move from employment in the primary sector towards to the tertiary sector. This is because tertiary sector industries create more added value for their products and consequently pay higher wages.

- Proportion of women in employment: The number and proportion of women in employment and in the labour force is increasing in most countries. This trend is occurring because social attitudes to women working is changing. Gender discrimination is declining, opening up job opportunities for women and raising their wages.

- Proportion of workers in the private and public sectors: The proportion of workers employed in the public sector in a number of countries is declining while the proportion employed in the private sector is increasing. This is because the countries are moving closer to market economies.

4.7.3 Measurement of unemployment

- **How unemployment is measured – claimant count and labour force survey – and the formula for the unemployment rate.**



The two major ways of measuring unemployment are to:

- count those in receipt of unemployment-related benefits
- carry out labour force surveys.

- Labor force = Employed + Unemployed
- Labor force participation rate = $\dfrac{\text{The number of people in the labor force}}{\text{Working-age population}} * 100$

- Unemployment rate = $\dfrac{\text{The number of unemployed people}}{\text{The labor force(Employed + Unemployed)}} * 100$

4.7.4 Causes/types of unemployment

- **Frictional, structural and cyclical unemployment.**

① Frictional unemployment

Workers who have been fired or voluntarily left one job, may have to wait for some time before finding another job. This type of unemployment, when workers are in between jobs, is called frictional unemployment. One form of frictional unemployment is what is called search unemployment. This arises when workers do not accept the first job offered, but spend time looking around for what they regard as an 'acceptable job'. Two other forms of frictional unemployment are casual and seasonal. Casual unemployment occurs when people are out of work between periods of employment. Actors and migrant farm workers are particularly prone to casual unemployment. Seasonal unemployment affects workers, including those working in the building and tourist industries, whose labour is not in demand at certain periods of the year and during periods of bad weather.

② Structural unemployment

Structural unemployment is caused by the decline of industries and particular occupations arising from long-term changes in demand and supply. Industries and occupations can become smaller or cease to exist, as a result of another country (or countries) becoming better at producing the product, a substitute being found for the product or capital being substituted for labour. Structural unemployment, which is concentrated in one area, can cause particular problems. Such unemployment can be referred to as regional unemployment.

Another form of structural unemployment is technological unemployment. This occurs when workers are made redundant as a result of advances in technology. Structural unemployment is more serious than frictional unemployment as it persists for longer periods and usually affects more workers.

③ Cyclical unemployment

Cyclical unemployment may be even more serious than structural unemployment as potentially it can affect more workers and it is spread throughout the country. It arises from a lack of aggregate demand(recession). It can also be referred to as demand-deficient unemployment. If an economy goes through a recession, demand for labour is likely to fall and cyclical unemployment will occur.

Q: Define cyclical unemployment.

Q: Explain how frictional unemployment differs from cyclical unemployment.

4.7.5 Consequences of unemployment

- **The consequences of unemployment for the individual, firms and the economy as a whole.**

<u>The effects on the unemployed (individual)</u>

- A fall in income. In some countries the unemployed do not receive any financial assistance when they are out of work. In those where unemployment benefits are paid, these are usually noticeably lower than what most of the unemployed were previously earning.
- Losing a job can result in a loss of self-worth. Lower income and the stress of being unemployed can result in a decline in the mental and physical health of the unemployed
- Lower income may have an adverse effect on the education of the children of the unemployed and hence their employment chances.
- The longer people are unemployed, the more they lose out on training in new methods and technology. They may also lose the work habit and their confidence may dip.

<u>The effects on firms</u>

- Firms may benefit from unemployment. They can employ unemployed workers in order to expand production. The existence of unemployment may put downward pressure on wage rises.
- Unemployment, however, may bring a significant disadvantage for firms. A high rate of unemployment is likely to mean a low demand for most firms' products. In such a situation, firms will be reducing rather than expanding production.

<u>The effects on the economy</u>

- Unemployment imposes an opportunity cost on an economy. Having unemployed workers means that the economy is not using all of its resources. The economy will not be making as many goods and services as possible.
- Unemployment also means that government tax revenue will be lower than possible. When people lose their jobs, their expenditure falls and as a result, indirect tax revenue declines. Income and firms' profits fall and, therefore, revenue from income tax and corporation tax decreases.
- Besides lowering tax revenue, unemployment also puts pressure on government expenditure. Expenditure on unemployment benefits will automatically rise with unemployment.
- There is a risk that rising unemployment may lead to rising levels of crime, as some of the unemployed may resort to criminal activities to ga in a higher income.

Q: Explain two consequences to firms of unemployment.

4.7.6 Policies to reduce unemployment

- **The range of policies available to reduce unemployment and how effective they might be.**

The policies a government will adopt to reduce unemployment will be determined by what it thinks are the cause or causes of unemployment.

① Frictional unemployment

It may seek to improve the working of the labour market by using supply-side policy measures. For instance, it may seek to increase the gap between pay and unemployment benefit by cutting income tax rates and reducing unemployment benefit. This may reduce the time that people spend searching for a new job. The government may also increase information on job vacancies so that people are made more aware of the jobs on offer.

② Structural unemployment

A government would also use supply-side policy measures. In particular, it is likely to try to improve the quality of education and training. If workers are more skilled and qualified, they will be more occupationally mobile. A government may increase training in specific skills needed in particular industries. A government may also give subsidies to new industries in areas of high unemployment to speed up their expansion.

③ Cyclical unemployment

A government will use expansionary fiscal and monetary policy. An increase in government spending, a reduction in tax rates and a cut in the rate of interest, for instance, may be used to raise aggregate demand. With higher aggregate demand, firms would expand and take on more workers.

Q: Analyse how higher government spending and tax cuts can lead to a fall in cyclical unemployment.

Q: Discuss whether or not an increase in government spending will reduce unemployment.

Problem solving(4.7)

1. To reduce unemployment what should increase to achieve this?
A. imports of goods
B. interest rates
C. public sector spending
D. taxation of firms

2. Which group is not included in unemployment?
A. redundant unskilled workers seeking alternative work
B. seasonal agricultural workers in out-of-season periods
C. students over 18 years continuing with full-time education
D. those who have left school and cannot get a job

	2014 (millions)	2018 (millions)
total labour force	30	30
employed workers	25	28
long-term unemployed	1	2
employment in manufacturing	4	2
employment in services	13	16

3. According to the table, what is the most likely type of unemployment?
A. cyclical
B. frictional
C. seasonal
D. structural

4. Information about job vacancies on a government website decreased in short-term unemployment. What is this type of unemployment?
A. cyclical unemployment
B. frictional unemployment
C. structural unemployment
D. technological unemployment

4.8 Inflation and deflation

4.8.1 Definition of inflation and deflation

Inflation is defined as a sustained increase in the average price level of goods and services.
Deflation is defined as a sustained decrease in the average price level. (negative inflation rate)

4.8.2 Measurement of inflation and deflation

- **Measurement of inflation and deflation using the Consumer Prices Index (CPI).**

To measure rises and falls in the price level, governments construct price indices. These show the change in general price level in percentage terms over time. One of the main price indices used is the consumer prices index (CPI).

<u>Constructing a price index</u>
There are a number of stages in constructing a price index.

① Selecting a base year : The base year is then given a figure of 100 and the price levels in other years are compared to this figure.
② Finding out how households spend their money: This is because a price change in an item on which people spend a large proportion of their total expenditure will have more impact on the cost of living than an item on which they spend a relatively small proportion. Household spending patterns are reviewed each year with new family expenditure surveys.
③ Attaching weights to items of expenditure
④ Finding out price changes from a range of trade outlets: Each month government officials find out information about prices.
⑤ Constructing a weighted price index: Having assigned weights to different items included in the index and measured the change in their prices over time, the final stage is to multiply the weights by the new price index for each category of products and to calculate the change in general price level.

year	CPI
1	100
2	120
3	135
4	140
5	138

4.8.3 Causes of inflation

- **Causes of inflation: demand-pull and cost-push.**

- Cost-push inflation : Cost-push inflation occurs when the price level is pushed up by increases in the costs of production. If firms face higher costs, they will usually raise their prices to maintain their profit margins. Ex. Raw material costs, Labour costs

- Demand-Pull Inflation : Demand-pull inflation occurs when the price level is pulled up by an excess demand. Firms therefore raise prices as they know they can sell goods at a higher price, resulting higher profits.

4.8.4 Consequences of inflation

- **The consequences of inflation for consumers, workers, savers, lenders, firms and the economy as a whole.**

- Consumers: The purchasing power of consumers goes down when there is inflation – there is a fall in their real income because money is worth less than before. Therefore, as the cost of living increases, consumers need more money to buy the same amount of goods and services.
- Fixed income earners: During periods of inflation, fixed income earners (such as pensioners and salaried workers whose pay do not change with their level of output) see a fall in their real income. Thus, they are worse off than before as the purchasing power of their fixed income declines with higher prices. Even if employees receive a pay rise, the rate of inflation reduces its real value.
- Savers: Savers, be they individuals, firms or governments, lose out from inflation, assuming there is no change in interest rates for savings. This is because the money they have saved is worth less than before. Hence, inflation can act as a disincentive to save. In turn, this leads to fewer funds being made available for investment in the economy.
- Lenders: Lenders, be they individuals, firms or governments, also lose from inflation. This is because the money lent out to borrowers becomes worth less than before due to inflation.
- Borrowers: By contrast, borrowers tend to gain from inflation as the money they need to repay is worth less than when they initially borrowed it – in other words, the real value of their debt declines due to inflation.
- Firms: Workers are likely to demand a pay rise during times of inflation in order to maintain their level of real income. As a result, labour costs of production rise and, other things being equal, profits margins fall.
- Business confidence levels: Inflation also causes business uncertainty. The combination of uncertainty and the lower expected real rates of return on investment (due to higher costs of production) tends to lower the amount of planned investment in the economy.

4.8.5 Policies to control inflation

- **The range of policies available to control inflation and how effective they might be.**

If the country is experiencing demand-pull inflation, the appropriate policy approach would be to use contractionary fiscal and/or monetary policy. Aggregate demand could be reduced by increasing tax rates, lowering government spending, raising the rate of interest and/or reducing the money supply. However contracting fiscal and monetary policy measures can have a number of adverse side effects, including reducing economic growth and possibly causing unemployment.

To reduce cost-push inflation, a government will use supply-side policy measures such as improved education and training and privatisation. These measures may be effective but, they make take some time. They may also be relatively costly and may, at least in the short run, add to aggregate demand. In addition, rises in firms' costs of production are not just influenced by what is happening in the domestic economy. Rises in the price of imported raw materials and fuel may put significant upward pressure on prices. In this case, a government may try to lower inflation by subsidising firms but this might need relatively large amounts of government revenue and so a high opportunity cost.

Q: Discuss whether or not an increase in the rate of income tax will reduce inflation.

4.8.6 Causes of deflation

- **Causes of deflation: demand-side and supply-side.**

Deflation may result from the supply-side or the demand-side of the economy.

The price level may be reduced as a result of advances in technology and increases in labour productivity. This is likely to be beneficial as it will mean that consumers can enjoy more goods and services and the economy may become more internationally competitive.

In contrast, deflation resulting from a decline in aggregate demand is likely to be harmful. This is because it ca n lead to a downward spiral in economic activity. Consumers expecting prices to be lower in the future, may postpone their purchase. With lower demand for their products, firms are likely to reduce their output and the number of workers they employ. The reduction in employment will push down aggregate demand further.

4.8.4 Consequences of deflation

- **The consequences of deflation for consumers, workers, savers, lenders, firms and the economy as a whole.**

The effect of deflation will be influenced by whether it is 'good' deflation (caused by an increase in aggregate supply) or 'bad' deflation (caused by a decrease in aggregate demand).

- Good deflation can be associated with increases in output and employment.
- Bad deflation, however, is likely to cause a rise in unemployment and lower output.
- It is also likely to discourage investment which will reduce productive capacity and endanger future economic growth.
- Both bad and good deflation increase the purchasing power of those whose income remains unchanged.
- Deflation raises the burden of debt. Any household or firm which has taken out a loan will have to pay back more in real terms. In this situation, borrowers will lose and lenders will gain.

4.8.5 Policies to control deflation

- **The range of policies available to control deflation and how effective they might be.**

A government will not be concerned about good deflation, but it will be anxious to avoid bad deflation. If there is a risk of bad deflation or if it is occurring, it is likely that the government will use expansionary fiscal policy and a central bank will use expansionary monetary policy. Bad deflation, however, can be difficult to reverse. If it has lasted some time, interest rates may be very low and there may be little room to cut them further. Confidence may be very low and the burden of debt high, so that cuts in income and corporation tax rates, for example, may not encourage households to spend and firms to invest.

Q: Analyse how a central bank could avoid deflation.

Q: Discuss whether or not deflation will benefit an economy.

Q: Explain two consequences of deflation.

Problem solving(4.8)

1. A country's inflation rate, measured by the Consumer Prices Index (CPI), was 5% in year 1. Three years later it was 3%. What is right?

A. Prices are falling.
B. The rate of price increases is falling.
C. The real rate of interest is negative.
D. There is increased purchasing power for those on fixed incomes.

2. What will deflation likely lead to?

A. a fall in the real value of debts
B. an increase in the exchange rate
C. an increase in the rate of interest
D. an increase in the real purchasing power of money

3. Company directors' salaries increased by 20%. Office workers' wages increased by 7%. The rate of inflation was 4%. What happened to real income?

	company directors' real income	office workers' real income
A	fell	fell
B	fell	rose
C	rose	fell
D	rose	rose

year	1	2	3	4
CPI	100	101.1	101.8	102.1

4. Which of the following is correct?

A. Consumer prices were highest in year 3.
B. The rate of inflation was 2.1% in year 4.
C. The rate of inflation was highest in year 2.
D. The rate of inflation was lowest in year 1.

5. What will occur when a country is experiencing deflation?

A. Consumers delay spending.
B. Governments raise interest rates.
C. The level of imports increases.
D. The real value of money falls.

6. The table shows the Consumer Prices Index (CPI) of a country for five years.

year	CPI
1	100
2	120
3	135
4	140
5	138

Which statement about the country is correct? C

A. It faced deflation in year 2.

B. It faced deflation in year 3.

C. It faced inflation in year 4.

D. It faced inflation in year 5.

7. Which of the following could lead to deflation?

A. advances in technology and increases in labour productivity

B. government using a policy of very low interest rates

C. increases in the costs of production that reduce firms' profits

D. increases in the rate of inflation as measured by the CPI

8. What is not required in the construction of CPI?

A. the selection of a base year

B. the selection of a representative range of items

C. the calculation of average wage levels

D. the weighting of each item in the index

9. If some goods take a greater percentage of a typical household's total spending than other goods, how is this accounted for in the construction of a consumer prices index?

A. by deducting the goods

B. by giving a weight to the goods

C. by taking an average of price fluctuations during a year

D. by using the price elasticity of demand for the goods

10. An economy is experiencing high inflation. Which government policy will reduce consumer spending?

A. introducing compulsory saving for income earners

B. investing more in building infrastructure

C. issuing more banknotes and coins

D. reducing indirect taxes

Section 5. Economic development

5.1 Living standards

5.1.1 Indicators of living standards

- **Real GDP per head and the Human Development Index (HDI).**
- **The components of real GDP and HDI.**
- **The advantages and disadvantages of real GDP and HDI.**

A main measure of living standards is still probably real GDP per head. There are also composite indicators such as the Human Development Index (HDI).

① Real GDP per head

Real GDP per capita is a measure of the average income per person. If real GDP grows but the population increases at a faster rate then average income per head will fall. This measure has the advantage that it takes into account differences in population size and also incorporates adjustments for inflation. But it may not necessarily indicate the real situation for a number of reasons.

- One is that real GDP is an average. Not everyone may benefit from a rise in the average income level. The extra income may be unevenly spread with a few receiving much higher income and some not receiving any extra income.

- Higher output will obviously mean that more goods and services are being produced, but not all of these may add to people's living standards. For example, an increase in the output and consumption of tobacco may actually reduce the quality of people's lives by affecting their health and life expectancy adversely.

- Living standards are also influenced by other factors such as the quality of and access to education, health care, clean water and sanitation, and environmental problems. But real GDP per head does not take into account theses factors.

- Comparing living standards between countries: There can be differences in the distribution of income, the size of the informal economy, working hours and conditions, the composition and quality of output and environmental conditions between countries. There is also a potential problem in comparing different countries' real GDP per head because countries measure their output in terms of their own currency initially. If an unadjusted currency is used, the comparison may be distorted.

② Human Development Index (HDI)

Human Development Index is a composite indicator of living standards in a country, obtained by measuring three dimensions of human development:

- Health care: this indicator measures life expectancy at birth. The better the health care in a country, the greater social and economic wellbeing tends to be.
- Education: this indicator measures the mean years of schooling and the expected years of schooling in the country.
- Income levels: the higher the national income (or Real GDP per capita) of a country, the greater human development tends to be.

Although the HDI does take into account other factors that influence people's living standards, it has been criticised for what it leaves out. Among the factors it does not take into account are political freedom and the environment. It also does not consider differences in life expectancy, education and differences in income between males and females and between those living in rural and urban areas, among other groups.

Q: Analyse the relationship between countries' GDP per head ranking and HDI ranking.

5.1.2 Comparing living standards and income distribution

- **Reasons for differences in living standards and income distribution within and between countries.**

Income is unevenly distributed between households in every country, but to different extents. Living standards vary between countries and between regions with in a country for a large number of reasons. These include, for example, differences in income, wealth, education and healthcare systems, levels of pollution and working hours.

5.2 Poverty

5.2.1 Definition of absolute and relative poverty

- **The difference between the two terms.**

- Absolute Poverty: The inability to afford basic necessities such as food, water, education, health care and shelter. This is measured by the number of people living below a certain income threshold.

- Relative Poverty: The condition in which people lack the minimum amount of income needed in order to maintain the average standard of living in the society in which they live. It is measured by the extent to which a person's or household's income falls below the average income in the economy.

Q: Explain the two types of poverty

5.2.2 The causes of poverty

- **The causes of poverty including unemployment, low wages, illness and age.**

There are a number of reasons why people are poor. These include being unemployed, being in low-paid work, falling ill and growing old. Once in poverty, it can become difficult to get out of it. People can become trapped in a vicious circle of poverty (poverty trap). Those who are poor are likely to have worse than average education and healthcare. This will reduce their productivity, employment opportunities and income, and will also affect the prospects of their children.

<u>Poverty trap</u>

5.2.3 Policies to alleviate poverty and redistribute income

- **Policies including those promoting economic growth, improved education, more generous state benefits, progressive taxation, and national minimum wage**

There are a number of measures a government may take in a bid to reduce poverty. Its choice of measures, however, can be restricted by the tax revenue it has raised to fund them.

- Improving the quantity and quality of education: In the long term this can be a very effective policy, as it can increase the job prospects and earning potential of the poor and their children.
- Promoting economic growth: For example, increasing government expenditure or reducing the rate of interest, will increase aggregate demand. This can increase output and create jobs. Unemployment is a major cause of poverty. Having unemployed and underemployed workers not only lowers their living standards, but also the living standards of others since output will be below potential.
- Introducing or raising a national minimum wage: This is designed to tackle the problem of people experiencing low living standards due to low wages.
- Providing benefits or more generous state benefits: The elderly, and some of the sick and disabled, may not be able to work and may not have any savings to support them. Giving them benefits, or raising the benefits they receive, may enable them to avoid absolute poverty. What is more debatable is the effect that raising unemployment benefit will have on poverty. If there is a lack of jobs, it may help in the short run, as it will not only raise the living standards of the unemployed, but may also reduce unemployment by increasing aggregate demand. If, however, jobs are available, and the unemployed are not filling them because they receive a higher income on benefits, raising benefits will reduce the incentive to work.
- Progressive taxes to reduce income and wealth inequality after tax

Q: Discuss whether or not a national minimum wage will reduce poverty

5.3 Population

5.3.1 The factors that affect population growth

- **Birth rate, death rate, net migration, immigration and emigration.**

5.3.2 Reasons for different rates of population growth in different countries

- **How and why birth rates, death rates and net migration vary between countries.**

- Birth rate: The birth rate measures the number of live births per thousand of the population. The higher the birth rate, the greater the population growth.
- Death rate: The number of deaths per thousand of the population per year. The lower the death rate, the greater the population growth.
- Net migration: The movement of people into and out of a country. It is measured as the number of people entering and leaving a country in a year.

  Net migration rate = Immigration – Emigration

  If more people enter than leave then the economy has net immigration, resulting in population growth.

5.3.3 The effects of changes in the size and structure of population on different countries

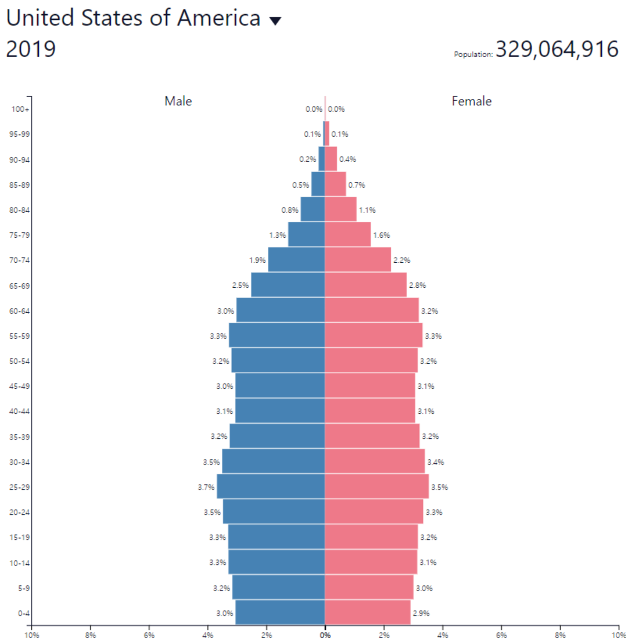
- **The concept of an optimum population.**
- **The effects of increases and decreases in population size and changes in the age and gender distribution of population.**
- **Note: interpretation of a population pyramid is required, but drawing is not.**

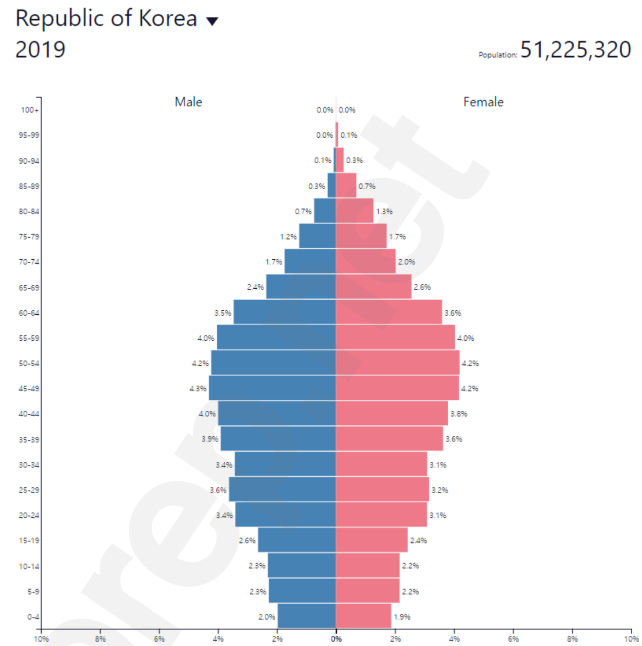
A population pyramid is a graph that allows us to see the gender and age structure of a population. There are different shapes to the pyramids which tell us different things about the population of the country. They are useful because they give a really visual idea of what the birth and death rates are like in a country, and because they show the life expectancy. They can also help governments plan for the future because they show change over time.

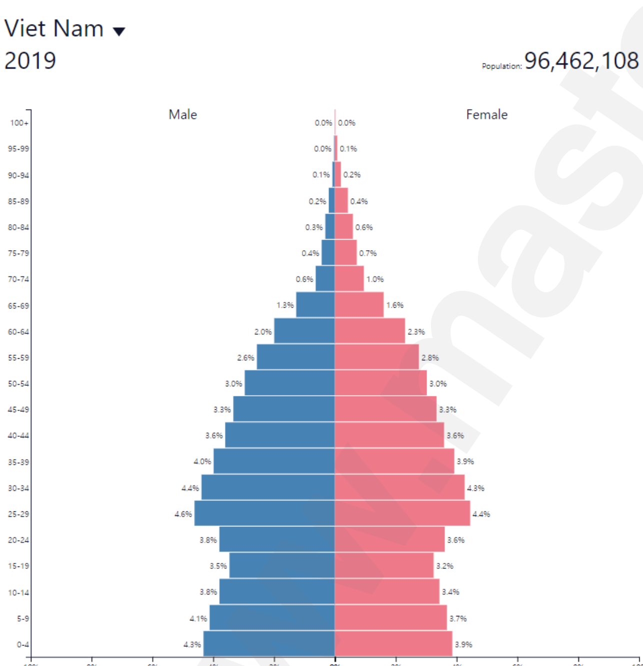
Factors affecting Population Structure

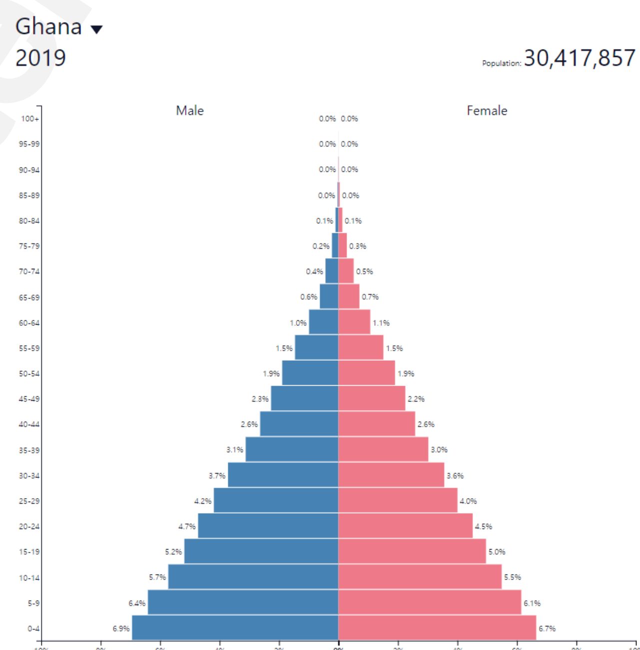
- Gender: This refers to the distribution of males and females within the population. For the vast majority of countries, the gender split is quite even.
- Age distribution: This refers to the number of people within the different age groups in the population in the younger age groups. Population pyramids are a graphical representation of the age and gender distribution of a population.
- Dependency ratios: The dependency ratio compares the number of people who are not in the labour force with those who are in active paid employment. The labour force is made up of those who are employed and those who are not working but are seeking work.

$$\frac{\text{Number in dependent age groups}}{\text{Number in the labour force}} \times 100$$







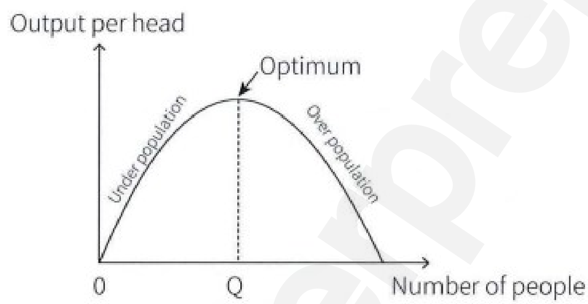


- Birth rate
- Death rate
- Life expectancy
- Population growth

The optimum population

The term optimum population refers to the number of people which, when combined with the other resources of land, capital and existing technical knowledge, gives the maximum output of goods and services per head of the population.

A country with a large geographical area and a small population may still be considered as overpopulated if there is a shortage of land, capital and technical knowledge, relative to the number of workers. In such a case, a government may seek to move towards its optimum population either by introducing measures to reduce its population size or by seeking to increase investment. A country is said to be under-populated if it does not have enough of human resources to make the best use of its resources. In such a case, its government may encourage immigration.



Problem with overpopulation

- Concerns about famine: If a country is currently overpopulated and agricultural productivity is low, there is a risk that the country may not be able to feed more dependants.
- Restrictions on improvements in living standards
- Overcrowding
- Environmental pressure: More people in a country may result in damage to wildlife habitats, water shortages and the depletion of non-renewable resources.
- Pressure on employment opportunities: If there is an increase in the number of people of working age who lack appropriate skills, the government may have to devote more resources to education and training.

→ Solutions: Improvement of healthcare and nutrition / improvement of the educational and employment opportunities for women/ make it illegal to have children above a specified number

Q: Explain two causes of a fall in the birth rate

<u>The consequences of an ageing population</u>

- A rise in the dependency ratio
- A change in the labour force
- Higher demand for healthcare
- Greater need for welfare services
- Rise in cost of state and private pensions.
- Change in the pattern of demand

→ Solution: Raise the retirement age

Q: Discuss whether or not an ageing population is a benefit to an economy

5.4 Differences in economic development between countries

5.4.1 Differences in economic development between countries

- **Causes and impacts of differences in income; productivity; population growth; size of primary, secondary and tertiary sectors; saving and investment; education; and healthcare.**

Economic development is an improvement in economic welfare. Besides improved living standards, it also involves reducing poverty, expanding the range of economic and social choices, and increasing freedom and self-esteem. As an economy develops, the economic welfare of its population increases. At first, the availability of basic life-sustaining products increases. Then consumption levels rise beyond those needed for survival, and people have more choice of what to consume, where to live and where to work.

<u>Stages of economic development</u>

① Less-developed economy
- Low level of economic development
- Low industrial development
- Lack of infrastructure
- Low levels of education and skills
- Low average incomes and poor living standards
- Low average life expectancy

② Developing economy
- Expanding manufacturing and services sectors
- Rapid development of modern infrastructure
- Rising incomes and living standards
- Improving health care, diet and life expectancy

③ Developed economy
- High level of economic development
- Wide range of industries
- Well developed road, power and communications networks
- Skilled and educated workforce
- High average incomes and living standards
- Long average life expectancy

<u>Causes of differences in economic development between countries</u>

- Differences in incomes per head
- Differences in saving due to differences in income per head: If savings are low, there will be a lack of finance for investment.
- Differences in investment: Countries with a low value of capital goods per worker will be likely to have low income per head.
- Differences in population growth: In countries with high population growth there is usually a high dependency ratio, with a high proportion of children being dependent on a small proportion of workers.
- Differences in education and healthcare: A lack of access to, or poor quality of, education and healthcare will reduce the quality of people's lives and will res ult in low levels of productivity.
- Differences in the size of the primary, secondary and tertiary sectors: Economic growth and the quality of people's working conditions tend to be lower the greater the proportion of workers employed in the primary sector.
- Differences in the concentration on a narrow range of exports (most of which are primary products): The demand for manufactured goods and services tends to increase more than the demand for primary products as income increases.
- Differences in productivity: Countries with a low output per worker hour will tend to have low income per head and so may have, for instance, lower education and healthcare.

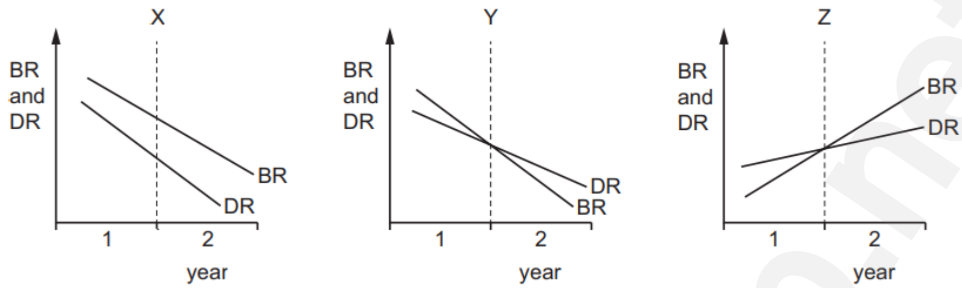
Q: Explain two causes of differences in economic development between countries.

<u>The impacts of differences in economic development between countries: The problems facing economies with relatively low economic development</u>

- High growth of population
- High levels of international debt: A large proportion of the country's income is taken up in repaying (and paying interest on) foreign loans. Th is means it cannot be used to spend on education, healthcare and investment. So the opportunity cost of repaying debt may be economic development.
- Reliance on the export of primary products. Over a period of time, the price of primary products tends to fall, relative to the price of manufactured goods and services. Th is means that so me poor countries receive relatively less for their exports, whilst having to pay more for their imports.
- Lack of investment in human capital and capital goods
- Emigration of key workers
- Unbalanced economies

Problem solving (Section 5_All)

1.



Which country was there a rise in population in year 1 and a fall in population in year 2?

A. X and Z

B. X only

C. Y and Z

D. Y only

2. If the richest 60% of the population received an increase in income and the income of the rest did not change, what happened to absolute and relative poverty?

	absolute poverty	relative poverty
A	increased	increased
B	increased	remained constant
C	remained constant	increased
D	remained constant	remained constant

3. Gross Domestic Product (GDP) can be a better measure of living standards if GDP is adjusted for the effects of

A. exports and inflation.

B. imports and exports.

C. population change and exports.

D. population change and inflation.

4. Which country seems to have the highest standard of living?

	birth rate	death rate	infant mortality rate	life expectancy
A	41	20	31	49
B	32	14	29	59
C	25	6	25	79
D	25	5	22	79

5. Which of the following is correct statement about poverty?

A. Absolute poverty occurs when income falls below what is needed for survival.

B. An advanced economy is likely to have a higher level of absolute poverty than relative poverty.

C. It is impossible for relative poverty to rise as absolute poverty falls.

D. Relative poverty is measured by the same goods and services in all countries.

6. If it is expected that the population in low-income countries will increase. What could be a cause of this?

A. Climate change will lead to lower food output and starvation.

B. Improved education for girls will lead to a small decline in birth rates.

C. Increasing numbers of people will migrate to higher income countries.

D. Modern medicine and sanitation will lead to a rapid decline in death rates.

7. Which of the following can limit economic development of low-income countries?

A. balance of payments surpluses

B. high saving ratios

C. large inflows of foreign investment

D. rapid population growth

8. Which country is likely to be the most developed?

	percentage employment		
country	primary sector	secondary sector	service sector
A	10	35	55
B	20	60	20
C	35	35	30
D	40	40	20

9. When countries experience absolute poverty, low incomes can start a process that keeps incomes low. What are the process?

A. low incomes → low consumption → low prices → low output → low incomes
B. low incomes → low government spending → high taxation → low employment → low incomes
C. low incomes → low investment → high profits → low dividends → low incomes
D. low incomes → low saving → low investment → low productivity → low incomes

10. What factor can decrease birth rate?

A. Fewer women work.
B. Infant mortality rates rise.
C. Medical supplies and healthcare improve.
D. The optimum population increases.

11. What factor is not taken into account when calculating the HDI?

A. education
B. income per head
C. level of savings
D. life expectancy

12. What is the differences between a more developed country and a less developed country?

A. Inflation rates are higher in the more developed country.
B. Interest rates are higher in the more developed country.
C. Natural resources are higher in the more developed country.
D. Real incomes are higher in the more developed country.

13. If relative poverty increases in one country, what might be the reason for this?

A. Direct taxes had increased, and indirect taxes had fallen.
B. Real gross domestic product was rising faster than the population.
C. The death rate was exceeding the birth rate.
D. The real value of government welfare benefits had fallen.

14. What is the main measure of absolute poverty?
A. dependence on aid for medical treatment
B. lack of transport to escape abroad
C. living in tents in temporary camps
D. receiving insufficient food for basic nutrition

15. Which country would be the most developed?

country	gross domestic product per year ($m)	population (millions)
A	600	3
B	700	2
C	12 000	40
D	15 000	100

Section 6. International trade and globalisation

6.1 International specialisation

6.1.1 Specialisation at a national level

- **The basis for specialisation at national level in broad terms of: superior resource allocation and/or cheaper production methods.**

Countries usually concentrate on producing those products they are best at making and which are in high global demand. What countries are best at producing is influenced by the quantity and quality of their resources. Specialization allows an economy to produce a greater volume of their goods and services more efficiently. It therefore increases output, incomes and living standards. Economies then trade with each other to obtain the other goods and services they need and want.

6.1.2 Advantages and disadvantages of specialisation at a national level

- **For consumers, firms and the economy.**

<u>The advantages and disadvantages for consumers</u>

- Output should be higher. The higher output should enable consumers to enjoy more goods and services and hence have higher living standards.
- Specialisation can enable the firms in the country concentrating on producing the product to develop skills and techniques in its production. This would raise the quality of the product.
- Specialisation may also result in lower costs of production and the benefit of this may be passed on to consumers in the form of lower price.

- There is a risk that one country or a small number of countries may gain control of most of the global market for a product and may use its or their power to restrict supply and push up price. The organisation of Petroleum Exporting Countries (OPEC), a group of the major oil producing countries, has pushed up the price of oil in the past.

<u>The advantages and disadvantages for firms</u>

- Firms can produce the product on a large scale and this may enable them to take advantage of economies of scale, such as buying and technical economies.
- Firms can also buy their raw materials from specialist firms, which are producing high quality raw materials at low costs.
- Engaging in international trade can help firms in the exchange of new management ideas, information about new products and new technology.

- If firms become more dependent on other countries for the markets of the products they produce and for the source of their raw materials, they can be adversely affected by events in those countries.

<u>The advantages and disadvantages for the economy</u>

- International specialisation and trade increases efficiency and economic welfare. By allowing an economy to concentrate on what it is most efficient at producing, its real GDP should be relatively high.
- If an economy specialises on the basis of quality and quantity of its resources, this should mean its resources will not be lying idle. This can mean that there is little unemployment of labour.
- As specialisation is based on efficiency, it may also keep the inflation rate relatively low.
- Specialisation may also enable an economy to build up a reputation in producing a particular product It would also boost its sales of exports.

- Concentrating on a few products is fine if demand for these products remains high and costs of production do not rise. If, however, demand suddenly falls or costs rise, the country can run into difficulties. Structural unemployment may increase if labour is occupationally or geographically immobile. Producing a wider range of products would spread risks.
- High transport costs may also offset any cost advantage a country has in producing a product. If the goods are heavy and have to be transported long distances, it may be more efficient for the importing economies to produce them themselves.

6.2 Globalisation, free trade and protection

6.2.1 Definition of globalisation

Globalisation is the process by which the world is becoming increasingly interconnected through trade and other links.

The possible causes of globalisation include:
- increasing ease of travel
- growing international trade in an increasing variety of goods and services
- increasing opportunities for firms to buy and sell products in any country in the world
- increasing opportunities for labour and capital to move anywhere in the world
- the growth of global financial market

6.2.2 Role of multinational companies (MNCs)
- **MNCs and the costs and benefits to their host and home countries.**

A multinational company (MNC) is a business organisation that produces in more than one country.

<u>Advantages</u>
- Through job creation, MNCs are able to help improve standards of living in the host countries in which they operate.
- MNCs operate on a very large scale and are therefore able to exploit economies of scale. This means that MNCs can pass on cost savings to their customers in the form of lower prices.
- By operating in overseas markets, MNCs are able to generate more profit by selling to a larger customer base. This benefits their home country too as profits are repatriated.
- MNCs are able to spread risks by operating in overseas markets.
- By producing in a foreign country, an MNC is often able to avoid any trade restrictions.
- MNCs can access new markets by locating overseas and this may reduce transportation costs as they no longer have to export products to these markets.
- MNCs might choose to move or expand their operations in foreign countries to benefit from lower rates of corporation tax.

Disadvantages

- Multinational corporations have often been criticised for their unethical and cost-cutting practices, such as poor working conditions and low wages for workers in low-income countries.
- While jobs might be created in overseas countries, MNCs can force local firms that are less competitive to close down. Their huge market power and ability to exploit economies of scale mean that local firms might struggle to compete. Moving and expanding overseas can also have a detrimental impact on domestic employment.
- Since many MNCs earn far higher sales revenue than the gross domestic product of the host country, they are often in a powerful position to exploit foreign governments over decisions.
- MNCs face an array of issues as a result of operating in different countries, such as different legal systems, tax regulations and environmental guidelines. The lack of local knowledge can also cause major problems for an MNC.
- The huge size and geographic spread of an MNC's operations makes it harder to manage the overall business. Effective communication can also be an issue if workers are located in countries with different languages, national cultures and time zones.
- MNCs may be unsuccessful if they offer goods and services that do not appeal to local tastes and customs.
- Fluctuating exchange rates can make it difficult to measure and compare the values of an MNC's sales and profits in overseas markets.

Q: Discuss whether or not MNCs improve the economic performance of the host countries in which they operate

Q: Discuss whether or not MNCs increase production and productivity in their host countries.

6.2.3 The benefits of free trade

- **The benefits for consumers, producers and the economy in a variety of countries.**

Free international trade occurs when there are no restrictions on the products bought by firms and consumers from abroad or products sold by firms to other countries and no imposition of special taxes.

<u>The benefits of free trade</u>

- It allows countries to benefit from specialization
- They can produce what they are best able to and then trade their surplus
- It increases consumer choice
- Consumers can enjoy a greater variety of goods and services from across the world
- It increases competition and efficiency
- Firms must improve product quality to compete with overseas producers
- It creates additional business and employment opportunities
- New and existing firms can expand their sales to growing consumer markets overseas
- It allows firms to access the best workforces, materials and technologies from anywhere in the world.

<u>Arguments against free trade</u>

- Trade with low-cost economies is threatening jobs in many developed economies and reducing opportunities for less developed economies to grow their industries
- Trade is increasing the rate at which we are depleting natural resources
- Trade may increase the exploitation of workers and the environment in many less developed economies as multinationals are attracted to them by low wages and taxes
- It has increased the gap between rich and poor nations

Q: Explain two benefits producers may gain from free trade.

6.2.4 Methods of protection

- **Tariffs, import quotas, subsidies and embargoes.**

Protectionism is the use of government barriers to limit or restrict the movement of goods or services across a country's borders.

- A tariff: A tax can be imposed on imported products. Such a tax is also referred to as a customs duty or import duty. Sometimes tariffs are used to raise government revenue but most commonly, they are used to discourage the purchase of imports. Placing a tariff on an imported product raises its price.
- A quota: A limit may be placed on the quantity of a good that can be imported.
- Embargo: The import of a product or trade with another country may be banned. A government may want to ban the import of demerit goods. A ban on a trade with a particular country is usually introduced for political reasons.
- Subsidies: A government may protect its domestic industries from cheaper imports by giving them subsidies. Such help may enable domestic firms to sell at lower prices, which may undercut the price of imports.

Q: Explain two non-tariff methods of protection

Q: Define tariffs

6.2.5 Reasons for protection

- **Including infant industry, declining industry, strategic industry and avoidance of dumping.**

6.2.6 Consequences of protection

- **Effectiveness of protection and its impact on the home country and its trading partners.**

- Protection of infant industries(= sunrise industries): The argument is that such new industries, which have the potential to grow, may be eliminated by foreign competition before they have really started. Giving them some protection may enable them to grow, take advantage of economies of scale and become internationally competitive.
- Protection of declining industries(= sunset industries): In a dynamic economy, some industries are likely to be declining. If other industries are expanding and labour is mobile, this may not be a problem. However, if labour is immobile and there is a shortage of job vacancies, the decline of a major industry may lead to a significant rise in unemployment. A government may decide to protect the industry to allow it to decline gradually, in order to avoid this.
- Protection of strategic industries: These are industries essential for the survival or development of the country. Most governments provide some protection to their agricultural and defence related industries, to ensure consistency of supplies.

- Raising employment and improving the trade position. Reducing imports can enable domestic firms to expand and take on more workers. This would raise employment and income. There is a high risk, however, of retaliation.

- Protection of industries from dumping: It is generally agreed that trade restrictions can be imposed to prevent dumping as this is seen as unfair competition. This occurs when foreign firms sell products at a price below the cost of production. This is selling excess supplies in other countries, in order to keep the price high in the domestic market. A more damaging motive behind dumping is to drive domestic firms out of the market, gain a large market share and then raise prices.

Problem solving(6.1~6.2)

1. What is a disadvantage of international specialisation?
A. Consumers pay higher prices for goods and services reducing their welfare.
B. Domestic firms may be uncompetitive leading to structural unemployment.
C. Domestic firms may experience rising costs as they pay more for imports.
D. Resources may be used less efficiently as domestic firms face less competition.

2.Which protection measure reduces the supply of an imported good to zero?
A. embargo
B. quota
C. subsidy
D. tariff

3. What is the benefit if a government removes tariffs on imported goods and services?
A. more choice for domestic consumers
B. more employment in declining industries
C. more exports by domestic firms
D. more tax revenue from imports

4. What would discourage globalisation?
A. creation of a single world market
B. direct foreign investment by multinational companies
C. expansion of trade in financial services
D. protectionist policies by trading groups

5. Which trade protection would help domestic firms lower their prices and undercut the price of imported goods?
A. a subsidy
B. a tariff
C. an embargo
D. an import quota

6. What could be a benefit of host country from a multinational company (MNC)?
A. It creates local employment.
B. It depletes local natural resources.
C. It imports raw materials.
D. It receives tax concessions.

7. What could be a disadvantage of multinational companies (MNCs) to the low-income country?
A. Local firms close because MNCs are more efficient.
B. New production techniques are introduced.
C. The balance of payments may improve.
D. The MNCs have to pay taxes on their profits.

8. What is the meaning of quota in international trade?
A. a government grant to encourage production
B. an administrative and technical barrier
C. a limit on the quantity of imports
D. a tax on imports

9. Many low-income countries rely on exports of raw materials. What is a disadvantage of this?
A. Countries have a constant demand for raw materials.
B. International trade only benefits the importing countries.
C. It is necessary for low-income countries to belong to a free trade area.
D. Raw materials have fluctuating prices.

10. What is a disadvantage of increased specialisation by a country?
A. It becomes more reliant on imports to meet all its needs.
B. It reduces the potential for international trade.
C. It results in access to a greater variety of goods for consumers.
D. It results in lower costs for home produced goods.

11. Which of the following can be a benefit of a multinational company (MNC) to the host country?
A. A MNC may improve the reputation of its home country as a high-quality producer.
B. Exports by a MNC may result in an improved trade balance for the host country.
C. Production by a MNC may lead to higher levels of pollution in the host country.
D. Profits made by a MNC are sent back to its home country.

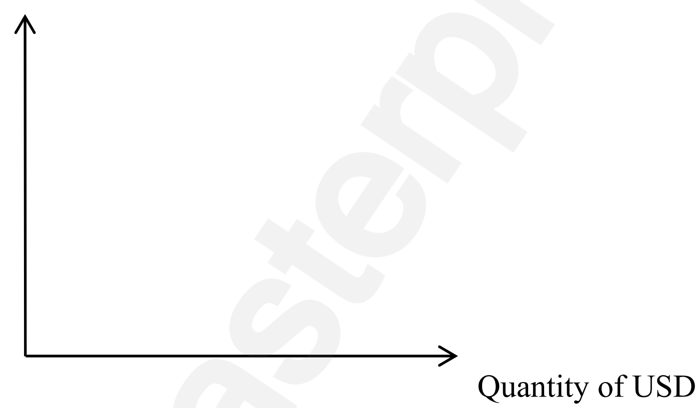
6.3 Foreign exchange rates

6.3.1 Definition of foreign exchange rate

- **Floating and fixed systems.**

A foreign exchange rate is the price of one currency in terms of another currency. It is also the value of the currency - that is, how much the currency is worth in terms of another currency.

A floating exchange rate is one which is determined by market forces. If demand for the currency rises or the supply decreases, the price of the currency will rise. Such a rise is referred to as an appreciation. In contrast, a depreciation is a fall in the value of a floating exchange rate. It can be caused by a fall in demand for the currency or a rise in its supply



Current Exchange Rate:

Appreciation(Stronger) → Import ↑

Depreciation(Weaker) → Export ↑

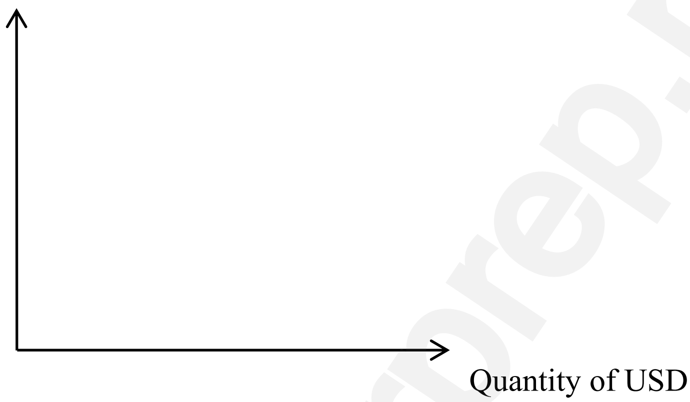
A fixed exchange rate is one whose value is fixed against the value of another currency (or currencies) and is maintained by the government. The value may be set at a precise price or within a given margin. If market forces are pushing down the value of the currency, the central bank will step in and seek to increase its value, either by buying the currency or raising the rate of interest. A change in the value of the currency from one exchange rate to a lower one is referred to as devaluation. A rise in a fixed exchange rate is called a revaluation.

6.3.2 Determination of foreign exchange rate in foreign exchange market

- **The demand for and supply of a currency in the foreign exchange market and the determination of the equilibrium foreign exchange rate.**

6.3.3 Causes of foreign exchange rate fluctuations

- **Including changes in demand for exports and imports, changes in the rate of interest, speculation, and the entry or departure of MNCs.**



<u>An appreciation in the exchange rate</u>

- Demand for the currency rises as overseas consumers buy more exports
- Interest rates rise relative to other countries. This attracts savings from overseas residents
- Inflation is lower than in other countries so exports will be cheaper and overseas demand for them, and the currency required to pay for them, will rise
- People speculate the currency will rise in value and buy more of the currency

<u>A depreciation in the exchange rate</u>

- Demand for other currencies rises as domestic consumers buy more imports
- Interest rates fall relative to other countries. People move their savings to bank accounts overseas
- Inflation rises relative to other countries. This makes exports more expensive and demand for them, and the currency needed to buy them, falls
- People speculate the currency will fall in value and sell their holdings of the currency

6.3.4 Consequences of foreign exchange rate fluctuations

- **The effects of foreign exchange rate fluctuations on export and import prices and spending on imports and exports via the PED.**

- Appreciation → Export ↓, import ↑ → Net export ↓ → AD ↓

A rise in a country's exchange rate would raise the price of its exports and lower the price of its imports. The effect on export revenue will depend on price elasticity of demand. If demand is elastic, the rise in price will cause a fall in revenue whereas if demand is inelastic, revenue will rise.

- Depreciation → Export ↑, import ↓ → Net export ↑ → AD ↑

A fall in the exchange rate, by lowering export prices and raising import prices, is likely to increase demand for domestic products. This rise in aggregate demand can increase output and employment of the economy. A fall in the exchange rate can, however, increase inflationary pressure for a number of reasons. Imported raw materials will be more expensive, which will raise the costs of production. Finished imported products will also be more expensive.

Q: Analyse how a fall in a country's foreign exchange rate could increase employment

6.3.5 Floating and fixed foreign exchange rates

- **The difference between, and the advantages and disadvantages of, a floating foreign exchange rate and a fixed foreign exchange rate system.**

<u>Advantages of floating exchange rates</u>
- Adjusts automatically because of market rules
- Allows the government to focus on other areas
- No need to hold foreign currency reserves

<u>Disadvantages of floating exchange rates</u>
- Fluctuations create uncertainty
- Speculators can influence the value of a currency
- No government control over external events

<u>Advantages of fixed exchange rates</u>
- Avoid currency fluctuations
- Stability encourages investment

<u>Disadvantages of fixed exchange rates</u>
- Need to hold foreign currency reserves
- Less flexibility
- Conflict with other macroeconomic objectives

Q: Discuss whether or not a country should switch from a fixed foreign exchange rate system to a floating foreign exchange rate system.

6.4 Current account of balance of payments

6.4.1 Structure

- **The components of the current account of the balance of payments – trade in goods, trade in services, primary income and secondary income.**
- **Calculation of deficits and surpluses on the current account of the balance of payments and its component sections.**

The balance of payments is a record of all economic transactions between the residents of a country and the rest of the world in a particular period**.** Money coming into the country is record ed as credit items and money leaving the country as debit items. The first section of the balance of payments is the current account.

The components of the current account

① Trade in goods: This covers exports and imports of goods including cars, food and machinery. If revenue from the export of goods exceeds the expenditure from import of goods, the country is said to have a trade in goods deficit. This ca n also be referred to as a visible trade deficit. In contrast, a trade in goods surplus occurs when export revenue exceeds import expenditure.

② Trade in services: This part records payments for services sold abroad and expenditure on services bought from foreign countries. Services are also sometimes called invisibles with sales of services abroad called invisible exports and the purchase of sales from abroad known as invisible imports. A trade in service surplus would mean t hat service receipts exceed payments for services.

③ Primary Income (income): It records two categories of income flow, which are compensation of employees and investment income. Compensation of employees includes wages, salaries and other benefits earned by residents working abroad minus that earned by foreigners working in the home economy. Investment income covers profit, dividends and interest receipts from abroad minus profit, dividends and interest paid abroad. Investment income is earned on foreign direct investment an d financial investment including shares, government bonds and loans.

④ Secondary Income (current transfers). This is transfers of money, goods or services which are sent out of the country or come into the country, not in return for anything else. It essentially covers gifts. Items include charitable donations, workers' remittances (money sent by migrant workers to relatives abroad and money received by relatives from migrant workers in other countries) and aid from one government to other governments. Workers' remittances are a large item in some countries' secondary income.

6.4.2 Causes of current account deficit and surplus

- **Reasons for deficits and surpluses.**

<u>Causes of current account deficit</u>

- Low incomes abroad
- High exchange rate

<u>Causes of current account surplus</u>

- High incomes abroad
- Low exchange rate
- High quality of domestically produced products
- Low costs of production

6.4.3 Consequences of current account deficit and surplus

- **Impact on GDP, employment, inflation and foreign exchange rate.**

<u>Consequences of current account deficit</u>

- Lower output and employment : A current account deficit may mean that a country is consuming more goods and services than what it is producing.
- Reduction in inflationary pressure : A current account deficit can also mean a reduction in inflationary pressure, as there will be a fall in aggregate demand.
- Downward pressure on the exchange rate

<u>Consequences of current account surplus</u>

- Rise in real GDP and higher employment : An increase in a current account surplus will increase an economy's aggregate demand and so may lead to a rise in real GDP and higher employment.
- Demand-pull inflation : More money will enter the economy than will leave it and the higher aggregate demand may cause demand-pull inflation.
- Appreciation in the exchange rate: This is because demand for the economy's currency will exceed its supply.

Q: Discuss whether or not a current account deficit on its balance of payments harms an economy.

6.4.4 Policies to achieve balance of payments stability

- **The range of policies available to achieve balance of payments stability and how effective they might be.**

Over time, a government is likely to want to achieve balance of payments stability. It will not want to see large and persistent current account deficits or large and persistent current account surpluses.

<u>Measures to correct a current account deficit</u>

A government will seek to reduce a current account deficit by using policy measures designed to reduce imports and/or increase exports.

- Imposing import restrictions
- Subsidising exports
- Reducing the country's foreign exchange rate
- Lower spending by the country's consumers (increasing income tax) to reduce imports
- Supply-side policy measures. For instance, education and training may result in lower average costs of production and a rise in the quality of products produced. The government may find that supply-side policy is the most effective approach. This is because this policy has the potential to raise international competitiveness over a longer period of time.

<u>Measures to correct a current account surplus</u>

These are, essentially, the reverse of measures to reduce a current account deficit.

- Appreciation of a floating exchange rate
- Expansionary fiscal policy and monetary policy. For example, a cut in income tax would raise the disposable income of households. This would enable them to buy more goods and services, including imported goods and services.

Q: Analyse how a fall in the value of a country's foreign exchange rate could reduce a deficit on the current account of its balance of payments.

Q: Discuss whether or not an increase in government subsidies will reduce a deficit on the current account of the balance of payments

Q: Analyse how a country's current account deficit might be reduced if its firms become internationally competitive.

Problem solving(6.3~6.4)

1. The price of Japanese truck is US$25 000 at the current rate of exchange. The US dollar then strengthens by 10% against the Japanese yen. What will be the new price for the Japanese truck?
A. US$20 000
B. US$22 500
C. US$25 000
D. US$27 500

2. What could increase the size of its current account deficit?
A. increased exports of its services
B. increased international competitiveness of its goods
C. increased numbers of visitors from abroad
D. increased spending on its military bases abroad

3. Which of following may result from a balance of payments trade surplus?
A. The exchange rate appreciates and causes export prices to fall.
B. The exchange rate appreciates and causes export prices to rise.
C. The exchange rate depreciates and causes export prices to fall.
D. The exchange rate depreciates and causes export prices to rise.

4. Which measure is most likely to reduce the current account deficit?
A. a cut in interest rates
B. a cut in the rate of income tax
C. a depreciation of the exchange rate
D. an increase in government expenditure

5. One country experienced a deficit of its trade in goods, primary income and secondary income. But, overall, it had a surplus on the current account of its balance of payments. What does this mean?
A. It had a floating exchange rate.
B. It had a surplus on its trade in services.
C. It had a surplus on the government's budget.
D. It was a low-income country.

6. What is the meaning of depreciation?
A. The government intervenes to reduce the exchange rate of the country's currency.
B. The rate of exchange of exports for imports for a country deteriorates.
C. The rate of inflation in a country continues to rise.
D. The value of a country's currency falls on the international exchange market.

7.

	$ billion
exports of goods	20
imports of goods	24
net services	+5
net primary income	–8
net secondary income	–8

Calculate the country's current account balance?
A. +$1 billion
B. –$4 billion
C. –$7 billion
D. –$15 billion

8. To increase a current account surplus on the balance of payments, which action would it take?
A. abolish an import quota
B. increase import tariffs
C. remove export subsidies
D. tax export producers

9.

	$m
exports of goods	200
imports of goods	190
exports of services	35
imports of services	38

Calculate the country's balance of trade in goods and services?
A. a deficit of $7 million
B. a deficit of $13 million
C. a surplus of $7 million
D. a surplus of $13 million

10. Which of the following would not be included in the current account?
A. dividends earned from a firm in another country
B. imports of TVs from another country
C. purchase of a house in another country
D. rents paid to owners of land in another country

11. Which of the following is included in the current account of the balance of payments?
A. all government income and expenditure
B. money withdrawn from a bank account
C. investments in other countries by manufacturers
D. trade in goods and services

12. If the value of a country's currency appreciate against other currencies, what effects will happen?

	prices of imports of raw materials	prices of exports of manufactured goods
A	cheaper	cheaper
B	cheaper	more expensive
C	more expensive	cheaper
D	more expensive	more expensive