Paper 4

Emerging economies and the way out of a recession

During the recession of 2009 several economists forecast that some emerging (fast developing) economies would perform better than the developed economies. One indicator of this, they said, was the strength of the exchange rate of the currency of some emerging economies against the US dollar. For example, between November 2008 and July 2009, the Brazilian currency rose 11.4% against the dollar and the Indonesian currency rose 10.2%. Another indicator was the forecast growth rate in GDP as shown in Table 1.

Table 1: Forecast growth rate in GDP for selected countries

Forecast Growth Rate in GDP		
	2009 %	2010 %
US	–2.7	+1.4
UK	–3.5	+0.3
Germany	–4.3	+0.3
Japan	–6.5	+0.4
Hong Kong	–5.9	–0.3
China	+6.0	+7.0
Singapore	–7.5	+1.9
Brazil	–1.5	+2.7
Columbia	–1.0	+1.5
India	+5.0	+6.4
Indonesia	–1.3	+0.6

Emerging economies are often dependent on exports to achieve an increase in GDP. Some economists suggested that it would be better for their economic growth if these countries were to concentrate on domestic demand rather than exports.

China, in particular, they said could lead the world out of the recession if it relied increasingly on domestic demand. Indeed, the Chinese government encouraged a shift from export-led industries to programmes aimed at improving the Chinese infrastructure in order to create jobs and thus increase consumption of Chinese goods. Banks were encouraged to make borrowing easier in order to create more credit for consumers and businesses. The government started a massive fiscal stimulus and increased its forecast of GDP to a growth rate of 8.3% in 2009 and 10.9% for 2010 (previous forecast figures were 6.0% and 7.0% as in Table 1).

However, other economists do not accept that there should be an emphasis on domestic demand. They argue that trading links are the strongest evidence of the emerging economies' ability to grow. They state 'no emerging market that adopted an export-led growth model has subsequently needed to break away from it – including China'. China's exports as a percentage of GDP are 32% compared with only 13% for the US. Smaller Asian countries are even more dependent on exports; Singapore's ratio of exports to GDP is 234%, Hong Kong's is 169%. It will be difficult for economies such as these to increase domestic demand and reduce their dependence on export-led growth.

(Source: Financial Times: June 12 2009. *Table source: Economist p105 April 18–24 2009)*

Question 1(a)

Explain what is meant by GDP. [3]

Mark scheme

The Gross Domestic Product (GDP) measures the value of economic activity within a country. Strictly defined, GDP is the sum of the market values, or prices, of all final goods and services produced in an economy during a period of time. [3]
(For stating Gross Domestic Product 1 mark only)

Example candidate response

Q1 a) GDP
- stands for gross domestic product.
- It is the monetary value ~~of~~ given to all the goods and services producted within the geographical limits of a country in one year.

Gross National Product = GDP + net income from abroad
⇒ GDP = GNP – net income from abroad.

3

Examiner comment

This candidate had an understanding of the meaning of GDP, and stated that it was for a given time period and expressed as a monetary value.

Mark awarded = 3 out of 3

Example candidate response

1a) GDP is the total value of goods and services produced by the factors of production in the country. It is said to be the national income of a country. Gross domestic product is the summation of consumption, investments, government spending, and net exports (GDP = C + I + G + (X – M)) 2

Examiner comment

This candidate gave an explanation of GDP but omitted to state it was for a given period.

Mark awarded = 2 out of 3

Example candidate response

1a GDP stand for Gross Domestic Product. ~~It determine~~ A ~~high~~ country with high GDP is ussually, indicate a rich country, while country with low GDP tend to be poor country. GDP shows the ~~good and~~

Examiner comment

This candidate gave a poor explanation which did not include any reference to monetary value nor to a time period.

Mark awarded = 1 out of 3

Question 1(b)

The article says that banks were encouraged to make borrowing easier.
Explain what this might mean and why the government might have thought this was necessary. [3]

Mark scheme

It means more available credit, easier to get; or credit at lower interest rates. This would be likely to increase national income by the multiplier process. (A descriptive reference to the process is sufficient; there is no need to use the actual term) [3]

Example candidate response

b) The statement means that the banks would allow individuals & and firms to borrow money more easily by lowering the interest rate. This would allow more credit for consumers and businesses and hence increase domestic consumption and investment. Since consumption and investment are components of the GDP, the GDP would thus increase, indicating economic growth. 3

Examiner comment

This candidate clearly explained the meaning of the phrase and the reason why easier borrowing might be necessary to stimulate economic growth.

Mark awarded = 3 out of 3

Example candidate response

(b) ~~A~~ in a period of recession, the consumption level goes down. More of saving ~~sharper~~ is being done. As they are in a period of recession, unemployment is high. So by encouraging borrowing from bank, will lead to investment in the country where employment will increase. When the employment will increase then ~~they~~ there will be more consumption. Thus little by little it will be the way out of recession.

Examiner comment

This candidate attempted to answer the question but the answer did not direct itself explicitly to the phrase which should have been explained. Instead the answer began by describing what happens to consumption in a recession.

Mark awarded = 1 out of 3

Example candidate response

b) In order to create more credit for consumers and business. Thus the government started a massive fiscal stimulus and increased its forecast of GDP to a growth rate of 8.3% in 2009 and 10.9% for 2010 which means with the bank borrowing there had been a marked increased of 2.6% in the GDP.

Examiner comment

This candidate mentioned credit but did not answer the question about what the phrase meant nor why the government might wish to increase credit.

Mark awarded = 0 out of 3

Question 1(c)

Is there enough evidence in the article to support the view that there has been an improvement in the economic situation of emerging economies? [6]

Mark scheme

Use the figures for specific exchange rates, and figures for GDP – expect to see examples of emerging/developing countries compared with developed countries. But they are only selected countries, and for only two years and they are projections not actual figures. Exchange rate figures may mean exports become more difficult to sell. [6]
[Maximum 4 for one side of the argument only]

Example candidate response

c) The table s shows future growth rate in GDP of different countries, in which all the emerging economies have an increase in ~~their~~ GDP. Also the article says that the exchange rates of emerging economies increased with respect to $US.

However, increase in GDP doesnot show that the economic situation has become better. Due to

- population : a greater rise in population than GDP means that economic situation is worsening.
- inflation : Rise in GDP may have caused demand pull inflation or the rate of inflation is high.
- Quality of life : increase in GDP doesnot tell us about the quality of life.
- Unemployment may have increased due to ~~rise~~

So, there is ~~evidence~~ not sufficient evidence to support the view that there has been an improvement in economic situation of developing economies.

4

Examiner comment

This candidate used the information in the article to illustrate an improvement in the economic situation of the countries but also suggested reasons why this information was not sufficient to draw a definitive conclusion.

Mark awarded = 4 out of 6

Example candidate response

No, there is not enough evidence. It is stated that emerging economies are often dependent on exports to achieve an increase in GDP, but no exact ~~amount~~ evidence is given. Besides, exchange rate ~~for~~ of the currency for other emerging economies against the US dollar is not given, only ~~the~~ figures of Brazil and Indonesian currency given, the indicator was not enough to show an improvement.

2

Examiner comment

This candidate mentioned that emerging countries are often dependent on export-led growth and did suggest that the information about this was not sufficient to indicate whether there had been an improvement in their economic situation. However, there was no mention of other indicators which might prove useful, nor much mention of other information in the article.

Mark awarded = 2 out of 6

Example candidate response

(c) No. There was no evidence shown on the rate of inflation ~~of on~~ in each country. An increase in inflation will lead to an increase in prices of goods and services. Inflation will tend to increase ~~the~~ GDP of a country. A country will high inflation such as Japan will show a faster growth rate in GDP compared to a country with lower inflation rate such as Indonesia. There was also no evidence shown on the balance of payment of each country. Some countries rely on exports for economic growth while some rely on domestic demand. The balance of payment of a country will show the reliability of exports ~~in~~ in order to allow economic growth. There was also insufficient evident ~~to show~~ on the exchange rate. ~~of~~ GDP is calculated in the currency of its own country. The value of exchange rate fluctuates from day to day. Therefore, the value of the GDP of each currency in a currency may be inaccurate.

1

Examiner comment

This candidate wrote about the level of inflation and the balance of payments. Although these two indicators might be used to consider whether there was an improvement in the economic situation of a country they were not relevant to the article given in the question which did not contain any statistics for these indicators.

Mark awarded = 1 out of 6

Question 1(d)

Identify the **two** policy approaches suggested by economists in the article and discuss whether there is a conflict between them. [8]

Mark scheme

An increase in domestic demand to encourage growth and export-led growth. 2 marks
Conflict? Different approaches but same aim of growth 2 marks
increase exports improves balance of payments and increases injections and GDP; increase domestic demand will also increase injections and help increase GDP. No conflict. 2 marks
Increase domestic demand may increase incomes and increase imports which may need to be offset by further export growth. A possible conflict. 2 marks
[8]

[A general description of fiscal and monetary policy; 2 maximum]

Example candidate response

d) The first policy approach suggested by economists is growth by increased domestic demand which was utilised in China in order to improve Chinese infrastructure and create jobs, thus increasing the consumption of goods. The second policy suggested is ~~the~~ growth by exports. They state that ~~developed economies~~ emerging economies such as Hong Kong and Singapore have an extremely high ratio of exports to GDP and ~~are heavily~~ rely heavily on exports to achieve economic growth.

A conflict exists between these two growth-achieving policies. If an economy were to adopt a domestic demand based policy it would have to impose protectionism measures to prevent imports from competing with the sale of domestic goods. This could potentially reduce future international competitiveness of that country if the domestic firms take advantage by hiding behind these measures and not expand. Conversely, a country that relies heavily on exports to grow can face a shortage in the domestic market if ~~exports~~ goods are exported excessively. Furthermore, the revenue generated by these goods depends on the ~~elasticity~~ demand elasticity of the goods.

However, the conflicts between the two policies can be nullified if a government strikes the right balance between the two policies. It is possible to export in large quantities yet be able to provide enough protectionism to allow local industries to expand and become a competitor in the international market in the future. 6

Examiner comment

This candidate identified the two policies mentioned in the article as the need to support an increase in domestic demand or the need to support export-led growth. The answer was then directed to the second part of the question which asked whether there was a conflict between the two aims. Although there was a statement in the last paragraph which refers to a way to lessen any conflict, the answer could have been improved by further comment on the possible similarities between the two policies.

Mark awarded = 6 out of 8

Example candidate response

(d) Two policy are fiscal policy and monetary policy. If ~~contractionary~~ expansionary fiscal policy is used, tax will be reduced but increase in government spending. while ~~contractionary~~ expansionary monetary policy is lower down interest rate and increase in money supply. If countries were to concentrate on domestic demand rather than exports, then expansionary fiscal policy will help to increase domestic demand because a lower tax means people will have more disposable income to spend, thus aggregate demand will be higher. while, countries to concentrate more on trading links, can be increased by expansionary monetary policy, because lower interest rate people will tend to spend more thus, thus aggregate demand higher. An increase in money supply will lead to a drop in exchange rate of currency, export will increase. No conflict between them, since ~~rate~~ reduce in tax and interest rate will help both achieve domestic demand and trading links.

3

Examiner comment

This candidate's main emphasis was to say that the two policies were fiscal and monetary policy rather than that which is in the article which are a decision to concentrate on domestic demand or on export-led growth. However, the answer did try to relate fiscal and monetary policy to domestic demand and export-led growth so there was some relevant material in the answer.

Mark awarded = 3 out of 8

Example candidate response

(d) The policy approaches suggested by economists are expansionary monetary policy and contractionary monetary policy. During recession, expansionary monetary policy ~~to~~ will cause a decrease in interest rates. This will cause ~~an~~ ~~increase in investment, economic activity will increase, unemployment will decrease which lead to an increase in price where inflation occur.~~ decrease in cost of borrowing which allow income of consumers to increase. When income increases, aggregate demand will increase leading to an increase in price. This will cause inflation. During inflation, contractionary monetary policy will increase interest rates. An increase in interest rates will cause an increase in cost of borrowing which allow income of consumers to fall. This will cause aggregate demand to fall leading a decrease in price. When prices of goods and services decrease, economic activity will fall which leads to unemployment. In expansionary monetary policy, unemployment is cured, however it leads to inflation. In contractionary monetary policy, ~~~~ inflation is cured, however it leads to unemployment. Therefore, there is a conflict between the two policies.

Examiner comment

This candidate wrote about contractionary and expansionary monetary policy. The answer bore little relation to the information in the article which considered the wisdom of supporting an increase in domestic demand against an increase in export-led growth.

Mark awarded = 1 out of 8

Question 2

The use of cars causes market failure. To achieve an efficient use of resources it would be better if governments intervened to affect both the production and the use of cars.

Explain the meaning of the terms 'market failure' and 'the efficient use of resources' and analyse whether economic theory can be used to support this argument. [25]

Mark scheme

Candidates need to explain the two terms, market failure and the meaning of the efficient use of resources, and then consider the argument. Market failure can be explained by reference to possible excessive profits, the need for very large investments, the existence of externalities and of merit goods, and of the need for public goods. Economic efficiency should be explained in terms of productive and allocative efficiency.

Government intervention can be through regulation, taxation or subsidies.

There are negative and positive externalities from car use. Negative externalities include pollution. Positive externalities include less crowded public transport with greater comfort; benefits from the expenditure of the tax receipts. Unlike other positive externalities where subsidies have been used, it has never been suggested that subsidies ought to be used to increase the positive externalities from private car use. Any subsidies given are used to make alternative public transport more attractive. However, taxes have been used to decrease negative externalities. Taxing the use of cars is usually presented in the context of negative externalities to achieve allocative efficiency. Taxing production might not result in productive efficiency. [25]

L4 For a thorough explanation of both efficiency and market failure and a competent discussion of the role of the government in promoting efficiency overcoming market failure. A reasoned conclusion should be presented [18–25]

L3 For a competent explanation with either a more limited comment on both efficiency and market failure (perhaps concentrating on productive efficiency) or a full explanation of one but little comment on the other. The role of the government will be discussed in a more limited way but a conclusion should still be presented. [14–17]
(L3 maximum if there is no mention of production and use of cars)

L2 For an undeveloped explanation of efficiency/market failure with very little discussion of the role of the government. Mention of the government will be descriptive rather than in the form of a discussion related to efficiency/market failure. It is likely there will be no conclusion. [10–13]

L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory. [1–9]

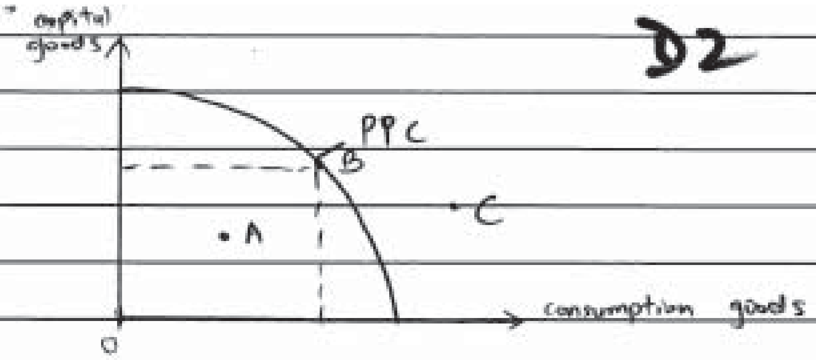
Example candidate response

2 Cars are modern means of transport and it is inevitable that everyone relies on it to travel from one place to another. However production and usage of cars may not be beneficial to the whole economy as it causes pollution and depletion of natural resources. There will be market failure and inefficient allocation of resources.

Market failure refers to an inefficient allocation of resources where there exists negative externalities, under-provision of merit goods, non provision of public goods and even imperfect markets. Negative ~~externalties~~ externalities include ~~air~~ pollution and traffic jam. Under provision of merit goods exist due to lack of information while public goods are not provided because of free rider problem. Free rider problem means a situation where ~~nobody~~ everybody is waiting for somebody else to produce a public good for the benefit of the whole economy. Imperfect markets are markets which do not produce at allocative and productive efficient points.

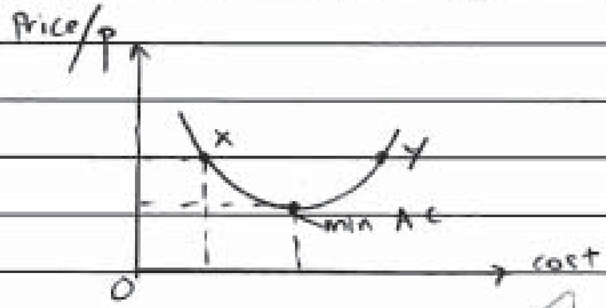
Efficient allocation of resources include allocative efficiency and productive efficiency. Allocative efficiency occurs when price equals marginal cost which means ~~pro~~ there is production of goods and services according to demand and supply of the economy. Productive efficiency occurs when price equals to minimum average cost where ~~pro~~ production takes place at its lowest cost. In other words, efficient allocation of resources refers to an economy producing at its production possibility ~~cure~~ curve (PPC) and the three economic problems of for whom to produce, how to produce and what to produce have been solve.

D2



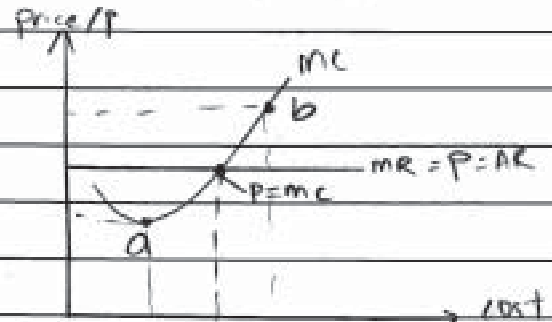
At ^point^ A, there is an under-utility of resources and production is inefficient. At point B, there is efficient allocation of resources and at point C, there is not enough resources to produce at that point. Production is unattainable.

~~Alloca~~ Productive efficiency is where P = minimum AC



If production is at x, then productive efficiency is not achieved and output has to be increased and price lowered so that cost ~~p~~ of production is at minimum AC. If it is at y, then price has to be lowered and output decreased

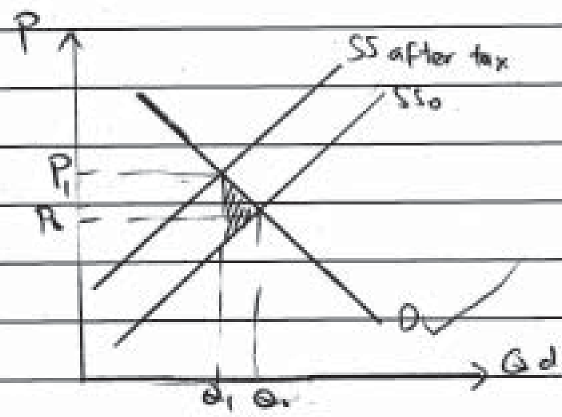
Allocative efficiency is where P = MC (marginal cost)



The point where P equals to mc is allocatively efficient and points a and b are not allocatively efficient. Price and output at b is too high ^whereas^ ~~and~~ price and output at a is too low.

However, according to principle of Pareto optimality, Pareto efficiency states that when someone is better off, another will be worse off. For example, when John is able to enjoy more goods, Ali will be worse off than before. Therefore, government intervention may be necessary to achieve efficient allocation of resources.

~~Ways of~~ government intervention in production and use of cars include regulation, taxes etc. The government intervenes so that pollution caused by usage of cars is reduced. Methods of intervention include imposing road tax. For example, Malaysian government ~~have~~ have increased the amount of road taxes and price of tolls ~~so the~~ to discourage frequent use of cars and encourage the use of trains and other public transports so that air and noise pollution can be reduced. Air pollution is a form of negative externality.



In the diagram above, when road taxes exist, the supply of car will decrease as cost of using cars have increased. Therefore, the quantity of cars on the road will decrease from Q_0 to Q_1 and cost of using cars increase from P_0 to P_1. ~~Hower~~ However, government intervention can cause dead weight loss as shown in the shaded region. Deadweight loss are loss in potential welfare of consumers

The government should also intervene so that there is no exploitation of natural resources in production of cars. This ~~means~~ that would ensure that the current and future generations are able to consume enough resources. The government ~~ne~~ sets regulations in production of cars such that only firms which obtain approval and licences from the government are able to produce cars. For example, the government of malaysia only issue licences to Perodua and Proton ~~to~~ for production of cars. However, this will cause imperfect market structure where only two large firms are involved in production of cars, i.e. ~~Oligopoly market will exist and~~ duopoly market will exist and consumer welfare may be compromised due to high prices and low output of a duopoly firm. The workings of the 'invisible hand' — price mechanism will also be affected.

Besides, the government intervenes so that quality of cars produced are high and consumers are not exploited. This is because consumers usually lack complete information when buying cars. So, the government monitors the production of cars by carrying spot checks in car factories. The government also made it compulsory for car manufacturers to do multiple test runs before launching the product so that money spent on buying cars are worth it. For example, ~~Toyota company~~ the Malaysian government sends officers to do spot checks ~~a~~ in car ~~manu~~ factories so that ~~there is not~~ production of cars are smooth and there are no faulty engines being used in production. However, ~~implementation of~~ there may be loopholes and transparency problem as some enforcement officers do not carry out the duty properly.

As a conclusion, government intervention is necessary to reduce market failure. However, ~~tear~~ it does not mean that there will be a perfect allocation of resources and

~~and~~ an economy free of market failure. The analysis above is at ceteris paribus and in reality, government intervention is a much more complex process.

L4 20

Examiner comment

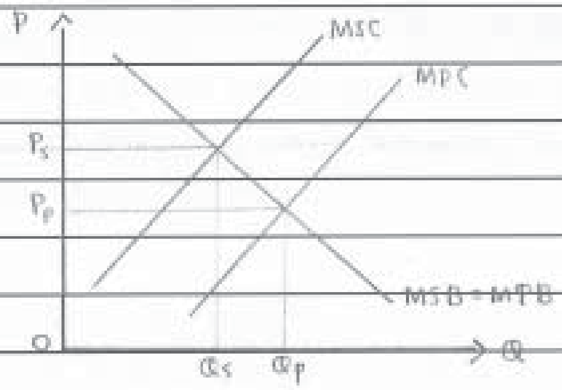
This candidate gave a good answer which referred to both the analytical theory of market failure and to the application required in the question relating to cars. A reasoned conclusion was presented. The answer fell within the band 18–20 in the general comments at the start of the mark scheme.

Mark awarded = 20 out of 25

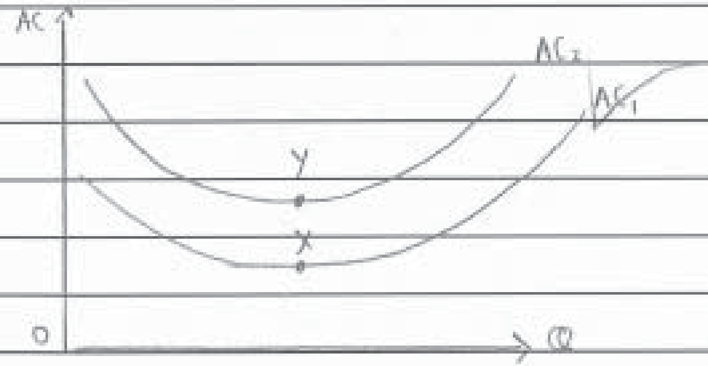
Example candidate response

2. Market is considered to be fail when there is non-provision of public goods, under-provision of merit goods and over-provision of demerit goods. Externalities are ~~cost~~ the cost ~~of~~ or benefit incurred by a third party of a production or consumption of a good or service. There are two types of externalities namely positive externalities and negative externalities.

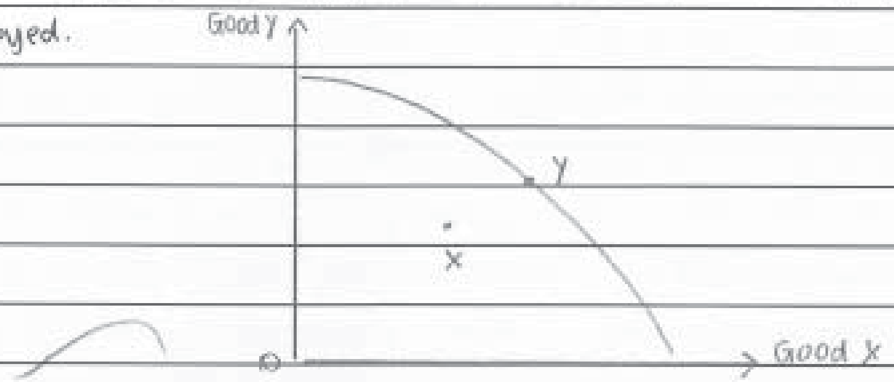
The use of cars are known as negative externalities. Negative externalities occur when marginal social costs (MSC) exceeds marginal private costs (MPC). As the good is produced more than the socially optimum level, it is said to be overproduced and this causes a low price the good. The use of cars are said to be negative externalities as ~~a~~ cars ~~an~~ emits carbon monoxide into the air, which causes air pollution. The third party will incur the external cost. ~~Marginal~~ Social costs can be found by adding ~~marginal~~ private cost with ~~the~~ external costs.



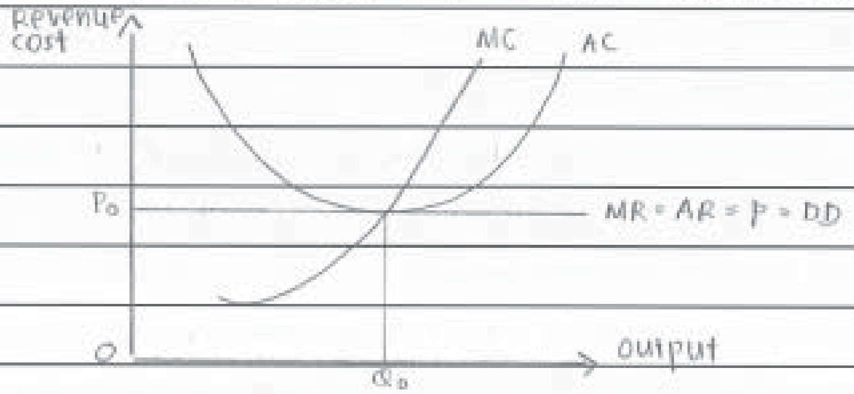
Economic efficiency can be achieved when there is productive efficiency and allocative ~~effect~~ efficiency. Productive efficiency occurs when goods and services are produced at the least possible cost.



Productive efficiency can be achieved by producing goods and services on the lowest possible cost which is AC_1. Secondly, it should produce on the lowest point of the lowest average cost curve. This is known as technical efficiency. Productive efficiency can also be achieved by producing goods and services right on the production possibility curve. The diagram below shows that point X is productive inefficient as the resources used can produce more goods. Point Y shows that it is productive efficient as resources are fully employed.

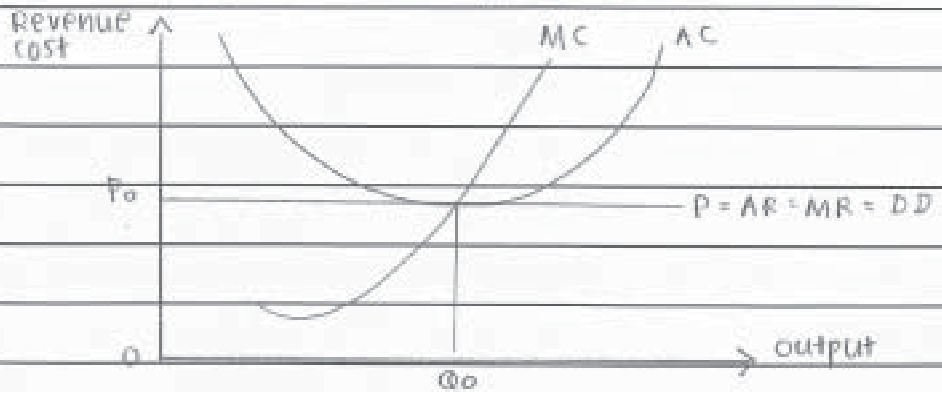


Competition allows productive efficiency to occur as firms will produce goods at the lowest possible cost. In perfect ~~compet~~ competition, productive efficiency is achieved.

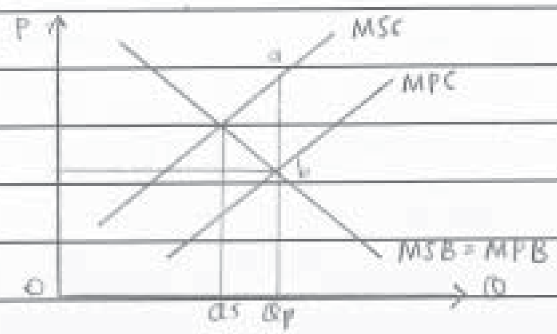


Allocative efficiency occurs when the right products are produced with the right amount of resources. Therefore allocative is achieved when price is equals to marginal cost (P = MC). When goods are produced at 2 units, it is allocative inefficient, as price exceeds marginal costs (P > MC). When goods are produced at 5 units, it is allocative inefficient as marginal costs exceed price (P < MC). It will be allocative efficient when goods are produced at 3 units as P = MC.

units	1	2	3	4	5	6
P	4	4	4	4	4	4
MC	2	3	4	5	6	7



To achieve economic efficiency and avoid market failure, government intervention is needed. Government should impose tax of ab as ~~to~~ shown in the diagram below to ~~a~~ correct market failure.



An imposition of tax will decrease the production of cars which would in turn decrease the amount of carbon monoxide emitted.

Government can enforce regulations such as peak hour charges. An amount of money to be paid for those who drive on the road during peak hours.

Government will also produce public goods and merit goods as public goods are not provided by the private sector and merit goods are few provided by the private sector.

An imposition of income tax ~~will~~ by the government will reduce disposable income of consumers. This will decrease the consumption of consumers. Government can also increase the interest rates of commercial banks. This will increase cost of borrowing which lead to ~~an~~ a reduction of consumers taking car loans. Imposing duty imports can also reduce consumption of cars. Car duties will increase prices of imported cars. This will lead to a fall in consumption of cars, which reduces pollution.

L3 15

Examiner comment

This candidate had a reasoned account of market failure in terms of public goods, merit goods and externalities. There was also an explanation of productive and allocative efficiency. The weakness of this answer was that there was little on the role of government intervention and even less on the application to cars. Both government intervention and an application to cars were required by the question.

Mark awarded = 15 out of 25

Question 3

(a) Discuss whether demand schedules and budget line diagrams are similar in the way they represent the effect of

(i) a rise in the price of a good

(ii) a rise in a consumer's income. [12]

(b) Analyse what is meant by the equi-marginal principle of consumer demand and whether it can be linked to the derivation of a market demand curve. [13]

Mark scheme

(a) A rise in the price of a good: a demand schedule has price and quantity of one good bought against price; budget line diagrams have quantities of two goods – price is not on the axis; one cannot tell how demand will change with budget line unless you also show preference lines.

A rise in a consumer's income: similarity, both move parallel out for a rise in income; but cannot tell what will be bought unless have supply line – with demand – or preference lines with budget line. [12]

L4 For a sound discussion indicating the similarities/differences [9–12]

L3 For an accurate explanation but with a less clear comparison [7–8]

L2 For a general undeveloped explanation with little comparison. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory [1–4]

(b) Analysis of equi-marginal principle which underlies an individual demand curve. The sum of individual demand curves form the market demand curve. Whether individual utilities can be added is debatable. [13]

L4 For a reasoned discussion linked to more than one good and clearly structured answer with a conclusion [9–13]
[Low L4 maximum if there is no mention of market demand]

L3 For a fair discussion but undeveloped answer but still with a conclusion [7–8]

L2 For a limited attempt which does not clearly determine the equilibrium position for more than one good and no conclusion. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. [1–4]

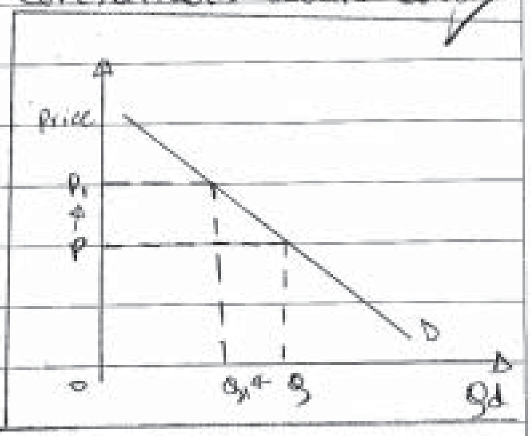
Example candidate response

3a

~~(ii)~~ Demand~~ed~~ schedule is the graphical representation of changes in quantities that consumers would demand or would want to purchase ~~and~~ at different prices at a certain period of time. It is ~~rated~~ used for ~~only~~ ~~only good~~ to represent the demand for only one good.

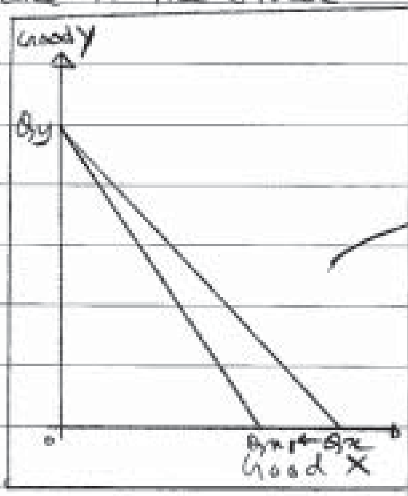
Budget line is the graphical representation of ~~with the~~ different possible combinations of ~~go~~ two goods that consumer ~~will~~ can purchase with their fixed income. ~~It~~ As consumer wants are restricted to be fullfilled by the income they earn and the price of product, it is important to produce a budget line as in to shows how two goods, ~~will be~~ in what combination, will be purchased.

(i) (i): A rise in price of product in case of demand schedule lead to ~~chan~~ a change in quantity along the curve. As the price rises consumers would demand the good less ~~as~~ than before.



As in figure on the right, shows the demand schedule ~~ffor~~ for a good, with quantity demanded in the x-axis and price in the y-axis. It is shown that a rise in price from P to P1 will lead to a fall Q to Q1. ✗

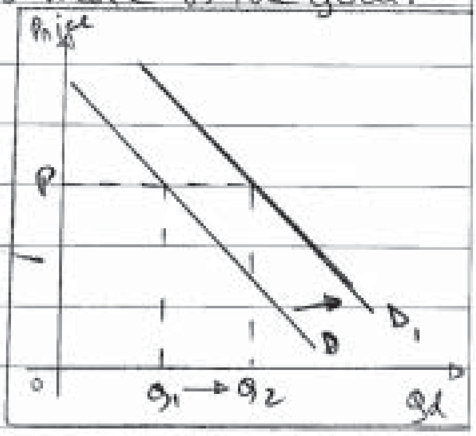
This will be also the same case for Budget line as the quantity demand for the ~~god~~ good will fall as the price rise. However since ~~it is the~~ Budget line shows the demand of one good in compare to the other it would be represente in the same way.



The figure shows, good X ~~x~~ is x-axis and ~~a~~ good Y ~~y~~ in the y-axis. Before the rise in prise for good x, the Quantity demand ~~wa~~ is Qx after the rise it pivoted at ~~Qy~~ Qy and fell to Qx_1. However ~~w~~ there could also be a rise in quantity demanded for good Y as a rise in good X would lead to consumer demanding less of good X and possibly substitute it with good Y.

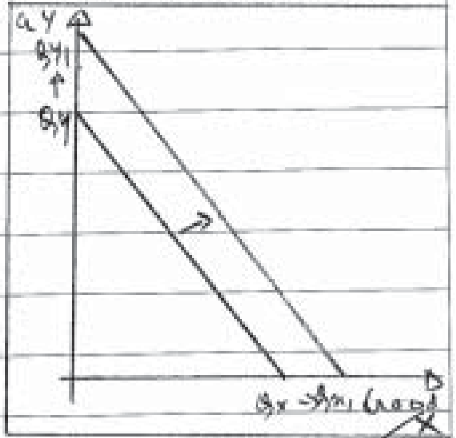
For both the demand schedule and Budget line the fall in quantity demand of the good that rise in price is because consumer would substitute the good which appear costly, to the good which appear cheap in compare this is referred to substitutiona effect.

(ii) A rise in eincome ~~for~~ would lead to a ~~change in~~ shift in ~~demand~~ curve to left in ~~for~~ both the ~~goods~~ diagram for demand schedule and budget line, ~~and~~ as an increase in income would allow consumer to spend more, so they would purchase ~~8~~ more of the good.



The figure shows a demand curve, with Qd in x-axis and Price in y-axis. ~~the~~ there, the rise in income shifted the curve to left. It means for the same Price, P, more Quantity is demanded, i.e Q_1 to Q_2.

Similarly in the case of Budget line the curve shifts to left meaning that ~~bot con~~ both the Good can be purchased more than before without sacrificing the other as there is an increase in Income. In the ~~dia~~ figure of budget line it is shown by an increase in Qd of the good, ie. Qy to Qy1 and Qx to Qx1 it rose.



This refers to the income effect for both the diagram, as an increase in income leads to increased disposable income for the consumers.

cf 12

3 b Consumers derives a happiness or satisfactory when they consume a ~~par god~~ good, it is referred to the utility of a ~~goo~~ consuming a good. Marginal Utility is the increase in satisfaction derived from the consumption of extra one unit of the good. However, this ~~Unit~~ Marginal Utility tends to fall as consumer consumption increases. This is known as diminishing marginal utility. As consumers ~~are~~ earn fixed income, they would want to utilise the income in a way that will maximise the utility derived from all the goods consumed with that ~~income~~ income. ~~They~~ It is the equi-marginal principle of consumer demand, ~~as they~~ and is represented as,

$$\frac{MU_A}{P_A} = \frac{MU_B}{P_B} = \frac{MU_C}{P_C} \; ------ = \frac{MU_N}{P_N}$$

MU is the Marginal Utility, P is the Price and A, B, C ---N ~~is~~ are the different goods purchased with the ~~fixed~~ income. ~~It~~ This shows that the ~~Ut~~ Utility derived from an extra Unit ~~of~~ good In compare to its price, is equal for ~~the~~ all the goods that the consumer purchases with its income.

This principle can be used to derive ~~the~~ demand curve of a good. As, if the price of a good A, let assume, rises then $\frac{MUA}{P_A}$ value will be less than the others. This would lead to less consumption of good A, so as to increase its MUA. This is all the case ~~for~~ seen in market demand curve, as a rise in price leads to a fall in quantity demanded. However, as consumer reduces the consumption of good A and ~~subs~~ instead increases the consumption of the other good, ~~ine~~ reducing their MU(Marginal ~~Uti~~ Utility), untill the equi-marginal principal is, of consumer demand is met. Thus the principal can be used to derive the ~~d~~ a
? market demand curve, by ~~analy~~ analysing the changes in Quantity demanded with changes in price.

until unclear C4 10 22

Examiner comment

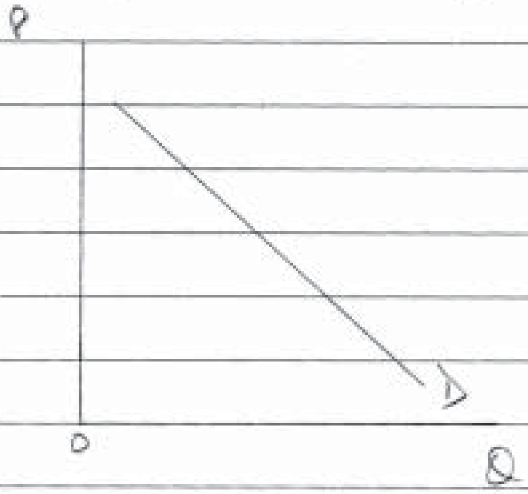
In section a) this candidate gave a clear explanation of both a demand line and a budget line. Changes in price were demonstrated correctly on both types of curve with a clear comparison. Income changes were correctly shown as indicating a similar movement on both types of curve. In section b) the candidate explained the meaning of the equi-marginal principle and discussed its link to a consumer's demand. The answer could have been improved if the last part of the question which asked about a market demand curve had been more clearly discussed. Mention was made of a market demand curve but the explanation surrounding this was really related to an individual consumer's demand curve.

Mark awarded = 22 out of 25

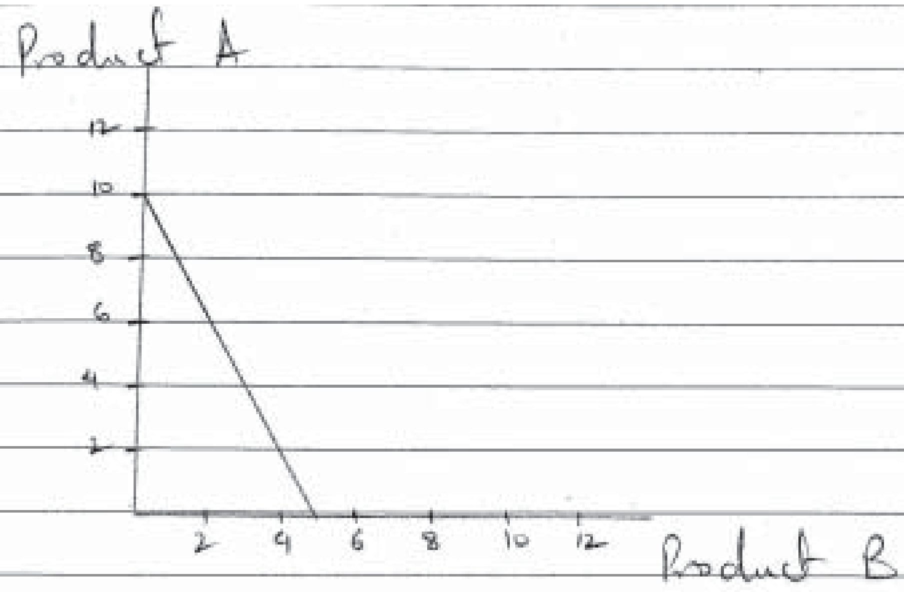
Example candidate response

Q3,

a)i, The demand curve shows the relationship between price and quantity demanded of a product. It is downward sloping as price and demand have an inverse relationship i.e if price increases demand decreases and vice versa.



The budget line illustrates the quantity of two goods that a consumer could by with the amount of given income/resources. For example income is $ 1000 and the are two goods, A and B which cost $100 and $ 200 the budget line would be as follows

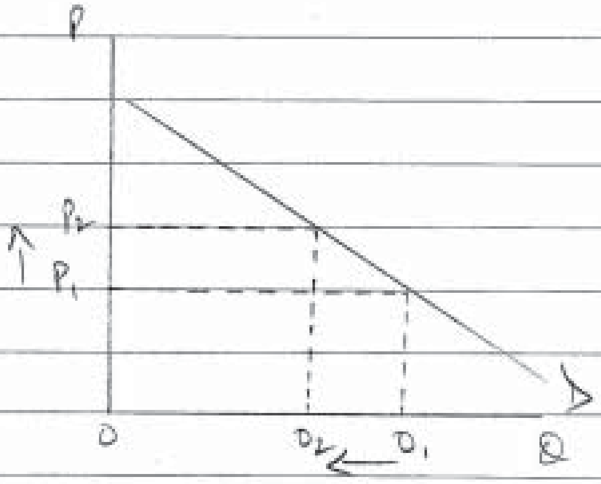


R.W

$\frac{1000}{100} = 10$

$\frac{1000}{200} = 5$

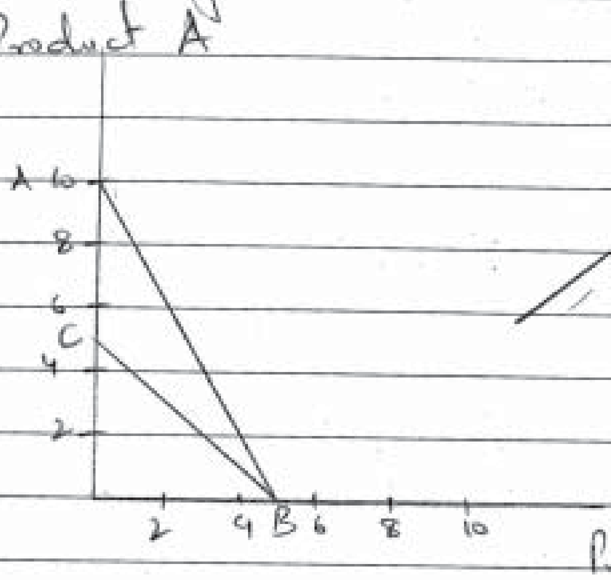
The When there is increase in the price of a good, the will be movement along the demand curve i.e



As the price increased from P_1 to P_2, the quantity demanded decreased from Q_1 to Q_2. However the degree of change would depend upon the elasticity of demand.

Whereas when price of one good

increases, there will be a partial shift in the budget line e.g. Price of good A also becomes $200



$\frac{1000}{200} = 5$

$\frac{1000}{200} = 5$

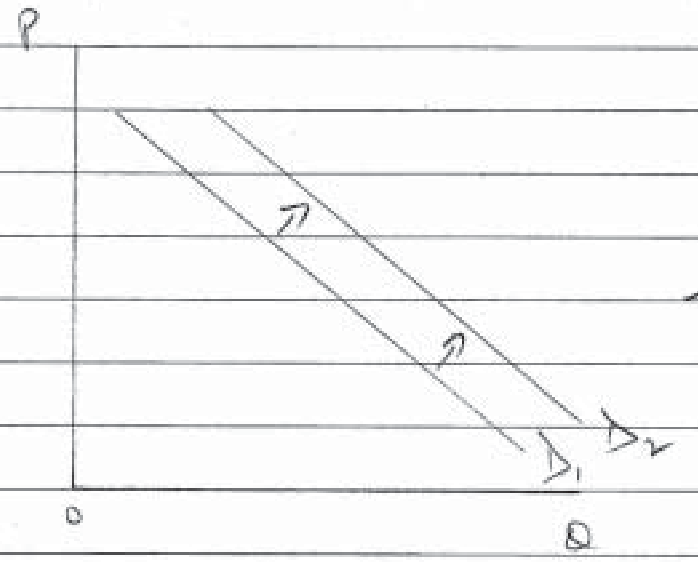
Previous budget line was AB while new budget line is CB.

Hence the effect of a rise in price is not same for budget line and demand curve as budget line shifts (partially for one and completely for both) to show an increase in price whereas there is only movement along demand curve.

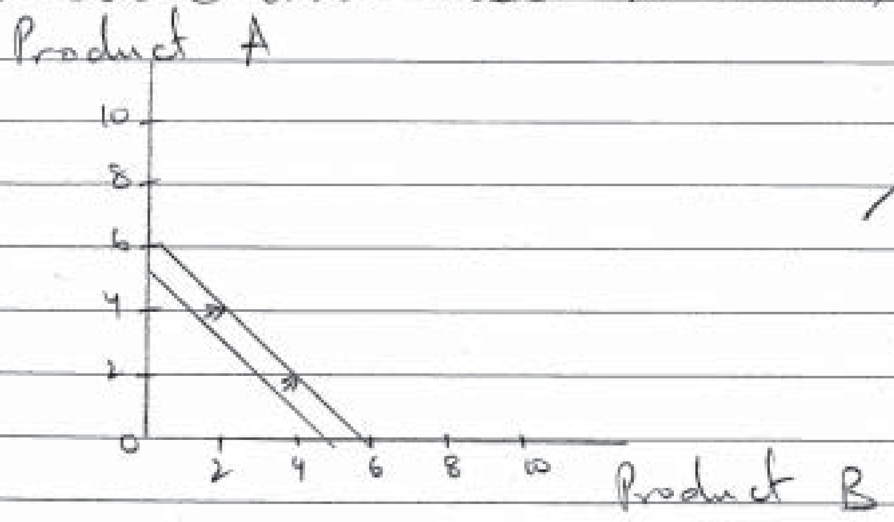
ii, As the consumer income increases the demand also increases (curve shifts rightwards). Same is the case for budget line, as the

~~income~~ increases, the budget line would shift rightward.

Effect on demand curve:



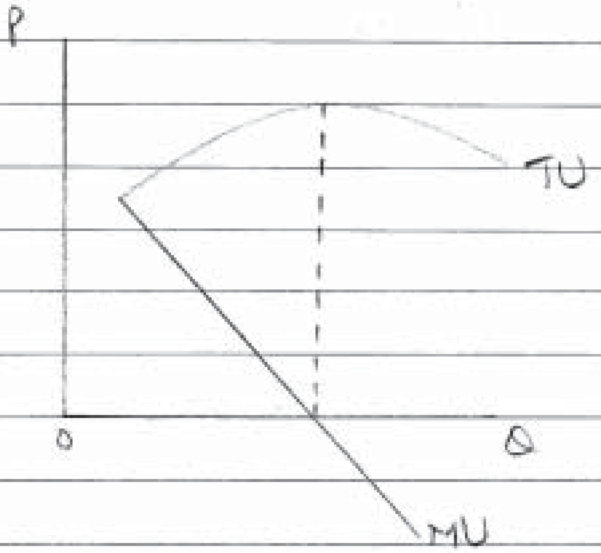
Effect on budget line: (Taking the example from part (i) let the prices be $200 for both goods and income increases to $1200)



However if other factors also increase simultaneously, the relative effect would have to be considered. c4 ? 9

explicit comparisons.

b) It is suggested by some economists that the 'demand' curve actually reflects the marginal utility of a product rather than total utility. This is why it is downward sloping (marginal utility decreases as quantity purchased is increased). This is the diminishing marginal utility theory. It guides the consumer how utility from a single good can be maximised. It is the point where marginal utility (MR) is 0. i.e



This theory only guides the consumer regarding the maximisation of utility from a single product and does

total with the
not explain how the utility from help of
all the goods can be maximised/ given
resources
For this another theory exists known
as the law of equi-marginal
utility. It states that when marginal
utility of different goods is equal,
total utility is maximum.

Consumer equilibrium = $MU_A + MU_B$ — —

It can be said that the law
of diminishing marginal utility
can be linked to the derivation of
demand curve however it is not
sure whether same is the case
for law of equi marginal utility
as there is no solid evidence.

L3 7 16

Examiner comment

This candidate gave a clear explanation of the meaning of a demand curve and a budget line in section a). For a price change the shift along a demand line and a pivot about a point on one axis for the budget line were indicated. Income changes were shown as a parallel shift in both the demand and budget lines. This section of the answer could have been improved if there had been more of an explicit comparison between the demand curve changes and the budget line changes. The reader was left to conclude which were similar and which were different. Section b) was a weaker section and although marginal utility was discussed the answer did not really explain the principle of equi-marginal utility and its link to a demand curve.

Mark awarded = 16 out of 25

Example candidate response

(a). A rise ~~of~~ in the price of a good do effects the demand schedules and ~~bridgen~~ budget line diagrams. ~~a~~ From ~~a~~ the demand curve in the demand graft, it is clear that the demand curve is move downward, which axis-y is price of a good and axis-x it the ~~qua~~ quantity of demand. When the price of a good is increasing the demand ~~witll~~ will drop. Because ~~pea~~ consumers will to buy another similar good ~~to~~ which is lower price to replace ~~the the the~~ the ~~o~~ ~~high~~ one with ~~higher~~ higher price. For example when ice-cream's price increased, ~~th~~ consumers willing to eat yogurt ~~rathan~~ rather than ice-cream, which caused ice-cream surplus.

However, a rise in a consumer's income may effect the demand schedules and budget line diagrams ~~and~~, in aggregate demand it calls income distributions ~~effect~~. effect. It is because the income of cunsumer increase, it gives ~~co~~ consumers the abilities to demand their needs ~~for~~ especially in the labor force.

Diag.

L1

(b) The demand curve and aggregate demand curve are totally different, which demand curve is based on individual demand ~~ba~~ but aggregate demand curve is aggregation. Demand in the market means ~~a~~ the abilities of consumers to buy goods but aggregate demand means the total of output in demand.

The equi-marginal principle of consumer demand means the equilibrium of the profit of consumer demand, which can be linked to the derivation of a market demand curve. ~~The~~ The market demand curve in another words is aggregate demand curve. ~~It~~, and the aggregate demand curve is ~~move~~ moving downward. There are ~~4 eff~~ four ~~to~~ effect causing the aggregate demand curve move downward equally.

First, ~~a~~ the income distribution is one of the effect. ~~of aggregate demand~~ Consumers usually ~~p~~ demand according to their income abilities compare with the price level. ~~So~~ Secondly, is the real balance effect. Third is foreign trading effect, and lastly investment effect.

7

3

~~4~~

7

C1

Examiner comment

This candidate gave a descriptive answer which did not contain any diagrams. In section a) the description of the change in the demand line with respect to a price change was reasonable but there was no real explanation of the change in a budget line due to a price change of a good. The changes caused by an increase in income were not explained. In section b) although there was a reference to the fact that the market demand was an aggregate, there was no explanation of the equi-marginal utility principle of consumer demand.

Mark awarded = 7 out of 25

Question 4

(a) Discuss whether it is always advantageous for a firm to grow in size. [12]

(b) Explain the economic theory of profit maximisation for a firm and consider whether firms are likely to follow this theory in fixing their price and output. [13]

Mark scheme

(a) Discussion of possible reasons for growth including large market demand, economies of scale, possible future profits, with a contrasting comment on reasons why it might not be advantageous to grow in size; diseconomies of scale, small market demand, specialised products/services. Allow a wider interpretation which discusses effects on consumers and in the economy. [12]

L4 For a sound discussion with contrasting explanations. *[9–12]*

L3 For an accurate explanation but with an emphasis on one side – possibly of economies of scale only. *[7–8]*

L2) For a general undeveloped explanation. *[5–6]*

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory *[1–4]*

(b) Explanation of the theory of profit maximisation. Candidates should then consider not only whether it is possible to calculate marginal revenue and marginal cost to achieve profit maximisation but also whether the firm might have alternative aims. Sales maximisation, behavioural, managerial, satisficing, market share aims might be mentioned. [13]

L4 For a reasoned discussion and clearly structured answer with a conclusion *[9–13]*

L3 For a fair discussion but undeveloped answer mentioning either only one part of the question or both parts but only limited mention of alternative aims, but still with a conclusion *[7–8]*

L2 For a limited but acceptable attempt to consider the question with very limited development of either part and no conclusion. *[5–6]*

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. *[1–4]*

Example candidate response

a) Large-scale production is often said to be advantageous for a firm due to the benefits that come with expanding productive capacity. This is not, however, always the case as sometimes growth of a firm may bring about negative effects.

One of the most commonly cited reasons to support growth of a firm is the benefit of gaining economies of scale. This refers to a situation in production where the average cost of production decreases while the output level increases. In figure 1, this is shown from output level Q to Q_1. As output rises, the long-run average cost decreases.

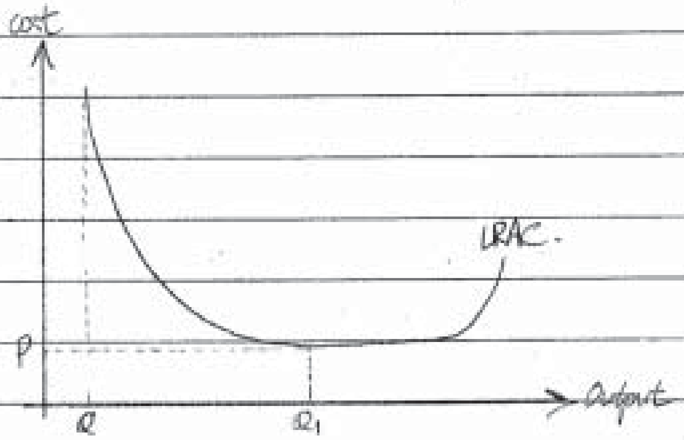


Fig. 1

This can be due to technical economies of scale, where capital and labour are used to achieve their maximum productivity levels, managerial economies of scale, which encourages specialization in job roles and functions and so on. Firms functioning with large-scale production can be said to enjoy lower average costs, which is an advantage for firms to engage in price competition as prices can be lowered without losing the profit margins. This is a benefit for consumers, as lower prices would increase spending power. Also, if prices do not fall, then firms with the benefit of economies of scale would be able to gain more profits and would be more likely to gain abnormal profits. This is also a benefit as it enables firms to invest in research and product innovation, providing an advantage in terms of non-price competition that also benefits consumers with better quality.

Economies of scale can generally be seen as an improvement in ~~terms~~ of efficiency as firms' costs are minimized and the use of resources is maximized. In these ways, large-scale production may be advantageous and firms' growth would be positive for the market.

However, this is not always the case as output levels above Q, in figure 1 show diseconomies of scale as firms find it increasingly difficult to manage production beyond a certain level. This decreases efficiency and results in wastage of resources.

Also, firms may become monopolies if growth is allowed to continue without sufficient competition. Monopoly situations can result in consumer exploitation as the lack of substitutes can cause firms to have total market control and raise prices excessively. Monopolies are also likely to be inefficient as the lack of competition reduces the incentive to minimize costs in order to maximize profits. Monopoly situations can result in a lack of choices for consumers and this would be seen as undesirable, especially if consumers lose sovereignty altogether in the market.

Exceptions may occur in the case of natural monopolies, where high sunk costs and costly technology or infrastructure may encourage a firm's growth to cater for ~~the~~ more of the market. This is because it may be better for the allocation of scarce resources if infrastructure and capital are not duplicated by having many small firms supply the same product. ~~If a firm is~~

In conclusion, there are advantages to a firm's expansion of productive capacity, but there may also be disadvantages. It is necessary to examine the market conditions in each situation and the ~~relevant~~ possible effects should be evaluated before determining how advantageous it would be for a firm to grow in size.

L4 9

b) Profit maximisation refers to a firm's objective to maximise profits in the production of a good or service, obtaining the highest possible profit margin. This is often illustrated as being the most common goal for many private firms. The maximum profits for a firm are obtained at the point where MC = MR, or where firms' marginal cost is equal to the marginal revenue generated by the extra unit produced. At this point, firms are on the verge of making a loss with the next unit of production.

Firms are said to aim for profit maximisation in order to gain more returns for the entrepreneur or shareholders. Also, in some firms it would be ideal to gain more profits in the hopes of earning abnormal profits that can then be reinvested or used for research and development or innovation purposes. This would then increase a firm's ability to compete in a non-price manner and improve the quality of output or improve the productivity of capital and labour through technological advances and training.

However, not all firms may engage in profit maximisation all of the time, depending on the circumstances of the firm and its position in the market and industry. Particularly for firms that have just entered a market, they may choose to maximise sales instead in order to more firmly establish their position and control of market share. This results in firms settling for a profit margin below the maximum attainable profit level in favour of increasing their clientele or consumer base, possibly through setting lower prices. It is worth noting that firms will rarely go to the point of being unable to sustain variable costs in the short run, indicating that in the long-run, profit maximisation may after all be the most commonly phrased objective for a firm. In the case of a new entrant in a market or industry, the firm is less likely to concern itself with profit maximisation if it is a firm that is able to diversify and cross-subsidise its goods. This refers to a firm's ability to sustain losses for the production of a good or service due to its preestablished position and higher profit margins for another good or service, again indicating that to some extent, profit maximisation is likely to play a

4b) part in firms' decisions regarding the level of output and price setting.

Profit satisficing may also play a role, albeit less frequently. This refers to decisions made most often by staff at the managerial level, where there is no incentive to increase revenue or profits beyond a predetermined level (usually the minimum returns to the shareholders) as it does not affect the wage rate of the workers involved. In these cases output and price are likely to be moderately deviating from the profit-maximising point of MC = MR.

In figure 2, MC = MR is shown as the profit-maximising level of output at quantity Q and price level P. The sales-maximising level of output is likely to be closer to MC = AR while the profit-satisficing level is likely to be lower or less than P and Q.

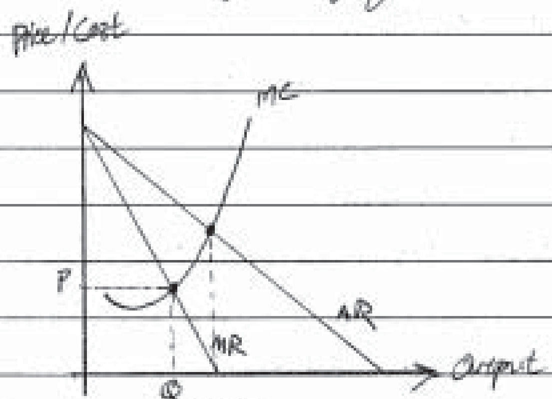


Fig. 2

The objectives of a firm differ between firms and markets, depending on such factors as competition, shareholders' roles, market conditions and the position of the firm, but it can be said that a large fraction of firms will emphasize profit maximization at some point if not most often during its operations.

cf 10 19

Examiner comment

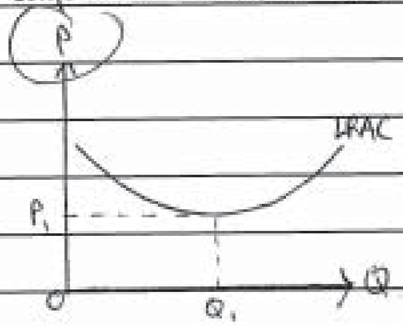
This candidate gave a good response to section a) which contained an explanation of the advantages of growth through economies of scale, the disadvantages caused by diseconomies and the undesirability of some monopolies. Profit maximisation was discussed in section b) but there was also a discussion of alternative aims of a firm including non-price competition, maximisation of sales, increasing market share, cross-subsidisation, satisficing, all of which might need to be balanced against the desire to gain maximum returns for shareholders.

Mark awarded = 19 out of 25

Example candidate response

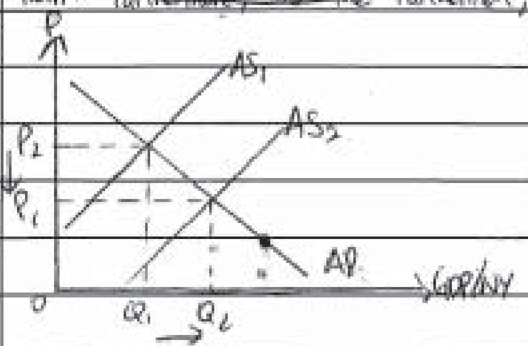
4) a) Firms in an economy can expand through external integration and internal integration. By internal integration, firms can expand ~~into~~ by increasing the ~~n~~ number of branches in an economy while external integration can be divided into forward integration or backward integration. Forward integration ~~is~~ occurs when a firms expand into a different sectors of industry which ~~has~~ takes place after its existing sector while backward integration occurs when a firm expand into a sector ~~which~~ before its initial sector in the industry. For example, ~~Volkswa~~ Volkswagen and BMW merged into a single company recently.

By expanding ~~a firm~~ a firm will be able to derive advantages as well as disadvantages. ~~They~~ One of the most significant advantages of large company is economies of scale. Economies of scale occurs in the long run where firms will be able to produce outputs at minimum cost. In other words, firms will be productive efficient.



Based on the diagram, as a firm expands in size, the firm will be able to produce Q_1 quantities at P_1 which is the lowest point of the long run average curve graph. When a firm experience economies of scale, various sectors such as financial will ~~be easier~~ have lower cost to the company. For example, large firms such as Tesco Supermarket will be able to obtain loans or financial aid easier as investors ~~or~~ will have high confidence towards the company as the risk bearing of the investors ~~to~~ will be lower. Compared to investing in small retail ~~sh~~ shop supermarkets. ~~Advertising~~ Specialisation can also take place when firms experience economies of scale, hence decreases costs such as time and thus, increase productivity of the firms.

Besides that, ~~as firms able is producing at~~ as a firm ~~expan~~ produces output at its minimum cost, the profit margin of the firm will increase. ~~as its revenues will be higher~~. The increase in profits earned by the firm can be used for research and developments as well as investments to further increase the ~~output~~ productivity as well as the quality of the goods and services produced. By doing so, consumers will also be able to have a wider range of goods and ~~services~~ services to choose firm. ~~Furthermore, as the~~ ~~Furthermore, the employment~~



~~Furthermore, as the output or productivity~~

Furthermore, the employment level ~~will~~ might also increase due to the increase in profit earned by the firm. Hence, the national income as well as the gross domestic product of an economy will increase from Q_1 to Q_2 as the supply increases from AS_1 to AS_2.

As firms expands in size, customer loyalty can also be gained. In other words, ~~the low price of goods and services of the firm~~ the firms can also gain market share in an economy. With the lower price charged on goods and services produced in an economy, consumers will be able to enjoy goods and services at lower prices, hence improving the standard of living of the ~~count~~ country. As ~~the~~ a firm obtain market share in the industry, less advertising will be needed as consumers loyalty are already obtained. For instance, ~~Tesco Supermarket~~ BMW will not need to advertise much as ~~consumers~~ it has already gained trust and market share due to its quality and the cars performance.

However, as firms expand, more space capacity will be needed, ~~for~~ hence increasing its ~~manufacturing as~~ buildings or premises. ~~By doing so, the lar~~ Large compounds will be needed and as the ~~increase~~ output increases, more resources will be used, ~~causing~~ increasing the possibility of exploitation of resources. The non-renewable resources such as petroleum ~~into~~ cannot be renewable, hence might decrease the availability of these resources for future generations. In other words, sustainable growth cannot be achieved.

Moreover, as a firm grows in size, there can be diseconomies of scale such as problems of coordination or communication. This causes time lag, ~~causing~~ affecting the ~~use~~ efficiency of the firm. There might also be alienation of staffs as a firm grows, causing demotivation of workers, causing a decrease in productivity.

As firms expand in size, ~~there~~ the firm might act as a monopoly market, where quantity of goods produced are reduced and the price charged on goods and services increases. This is because due to investment in research and development, the quality of goods produced by the large firms might be of better quality compared to the small retail shops, causing an inelastic demand of goods. With this, the price ~~of~~ can be charged higher to obtain higher revenue and profits. Along with this, the small companies which do not enjoy economies of scale might shut down due to ~~pr~~ extreme price cuts to compete with the large firms.

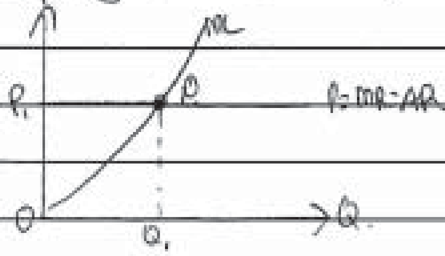
In conclusion, ~~as a firm~~ there are disadvantages and advantages that can occur as a firm expands. However, ~~it~~ it is able to control the ~~damages of di~~ damage of disadvantages by government intervention such as maximum ~~pr~~ and minimum prices as well as subsidies to infant ~~ins~~ industries. Quotas on ~~access~~ to resources can also be imposed to maintain sustainable growth in the ~~econ~~ economy.

L3

8

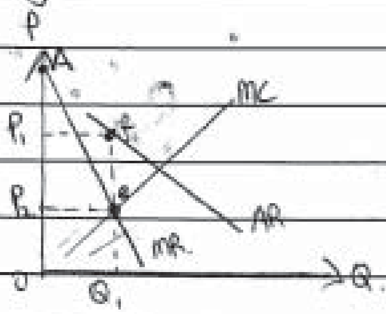
4)b) Profit maximisation for a firm can be achieved when the marginal cost curve equals to the marginal revenue curve. This is because since marginal cost is the ~~difference in~~ additional cost of producing an additional unit $\left(\frac{\Delta \text{ Total cost}}{\Delta \text{ Quantity}}\right)$, it can be said that it is the supply curve of a firm. Marginal ~~revenue curve is upw~~ revenue curve is said to be the additional revenue generated by an increase of a unit of sales of the firm $\left(\frac{\Delta \text{ Total profit}}{\Delta \text{ Quantity}}\right)$. Hence, it ~~can~~ be taken to be the demand curve of the firm. ~~Marginal revenue curve is downwards sloping as the increase in price will generate lower demand by causing due to substitution effect where consumers will switch to relatively cheaper substitutes~~

Hence, firms will produce according to profit maximisation to obtain ~~its~~ their maximum possible revenue. However, it differs for the type of market structure in an economy. In perfect competition market, the firms are price takers, hence the marginal revenue will be perfectly elastic as the price are equal at various outputs. Therefore, the average revenue, marginal revenue curves are the same as price.



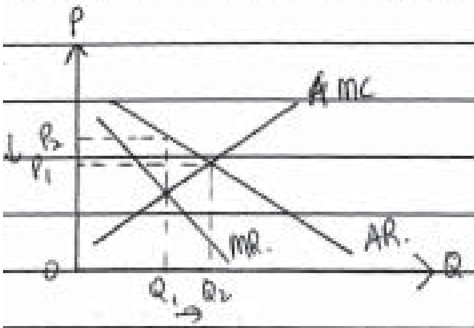
Based on the graph, MC cuts MR at point e where firms produce at Q_1 ~~at~~ e and set a price at P_1.

In monopoly and monopolistic markets, firms will ~~ca~~ charge higher price at lower quantity because of the inelastic demand of consumers. Due to product differentiation in monopolistic markets, the marginal revenue and average revenue graph is downwards sloping while in monopoly, the inelastic demand due to monopolisation causes the marginal revenue and average revenue graph to be downwards sloping. In this case, monopolistic firms and monopoly firm ~~will~~ are ~~the~~ price setter.



Based on the graph, the MC curve cuts the MR curve at point e where the quantity produced is Q_1 ~~at~~ and price charged at P_2. However, due to inelastic demand and being price setters, the firms charge a higher price at P_1 instead of P_2 to obtain higher revenue, converting consumer surplus of area AP_2e into revenue.

It is different in ~~contestable~~ contestable markets as they have free entry and exit into an industry. Since the cost of entry and exits are minimal or zero, contestable firms are able to charge lower prices and producing more goods.



In a non-contestable market, the profit-maximising output is at ~~P_2~~ Q_1 where price charged on goods at P_2. However, in ~~a~~ contestable market, a firm is able to increase outputs at ~~lower price~~ Q_2 and charge price of goods at P_1. Based on the graph, contestable markets ~~increase~~ produces more ~~its~~ output and charge lower prices compared to ~~a~~ non-contestable firms. This is known to be marginal cost pricing.

Besides that, some firms might also charge low prices on goods and services to force other companies out of the industry. This is known as predatory pricing. Only firms ~~without~~ with ~~the~~ consumer loyalty will be able to resist price cuts. As a firm decreases the price, it will attract consumers from other ~~con~~ firms due to substitution effect. However, this will only happen if the demand for the good is elastic. ~~Entry prevention~~ After ~~the~~ price wars, the firm will be able to monopolise the industry.

In conclusion, firms might not follow profit maximisation as it depends on the ~~[illegible]~~ ~~the~~ situation and intention of the firms.

L3 7

15

Examiner comment

This candidate gave a reasonable answer which could have been improved in section a) if there had been further development of economies of scale and/or of the reasons why it might be advantageous for small firms to exist in their own right, rather than concentrating on the lack of managerial control as a firm seeks to grown. An improvement could have been achieved in section b) if there had been further discussion on the alternative policies that a firm might use. Mention was made of contestable markets and predatory pricing but the answer could have been developed with a mention of sales maximisation, behavioural aims or satisficing.

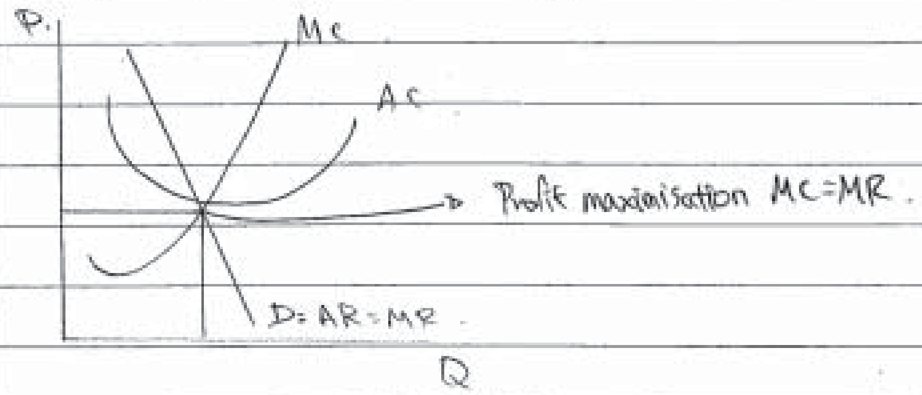
Mark awarded = 15 out of 25

Example candidate response

a). ~~It may be advantegeous, if a firm is competing in ~~ ~~perfectly competitive market where firm achieve abnormal profit, as a result of profit maximisation~~

It may be advantegeous, if a firm is competing in perfectly competitive market where profit maximisation, MC=MR occurs.

Since in perfectly competitive market, P=MC, therefore MC=MR, so P=MR. price is equal to marginal revenue, means firms achieve short run abnormal profits. This abnormal profits can be direct to R & D, which may innovate the production process resulting the firm to experience economies of scale, ~~where~~ which is reducing average cost as size of firm grows.

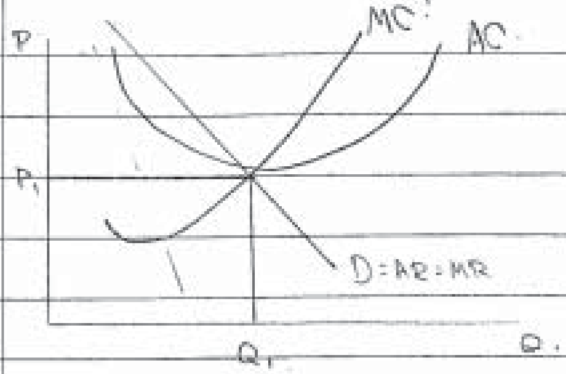


It may be disadvantegeous, as firm achieve abnormal profits, competitors may enter the market, resulting the price to be fall, therefore firm cannot achieve abnormal profit in the long run, but normal profit. Then they may not be able to invest sufficient amount of fund to R&D, and may not experience economies of scale, but ~~possibley~~ possibly diseconomies of scale, as firm grows in size, but they may not find innovative method to reduce average cost. 4

4

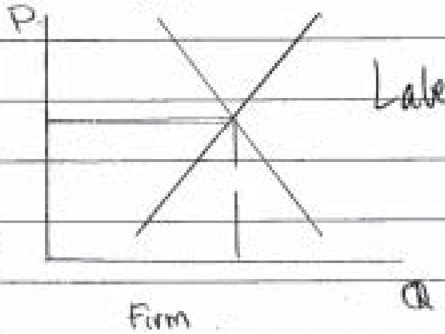
Leave blank

b) Profit maximisation is a point where MC = MR, as shown in the diagram



~~In the short run, they achieve abnormal profits, which attract firms to enter the market, this shifts industry~~

In the short run, they achieve abnormal profits, which attract firms to enter the ~~market~~, this shifts industry ~~ex~~ supply curve outwards resulting in price to fall, ~~...~~ this continues until firms earning normal profits in the long run. If only normal profits are earned, then firms exit the market, so industry supply curve shifts ~~...~~ inward, again in the long run, firms achieving normal profits only. Therefore as a result, firms maximising profit earns normal profits in the long run.



Label!

∴ Industry curve shown above.

~~They~~ Firms in oligopoly may collude to generate greater profits, fixing price at which abnormal profits are generated and give quotas to each firm. But this may be break up easily, if one firm cheat to generate even greater profits by exceeding ~~...~~ production quotas and charging higher prices.

L1

4

8

Examiner comment

This candidate began the answer to part a) by explaining profit maximising in perfect competition and only briefly mentioned diseconomies of scale. Some of this information was repeated for section b). The diagram in section b) lacked the correct labels and although there was a brief mention of oligopoly there was no real explanation of the theory of profit maximisation and no discussion of alternative aims which a firm might follow.

Mark awarded = 8 out of 25

Question 5

In imperfect competition, labour markets can lead to worker exploitation in terms of the wage rates they receive compared with wage rates in perfect competition. Discuss this opinion. [25]

Mark scheme

Candidates should explain the economic theory of wage determination (marginal revenue product) and compare the situation in perfect and imperfect competition. The theory indicates that wages are lower in an imperfect labour market especially if there is monopsony. The extent of the reduction varies depending on whether the labour market is considered with a perfect or imperfect product market. However, the comparative reduction in wage rates may be corrected, at least in part, by the strength of unions or by government legislation. [25]

L4 For a thorough explanation of the analysis of wage determination with a clear comparison of the two markets and a comment on trade unions and/or government policy. [18–25]
(14–17 for demand and supply only with institutional factors and/or government policy)

L3 For a competent explanation of the two markets but with a limited discussion and application.
(10–13 for demand and supply) [14–17]

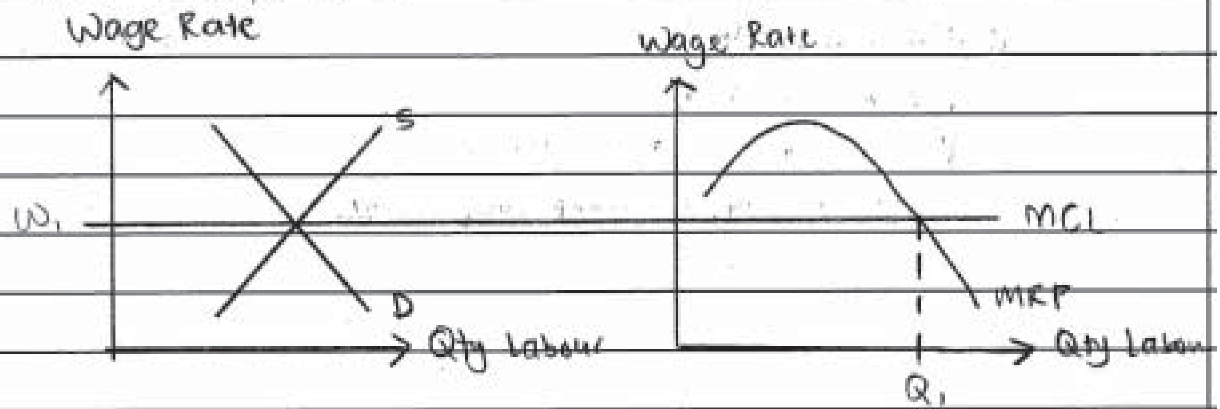
L2 For a correct but undeveloped explanation with only brief application [10–13]
(6–9 for demand and supply)

L1 For an answer which contains inaccuracies and only a few correct points [1–9]
(1–5 for demand and supply only)

Example candidate response

Whether labour markets under imperfect competition lead to worker exploitation in terms of wage rates they receive compared to wages in perfect competition is highly subjective and dependant on an analysis of the presence of a monopsonist, trade unions and government intervention in an imperfect market.

Firstly, under perfect competition, the MRP theory best explains how wages are determined in the market. Here, the wages of workers are dependant on their Marginal Revenue Product (MRP). MRP, in essense, is the amount of additional revenue a firm would earn by employing an additional unit of worker. Since firms under perfect competition are profit maximisers, firms will higher workers up to the point where MRP is equivalent to the marginal cost of ~~labour~~ (MCL) as illustrated in the graph below. [Graph 2]

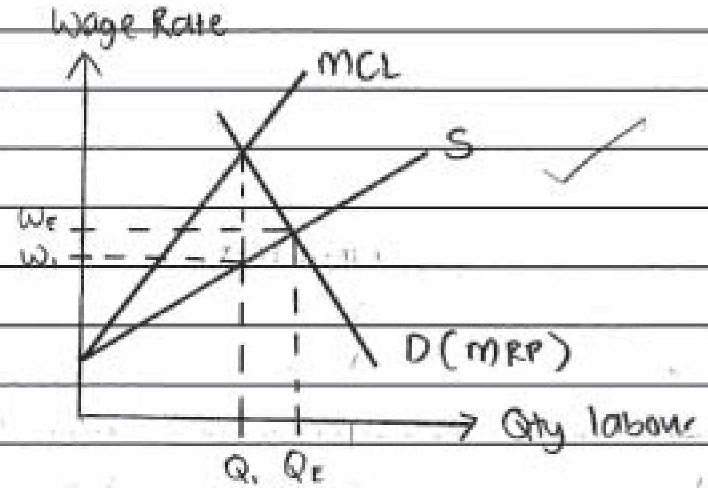


Graph 1 : market Graph 2 : Firms

Since under perfect competition buyers (firms) and sellers (workers) are price takers, the wage rate is set by the interaction of demand and supply in the market. The reason that the graph for the individual firm is represented is to distinguish between perfect and imperfect competition. It is assumed that under perfect competition, all workers are homogenous. Hence, the cost of hiring an additional unit of worker to the firm is constant. There is no exploitation of workers in terms of wage rate under perfect competition as a firm who offers a ~~~~ wage rate lower than the market rate would have no worker wanting to work for them given the unlimited buyers (other firms) who offer the market wage.

There are several reasons as to why there could be exploitation in terms of wage rate under imperfect competition. In the presence of a monopsonist, wages are often much lower than what they would have been under perfect competition. ~~A monops~~ This is because a monopsonist has an upward sloping supply curve and even steeper marginal cost of labour curve. The reason for this is that a monopsonist would have to increase the current wage rate in order to attract more labour into the market.

To add a definition, a monopsony exists when there is only a single buyer in the market. This is illustrated by the diagram below:



Graph 3

Being a profit maximiser, a monopsony would hire workers up to the point where MCL = MRP. As observed from the diagram above, workers are paid a much lower wage rate ~~than~~ (W_1) than the market equilibrium (W_E). Hence, one might conclude that under a monopsony, workers are indeed exploited and paid lower wages. The reason a monopsony is able to do so is because that since it is the sole buyer of labour in the market, workers have no choice but to accept the lower wage rate.

Conditions however, are not too dire when a trade union enters the picture. Trade unions (another key characteristic of imperfect labour markets) serve the purpose of collectively representing workers in negotiating wage rates with employers. This is because collective bargaining power exerts a significantly large amount of influence than the individual bargaining with an employer can. The entrance of a trade union in a situation of monopsony is as illustrated below.

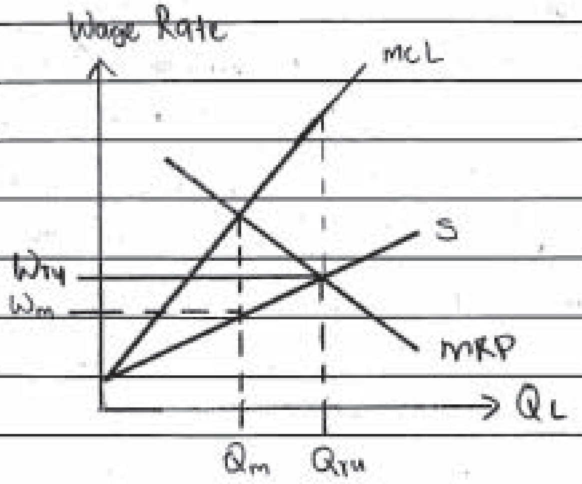
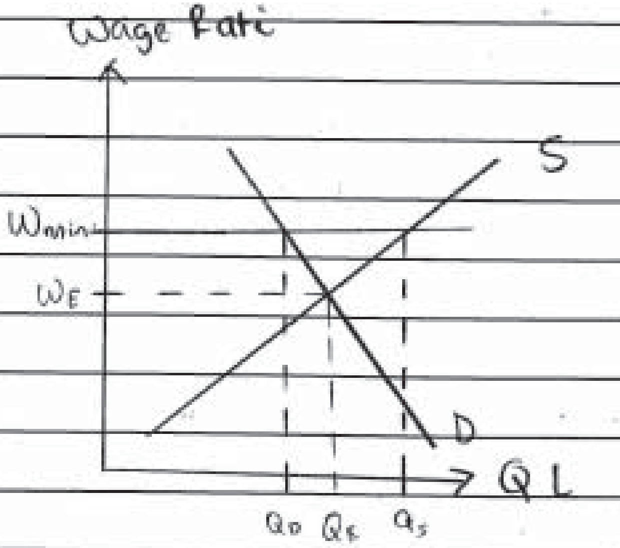


Diagram 4

Here, the trade union has successfully negotiated a higher wage rate for workers than the monopsonist had initially offered ~~Hence,~~ ~~one mig~~ The wage rate the monopsonist offered (W_m) ~~which~~ has now increased to W_{TU}. In this instance, the trade union had negotiated ~~the~~ a wage rat equivalent to the market equilibrium. However, a trade union with higher bargaining power would be able to demand an even higher wage rate. This would depend ~~on~~ factors like the union density and substitutability of labour. In essence though we might derive from here that it is possible for wage rates to be higher than the market equilibrium (and hence perfect competition) under circumstances of imperfect competition.

Intermediately, we can conclude that a monopsony drives wages lower than what they would be under perfect competition. However, with the presence of a trade union, wages could potentially be much higher.

Besides this, there is no government intervention under perfect competition. Imperfect competition, on the ~~and~~ other hand may evoke government legislature such as minimum wage requirements that could drive up wages. This is ~~illustrated~~ illustrated in the graph that follows



Graph 5

The government could set the minimum wage above what the market would have. Hence, this would drive the wage higher than what it would have been under perfect competition ($W_{min} > W_E$).

~~There are numerous~~

While intuitive wisdom suggest that exploitation may occur under imperfect competition, the introduction of a minimum wage or trade union may set the ~~pace~~ wage rate higher than what it would have been under perfect competition. These efforts, however, are highly controversial as in some instances (Graph 5), they could result in an increase in unemployment ($Q_S > Q_D$).

L4 21

Examiner comment

This candidate gave a very clear explanation of the determination of wages in perfect competition through the market demand and supply. This analysis was then contrasted with that which applies to imperfect competition. A discussion of the influence and power of a monopsonist, a trade union and a minimum wage determined by a government then followed. A concluding paragraph drew attention to the difference that may occur between perfect and imperfect markets when trade unions and minimum wage regulations exist.

Mark awarded = 21 out of 25

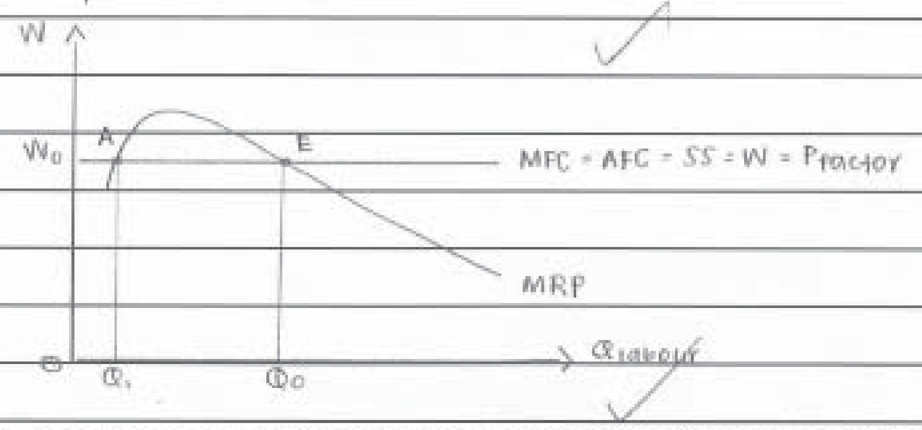
Example candidate response

5. Labour is derived demand. ~~An increase~~ For example, an increase in the demand for property houses will lead an increase in property development. Thus, this will lead to an increase in the demand for construction workers.

Marginal revenue product (MRP) is used to indicate the demand for labour. MRP is obtained by multiplying marginal physical product with marginal revenue. (MRP = MPP × MR). MPP is the additional output produced by employing an additional worker. MR is the additional generated by employing an additional worker. MRP is known as the additional revenue of a product produced by employing an additional worker.

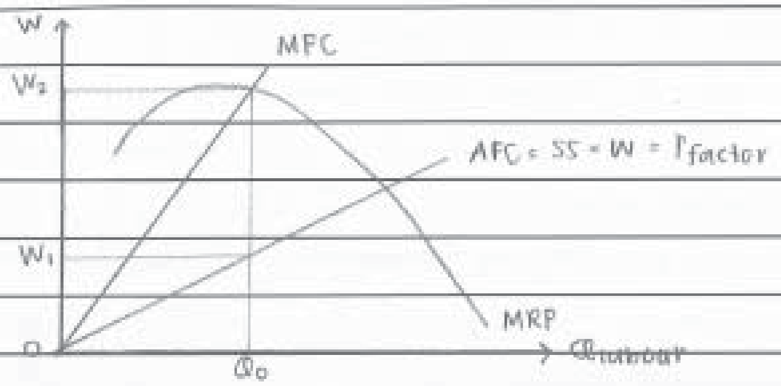
There are assumptions for MRP. There are perfect and imperfect in goods market and factor market. ~~All variab~~ Perfect in the goods market indicates that the demand for labour is a horizontal line where DD = P = MR = AR. Imperfect in the goods market indicates that the demand for labour is downward sloping. All variable factors are homogenous. It is due to the law of diminishing marginal return. Firms are ~~set~~ to operate in order to achieve maximum ~~prod~~ profit.

Wages are determined where MRP = MFC, MFC is the additional cost of employing an additional worker. The diagram below shows wage determination in the perfect market.



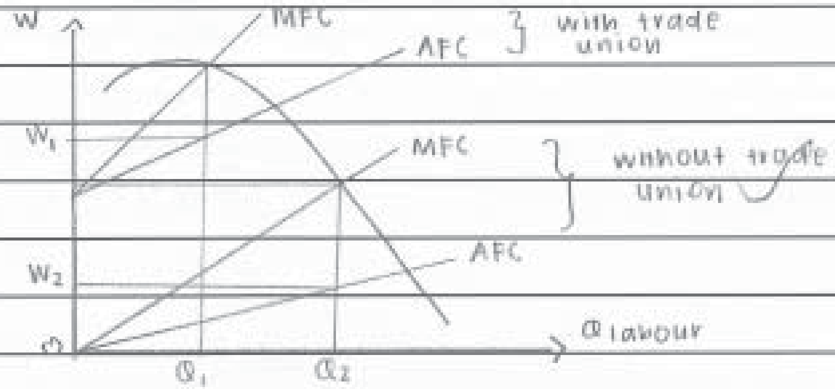
The supply curve of the labour is horizontal as labour and firms ~~#~~ both have perfect knowledge. The equilibrium is at point E where wages are at W₀ and quantity of labour is at Q₀. Point A cannot be the equilibrium point as MRP ~~not~~ continues to rise. When MRP > MFC, firms will employ more workers until it reaches an amount of Q₀ labours.

The diagram below shows ~~the imperfect~~ wage determination in the imperfect market.



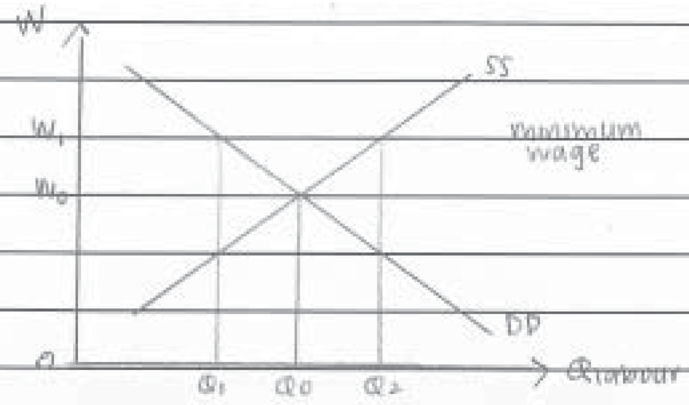
The supply curve of labour is upward sloping as both labours and firms have imperfect knowledge. Wage is determined where MFC = MRP, which is where wages are at W_2. However, firms do not have to pay W_2 to get Q_0 amount of labours. It only needs to pay the labour at W_1. This is due to the imperfect knowledge of the workers on the availability and types of jobs. Workers are being exploited at they should be paid at W_2 but instead are being paid at W_1. This is due to the fact that in ~~when there is exploitation of workers,~~ imperfect market, monopsonist are the price setters. ~~w~~

When there is exploitation of workers, there will be the presence of trade union and government. Trade union will helps workers to talk terms with the firm in order to increase their wages.



The diagram above shows the difference in wages when there is a presence of trade union. With trade union, wages of labour are at W_1 where as wages of labour are at W_2 without trade union. Trade union will also help labours seek for working benefits such as medical benefits and overtime pay.

Government intervene by setting minimum wages of the labour. This will allow a decrease in employment of Q_0Q_1.



c8

It also ~~dem~~ depends on the elasticity of demand and the elasticity of supply.

L3 17

Examiner comment

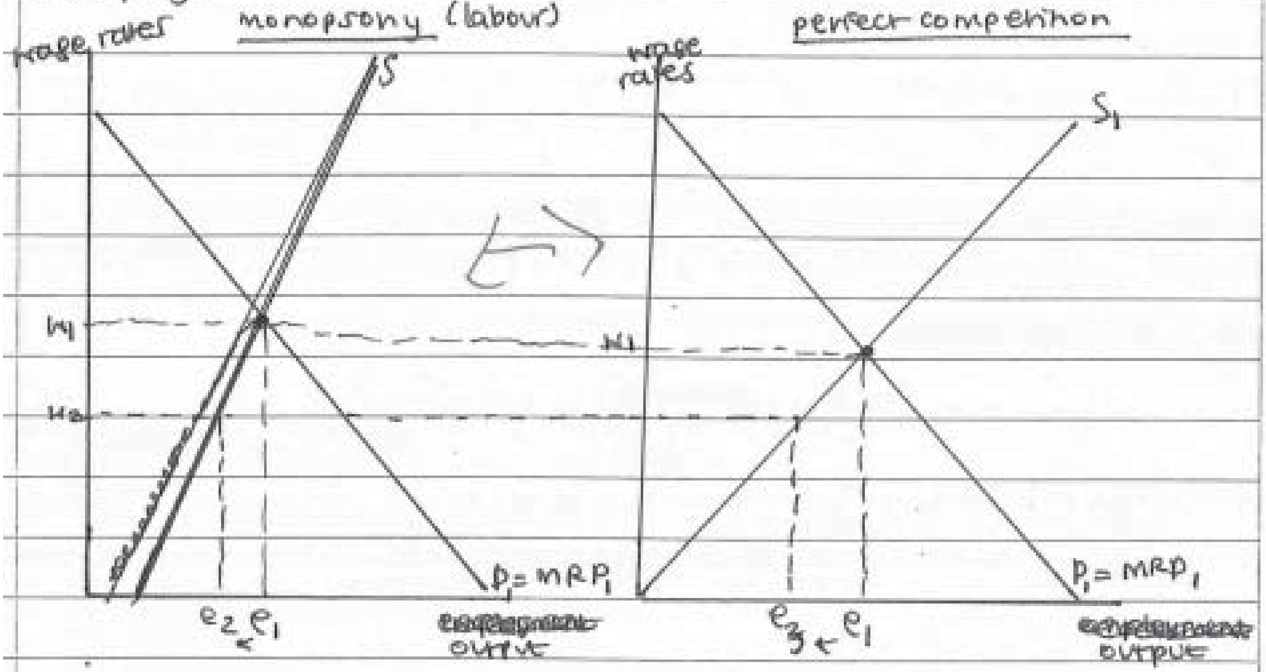
This candidate gave an explanation of the analysis involving marginal revenue product theory but with less development than is required for a very good answer. For example, the candidate did not clearly indicate how the wage which was used by a firm in perfect competition was determined by the demand and supply in the market.

Mark awarded = 17 out of 25

Example candidate response

In imperfect competition, which may manifest itself in the form of monopolistic competition, oligopoly, monopsony, duopoly, or monopoly, the notion of fair wages is often debated because such imperfect markets are thought to distort equal wage determination and exploit workers.

The comparison may be held between a perfectly competitive market structure and a ~~monopoly~~ monopsony, as well as a monopoly.



A monopsony is, essentially, a monopoly buyer of labour. It is one buyer for many sellers which is why the supply in a monopsony for labour ~~[illegible]~~ is significantly more inelastic than that of the supply in a perfectly competitive labour market. This means that, while equilibrium wage is at W1, a monopsony, being profit maximising, may hire workers at ~~[illegible]~~ W2 without an incredible decrease in output whereas in perfect competition, where demand is equal to ~~[illegible]~~ the marginal revenue product of a worker, ~~[illegible]~~ a wage decrease would result in a great loss of output, which will stop firms from blank

reducing wages. ~~The~~ This insures that wages in a perfectly competitive market do not exploit the workers, as they are determined by the demand and supply for labour. A monopsony, however, must also be careful with its wage setting power, as if its wage rates go below the transfer earnings level of wage for too many workers, the amount of workers available to the firm will sharply decline. In imperfect competition, there are also the presences of discrimination and imperfect knowledge, or assymetric information between the employer and worker, which leads to the exploitation of workers because they are not given the opportunities their MRP requires. With discrimination against ~~[illegible]~~ female employees, for example, employers may pay them lower wages than men in the same occupation. This is not possible in a perfectly competitive market where there is no discrimination and perfect knowledge, as well as occupational mobility / geographical mobility. ~~[illegible]~~ Immobility contributes to the wage setting power of ~~[illegible]~~ monopsonies as labourers often have no choice but to work at lower wage rates as their skills are not transferable or they are not able to move to a location with more opportunities. These are all characteristics of ~~[illegible]~~ an imperfect market competition ~~[illegible]~~ which distort wage rates and exploit workers. Workers may also be exploited if their wages are below the real wage rate so that they operate under a 'money illusion'.

In a monopsony and a monopoly, labour is often not paid the wage rate ~~[illegible]~~ its marginal revenue product commissions and ~~the~~ imperfect competition in such market structures lacks the equity of perfect competition which ensures fair wages so the opinion is largely correct, if somewhat inevitably. Firms in oligopolies, duopolies, and monopolies, with wage setting power, do not seek to retain fairness amongst their workers.

10

L2

Examiner comment

This candidate gave a descriptive answer. The diagrams were not clearly labelled and there was confusion between perfect and imperfect competition. There was only passing reference to marginal revenue productivity, the analysis of which was omitted, no reference to trade unions nor to government intervention in the form of minimum wage legislation or regulation.

Mark awarded = 10 out of 25

Question 6

(a) An increase in investment will raise national income but an increase in the desire by consumers to save will reduce national income.

Explain why this is the case. [12]

(b) To increase national income, interest rates should be lowered; indeed lowering interest rates is the only policy available to increase national income.

Discuss whether you support this opinion. [13]

Mark scheme

(a) Candidates should explain the different effects of an injection of investment and a withdrawal through saving by use of the multiplier process. Possible use of 'paradox' of thrift idea. [12]

L4 For a sound explanation with good application and a clear understanding of the principles involved. [9–12]

L3 For an accurate explanation of the multiplier but with a more limited contrast of the difference between the investment and saving. [7–8]

L2 For a general explanation probably in descriptive form. [5–6]
[Maximum L2 if there is no mention of the multiplier]

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory [1–4]

(b) Candidates should analyse how lowering interest rates might help increase national income through increased investment or increased spending and then discuss whether lowering interest rates is the only policy available. [13]

L4 For a sound discussion with good explanation of the analysis of interest rate changes and a consideration of alternative fiscal measures with a conclusion [9–13]

L3 For a competent comment but with limited development of the analysis or undeveloped alternative policies and a weaker conclusion. [7–8]

L For a brief explanation and with a weak discussion of interest rates or weak alternative policy measures with no conclusion. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial [1–4]

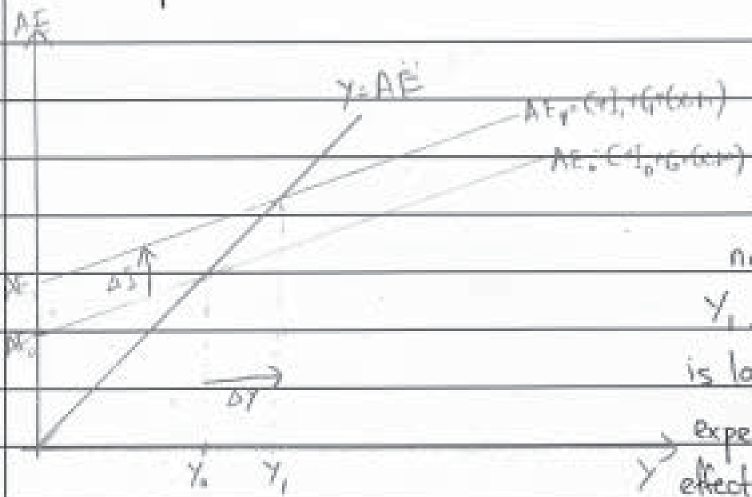
Example candidate response

6a) Consumption and investments are two important components in measuring the national income of an economy. These two components are part of the aggregate expenditure of an economy and contribute to the gross domestic product (GDP). The circular flow of income indicates that a change in consumption and investments can cause a change in national income due to change in aggregate expenditure. This can be proven by the formula

$$AE = C + I + G + (X - M)$$

where C is consumption, I is investments, G is government spending, X is exports and M is imports.

We can show the changes in national income due to investments by drawing diagrams as well as including the multiplier effects. Investments are spendings ~~mad~~ by firms in a certain capital so that the firms would be able to produce a larger quantity of goods and services in the future. For example, a firm invests in a plot of land to build a factory so that production can be increased. Investments consist of autonomous investment & and induced investment, ~~the latter a~~. ~~Investments~~ Investments are usually fixed in volume, so the change ~~de~~ in investments would cause the aggregate expenditure (AE) curve to shift upwards.

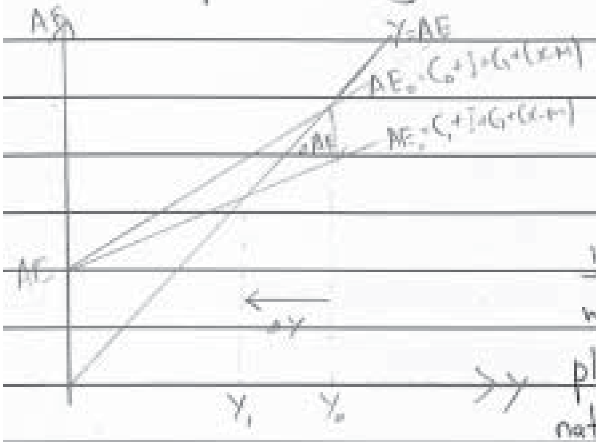


In the diagram, an increase in investments would cause the AE curve to shift from AE_0 to AE_1. As a result, national income would increase from Y_0 to Y_1. We can note that the increase in Y is larger ~~A~~ than the increase in aggregate expenditure. This is due to the multiplier effect which states that a small change in aggregate expenditure leads to a larger change in national income. This can be represented by $\Delta Y = k \Delta AE$ where k is the multiplier and $k \geq 1$,

$$k = \frac{1}{MPS + MPM + MPT}$$

MPS is the marginal propensity to save, MPM is the marginal propensity to import and MPT is the marginal propensity to tax. Therefore, an increase in investments would cause a larger increase in national income.

On the other hand, an increase in savings would cause national income to decrease. To understand this, we must note that saving is the alternate option to consuming and at a fixed income, ~~&~~ consumption decreases as savings increase. (MPS + MPC = 1). A desire to save by consumers causes the MPC (marginal propensity to consume) of consumers to decrease. This causes the gradient / slope of the AE curve to become more shallow since the MPC represents the gradient of the AE curve.



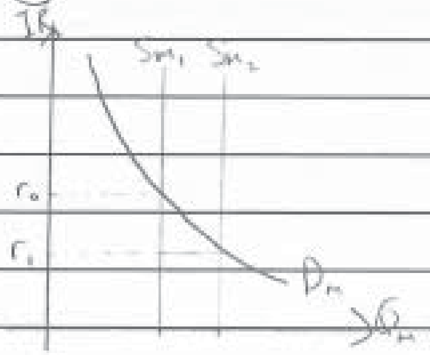
When consumption ~~falls~~ decreases, the AE curve would shift from AE_0 to AE_1, downwards. The result is that national income would decrease from Y_0 to Y_1. Again we must note that the multiplier effect takes place when this happens as the decrease in national income (ΔY) is significantly larger than the decrease in aggregate expenditure (ΔAE).

As we can see, changes in components of the aggregate expenditure can lead to a larger change in the national income. ~~However~~, Hence, economists and governments can implement policies to contract or expand the economy using the effect of the multiplier when necessary. However, the multiplier value is different for every economy and it is not easily measured in reality. Furthermore, there is a possibility that the multiplier value is less than one, making policies inefficient. Therefore, a research must be done before policies to contract or expand the economy can be carried out.

L4 | 10

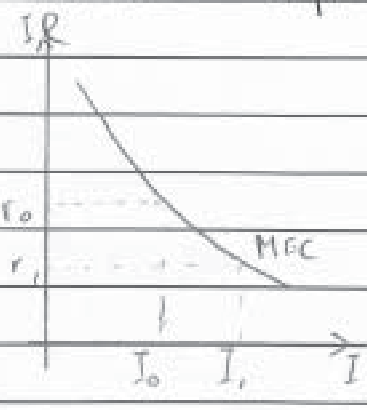
6 b) Keynesian economists stress upon the importance of interest rates in an economy. Interest rates are crucial in the money market as well as the goods market as it determines the money supply in an economy as well as the number of investments made, both of which are factors ~~are~~ influencing national income. There have been arguments about whether controlling the interest rate is the best way to increase national income.

The effect of lowering the interest rates to increase national income can be explained using the monetary ~~market~~ transmission mechanism. In a money market, interest rates are determined by the demand and supply of money. Suppose the central bank increases the money supply, this would cause a rightward shift of the money supply curve, causing the interest rate to decrease.



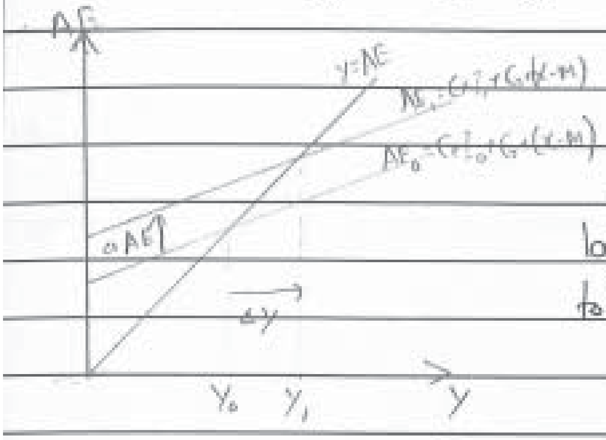
The money supply increases from Sm_1 to Sm_2, causing the interest rate to decrease from r_0 to r_1.

Interest rates are the most important factor influencing investments. This is because firms wanting to invest would require large amounts of capital and would need to borrow these funds from banks. If the interest rate were high, there would be less incentive for firms to borrow as they would have to pay back more. A fall in interest rates would prompt investments by firms.



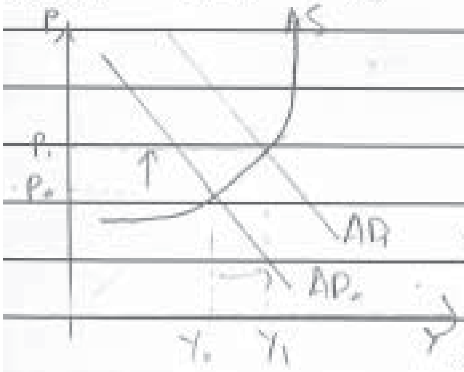
In the diagram, MEC is the marginal efficiency of capital. When interest rates decrease from r_0 to r_1, the ~~equa~~ value of investments made would increase from I_0 to I_1 as firms tend to invest more.

Investments are a part of the aggregate expenditure. An increase in investments would cause an increase in aggregate expenditure, and with the aid of the multiplier effect, cause ~~a~~ significantly large increase in national income.



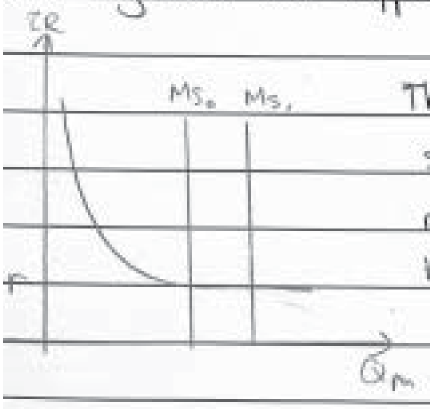
In the diagram, when investments increase, aggregate expenditure would increase from AE_0 to AE_1. This would result in a significantly larger increase in national income (Y_0 to Y_1) due to the multiplier effect.

Indeed, the reduction of interest rates would increase national income, and also promote growth. However, a reduction in interest rates can also result in inflation. ~~&~~ This is because the aggregate demand in an economy would increase without the aggregate supply shifting.



In the diagram, when aggregate demand increases from AD_0 to AD_1, at ceteris paribus, the national income increases from Y_0 to Y_1 but the general price level increases from P_0 to P_1. This signals inflation. If this were to happen in the long run, there could be hyperinflation as the aggregate supply is stagnant.

Besides that, the action of reducing interest rates would be ineffective if the liquidity trap was operative. The liquidity trap occurs when the demand for money is horizontal, thus ~~changing~~ increasing the money supply would not cause the interest rate to decrease. The liquidity trap occurs during times of strife such as natural disasters and large scale war happening, or during a recession such as the Great Depression.



The diagram shows the liquidity trap. Although the money supply has been increased from Ms_0 to Ms_1, the interest rate remains unchanged at r. Investments would not increase and national income would not either. L3 8

18

In conclusion, although lowering the interest rate ~~does~~ is an effective method to expand an economy, it is not the only policy available to increase national income. ~~Ot~~ Fiscal policies such as reducing tax rates and increasing government spending can help increase the national income, as well as supply side policies such as the Reagan income tax cuts in the 1980's. These policies can increase national income without causing inflation. The government should carefully review a policy and consider its effects on the economy before implementing that policy.

Examiner comment

This candidate gave a clear and reasoned account of the process of the multiplier in section a) with a conclusion on how an increase in investment or an increase in savings might affect the level of national income. There was a good account in section b) of the link between a change in interest rates and a change in investment. The weakness of the answer in section b) was that although the candidate began the final paragraph with the words 'in conclusion', the paragraph was really a very brief list of possible alternative policies to the use of interest rates. No development of these policies was given. The candidate did not, therefore, develop the answer to deal with the second part of the quotation in the question nor did the candidate draw a conclusion about the argument presented in the question. Overall, however, this was still a good answer.

Mark awarded = 18 out of 25

Example candidate response

9. An increase in investment ~~would mean~~ by the government or a firm refers to an injection of money into the economy. When, for example, a firm invests, it hires more factors of production. One main factor of production it hires would be labour. As a firm hires more labour, employment in the industry increases, causing increases in disposable income of the workers in the industry. According to the theory of the multiplier, ~~the~~ a proportion of increased income recieved would be spent on consumer goods by the ~~consumer~~ worker. This spending would then become income for another firm/worker, and the proportion they spend on ~~___~~ goods/services would become income for another person. The multiplier, therefore refers to the number of times money is used in an economy. To calculate the value of the multiplier, we use the formula $\frac{1}{1-MPC}$ where

MPC = marginal propensity to consume, i.e. the proportion of money spent on an extra dollar earned by a person. ~~An injection, therefore adds to the circular flow of income between households and firms~~ An increase ~~in income would normally lower the value~~ in injections, and therefore incomes, would normally lower the value of the ~~margin~~ MPC, as when more income is earned, ~~while~~ the proportion spent on ~~ext~~ an extra dollar earned would fall. When the value of the MPC falls, the value of the multiplier increases. ~~This causes the number~~ This means that the extra $100 earned ~~to~~ by workers of the particular industry would have a much larger effect on the income within the economy, as money is rolled over more times. This causes an increase in real national income.

On the contrary, the desire for a consumer to save refers to a withdrawal from the circular flow of income between households and firms. This withdrawal causes money to be lost from the economy, as it is not spent on goods and

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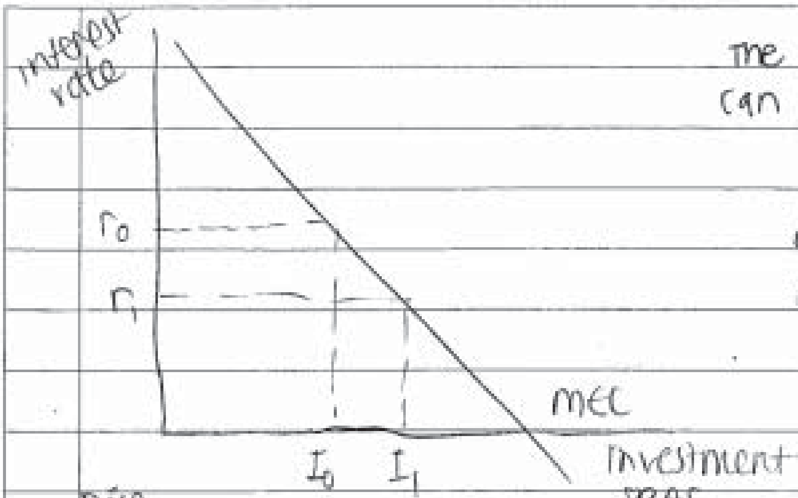
services. The marginal propensity to save $(1 - MPC)$ refers to the proportion of money an individual saves for an extra dollar earned. An increase in the marginal propensity to save (MPS) would decrease the value of the multiplier, hence $\frac{1}{MPS}$. A decrease in the multiplier value would mean the $100 that money is not being used ~~to~~ as many times, due to ~~to~~ households saving a larger proportion. This causes a decrease in real national incomes because less people are recieving portions of the extra income earned. ~~and therefore will face lower in~~

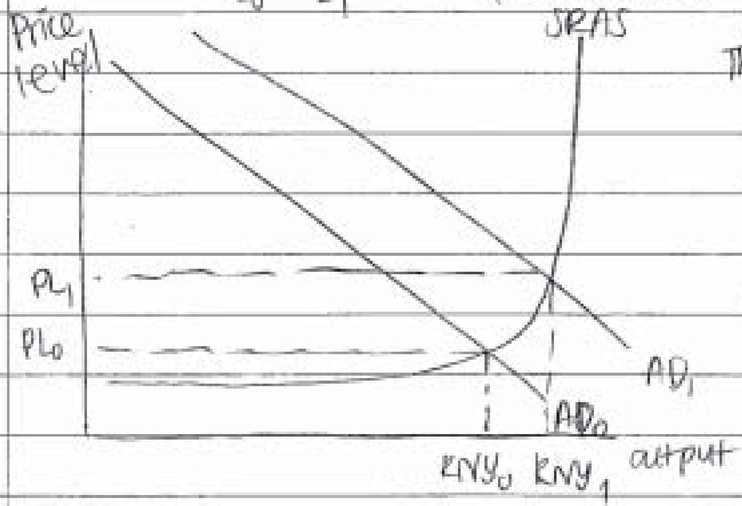
L3

7

b. Interest rates can be used to increase national income. This is because a fall in interest rates would lower the costs of borrowing for consumers and firms. Consumers would benefit from cheaper loans and cheaper mortgage repayments which would increase their ~~dis~~ descretionary income (less money needed to pay for mortgages). ~~The~~ Households will become more attracted to spending than to saving, as savings would not give good returns and therefore leads to a higher opportunity cost. ~~This increase. This leads to an incr~~ When firms can borrow more cheaply, they are more likely to invest. ~~as it is set~~ Investment would lead to increased real national income, as mentioned in question A. ~~Both of th~~ Both increases in consumer spending and increase in investment would contribute to higher levels of aggregate demand.



The increase in investment can be shown via the marginal efficiency of capital diagram, where as interest rates fall from r_0 to r_1, investment increases from I_0 to I_1.



The increase in aggregate demand would lead to a move along the short run aggregate supply curve. Real national incomes would increase from RNY_0 to RNY_1.

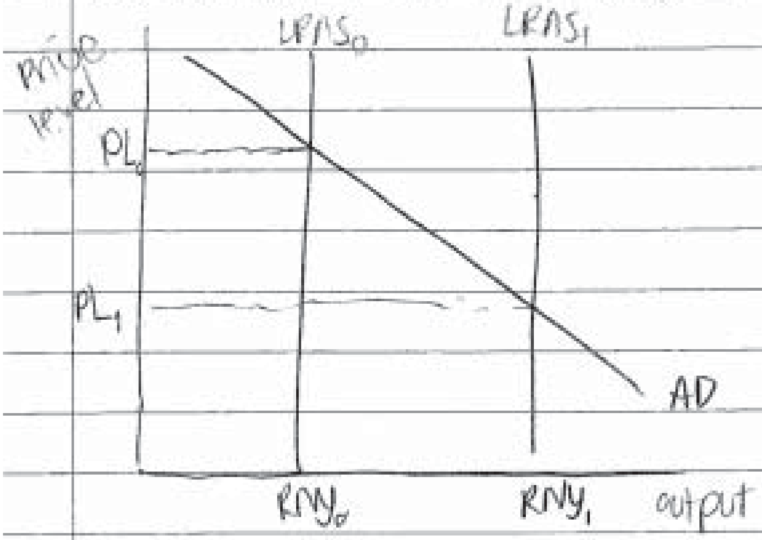
Although the lowering of interest rates could have the potential of increasing ~~A~~ aggregate demand and therefore real national incomes, there are also other policies that would also lead to increases in national incomes.

An example could be a reflationary fiscal policy, where taxes are reduces and government benefits and ~~investment~~ spending increases. ~~Given that a high tax rate reduces a workers~~ The removal of taxes ~~and~~ would allow for increased discretionary income, and therefore consumer demand for goods and services would increase. ~~The~~ increased government spending would also produce income for ~~a cert~~ ~~certain wo~~ workers in certain industries, for example infrastructure. The multiplier effect would then allow real national income to increase, as these workers spend their ~~marginal~~ extra income. A reflationary fiscal policy would therefore also shift aggregate demand outwards and cause

Leave blank

real national incomes to increase, while the multiplier would also take effect.

Another example would be the use of supply-side policies that aim to shift the long run aggregate supply curves to the right. This could include provision in education and training, so that workers have increased marginal revenue products that will determine their wages. ~~Of~~ Other supply side policies



could be to remove taxes ~~and distortions in the labour market, so that wo~~ so that workers have more incentive to work and earn more income. The ~~sup~~ shifted LRAS would cause real national income to rise from RNY_0 to RNY_1.

Therefore, lowering interest rates may be a possible way to increase national income, but it is not the only way. There are other policies that will ~~give the~~ ~~also achieve~~ the aim for example fiscal and supply-side policies. The increase in real national income will be greater if these policies are used in combination with the others.

L3

8

15

Examiner comment

This candidate gave a correct response to both sections of the question. The weakness of the answer was not that it was incorrect but that it lacked development and discussion. Section a) could have given a fuller explanation of the multiplier process and section b) could have dealt more with alternative policies to interest rate changes.

Mark awarded = 15 out of 25

Question 7

(a) As an economy develops, the relative importance of different sectors of production changes. Explain, with examples, why the pattern of employment might change as an economy develops. [12]

(b) Discuss whether increases in economic growth are necessarily beneficial to an economy.[13]

Mark scheme

(a) The usual division of production is into primary, secondary and tertiary sectors. Developing economies move from a dependence on the agricultural sector through industrialisation. Along with this there is a growth in the service sector – industries relying on IT, call centres, tourism. The changes reflect changes in demand, income, urbanisation, government policy, comparative advantage and competitiveness. [12]

L4 For a clear explanation of why the relative importance of the productive sectors of the economy might change with good illustration or examples [9–12]

L3 For a less developed explanation with fewer examples [7–8]

L2 For a more general descriptive account with lack of comment on the causes of the change and with few examples [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. [1–4]

(b) Economic growth involves greater production measured by changes in GDP/GNP. This could cause an increase in the standard of living, improved health, education and employment opportunities. There may be disadvantages. Poor working conditions, the growth of externalities, the careless depletion of resources. There may also still be questions of inequality in the distribution of income or whether the increased GDP is spent on things which might not give direct benefit e.g. military research. [13]

L4 For a discussion of the overall effect of growth on development presenting both positive and negative aspects with a conclusion. [9–13]

L3 For an analysis of the contribution of growth to development but with a concentration on either the positive or the negative aspects with a conclusion. [7–8]

L2 For a more descriptive account without much evaluation and without a conclusion. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial [1–4]

Example candidate response

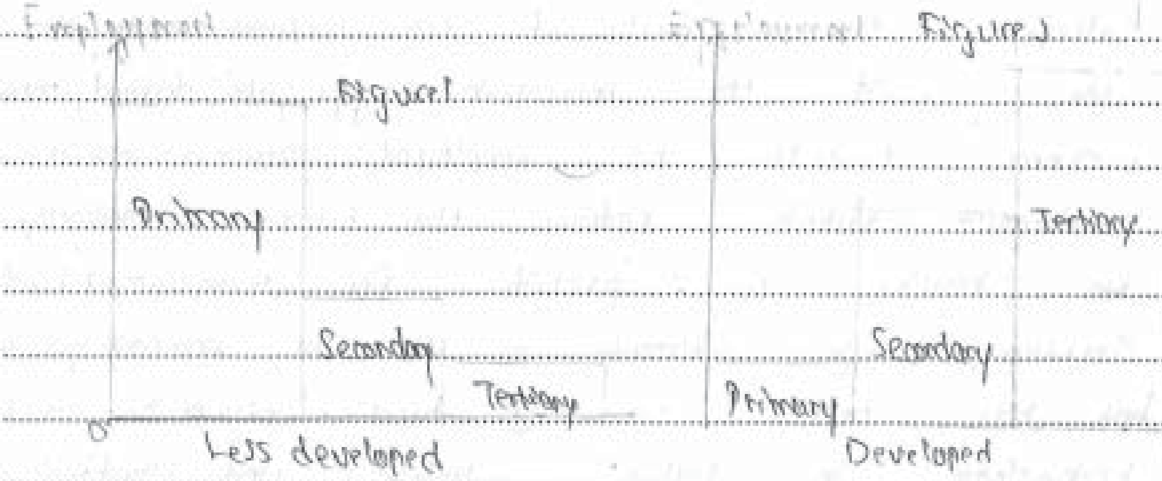
(d) As an economy develops, the economy is more prone to encounter economic growth and become an emerging economy. When a developing economy encounters economic development, it starts moving towards developed economies by experiencing the same benefits as higher GNP, higher standard of living and better life. When an economy grows, the relative importance of different sectors like the primary, secondary and tertiary sector involvement will change.

An ~~develo~~ economy in the phase of development will start to focus more attention onto its tertiary sector, with relatively more ~~focus to~~ ~~focus~~ focus to manufacturing sector and very less importance to primary sector. This is because the economy feels it is better off and people start to consider the primary sector as an inferior one with manual occupations such as fisherman, gardening. ~~They~~ The primary sector is more likely to become mechanised with modern equipment like cranes in sugar cane fields and large fishing vessel to reduce labour.

Secondly, in the manufacturing sector, more importance is given to capital intensive production rather than labour intensive. More robotisation and automation is likely to benefit all. Also, when the economy develops, more ~~fo~~ foreign investors like multinational companies come to invest and set up huge

~~new~~ manufacturing firms to produce for local market and ~~domestic~~ for exportation. Thus, Coca-Cola setting its plant and machinery in mauritius has benefitted many locals in terms of job. Also, these foreign firms along with foreign direct investment bring their ~~expertise~~ expertise which makes the host economy more efficient. This is likely to increase the exportation causing a Balance of payment surplus.

Thirdly, employment in the tertiary sector in terms of doctors, accountants and other white collar ~~ch~~ jobs increase. This is because improvement in an economy in terms of human capital in the field of education and ~~polytechnique~~ polytechnique institutes make the local citizens literate. They prefer to get employed in these service sectors because of higher pay, less manual ~~pt~~ and physical effort and less risk to life.
This can be shown as follows:



A ~~develope~~ country experiencing development will approach figure 2 in terms of its different sectors.

10

L4

(b) Economic growth is a very complex phenomenon which cannot be brought down to a single definition easily by economists. Some economists describe economic growth as an increase in the real per capita income ~~of the~~ citizens of an economy usually accompanied by an improvement in net welfare. According to Ragnar Nurkse, economic growth has much to do with human endowment, social factors, political factors and history. Additionally, economic growth is shown by an outward shift in the production ~~possib~~ possibility curve of an economy. Increase in economic growth is not an unmixed blessing and have both its positive and negative aspects of an economy.

To begin, an increase in economic growth means the population is better off and is earning higher income. Thus, they will demand more goods and services to enjoy a higher standard of living. Therefore, the economy has to increase production to satisfy the quests of the consumers. ~~with~~ To cope with the increase in aggregate demand, more workers have to be employed cause a rise in employment which reduces the burden of authority ~~to~~ having to provide for unemployment benefits. However, for example in Mauritius, economic growth ~~has~~ has been cause ~~by~~ by a rise in the use of technology in textile industries and therefore there is non-pregnant jobs. This as been termed by economists as the "catalytic crisis syndrome".

Furthermore, an increase in economic growth is beneficial as when more peopleare employed, they are more liable to pay taxes. Thus, the ~~tax~~ revenue of the government increases enabling it to finance more projects and ~~increase~~ ~~t~~ increase economic development in terms of infrastructure. However, if the government increases the tax threshold, less tax revenue will be ~~other~~ obtained.

Increases in economic growth are beneficial as people enjoy a higher standard of living. There is less stressful life as more facilities are available for their leisure time. Also, economic growth entails that the economy is a favourable place for potential investment. Thus, foreign investors will be attracted to bring Foreign Direct Investment because of business optimism ~~pe~~ prevailing in the economy. This further improves national income .

~~Economic~~ ~~Ec~~ ~~Economic growth means~~ - ~~Economic growth~~

Write on both sides of the paper

Nothing is to be written in this margin

However, economic growth involves some serious drawbacks. Economic growth refers to increased production of goods and services which imply more pollution and external costs. These external costs reduce the economic welfare of the citizens of the economy. Also, economic growth implies higher standard of living which brings along the "rich-man diseases" such as diabetes, hypertension, and cholesterol due to increased consumption. Thus, the extra income from economic growth goes to medical ~~treat~~ treatment. ~~Along~~ Also, economic growth can be disastrous when there is inequality of distribution prevailing in an economy. For example, in Saudi Arabia, the ~~St~~ rich Sheiks appropriates all the income leaving ~~no~~ others neither better off nor worse-off. This can lead to revolts by the middle-class persons and tension in the economy will discourage investors to invest. Also, economic growth can be due to the production of more capital goods than consumer goods. In countries like India where more producer goods is produced, the country enjoys economic growth but the ~~pop~~ population does not benefit. A rise in economic growth ~~a the time when it~~ ~~the~~ it makes people better off and they start demanding for imported goods. A rise in imports will definitely worsen the Balance of payment of the economy which may reduce the economy to be indebted.

~~Economic growth may make the citize~~

L4

9

19

Examiner comment

This candidate gave a clear explanation in section a) of the differing importance of the industrial sectors as an economy develops and consumers' expenditure and job aspirations change. In section b) the candidate gave a well-structured answer. It began with the beneficial changes caused by economic growth but this was balanced by a consideration of the drawbacks of economic growth in terms of pollution, changes in income distribution and changes in health, and possible discontent in the population because the economic growth had been fuelled by the production of capital goods which the population did not use.

Mark awarded = 19 out of 25

Example candidate response

(a) The sectors of production involves primary, secondry and tertiery ~~(the services sector)~~. Primary sectors are ~~major~~ majorly agriculture production or raw material minding. ~~Sector~~ Secondary sectors involves ~~manufacturing~~ machinary manufactory. The tertiery sectors ~~are~~ are considered as services sector.

When economy was not developed, the country is majorly rely on primary sectors, with only few secondary, but almost no service sectors, because they have limited capital input to operate machins or services. As economy develops, the amount of capital available increase, they no longer have to rely on their primary sectors, ~~the~~ because land and labour are not the only factors of production they have. So the amount of primary sectors contribute to overall economy will be lower. En

In short run, the manufactorying sectors will increase their contribution as they have more capital input, but in long run, it will move to the service sector, because they can purchase the primary or secondary product from aboard, but improves the goods and services within the country, to improve the living standard. Also, there is a forth sector where it is for technology developing, ~~as~~ a better technology can improve the ~~ec~~ ecnomy growth.

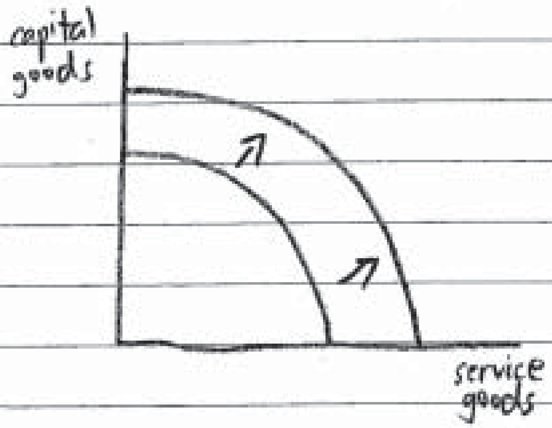
The example of this is ~~a~~ between USA and ~~Sou~~ Africa. USA is a well developed country while Africa ~~we~~ is not well developed. USA often buy the raw materials ~~or other~~ such as diamond, iron, or other resources from Africa,

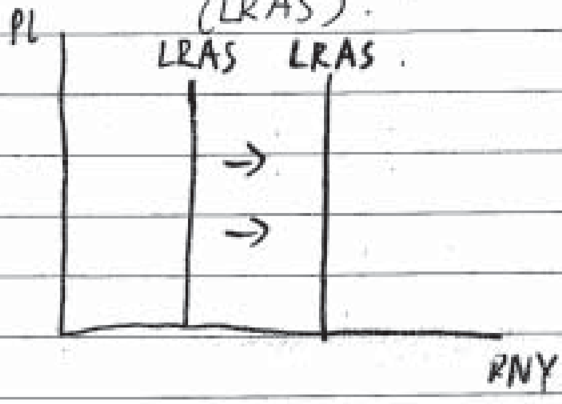
Leave blank

which is in primary sector. But the service provided in USA is super excellent compared to Africa. The reason for change in employment partterns are usually because of people wants a better living standard, and also a easy ~~job~~ and safe job. raw material mining or other primary sector's jobs are very tiring and have a risk of dangerous. Also the service sector requires high education and good skills, which is only able to generate very well in developed countries. L2

6

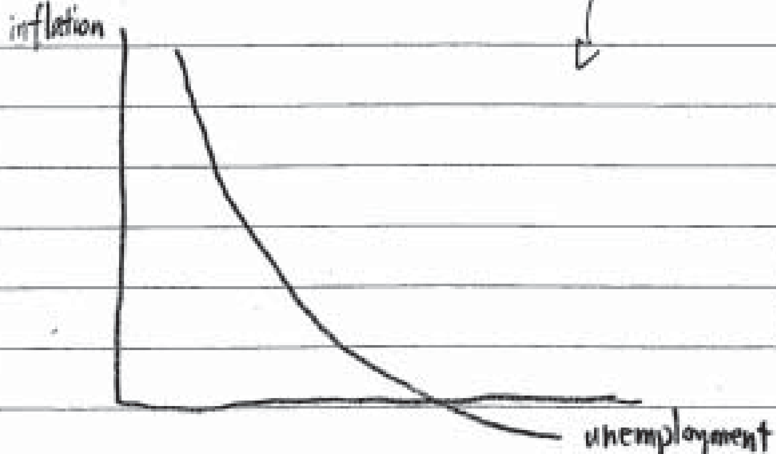
(b) Economic growth is the long term expansion of productive ~~capi~~ capacity in an economy. The rate of economic growth is measured in increasing in real GDP. It can be shown on PPF and Long Run ~~AS curve~~ Aggregate Supply curve (LRAS).





The economic growth result in shift out in PPF and shift out in LRAS. It has a lot of benefits. Firstly, people are having better living standard because of higher income and better ~~serv~~ service ~~produc~~ provided. ~~The health car~~ For example: the increased health care is able to longer people's life expectancy. Also during economic growth, consumers are having high confidence, therefore consumption and investment will increase which lead to increase in national income. The technology will also improved in order make better quality product or better infrastructure to make people's life ~~more easy~~ easier and more enjoyable.

~~Hower~~ However there are ~~several~~ some drawbacks. First of all, the environmental concern. The resources are running out because of higher production, more pollution and waste created which can affect people's health. Also the ~~extinct~~ extinction of species because of ~~m~~ increasing deforestation and ~~lead to people animal~~ make animals ~~homelet~~ homeless. Secondary, economic growth can result in more income inequalitgies because most of increasing GDP ~~a~~ is resulted by rich people, while poors remain poor. It could cause a lot ~~socie~~ social problems such as crime. Last but not the least, from the phillip's curve, we can know that economic growth cause inflation, the graph is shown below:



~~The~~ economic growth will result in less unemployment, so people's average income will increase, so lead to higher AD. ~~therefore~~ Business will facing an increasing pressure on wage, therefore they will ~~a~~ pass the cost to consumers. All the firm also want to increase their profit margin, so they will rise the price.

In conclusion, economic growth is ~~a~~ necessarily beneficial to an economy, but the several negative effect should not be ignored. Government must intervene ~~the~~ and introduce some policy such as supply side policy, to ~~improve the [illegible]~~ ~~[illegible]~~ reduce the negative effect on economy. L3

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8

14

Examiner comment

This candidate referred to the change in the importance of the proportion of people employed in different industrial sectors in section a) and considered some of the possible advantages and drawbacks of economic growth in section b). The weakness of the answer was that both sections, although correct, lacked development with either further explanation or discussion.

Mark awarded = 14 out of 25

Example candidate response

7a) The development of an economy can lead to changes in its structure in terms of goods and services produced as well as the growth and contraction of different sectors. This can cause the employment rates ~~a~~ in an economy to change drastically. Whatever the case of economic development, unemployment is avoidable, as there will definitely be some people who will be unemployed.

As the structure of an economy changes, the importance of different sectors in an economy changes as well. However, ~~in this~~ the mobility of labour cannot possibly keep up with this change as mobility depends largely on human capital and human capital takes time to be instilled. As a result, many labourers who are unfamiliar with the change in economic structure would find themselves unable to contribute and laid off work. This is known as structural unemployment. The Industrial Revolution in ~~the~~ Great Britain is a classic example of this. As the country moved from dependence on agriculture to manufacturing, farmers began to become unemployed as they were not familiar with the processes of the manufacturing industry. This resulted in a period of time where there was large scale unemployment. Fortunately, this form of unemployment can be overcome if people are willing to increase human capital by undergoing training and education.

The growth of an economy is not as smooth as we would like it to be. There are times when an economy experiences a ~~big~~ huge expansion (boom) and times when the economy faces recession. This instability of the economy

cause the employment trend to follow it. During the times where the economy experiences a boom there is very little unemployment. However, during the recession, unemployment would be very high. This is known as cyclical employment. An example of this is the financial crisis in 2008 where a large number of people in the United States faced unemployment. Since then, employment rates have been improving with the recovery of the economy.

In conclusion, the pattern of growth of an economy very much affects the state of ~~an economy~~ employment in an economy. Since one of the macroeconomic goals is to achieve full employment, the presence of unemployment is seen to be a scourge in the economy. Unfortunately, it is impossible to achieve full employment in an economy, but the right policies can bring the employment rate close enough to full employment.

L1 4

7b) Economic growth is probably the most important of all the economic goals of the macroeconomy. Growth is seen as a prestegious thing in the eyes of all governments. To economists, growth is the sustained increase in the ~~national income of~~ overall standard of living in a country. There are many benefits of economic growth to an economy.

Economic growth indicates a higher standard of living of a country's ~~of~~ population. Since economic growth is indicated as the increase in gross domestic profit (GDP) of a country, it also means that the GDP per capita of ~~a~~ the economy is higher, indicating that the population is better off due to an increase in real income. ~~However, this~~ The population is able to purchase more goods and services. However, the usage of economic growth as an indicator of the standard of living is a flawed method because it does not take into account the income distribution gap between the rich and poor. India for example has one of the highest GDP's in the world. However, the income gap between India's rich and poor is very large. ~~It GDP there~~ Growth therefore does not necessarily mean a higher standard of living. A better measurement is the Human Development Index.

Economic growth also promotes employment in an economy. As an economy grows, different sectors of the economy would expand and diversify as well. This would create job opportunities for the population and hence increase the employment rate. However, the increase in employment and growth conflicts with the objective to keep inflation low, as employment and inflation have an inverse relationship. It is not possible to have low inflation rates and yet ~~be~~ have high employment rates as well.

Economic growth can also boost the competitiveness of an economy internationally. ~~Wit~~ With growth, more money can be invested into research and development to produce goods and services at a lower cost. This would enable countries to sell and export their goods at lower prices, allowing countries to export more and thus improve the balance of trade of that country. ~~However, this could also~~

In conclusion, economic growth is beneficial but at the same time harmful to an economy. The government needs to implement suitable policies to ensure that the five macroeconomic goals do not conflict with each other, ~~&~~ and can be achieved.

L3 7

11

Examiner comment

This candidate gave a relatively undeveloped answer to section a) which dealt with structural and cyclical unemployment. Although mention was made of a shift between sectors in the industrial revolution in Great Britain the idea of a change in the relative importance of different sectors as a country develops was not elaborated. The answer to section b) had a good structure to it; both the advantages and disadvantages of economic growth were mentioned. The weakness of the answer was that these changes were not developed nor discussed at any length. This was a pity as there was a clear attempt to balance one side of the argument about economic growth against the other.

Mark awarded = 11 out of 25