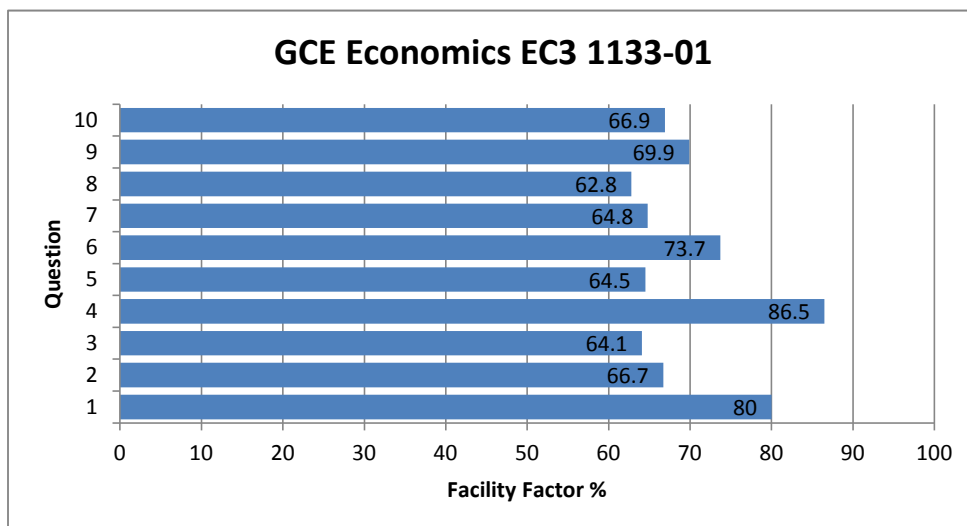


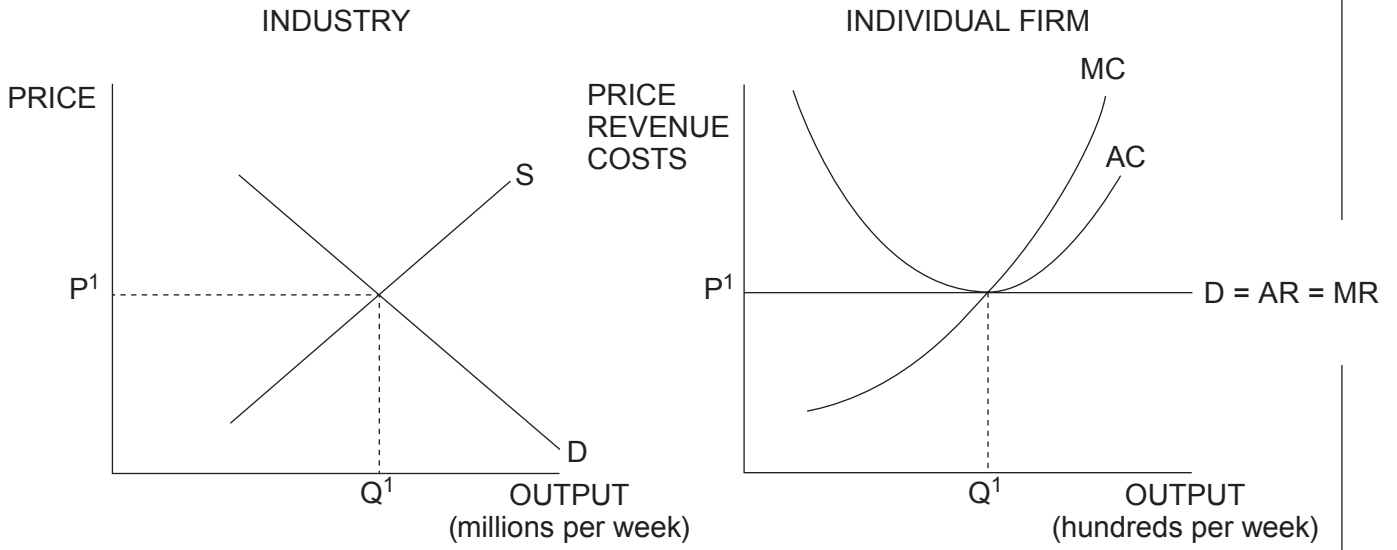
GCE Economics EC3 1133-01

All Candidates' performance across questions

Question Title	N	Mean	SD	Max Mark	FF	Attempt %
1	837	3.2	0.9	4	80	99.9
2	838	5.3	2	8	66.7	100
3	838	2.6	1	4	64.1	100
4	836	3.5	0.8	4	86.5	99.8
5	836	3.9	1.8	6	64.5	99.8
6	837	4.4	1.3	6	73.7	99.9
7	836	5.2	1.8	8	64.8	99.8
8	228	12.6	2.9	20	62.8	27.2
9	481	14	3.9	20	69.9	57.4
10	127	13.4	2.9	20	66.9	15.2



2.



The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

.....

.....

.....

.....

.....

.....

.....

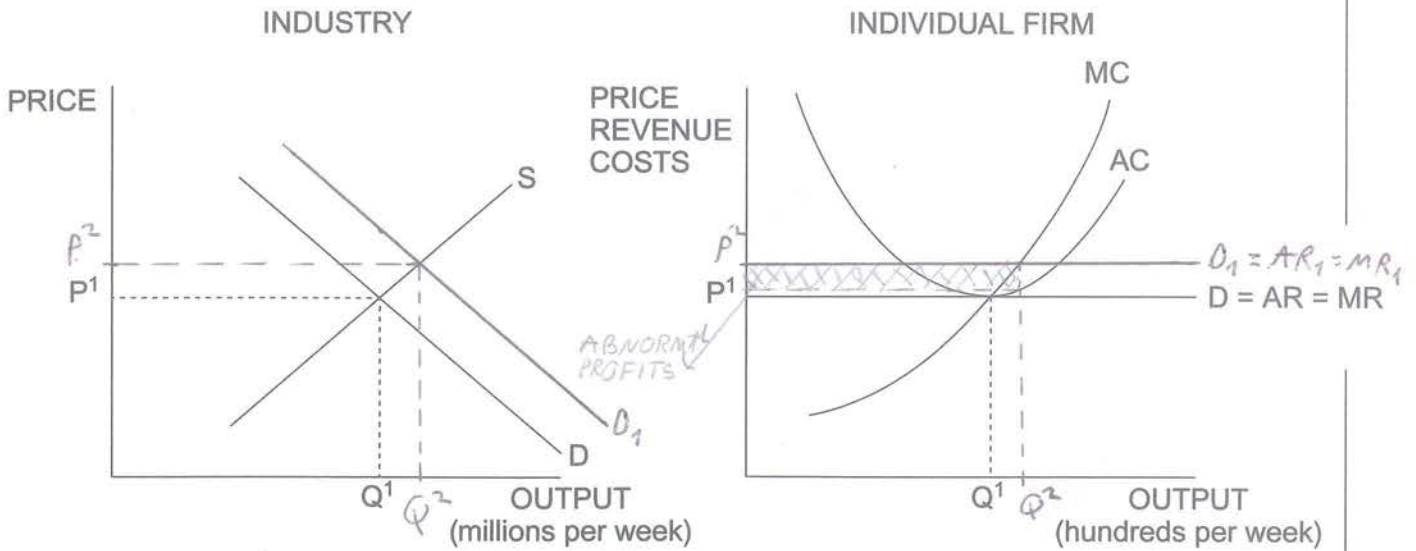
.....

.....

.....

1133 010003

2.

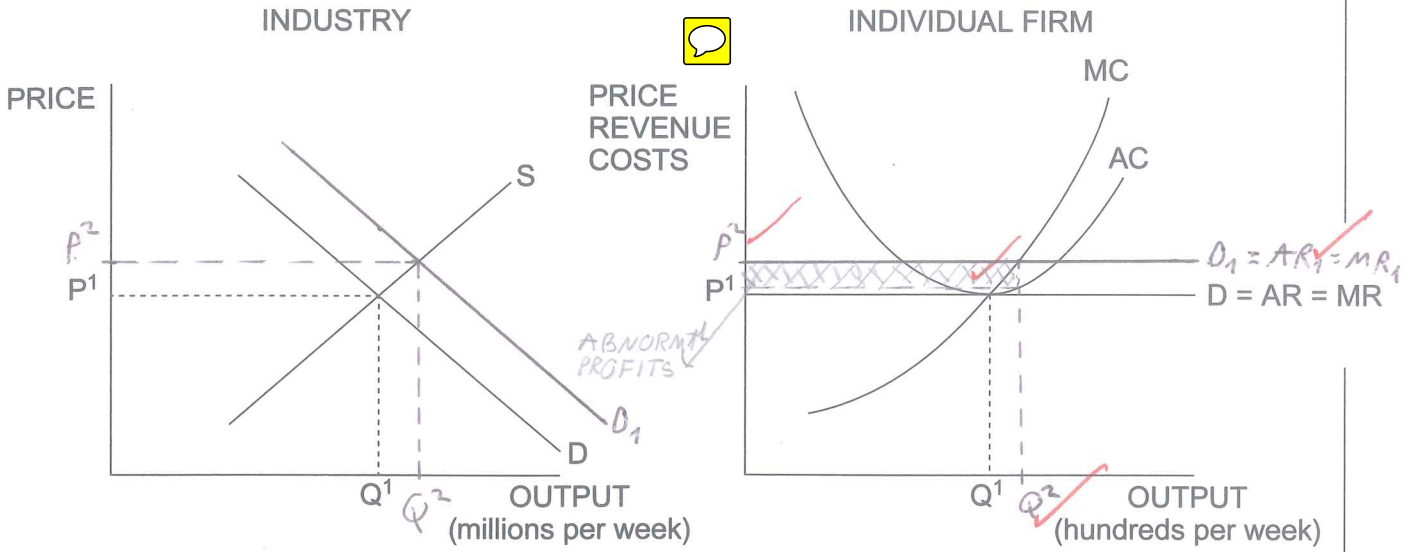


The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

In the long-run, abnormal profits will be reduced and only normal profits will be gained. This is because perfect knowledge of the market allows other firms to be informed about the abnormal profits. Firms will be attracted into the market and abnormal profits will be competed away. The industry's supply curve will shift to the right and price will be P¹ in the long-run.

2.



The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

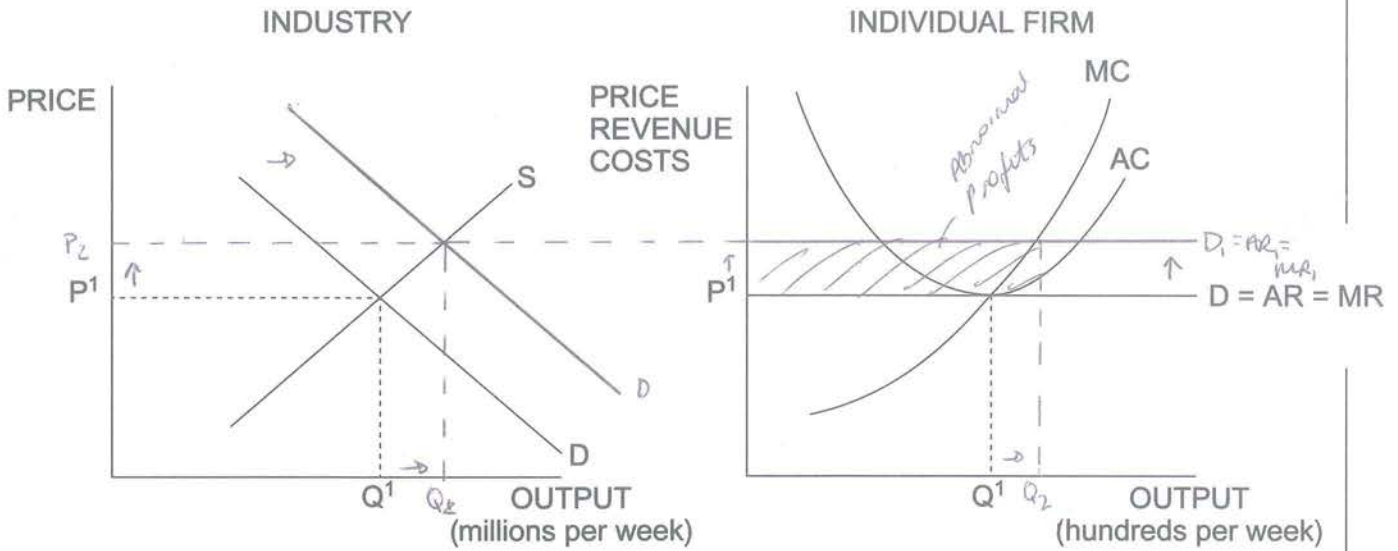
In the long-run, abnormal profits will be reduced and only normal profits will be gained. This is because perfect knowledge of the market allows other firms to be informed about the abnormal profits. Firms will be attracted into the market and abnormal profits will be competed away. The industry's supply curve will shift to the right and price will be P^1 in the long-run.

4

4

8
8

2.



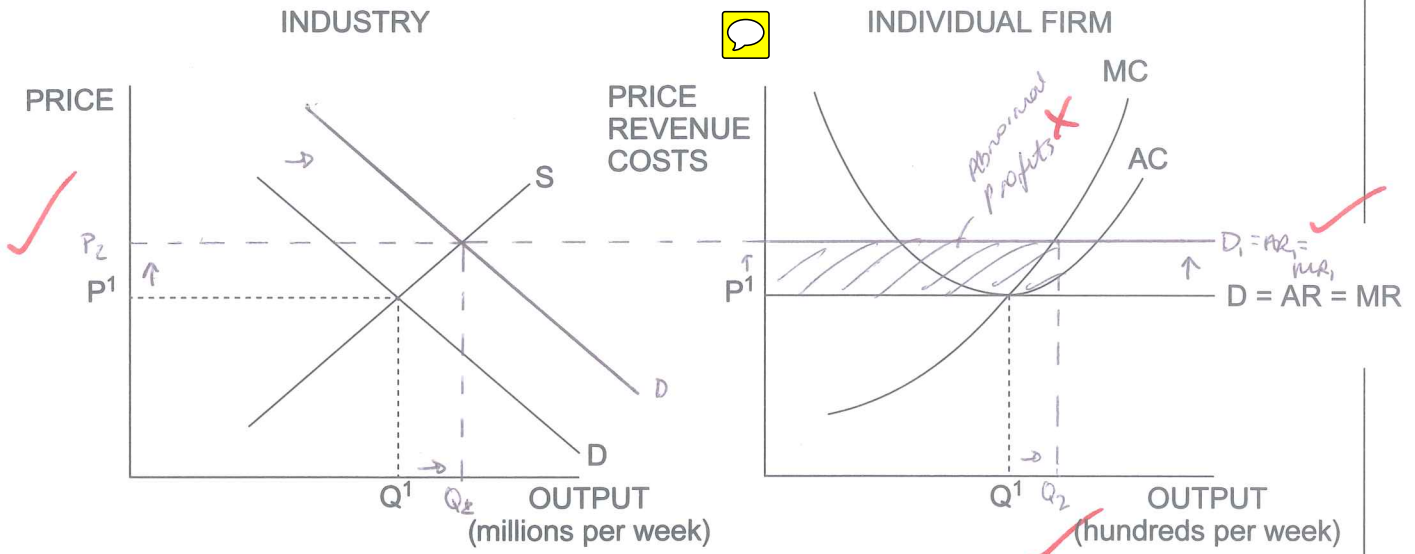
The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

In the long run, the firm's price will fall back to P_1 . This is because in the short run, the firm is making abnormal profits as $P_2 > AC$. As there are no barriers to entry (and exit), firms will enter the industry as they're attracted to the abnormal profits. However, as supply increases due to an increase in the number of firms, the profits will be eroded away. Consequently, price will return to P_1 and the firm will not be able to make abnormal profits in the long run.

1133 010003

2.



The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

In the long run, the firm's price will fall back to P_1 . This is because in the short run, the firm is making abnormal profits as $P > AC$. As there are no barriers to entry (and exit), firms will enter the industry as they're attracted to the profits. However, as supply increases due to an increase in the number of firms, the profits will be eroded away. As a consequence, price will return to P_1 and the firm will not be able to make abnormal profits in the long run.



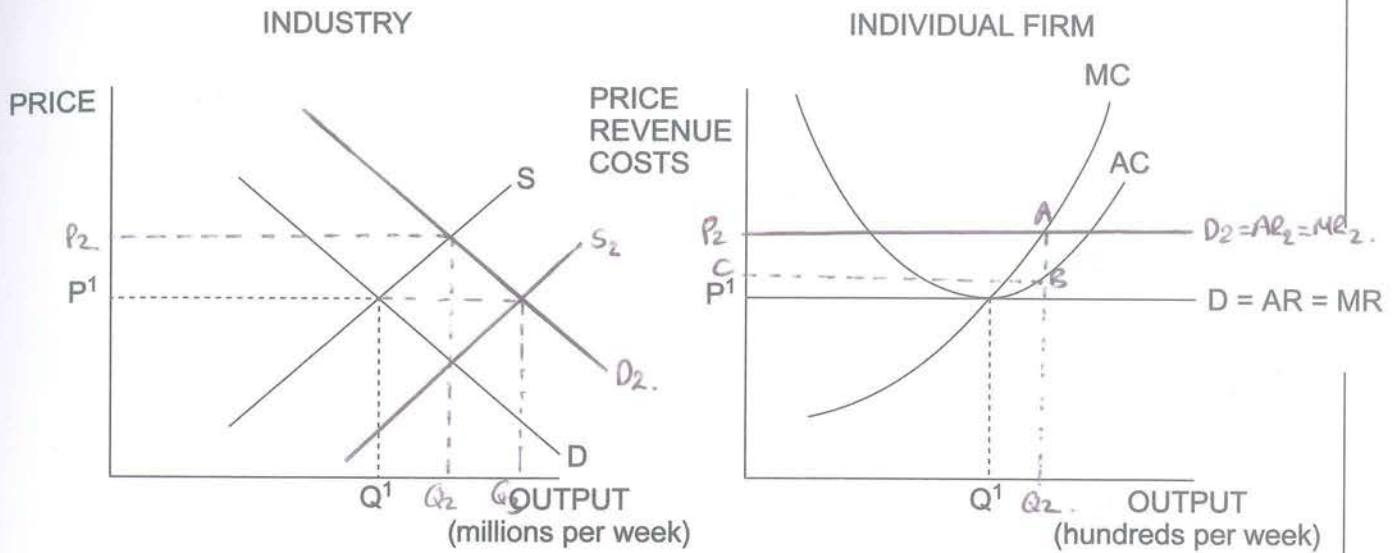
LR output ?

1133 010003

3

6
8

2.



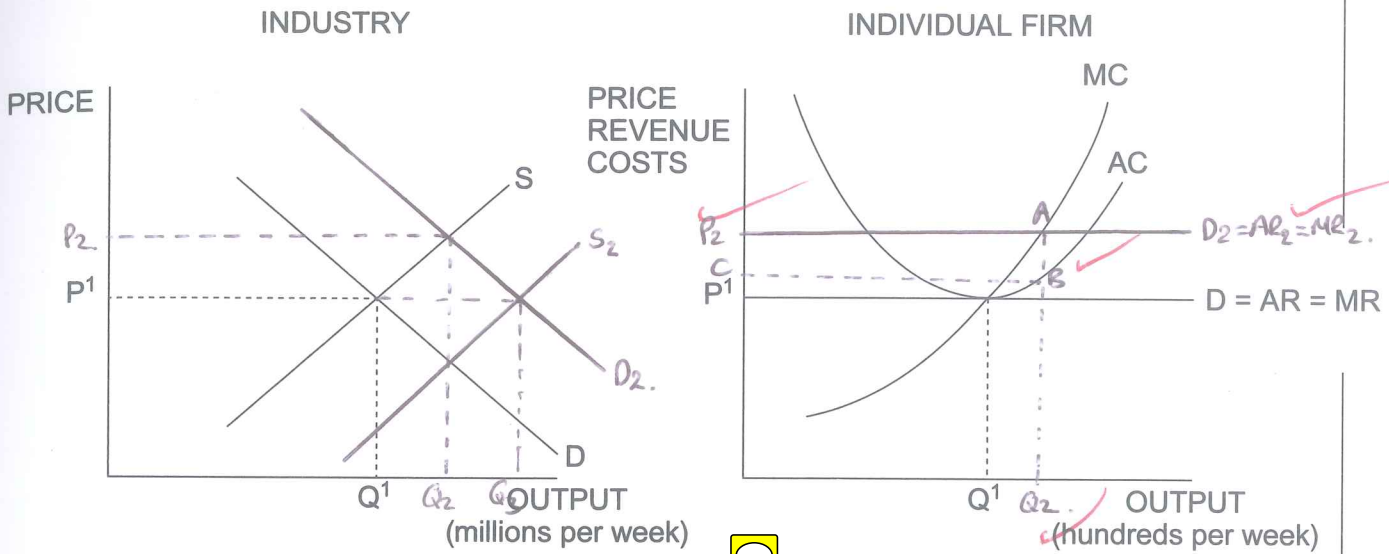
Profit of A, B, C, P₂.

The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

As there are no barriers to entry or exit in perfect competition, firms will see spare capacity in the market and enter the market. As this happens, supply shifts to S₂ until there is normal profits once again. In the long run price will fall, until the firm is making normal profits, output ^{for the firm} will fall to Q₁ & (back page) where the firm is making normal profits and supernormal profits will fall so there is no excess capacity in the market and there is only normal profits.

2.



Profit of A, B, C, P2.

The diagram above shows a firm operating in a perfectly competitive market in long-term equilibrium.

- (a) Adapt the diagrams to show how the firm's price, output and profits will be affected by an increase in demand in the short-run. [4]
- (b) Explain what will happen to the firm's price, output and profits in the long-run. [4]

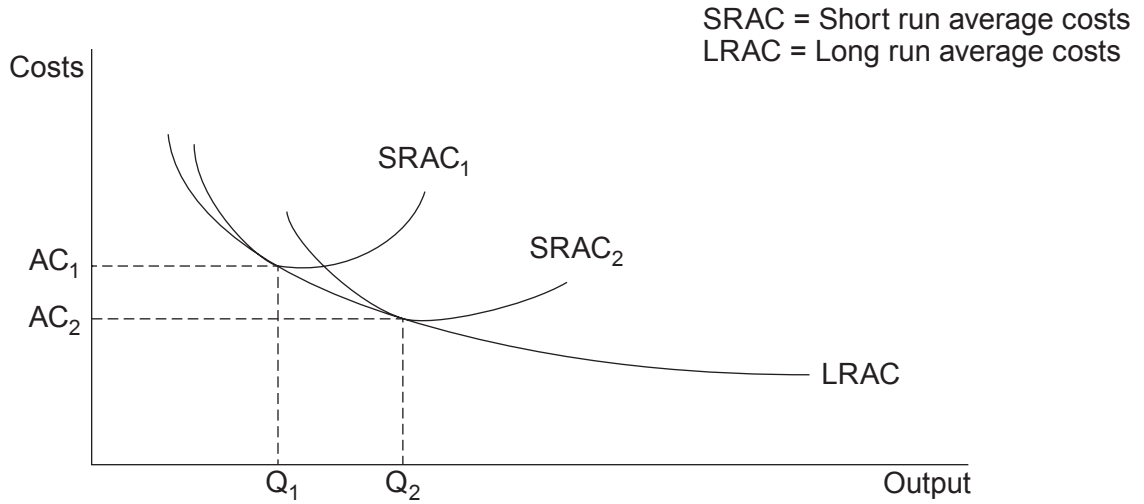
As there are no barriers to entry or exit in perfect competition, firms will see spare capacity in the market and enter the market. As this happens, supply shifts to S_2 until there is normal profits once again. In the long run price will fall, until the firm is making normal profits, output will fall to Q_1 & (back page) where the firm is making normal profits and supernormal profits will fall so there is no excess capacity in the market and there is only normal profits.

1133 010003

4

4
8
8

3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



Using the diagram explain why its long run costs fall when its output expands from Q₁ to Q₂.

[4]

.....

.....

.....

.....

.....

.....

.....

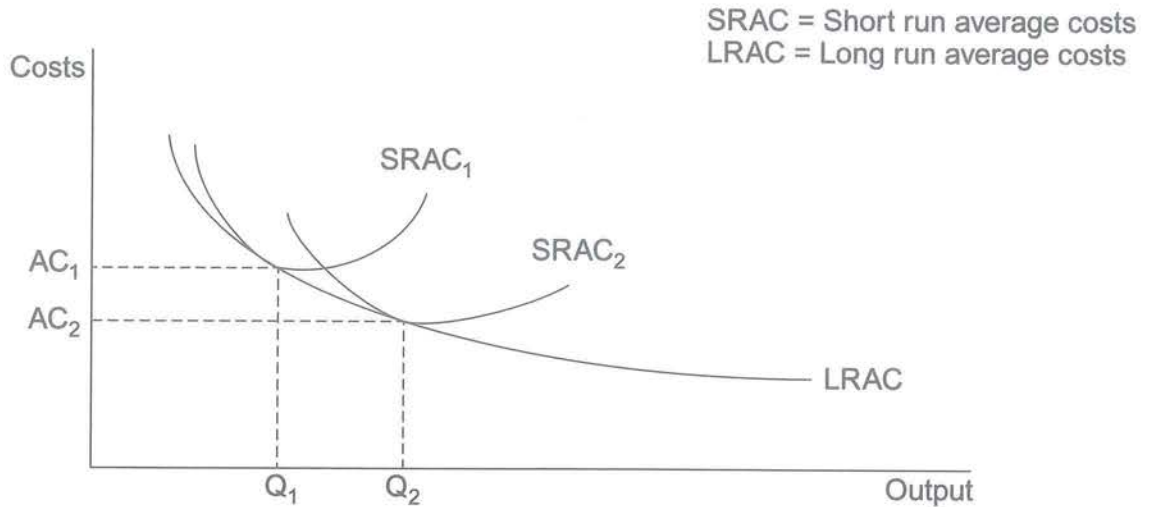
.....

.....

.....

4

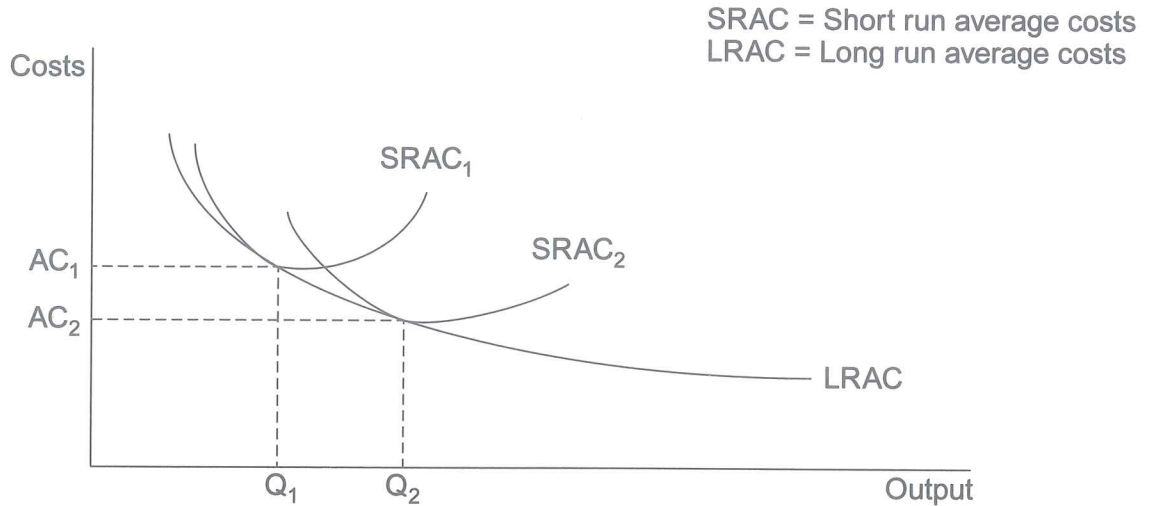
3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

Its long run costs fall due to economies of scale. In this case the firm benefits from ^{manufacturing} ~~production~~ economies of scale, where the more they ^{make} buy in bulk, the cheaper each unit becomes. As demand output increases from Q_1 to Q_2 , more units are needed to be made. Because they can make more cheaper their costs fall from AC_1 to AC_2 .

3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

Its long run costs fall due to economies of scale. In this case the firm benefits from ~~producing~~ ^{manufacturing} economies of scale, where ~~the~~ ^{more} they ~~buy~~ ^{make} in bulk, the cheaper each unit becomes. As demand output increases from Q_1 to Q_2 , more units are needed to be made. Because they can make more cheaper their costs fall from AC_1 to AC_2 .

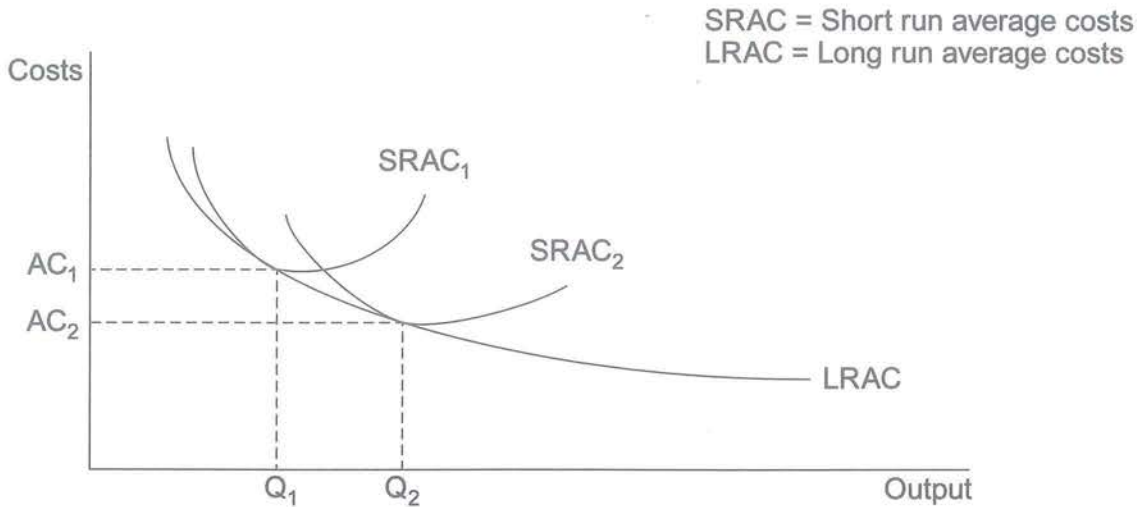
Fixed / variable factor
needed



2

4

3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



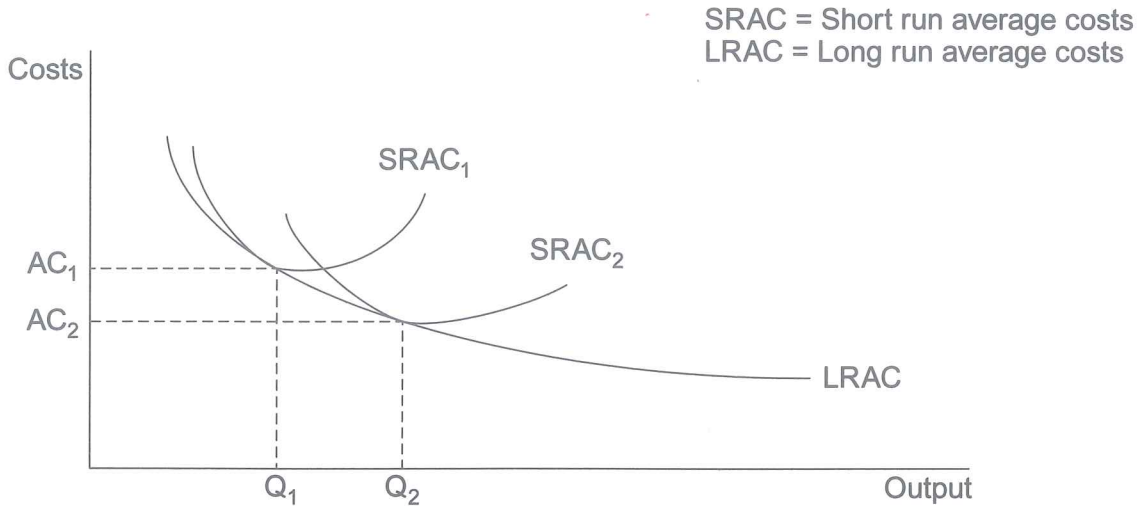
Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

In the long run, all factors of production are variable. In the short run, at least one factor of production is fixed. In the long run, the car manufacturer can make a production plan that benefits from economies of scale, therefore decreasing long run costs. For example, the manufacturer may buy another factory and move production there. For this factory may have ~~less~~ ^{machines} that are an ~~initially~~ ^{initially} economy of scale, and can produce far more for an initially large cost. Hence in the long run,

3) ~~This~~ factors of production may be achieved. This would be impossible in the short run.

seen

3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



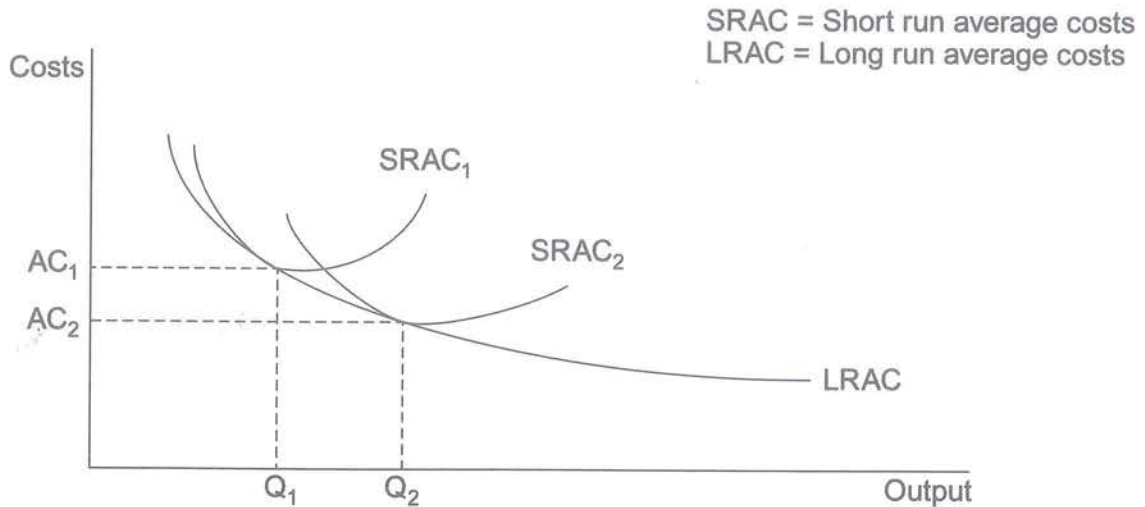
Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

In the long run, all factors of production are variable. In the short run, at least one factor of production is fixed. In the long run, the car manufacturer can make a production plan that benefits from economies of scale, therefore decreasing long run costs. For example, the manufacturer may buy another factory and move production there. The new factory may have ^{machines} that are an indivisibility economy of scale, and can produce far more for an initially large cost. Hence in the long run,

3) These factors of production may be achieved. This would be impossible in the short run.



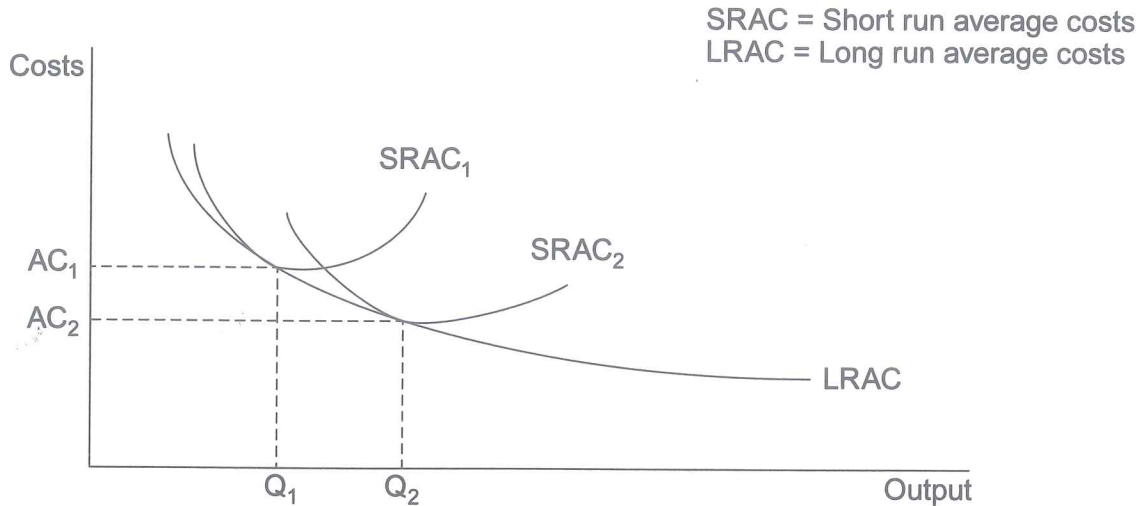
3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

long-run is defined as a time period when a firm can all factors of production become variable. The firm's long run costs fall because it experiences economies of scale. Economies of scale are factors that cause unit costs to fall as a firm expands and increases its scale of plant. It may be because in this case the firm introduces one more factor of production from the ones that were fixed in $SRAC_1$, so adding one more of the initially fixed factor will result in a movement to a new $SRAC$, which is $SRAC_2$.

3. A car manufacturer is faced with a large increase in demand for its product. As a result it needs to increase its production.



Using the diagram explain why its long run costs fall when its output expands from Q_1 to Q_2 . [4]

long-run is defined as a time period when a firm can all factors of production become variable. The firm's long run costs fall because it experiences economies of scale. Economies of scale are factors that cause unit costs to fall as a firm expands and increases its scale of plant. It may be because in this case the firm introduces one more factor of production from the ones that were fixed in $SRAC_1$, so adding one more of the initially fixed factor will result in a movement to a new $SRAC$, which is $SRAC_2$.



No EXAMPLE

3

4

SECTION B

Answer **one** question from this section.

Examiner
only

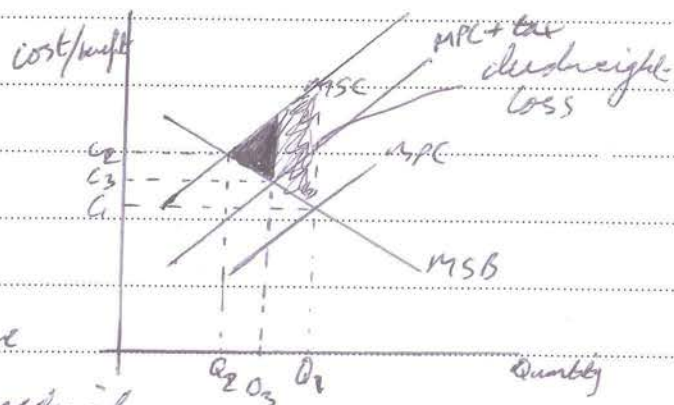
- 8.) "The Government should use taxes and subsidies to encourage people to use buses and trains rather than private cars." Discuss. [20]

Answer the question from Section B using the following pages.

A highly concentrated market is a market with
 8.) A subsidy is money given to a firm to compensate for some of the firm's expenditure. A tax is what the government obtains indirectly through indirect taxes like VAT and directly through direct tax like corporation tax or income tax.

There is an issue with cars that they produce a lot of negative externalities. One is pollution in the economy and also congestion on major roads in cities like London. On the

of diagram we can take pollution. Its effect on the person, private, is a lot lower than the cost to society. Society will have to clear up buildings or medical issues due to this pollution. This causes a deadweight loss or welfare loss to society. This is shown by the outer



triangle. This is bad for the economy. So an introduction of a tax ^(higher VAT) can help with this. It raises the MPC up closer to MSC. This as you can see reduces the deadweight loss. This is because it internalises the externality. The private pays for their cost. This is good also because of price rises. Depending on the elasticity of cars, people may look for an alternative. This attracts them to using buses or trains if they become cheaper. This may also have negatives. A rise in price will not necessarily help if cars are inelastic. Consumers may take the burden, like they have done in the past, and continue driving. This causes unstable prices, against government objectives due to inflation. Bad for the economy if above 2% target, because it could reduce consumption and damage A.D. causing unemployment.

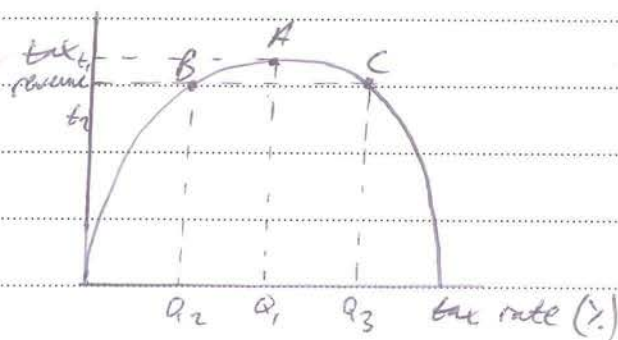
They could also use subsidies. If the government do this, bus and train services can reduce their prices by pass the subsidy onto the consumer. ^{Being cheaper} they then become more competitive and people choose them instead of cars and this solves the issue. They could also improve their service making demand increase for their service, currently a possible factor to cross amount of ~~public~~ private cars. This increase in quality can help smaller transport services, mainly buses, expand and grow. This growth can later lead to subsidies being removed and instead taxing the firms when they are big. This increases capital for government to spend elsewhere and helping UK to grow. This being a government objective.

However ^{government} firms may not ~~not~~ have the capital needed, already being in debt. If firms are being taxed they can give them tax breaks to give the same effect. Buses and trains may not use it effectively though. They may waste it or keep it as profit and therefore there would have been no point in the government doing this. An example would be train services that have been subsidised to build new train stations but finish over budget and late, this affects trains as the station may irritate consumers.

On the other hand maybe the government should step back. Privatise any public transport and leave them to compete. The invisible hand of the market will mean firms need to be efficient and give consumers what they want in order to survive. The incentive of profit and possible super normal profit, if gain large market share like local buses in local economy, will force them to compete. This will end up making them more enticing to private ~~car~~ owners to use.

Also could be argued that taxes may not work. Depending on the current level of tax any change could have a negative effect. This can be shown by the Laffer curve.

If corporation tax is at A, and they try to increase it to C, they lose revenue due to



possible tax evasion like Amazon. This would mean that any future benefits would be taken away. Therefore Government may feel that they don't wish buses and trains should get any more power or they would become more powerful than the government. At this moment they can control them. This view shows they shouldn't use tax or subsidies to help increase bus and trains, as they get nothing in return.

In conclusion the government can help encourage people to use public transport as long as the firms use the extra capital wisely. There maybe be a lag in some areas, like rebuilding, and possibly want work as people just like their own transport. Being in debt the government may not wish to spend more but there is also the opportunity cost. Maybe transport is not as important as education at this moment in the economy. Maybe other areas should be focused on like balance of payments, unemployment or supply side policies. This may seem more important at the moment.

SECTION B

Answer one question from this section.

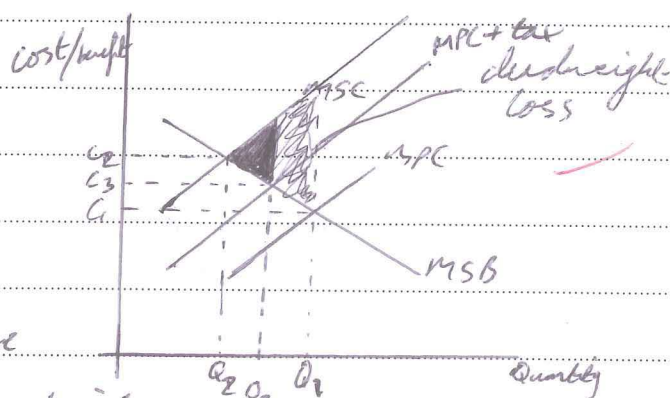
8. "The Government should use taxes and subsidies to encourage people to use buses and trains rather than private cars." Discuss. [20]

Answer the question from Section B using the following pages.

A highly concentrated market is a market with
 8.) A subsidy is money given to a firm to compensate for some of the firm's expenditure. A tax is what the government obtain indirectly through indirect taxes like VAT and directly through direct tax like corporation tax or income tax.

There is an issue with cars that they produce a lot of negative externalities. One is pollution in the economy and also congestion on major roads in cities like London. On the

of diagram we can take cars pollution. Its effect on the person, private, is a lot lower than the cost



to society. Society will have to clear up buildings or medical issues due to this pollution. This causes a deadweight loss or welfare loss to society. This is shown by the outer

triangle. This is bad for the economy. So an introduction of a tax ^(higher VAT) can help with this. It raises the MPC up closer to MSC. This as you can see reduces the deadweight loss. This is because it internalises the externality. The private pays for their cost. This is good also because of price rises. Depending on the elasticity of cars, people may look for an alternative. This attracts them to using buses or trains if they become cheaper. This may also have negatives. A rise in price will not necessarily help if cars are inelastic. Consumers may take the burden, like they have done in the past, and continue driving. This causes unstable prices, against government objectives due to inflation. Bad for the economy if above 2% target, because it could reduce consumption and damage A.D. causing unemployment.

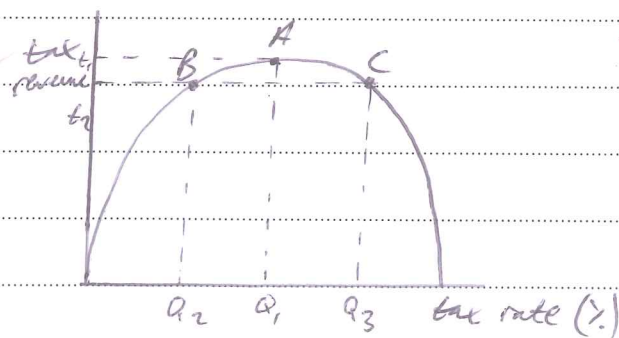
They could also use subsidies. If the government do this, bus and train services can reduce their prices by pass the subsidy onto the consumer. ^{Being cheaper} they then become more competitive and people choose them instead of cars and this solves the issue. They could also improve their service making demand increase for their service, currently a possible factor to cross amount of public private cars. This increase in quality can help smaller transport services, mainly buses, expand and grow. This growth can later lead to subsidies being removed and instead taxing the firms when they are big. This increases capital for government to spend elsewhere and helping UK to grow. This being a government objective.

However ^{government} firms may not ~~not~~ have the capital needed, already being in debt. If firms are being taxed they can give them tax breaks to give the same effect. Buses and trains may not use it effectively though. They may waste it or keep it as profit and therefore there would have been no point in the government doing this. An example would be train services that have been subsidised to build new train stations but finish over budget and late, this affects trains as the station may irritate consumers.

On the other hand maybe the government should step back. Privatise any public transport and leave them to compete. The invisible hand of the market will mean firms need to be efficient and give consumers what they want in order to survive. The incentive of profit and possible super normal profit, if gain large market share like local buses in local economy, will force them to compete. This will end up making them more enticing to private ~~car~~ owners to use.

Also could be argued that taxes may not work. Depending on the current level of tax any change could have a negative effect. This can be shown by the Laffer curve.

If corporation tax is at A, and they try to increase it to C, they lose revenue due to



possible tax evasion like Amazon. This would mean that any future benefits would be taken away. Therefore Government may feel that they don't wish buses and trains should get any more power or they would become more powerful than the government. At this moment they are control them. This view shows they shouldn't use tax or subsidies to help increase bus and trains, as they get nothing in return.

In conclusion the government can help encourage people to use public transport as long as the firms use the extra capital wisely. There maybe be a lag in some areas, like rebuilding, and possibly want work as people just like their own transport. Being in debt the government may not wish to spend more but there is also the opportunity cost. Maybe transport is not as important as education at this moment in the economy. Maybe other areas should be focused on like balance of payments, unemployment or supply side policies. This may seem more important at the moment.

A good discussion with some consideration of wider issues

SECTION B

Answer one question from this section.

8. "The Government should use taxes and subsidies to encourage people to use buses and trains rather than private cars." Discuss. [20]

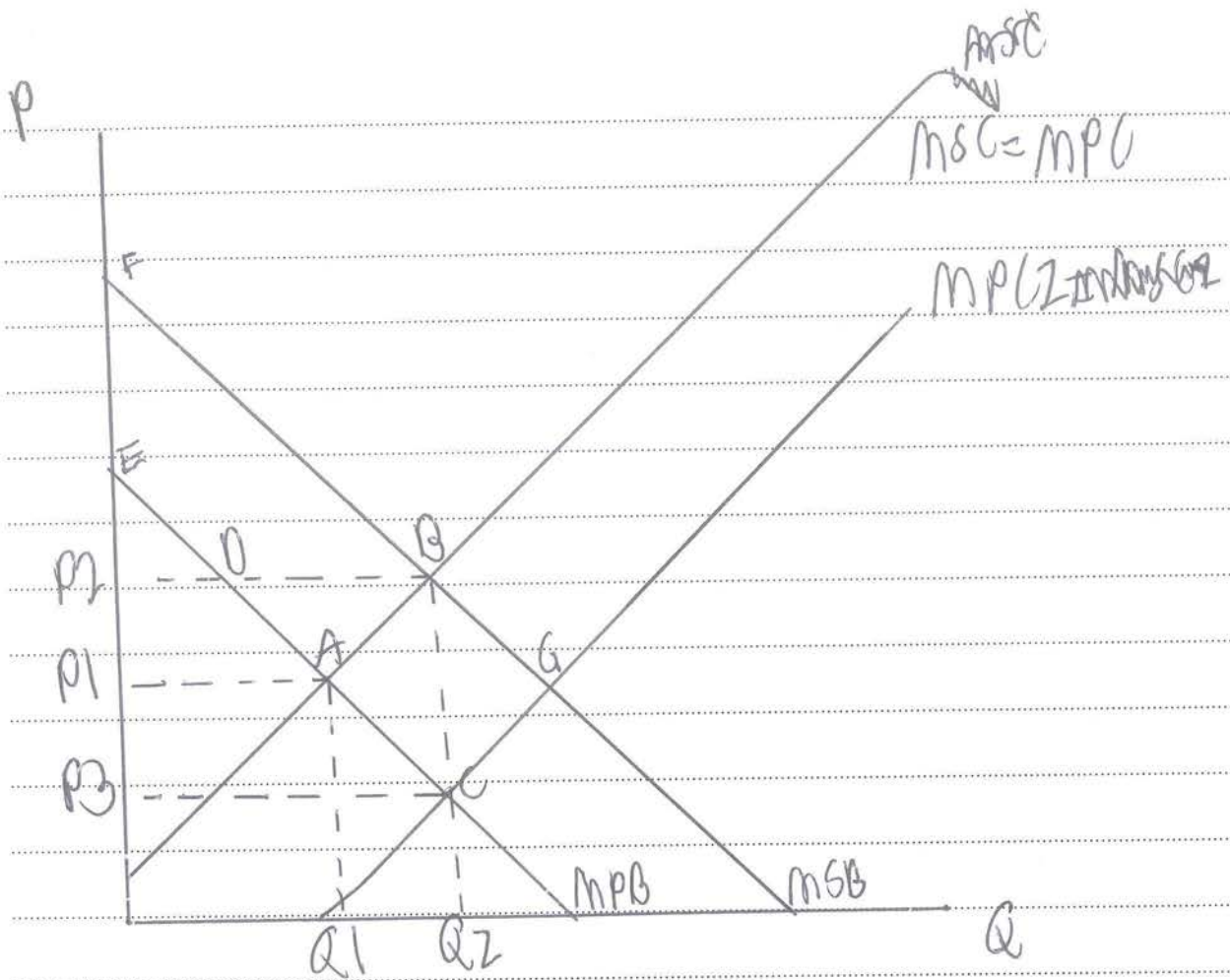
Answer the question from Section B using the following pages.

8. Buses and trains both have positive externalities of consumption. An externality is a cost or benefit of a transaction of a third party. Positive externalities mean the marginal private benefit is less than the marginal social benefit of consumption. This means the market will not produce at socially optimum output. That is where the marginal social cost of production = marginal social benefit of consumption.

Buses and ~~trains~~ trains have multiple positive externalities including increased mobility and decreased pollution.

Positive externalities mean the goods are known as merit goods.

The under production of merit goods by the free market is known as market failure.



The free market will produce where private costs = private benefits, P_1, Q_1 . This is $Q_2 - Q_1$ less than the socially optimum output. This means there is a net welfare loss of area ABD . This is bad for society and therefore government seek to interfere.

One method used is subsidies. Subsidies decrease the cost of production, thus shifting the marginal ~~social~~ private cost curve to the right to MP_2 . This changes the market output to Q_2, P_3 .

or socially optimum output. This will increase ~~consumption~~ ~~output~~ by ~~output~~ we have in society. However the subsidy will add cost to the government P2, P3, B, C.

Subsidies may not be a popular method of present because of the cost. Increasing subsidy means government spending will go up which means either greater deficit or increased taxation.

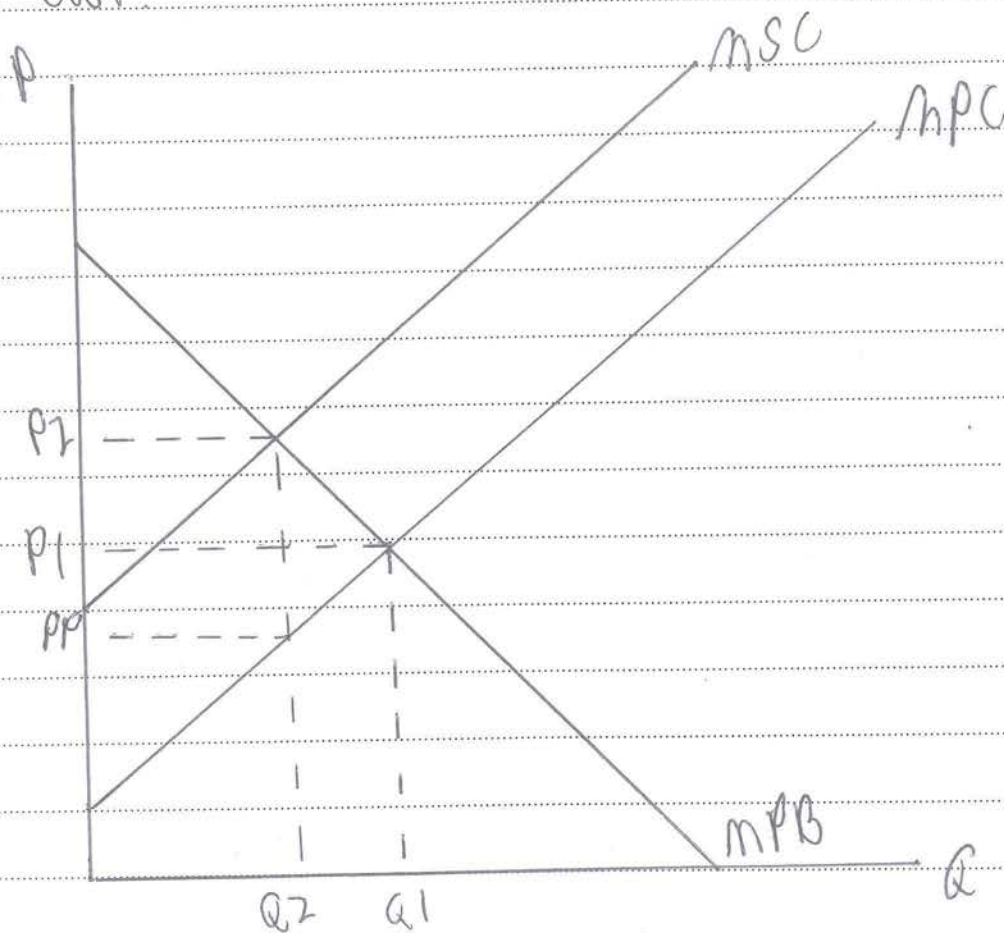
Some argue there are better ways to increase consumption such as better information and advertising about train and bus availability. This would increase the marginal private benefit towards marginal social benefits leading to output leading to socially optimum.

The main issue with subsidies is as a method to produce a socially optimum output estimating the size of the externality. If incorrectly estimated a subsidy may lead to government failure. That is government intervention in the market leading to a ~~loss~~ welfare loss in welfare.

Some also argue that bus travel in particular also carries negative long term

externalities. The diesel engine emit high levels of sulphur dioxide and carbon monoxide. As a result this means socially optimum output may be less than Q_1 as the marginal social cost may be greater than the marginal private cost.

Private cars are viewed as having negative externalities such as pollution, both noise and air. This means the marginal social cost of car travel is ~~not~~ greater than the marginal private cost.



The free market will produce at P_1, Q_1 . This is $Q_1 < Q_2$ less than the socially optimum output. This leads to a loss of welfare for society and is market failure.

In an attempt to eliminate market failure some argue governments should place taxes on consumption of car travel, an example being fuel duty. This attempts to raise the cost of motoring so $MPC = MSC$. This would lead to socially optimum output being produced. This would also lead to government revenue of $(P_2 - P_1) \times Q_2$. This revenue could be used to fund the subsidy on rail and bus travel.

One problem is estimating the size of the negative externality. If the size of the externality is incorrectly measured then the market will not produce in a socially optimum manner. This may even lead to a greater loss in welfare, government failure.

Some would argue the government got better at inserting in reducing

The negative externalities of car use. For example by installing charging points and the costs for electric cars which emit less noise and air pollution. Some even argue investment in self driving cars may decrease negative externalities by increasing efficiency and increasing the ~~social~~ social benefit of car travel by raising workplace productivity. However these are both long term solutions.

The government already employs both taxes and subsidies to increase the use of public transport and discourage car use.

The effectiveness of taxes on car use in reducing demand is reduced by the inelastic nature of demand. ~~and demand is~~ This means although taxes will raise revenue there will have less of an effect on consumption.

Although governments may aim to achieve socially optimum output as this is the most socially efficient allocation of resources taxes and subsidies can only help towards that goal as the true marginal social and private costs and benefits of production are impossible to measure. However as a method of increasing welfare in the transport market they are useful.

SECTION B

Answer one question from this section.

8. "The Government should use taxes and subsidies to encourage people to use buses and trains rather than private cars." Discuss. [20]

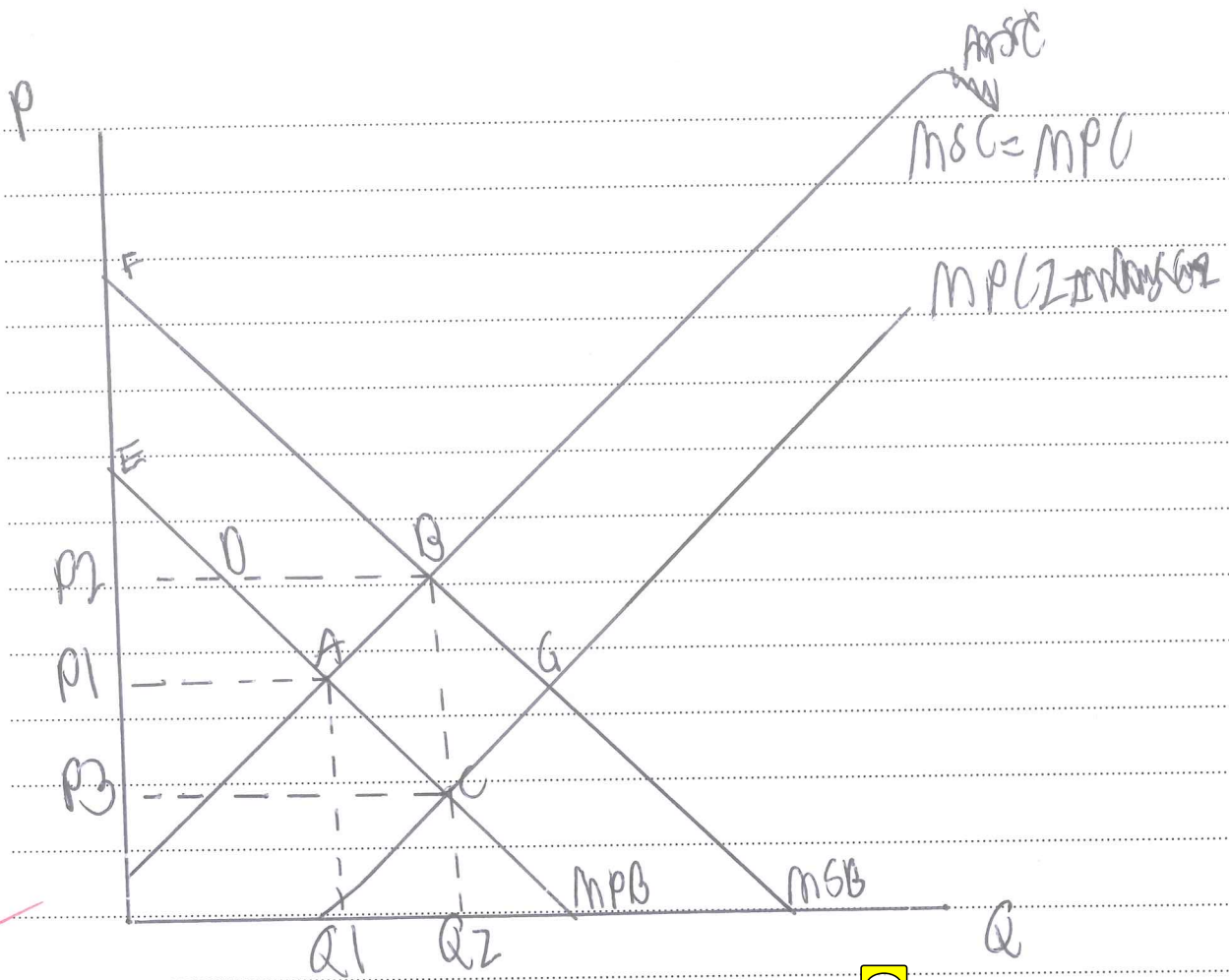
Answer the question from Section B using the following pages.

8. Buses and trains both have positive externalities of consumption. An externality is a cost or benefit of a transaction of a third party. Positive externalities mean the marginal private benefit is less than the marginal social benefit of consumption. This means the market will not produce at socially optimum output. That is where the marginal social cost of production = marginal social benefit of consumption.

Buses and ~~trains~~ trains have multiple positive externalities including increased mobility and decreased pollution.

Positive externalities mean the goods are known as merit goods.

The under production of merit goods by the free market is known as market failure.



The free market will produce where private costs = private benefits, P_1, Q_1 . This is Q_1 less than the socially optimum output. This means there is a net welfare loss of area ABD . This is bad for society and therefore government seek to interfere.

The method used is subsidies. Subsidies decrease the cost of production, thus shifting the marginal ~~social~~ private cost curve to the right to MPC_2 . This changes the market output to Q_2, P_3 .

or socially optimum output. This will increase welfare in society. However the subsidy will ~~be~~ ~~cost~~ the government P2, P3, B, C.

Subsidies may not be a popular method of ~~present~~ ~~government~~ ~~spending~~ because of the cost. Increasing subsidy means ~~greater~~ ~~deficit~~ or increased taxation.

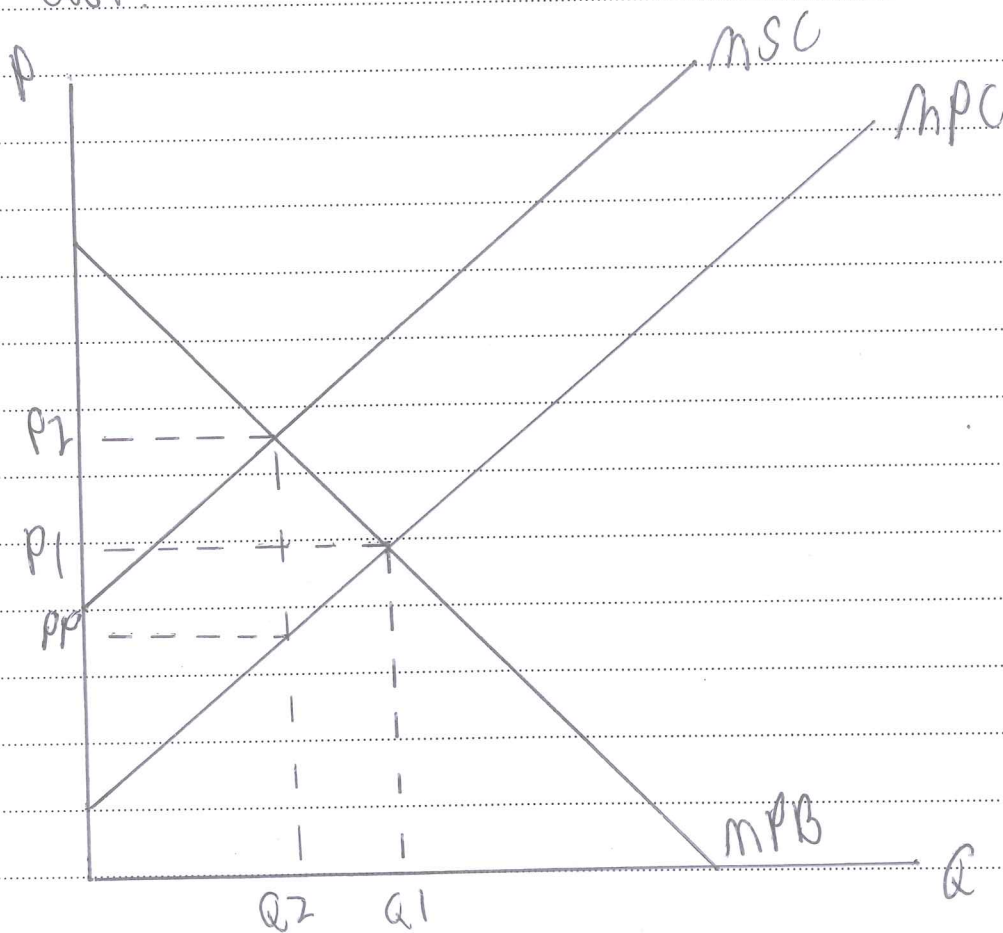
Some argue there are better ways to increase consumption such as better information and advertising about train and bus availability. This would increase the marginal private benefit towards marginal social benefits leading to output leading to socially optimum.

The main issue with subsidies is as a method to produce a socially optimum output ~~estimating~~ ~~welfare~~ the size of the externality. If incorrectly estimated a subsidy may lead to government failure. That is government intervention in the market leading to a ~~loss~~ ~~welfare~~ loss in welfare.

Some also argue that bus travel in particular also carries negative long term

externalities. The diesel engine emit high levels of sulphur dioxide and carbon monoxide. As a result this means socially optimum output may be less than Q_1 as the marginal social cost may be greater than the marginal private cost.

Private cars are viewed as having negative externalities such as pollution, both noise and air. This means the marginal social cost of car travel is greater than the marginal private cost.



The free market will produce at P_1, Q_1 . This is $Q_1 - Q_2$ ~~less~~ ^{so} they lead to a loss of welfare for society and is market failure.

In an attempt to eliminate market failure some argue governments should place ~~taxes~~ on consumption of car travel, an example being fuel duty. This attempts to ~~raise~~ ^{raise} the cost of motoring so ~~MPC = MSC~~. This would lead to socially optimum output being produced. This would also lead to government revenue of $(P_2 - P_1) \times Q_2$. This revenue could be used to fund the subsidy on rail and bus travel.

One problem is estimating the size of the negative externality. If the size of the ~~ex~~ externality is incorrectly measured then the market will not produce in a socially optimum manner. This may even lead to a ~~greater~~ loss in welfare, government failure.

Some would be argue the government ~~got~~ ^{is} better inserting in reducing

The negative externalities of car use. For example by installing charging points and the costs for ~~electric~~ cars which emit less noise and air pollution. Some even argue investment in self driving cars may decrease negative externalities by increasing efficiency and increasing the ~~social~~ social benefit of car travel by raising worker productivity. However these are both long term solutions.

The government already employs both taxes and subsidies to increase the use of public transport and discourage car use.

The effectiveness of taxes on car use in reducing demand is reduced by the ~~inelastic~~ inelastic nature of demand. ~~and demand~~ This means although taxes will raise revenue there will have less of an effect on consumption.

Although governments may aim to achieve socially optimum output as this is the most socially efficient allocation of resources taxes and subsidies can only help towards that goal as the true marginal social and private costs and benefits of production are impossible to measure. However as a method of measuring welfare in the transport market they are useful.

Reasons
applicat
of
teaching
middle
147
47