

Assessment Schedule – 2025

Economics: Demonstrate understanding of the efficiency of different market structures using marginal analysis (91400)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Demonstrating understanding of the efficiency of different market structures using marginal analysis involves:</i></p> <ul style="list-style-type: none"> • providing an explanation of: <ul style="list-style-type: none"> - the efficiency of a market structure - the impact of a change in a market on the short- and / or long-run pricing and / or output decisions of a firm using marginal analysis - a government policy to improve the efficiency of a monopoly market - pricing and output decisions for perfectly competitive and / or monopolist firms using marginal analysis • using an economic model(s) to illustrate concepts relating to the efficiency of different market structures. 	<p><i>Demonstrating in-depth understanding of the efficiency of different market structures using marginal analysis involves:</i></p> <ul style="list-style-type: none"> • providing a detailed explanation of: <ul style="list-style-type: none"> - the efficiency of a market structure - the impact of a change in a market on the short- and / or long-run pricing and / or output decisions of a firm using marginal analysis - a government policy to improve the efficiency of a monopoly market - pricing and output decisions for perfectly competitive and / or monopolist firms using marginal analysis • using an economic model(s) to illustrate complex concepts and / or support detailed explanations relating to the efficiency of different market structures. 	<p><i>Demonstrating comprehensive understanding of the efficiency of different market structures using marginal analysis involves:</i></p> <ul style="list-style-type: none"> • comparing and / or contrasting: <ul style="list-style-type: none"> - the efficiency of market structures - the impact of a change in a market on the short- and long-run pricing and / or output decisions of a firm using marginal analysis - the effectiveness of government policies to improve the efficiency of a monopoly market • integrating an economic model(s) into explanations relating to the efficiency of different market structures.

Evidence

Q1	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)(i)	See Appendix.	TWO of: <ul style="list-style-type: none"> • $P_{SR} = P_{LR}$ labelled • $Q_{SR} = Q_{LR}$ labelled • supernormal profit shaded and labelled • deadweight loss shaded and labelled. 		
(ii)	<p>The price, output level, and profit are the same in the short and long run. The output level of QSR is the same as QLR as they are both where $MC = MR$ i.e. at profit maximisation. Being a price maker and a sole seller, the monopoly supplies to the entire market, therefore the AR curve is the market demand curve. This means that it can charge a high price by restricting quantity, OR if it chooses to reduce price, it is able to increase quantity sold, based on the $AR = D$ curve, i.e. at output level QLR, the price charged will be PLR where QLR meets the AR curve. As the output $Q_{SR} = Q_{LR}$, the price in the short run and long run remains the same at $PSR = PLR$.</p> <p>The monopoly makes supernormal profit (shaded rectangle on Graph One) in the short run and continues to make it in the long run as its $AR > AC$ (or $TR > TC$). The monopoly has strong barriers to entry such as high set up costs, copyright, or patents. This will prevent any potential new firms from entering the market attracted by the supernormal profits the monopoly is making in the short run. As new firms are prevented from increasing the market supply, the monopoly can keep making supernormal profits in the long run as the price will be prevented from falling.</p>	<p>Explains:</p> <ul style="list-style-type: none"> • the output in the short run is the same as in the long run <p>OR</p> <p>the price in the short run is the same as in the long run</p> <p>OR</p> <p>the monopoly makes a supernormal profit in the short run and continues to make a supernormal profit in the long run.</p>	<p>Explains in detail:</p> <ul style="list-style-type: none"> • the output in the short run is the same as in the long run due to profit maximisation being at the same point <p>OR</p> <p>the price in the short run is the same as in the long run, with a reason linked to characteristics of a monopoly</p> <p>OR</p> <p>the monopoly makes a supernormal profit in the short run and continues to make a supernormal profit in the long run, with a reason linked to the characteristics of a monopoly.</p> <p>AND refers to Graph One.</p>	<p>Explains in detail:</p> <ul style="list-style-type: none"> • the output, price, and profit in the short run are the same as in the long run, each with an explanation / reason linked to a characteristic of a monopoly <p>AND</p> <p>the monopoly makes a supernormal profit in the short run and continues to make a supernormal profit in the long run, with a reason linked to the characteristics of a monopoly.</p> <p>AND refers to Graph One.</p>
(iii)	<p>The monopoly is not allocatively efficient as it produces at $MR = MC$, which is not $AR = MC$, so it does not produce where $D = S$. This means that a deadweight loss occurs in this market (as shaded ) and the sum of consumer surplus and producer surplus is not maximised.</p>	<p>Explains that the monopoly is not allocatively efficient due to ONE of:</p> <ul style="list-style-type: none"> • D does not equal S • there is a DWL 	<p>Explains in detail that the monopoly is not allocatively efficient:</p> <ul style="list-style-type: none"> • as it does not produce at $D = S$ <p>AND</p>	<p>Explains in detail that the monopoly is not allocatively efficient:</p> <ul style="list-style-type: none"> • as it does not produce at $D = S$ <p>AND</p>

		<ul style="list-style-type: none"> • sum of CS and PS is not maximised. 	<ul style="list-style-type: none"> • there is a DWL <p>OR</p> <ul style="list-style-type: none"> • sum of CS and PS is not maximised. 	<ul style="list-style-type: none"> • there is a DWL <p>AND</p> <ul style="list-style-type: none"> • sum of CS and PS is not maximised.
(b)(i) (ii)	See Appendix.	<p>AR₁ added and labelled (must be twice the distance of MR₁ from the origin)</p> <p>AND ONE other correct:</p> <ul style="list-style-type: none"> • Pe and Qe labelled • P₁ and Q₁ labelled • supernormal profit shaded and labelled. 		
(iii)	Following the increase in demand, if the monopoly was producing output level Q _e , MR ₁ > MC, which means its additional revenue generated from the last unit of output is greater than the additional cost of producing it, so the monopoly is missing out on marginal profits. To maximise profits, the monopoly will increase its output to Q ₁ where MR ₁ = MC which is where profit maximisation is.	<p>Explains ONE of:</p> <ul style="list-style-type: none"> • MR₁ is greater than MC • missing out on marginal profits • increase output to Q₁ • Q₁ is where MC = MR₁ and profits are maximised. 	<p>Explains in detail THREE of:</p> <ul style="list-style-type: none"> • MR₁ is greater than MC • missing out on marginal profits • increase output to Q₁ • Q₁ is where MC = MR₁ and profits are maximised. <p>AND refers to Graph Two.</p>	<p>Explains in detail that the monopoly will increase output to Q₁ because:</p> <ul style="list-style-type: none"> • MR₁ is greater than MC • missing out on marginal profits • Q₁ is where MC = MR₁ and profits are maximised. <p>AND refers to Graph Two.</p>
(iv)	<p>Before the increase in demand the monopoly was making a normal profit where its AR=AC (or TR=TC). This is the minimum return required to keep the monopoly in the market, so it is just sufficient profit for the monopoly to stay.</p> <p>After the increase in demand the monopoly is now making a supernormal profit where its AR>AC (or TR>TC). This is more than sufficient profit for the monopoly to stay in the market.</p>	<p>Explains ONE of:</p> <ul style="list-style-type: none"> • Before: <ul style="list-style-type: none"> - monopoly making normal profit, AR=AC (or TR=TC), the minimum return required and sufficient to stay in the market <p>OR</p> <ul style="list-style-type: none"> • After: <ul style="list-style-type: none"> - monopoly making supernormal profit AR > AC (or TR > TC) more than sufficient to stay. 	<p>Explains in detail that:</p> <ul style="list-style-type: none"> • Before: <ul style="list-style-type: none"> - monopoly making normal profit, AR = AC (or TR = TC) minimum return required sufficient to stay <p>OR</p> <ul style="list-style-type: none"> • After: <ul style="list-style-type: none"> - monopoly making supernormal profit AR > AC (or TR > TC) more than sufficient to stay. <p>AND refers to Graph Two.</p>	<p>Explains in detail that:</p> <ul style="list-style-type: none"> • Before: <ul style="list-style-type: none"> - monopoly making normal profit, AR=AC (or TR=TC) minimum return required sufficient to stay <p>AND</p> <ul style="list-style-type: none"> • After: <ul style="list-style-type: none"> - monopoly making supernormal profit AR > AC (or TR > TC) more than sufficient to stay. <p>AND refers to Graph Two.</p>

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence.	Nearly all Achievement evidence	Some Merit evidence. Must refer to Graph One and Graph Two.	Most Merit evidence.	Excellence evidence. One part may be weaker. Integrates relevant information from Graph One and Graph Two into answer.	All points covered.

N0 = No response; no relevant evidence.

Q2	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)(i)	<p>Fixed costs are independent of the level of output. They remain the same even when output levels change. For example, farmers will pay the same amount of council rates whether they produce more or fewer crops.</p> <p>Variable costs are dependent on output, so will increase when output increases and decrease when output decreases. For example, if the farmer produces more crops, more fertilisers will be used, meaning the cost for fertiliser will also increase.</p>	<p>Explains:</p> <ul style="list-style-type: none"> Fixed costs are independent of output <p>OR</p> <ul style="list-style-type: none"> variable costs are dependent on output or change with output. 	<p>Explains:</p> <ul style="list-style-type: none"> Fixed costs are independent of output <p>AND</p> <ul style="list-style-type: none"> variable costs change with output <p>AND uses correct examples to explain what independent of output and changes with output mean.</p>	
(ii) (iii)	<p>See Appendix.</p>	<p>Graph Three:</p> <ul style="list-style-type: none"> AC₁ added, intersecting MC at AC₁'s lowest point <p>AND ONE of:</p> <ul style="list-style-type: none"> Pe and Qe = Q_{FC} labelled Subnormal profit shaded and labelled. <p>OR</p> <p>Graph Four:</p> <ul style="list-style-type: none"> AC₁ added, intersecting MC₁ at AC₁'s lowest point <p>AND ONE of:</p> <ul style="list-style-type: none"> Pe and Q_{VC} labelled Subnormal profit shaded and labelled. 		
(iv)	<p>As fixed costs are independent of output, the increase in fixed costs does not affect marginal cost, i.e. the cost of producing one more unit. Therefore, only the per unit cost or the AC curve shifts up. Because the MC curve has remained the same, the profit maximising output also remained unchanged at Qe = Q_{FC}, i.e. the farmer is still operating at MC = MR.</p> <p>Variable costs increase with output, so when an additional unit is produced its marginal cost will increase, hence MC curve shifts up to the left. As total cost is made up of fixed and variable costs, an increase in variable</p>	<p>Explains:</p> <ul style="list-style-type: none"> fixed costs do not affect MC, the cost of producing an additional unit <p>OR</p> <ul style="list-style-type: none"> variable costs increase with output, so marginal cost will increase and so will AC, as AC = TC / Q. 	<p>Explains in detail:</p> <ul style="list-style-type: none"> fixed costs do not affect MC – the cost of producing an additional unit – and only affect the per unit cost, so MC does not shift and only the AC curve shifts up <p>AND</p> <ul style="list-style-type: none"> variable costs increase with output, so marginal costs will increase, hence the MC 	<p>Explains in detail ALL of:</p> <ul style="list-style-type: none"> fixed costs do not affect MC – the cost of producing an additional unit – and only affect the per unit cost, so MC does not shift and only the AC curve shifts up <p>AND</p> <ul style="list-style-type: none"> variable costs increase with output so, marginal costs will increase, hence the MC

	<p>cost increases total cost. If total cost increases, the average, derived from TC / Q in turn will also increase, hence the AC curve shifts up as well. With the MC curve shifted left in Graph Four to MC_1 (increase in variable cost) the profit maximising (loss minimising) output has decreased to Q_{VC}, where $MC_1 = MR$. This is lower than the output level in Graph Three.</p> <p>Therefore, the farmer facing increased fixed costs continues to produce at $Q_e = Q_{FC}$, while the farmer facing increased variable costs decreases its output from Q_e to Q_{VC}.</p> <p>(Accept: Therefore, the short run output level is higher when fixed costs increase compared to when variable costs increase.)</p>		<p>curve shifts up to the left AND explains how TC / Q increases, so the AC curve increases and shifts up</p> <p>OR</p> <ul style="list-style-type: none"> output is lower when VC increases compared to when FC increases, due to where $MC = MR$ is (and MC for VC has shifted left while MC for FC hasn't). <p>AND refers to Graph Three and Graph Four.</p>	<p>curve shifts up to the left AND explains how TC / Q increases, so the AC curve increases and shifts up</p> <p>AND</p> <ul style="list-style-type: none"> output is lower when VC increases compared to when FC increases, due to where $MC = MR$ is (and MC for VC has shifted left while MC for FC hasn't). <p>AND refers to Graph Three and Graph Four.</p>
(b)(i)	See Appendix	<p>BOTH</p> <ul style="list-style-type: none"> $MR_1 = AR_1 = D_1$ correctly placed and labelled P_1 and Q_1 labelled. 		
(ii)	<p>Following the increase in fixed costs due to paying higher rates, farmers will be making insufficient revenue to cover all economic costs, so are making a subnormal profit where $AC > AR$ (or $TC > TR$). As this is insufficient return to stay in the industry, some farmers will leave. They are able to leave as there are no barriers to exit. This decreases market supply, which results in a rise in the market price. As the farmers / firms in perfect competition are price takers, they take the new higher price, P_1, and $MR = AR = D$ shifts up to $MR_1 = AR_1 = D_1$.</p> <p>At the original output of $Q_e = Q_{FC}$, MR_1 is now greater than MC, meaning that the additional revenue generated from selling the last unit is greater than the additional cost of producing it, so the farmers are missing marginal profits. To maximise profit, they will increase output from $Q_e = Q_{FC}$ to Q_1 where $MC = MR_1$ (profit maximisation).</p> <p>In the long run, at output level Q_1 the perfect competitor / farmer will make normal profit as $AR = AC$ (or $TR = TC$) and the farmer is making just sufficient return to stay in the industry (or there is no more incentive to leave / enter).</p>	<p>Explains:</p> <ul style="list-style-type: none"> the price increases due to market supply decreasing <p>OR</p> <ul style="list-style-type: none"> output increases to where $MC = MR_1$ <p>OR</p> <ul style="list-style-type: none"> normal profits are made as $AR = AC$ (or $TR = TC$). 	<p>Explains in detail:</p> <ul style="list-style-type: none"> the price increases due to market supply decreasing referring to the characteristics of perfect competition <p>OR</p> <ul style="list-style-type: none"> output increases, referring to marginal analysis <p>AND</p> <ul style="list-style-type: none"> normal profits are made in the LR, as $AR = AC$ (or $TR = TC$), i.e. making just sufficient return to stay in the industry (or there is no more incentive to leave / enter). <p>AND refers to Graph Three.</p>	<p>Explains in detail:</p> <ul style="list-style-type: none"> the price increases due to market supply decreasing referring to the characteristics of perfect competition <p>AND</p> <ul style="list-style-type: none"> output increases, referring to marginal analysis <p>AND</p> <ul style="list-style-type: none"> normal profits are made in the LR, as $AR = AC$ (or $TR = TC$) i.e. making just sufficient return to stay in the industry (or there is no more incentive to leave / enter). <p>AND refers to Graph Three and the resource material.</p>

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence. Must refer to Graph Three and Graph Four.	Most Merit evidence.	Excellence evidence. One part may be weaker. Integrates relevant information from Graph Three, Graph Four, and the resource material.	All points covered.

N0 = No response; no relevant evidence.

Q3	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)(i)	See Appendix.	TWO of: <ul style="list-style-type: none"> • Pe and Qe labelled • supernormal profit shaded and labelled • deadweight loss shaded and labelled. 		
(ii)	<p>A natural monopoly is a single seller with high initial set-up costs due to costly infrastructure networks, for example in industries such as electricity generation and water supply. The high set-up costs are strong barriers preventing other firms from entering the market. The natural monopoly benefits from significant economies of scale as the set-up (fixed) costs are spread over larger outputs, decreasing its average costs. This is represented by its downward sloping AC curve, another feature of the natural monopoly. Because of this the natural monopoly can sell at a lower price than if there are two or more sellers in the market.</p> <p>Having other firms competing would lead to wasteful duplication of resources, which will increase inefficiency / cost. This is because the market share for the natural monopoly will decrease and restrict its ability to benefit from economies of scale, and therefore its ability to sell to the entire market at a lower price than if there were more firms competing. This is why despite the inefficiency indicated by the deadweight loss and the relatively high price of Pe, it is still desirable to have the natural monopoly supplying to the entire market rather than encouraging competition.</p>	Explains TWO of: <ul style="list-style-type: none"> • single seller • high set up costs (include example) • strong barriers • downward sloping AC • more firms competing leads to duplication of resources • reduces market share and ability to gain EOS. 	Explains in detail, the characteristics of a natural monopoly that contribute to it being able to supply to the entire market at lower prices. Includes FOUR of: <ul style="list-style-type: none"> • single seller • high set up costs (include example) • strong barriers • downward sloping AC • more firms competing leads to duplication of resources • reduces market share and ability to gain EOS (includes some link to how lower prices are achieved). AND refers to Graph Five.	Explains in detail the characteristics of natural monopoly that contribute to it being able to supply to the entire market at lower prices. Includes ALL of: <ul style="list-style-type: none"> • single seller • high set up costs (include example) • strong barriers • downward sloping AC • more firms competing leads to duplication of resources • reduces market share and ability to gain EOS (must explain how EOS allows the NM to sell at lower prices and how competition reduces ability to gain EOS). AND refers to Graph Five.
(iii)	If it produces less than Qe, MR is greater than MC, meaning that the additional revenue generated from selling the last unit is greater than the additional cost in producing it, so there are more marginal profits to be made. To maximise profit, the natural monopoly will increase output to Qe where MC = MR (profit maximisation). If it produces more than Qe, MR is lower than MC, meaning that the additional revenue generated from selling the last unit is not enough to cover the additional cost of producing it, so the natural	Explains that the natural monopoly will produce at output level Qe because it is where MC = MR, where profits are maximised.	Explains in detail that the natural monopoly will produce at output level Qe because: <p>if less than Qe:</p> <ul style="list-style-type: none"> • MR is greater than MC • missing out on marginal profits • Qe is where MC = MR and profits are maximised 	Explains in detail that the natural monopoly will produce at output level Qe because: <p>if less than Qe:</p> <ul style="list-style-type: none"> • MR is greater than MC • missing out on marginal profits • Qe is where MC = MR and profits are maximised

	monopoly is making marginal losses. To maximise profit, it will decrease output to Q_e where $MC = MR$ (profit maximisation). Therefore, the natural monopoly will produce at output level of Q_e so that its profit is maximised.		OR if more than Q_e : <ul style="list-style-type: none"> • MC is greater than MR • marginal losses being made • Q_e is where $MC = MR$ and profits are maximised. 	AND if more than Q_e : <ul style="list-style-type: none"> • MC is greater than MR • marginal losses being made • Q_e is where $MC = MR$ and profits are maximised.
(b)(i)	See Appendix.	BOTH correct: <ul style="list-style-type: none"> • P_1 and Q_1 labelled • subnormal profit shaded and labelled. 		
(ii)	If unregulated, the natural monopoly will price its product at P_e , which is where the AR (or demand) curve aligns with the output level (Q_e) produced at profit maximising where $MC = MR$. This price is higher than P_1 , which is the price charged if the natural monopoly is regulated to operate under marginal cost pricing, i.e. where $MC = AR$. At P_e , the unregulated monopoly makes a supernormal profit as its $AR > AC$ (or $TR > TC$), and this is more than sufficient profit to keep the natural monopoly in the industry in the long term. At P_1 , the regulated natural monopoly makes a subnormal profit as its $AC > AR$ (or $TC > TR$), and this is not sufficient to keep the natural monopoly in the industry in the long term. If it continues to make a subnormal profit in the long run, the regulated natural monopoly will leave the industry. For it to stay, the Government could provide a subsidy to cover its subnormal profit.	Explains TWO of: <ul style="list-style-type: none"> • unregulated NM charges P_e as that is where AR is • regulated NM charges P_1 where $MC = AR$ • unregulated NM makes supernormal profit as $AR > AC$ (or $TR > TC$) • regulated NM makes subnormal profit as $AC > AR$ (or $TC > TR$). 	Explains in detail THREE of: <ul style="list-style-type: none"> • the price is higher if unregulated • price is determined where $MC = MR$ and $MC = AR$ respectively • the unregulated NM makes supernormal profit while the regulated makes subnormal profit • the unregulated NM makes more than sufficient profit to stay in the market while the regulated will leave the market as subnormal profit is insufficient for it to stay unless the government subsidises. AND refers to Graph Five.	Explains in detail ALL of: <ul style="list-style-type: none"> • the price is higher if unregulated • price is determined where $MC = MR$ and $MC = AR$ respectively • the unregulated NM makes supernormal profit, while the regulated makes subnormal profit • the unregulated NM makes more than sufficient profit to stay in the market, while the regulated will leave the market as subnormal profit is insufficient for it to stay unless the government subsidises. AND refers to Graph Five.

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence. Must refer to Graph Five.	Most Merit evidence.	Excellence evidence. One part may be weaker. Integrates relevant information from Graph Five.	All points covered.

N0 = No response; no relevant evidence.

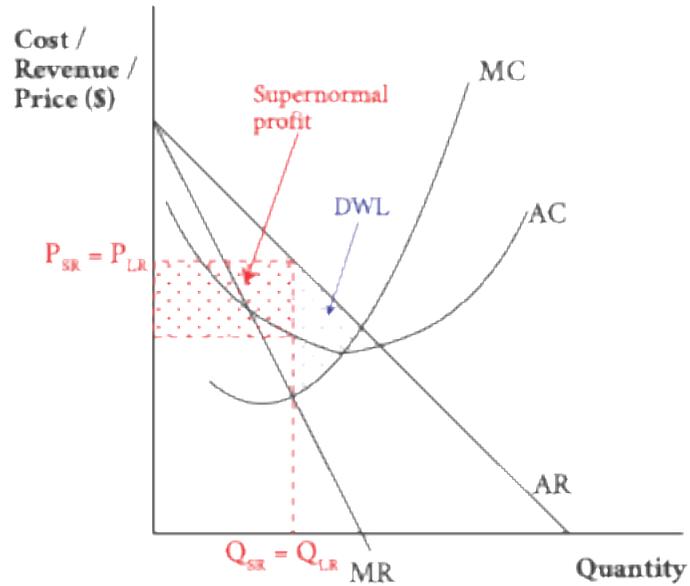
Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0–6	7–13	14–19	20–24

Appendix

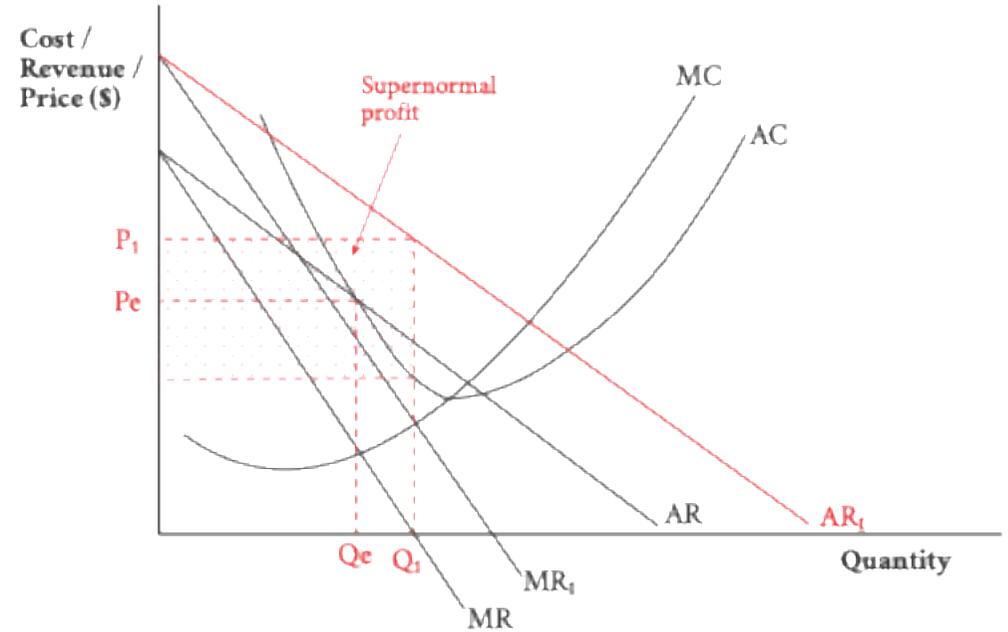
Question One (a)(i)

Graph One: A Monopoly in the short and long run



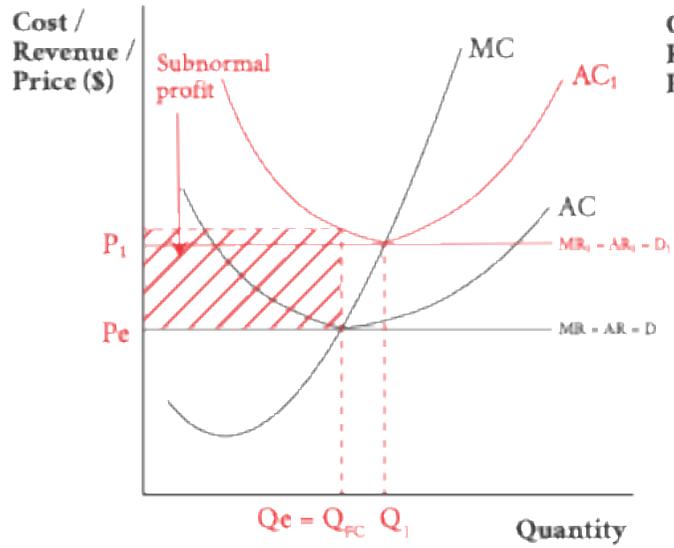
Question One (b)(i)(ii)

Graph Two: A monopoly before and after an increase in demand

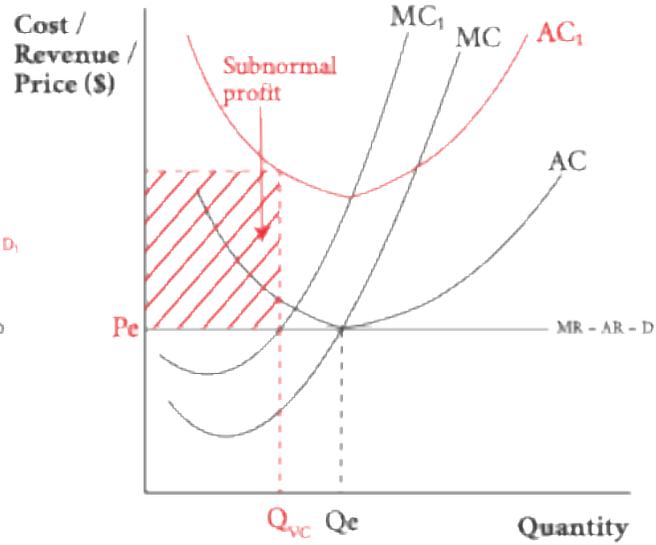


Question Two (a)(ii), (iii), and (iv)

Graph Three: Increased fixed costs



Graph Four: Increased variable costs



Question Three (a)(i) and (b)(i)

