

Assessment Schedule – 2019

Economics: Demonstrate understanding of producer choices using supply (90985)

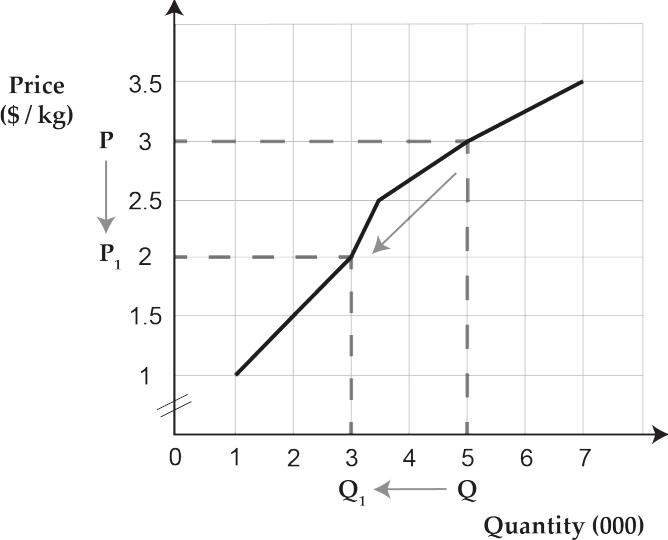
Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Demonstrate understanding</i> involves:</p> <ul style="list-style-type: none"> defining, identifying, describing and/or providing an explanation of choices a producer makes in response to a change in either internal or external factors affecting supply identifying, describing, and/or providing an explanation of the flow-on effects for the producer clearly illustrating changes using the supply model. 	<p><i>Demonstrate in-depth understanding</i> involves:</p> <ul style="list-style-type: none"> using the supply model to provide a detailed explanation of choices a producer makes in response to a change in either internal or external factors affecting supply providing a detailed explanation of the flow-on effects for the producer. 	<p><i>Demonstrate comprehensive understanding</i> involves:</p> <ul style="list-style-type: none"> linking detailed explanations of the flow-on effects for the producer, with detailed explanations of choices a producer makes in response to a change in either internal or external factors affecting supply integrating changes in supply into detailed explanations.

N0	N1	N2	A3	A4	M5	M6	E7	E8
No response; no relevant evidence.	Very little Achievement evidence.	Some Achievement evidence, partial explanations.	Most Achievement evidence, at least one explanation.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

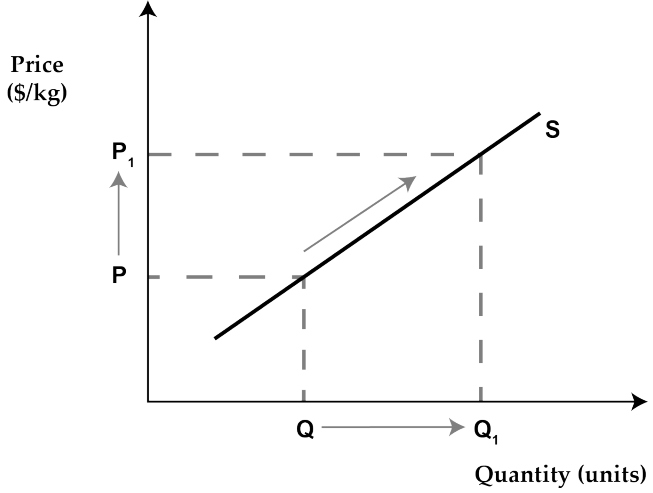
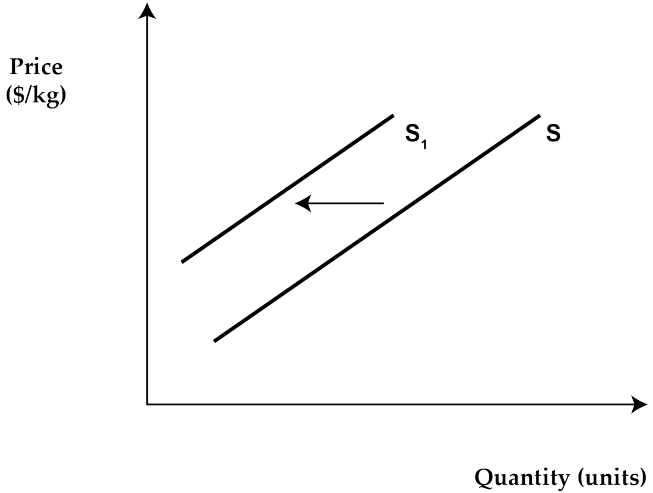
NB: Each question should be read as a whole before awarding a grade.

Evidence

Question	Sample answers / Evidence														
<p>ONE (a)</p>	<p>No time period is given. No 'S' occurs at the end of the curve to denote that it is one of supply.</p>														
<p>(b)</p>	<p>Las Vegas' monthly supply of cauliflower</p> <table border="1" data-bbox="338 368 848 715"> <thead> <tr> <th>Price (\$)</th> <th>Quantity (000)</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>1</td> </tr> <tr> <td>1.50</td> <td>2</td> </tr> <tr> <td>2.00</td> <td>3</td> </tr> <tr> <td>2.50</td> <td>3.5</td> </tr> <tr> <td>3.00</td> <td>5</td> </tr> <tr> <td>3.50</td> <td>7</td> </tr> </tbody> </table>	Price (\$)	Quantity (000)	1.00	1	1.50	2	2.00	3	2.50	3.5	3.00	5	3.50	7
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<p>(c)</p>	<p>Las Vegas' supply curve for Cauliflower</p> 														

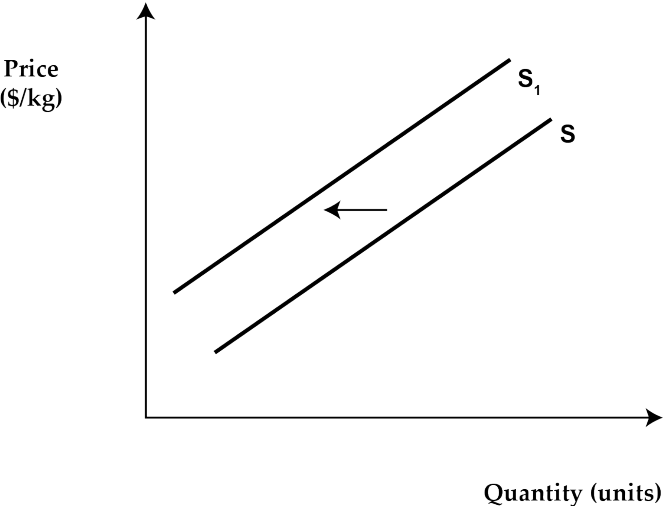
<p>ONE Cont'd (d)</p>	<p>The law of supply says that as the price of cauliflower decreases from \$3 (P) to \$2 (P₁), the quantity of cauliflower <i>Las Veges</i> supplies each month will decrease from 5000 (Q) to 3000 (Q₁), assuming the principle of <i>ceteris paribus</i> (i.e. all other factors remaining unchanged). This principle means the price change for cauliflower is the only thing that determines the change in <i>Las Veges</i>' quantity of cauliflower supplied. Other factors that remain unchanged may include the cost of materials, seedling prices, price of related goods, wage rates.</p> <p>As the price of cauliflower decreases, <i>Las Veges</i> is less able to cover the costs of producing/growing cauliflower, such as wages. This means growing/farming cauliflower becomes less profitable for <i>Las Veges</i> because the difference between revenue and costs is reduced. Because it is less profitable at the lower price of \$2, <i>Las Veges</i> will decrease the quantity of cauliflower it supplies.</p>
<p>(e)</p>	<p>Possible flow-on effects include:</p> <ul style="list-style-type: none"> • Since less cauliflower is being grown each month, <i>Las Veges</i> may not need as many employees and may reduce their workers' hours. • <i>Las Veges</i> may reduce its seedling-supplies order. This is because it will not need the same volume of seedlings it did when growing more cauliflower. • <i>Las Veges</i> may need to refinance its debt if its revenue falls as a result of there being fewer cauliflowers grown. It may be less able to meet its current repayments. • As a result of cauliflower becoming less profitable to produce, <i>Las Veges</i> might divert some/all resources to the production of a related good (e.g. broccoli), which is relatively more profitable due to having the production expertise and equipment to hand for that vegetable.

Achievement	Achievement with Merit	Achievement with Excellence
<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> • completing the supply schedule, accurately • identifying one element missing from the graph (i.e. missing S label for supply curve, and no time period is given) • identifying accurate movement down the supply curve (e.g. dotted lines, labels, arrows) • describing the law of supply • describing the principle of <i>ceteris paribus</i> • explaining a reason for the law of supply • explaining possible flow-on effect(s). 	<p>Detailed explanation that includes:</p> <ul style="list-style-type: none"> • the law of supply and the idea of increased profitability, as well as using data in context • describing the principle of <i>ceteris paribus</i> in the context of supply • fully explaining a flow-on effect. <p>Candidate uses detailed explanations</p>	<p>Comprehensive explanation that includes fully explaining:</p> <ul style="list-style-type: none"> • the law of supply, referring to lower profitability with revenue and cost • the principle of <i>ceteris paribus</i> with an example • one flow-on effect. <p>Candidate refers to the changes on the graph and uses correct economic terminology.</p>

Question	Sample answers / Evidence
<p>TWO (a)</p>	<p>Cauliflower and broccoli are related goods because they require similar resources in their production, such as soil, seedlings, irrigation, agricultural skills of workers. They may also require similar production processes e.g., weeding, harvesting, composting. Therefore, a business may easily swap production between related goods (increase production of the relatively more profitable one), in order to maximise profit.</p>
<p>(b)</p>	<p><i>Las Vegas' supply of broccoli (per year)</i></p>  <p>The graph shows a single upward-sloping supply curve labeled 'S'. The vertical axis is labeled 'Price (\$/kg)' and has two points, P and P₁, with an upward-pointing arrow between them. The horizontal axis is labeled 'Quantity (units)' and has two points, Q and Q₁, with a rightward-pointing arrow between them. Dashed lines connect P to Q and P₁ to Q₁ on the supply curve. A small arrow points up and to the right along the curve.</p> <p><i>Las Vegas' supply of cauliflower (per year)</i></p>  <p>The graph shows two parallel, upward-sloping supply curves. The lower curve is labeled 'S' and the upper curve is labeled 'S₁'. A horizontal arrow points from the lower curve to the upper curve, indicating a decrease in supply.</p>

<p>TWO Cont'd (c)</p>	<p>When the price of broccoli increases from P to P₁, <i>Las Veges</i> is likely to increase its quantity supplied of broccoli from Q to Q₁. This is because it will be more profitable for it to produce broccoli (now that the difference between its revenue and costs of production is now greater). As a result, <i>Las Veges</i> will devote more of its time, machinery and other resources to growing this vegetable. Cauliflower is now relatively less profitable to produce / grow than broccoli, as it has not experienced a similar change in either price or quantity. <i>Las Veges'</i> supply of cauliflower will consequently decrease, and the supply curve will shift to the left, from S to S₁.</p>
<p>(d)</p>	<ul style="list-style-type: none"> • <i>Las Veges</i> may, because of the switch in production to broccoli from cauliflower, need to change the supplies ordered so that it has sufficient materials/seedlings to produce more broccoli. • <i>Las Veges</i> may, as it prepares to produce more broccoli, need to either hire or buy some different resources, specifically those required for producing broccoli instead of cauliflower • Because they are now producing more broccoli, in order to avoid either inefficiencies in production or breakdowns in machinery caused by inexperienced workers, <i>Las Veges</i> may need to provide training on how to use different equipment, or to provide specialist knowledge about broccoli-growing, when the switch to broccoli production from cauliflower occurs. • Now that the business wants to attract more customers to buy their broccoli, since they are growing more of it, <i>Las Veges</i> might change its advertising (e.g. imagery, or where the advertising is placed, informational brochures to show ways that you can create delicious food with broccoli). This is because it may not need as many buyers for cauliflower, due to the reduced production, but will want to attract more customers for broccoli.

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<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> • Defining or explaining the idea of a related good • Showing a movement up the broccoli supply curve and shifting the cauliflower supply curve to the left • Stating or explaining decrease in supply of cauliflower as broccoli becomes more profitable • Stating or explaining a flow-on effect. 	<p>Detailed explanation that includes:</p> <ul style="list-style-type: none"> • correct changes to both graphs with appropriate labelling • explaining the decrease in the supply of cauliflower with either the relative profitability idea or the switching of resources • fully explaining a flow-on effect. <p>Candidate uses detailed explanations.</p>	<p>Comprehensive explanation that includes fully explaining:</p> <ul style="list-style-type: none"> • the link between price change and the increased quantity of broccoli/decreased supply of cauliflower. Includes references to relative profitability and switching of resources • a flow-on effect. <p>Candidate refers to changes on the graphs and uses correct economic terminology.</p>

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<p>THREE (a)</p>	<table border="1" data-bbox="338 252 981 552"> <thead> <tr> <th data-bbox="338 252 658 301">Non-price factor</th> <th data-bbox="658 252 981 301">Industry example</th> </tr> </thead> <tbody> <tr> <td data-bbox="338 301 658 351">Environmental</td> <td data-bbox="658 301 981 351">C</td> </tr> <tr> <td data-bbox="338 351 658 400">Technological</td> <td data-bbox="658 351 981 400">B</td> </tr> <tr> <td data-bbox="338 400 658 450">Cost of production</td> <td data-bbox="658 400 981 450">E (given)</td> </tr> <tr> <td data-bbox="338 450 658 499">Restrictions on trade</td> <td data-bbox="658 450 981 499">D</td> </tr> <tr> <td data-bbox="338 499 658 549">Legal</td> <td data-bbox="658 499 981 549">A</td> </tr> </tbody> </table>	Non-price factor	Industry example	Environmental	C	Technological	B	Cost of production	E (given)	Restrictions on trade	D	Legal	A
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<p>(b)</p>	<p><i>Las Vegas</i>' supply of cauliflower (monthly)</p>  <p>The graph shows a coordinate system with a vertical axis labeled 'Price (\$/kg)' and a horizontal axis labeled 'Quantity (units)'. Two parallel, upward-sloping lines represent supply curves. The lower line is labeled 'S' and the upper line is labeled 'S₁'. An arrow points from the lower line 'S' to the upper line 'S₁', indicating a leftward shift in the supply curve.</p>												
<p>(c)</p>	<p>The heavy rainfall will reduce the quantity of cauliflower that <i>Las Vegas</i> is willing and able to supply at every price. The heavy rain will damage the cauliflower, meaning it may not either grow or ripen properly. It may also damage the appearance of the vegetable, potentially making it unsuitable for sale as a superior-graded product. Trying to prevent the damage from heavy rainfall may increase costs of production because it can require extra time, effort, fuel costs and machinery hire. Growing cauliflower may then be less profitable as <i>Las Vegas</i> will have fewer of this vegetable available for sale, and these would also have increased costs from trying to protect them from the heavy rainfall. However, the use of protective measures may help to reduce the amount of lost revenue, as it would help more cauliflowers successfully grow to a good size and quality so that they are able to be sold. Overall, because of these issues, <i>Las Vegas</i>' supply of cauliflower may decrease, as shown by the shift of the supply curve to the left from S to S₁, which indicates <i>Las Vegas</i> supplies fewer cauliflower at each and every price, due to reduced profitability.</p>												

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrates understanding by: <ul style="list-style-type: none"> • matching some non-price factors to industry examples • shifting the supply curve to the left • stating that there is a decrease in the supply of cauliflower • explaining a link between heavy rainfall and/or crop protection and decreased supply 	Detailed explanation that includes : <ul style="list-style-type: none"> • accurately matching most non-price factors to industry examples • showing the shift correctly on the chart with appropriate labelling • linking heavy rainfall or crop protection to a decrease in profitability and supply, with an example Candidate uses detailed explanations.	Comprehensive explanation that includes fully explaining : <ul style="list-style-type: none"> • the link between heavy rainfall and crop protection to a decrease in profitability by referring to revenue, costs and supply, with an example Candidate refers to the changes on the graph and uses correct economic terminology.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 6	7 - 12	13 - 18	19 –24