

Assessment Schedule – 2017**Economics: Demonstrate understanding of how consumer, producer and / or government choices affect society, using market equilibrium (90986)****Assessment Criteria**

Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Demonstrate understanding</i> involves:</p> <ul style="list-style-type: none"> identifying, describing, or providing an explanation of how producer, consumer, and / or government choices affect market equilibrium identifying, describing, or providing an explanation of how changes in market equilibrium affect different sectors clearly illustrating changes using the supply and demand model. 	<p><i>Demonstrate in-depth understanding</i> involves:</p> <ul style="list-style-type: none"> providing a detailed explanation, using the supply and demand model, of how producer, consumer and / or government choices affect market equilibrium providing a detailed explanation, using the supply and demand model, of how changes in market equilibrium affect different sectors. 	<p><i>Demonstrate comprehensive understanding</i> involves:</p> <ul style="list-style-type: none"> linking detailed explanations of how producer, consumer, and / or government choices affect market equilibrium, with detailed explanations of how those changes affect different sectors integrating changes in supply and demand into detailed explanations.

Cut Scores

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

Evidence

Question	Sample Evidence	Achievement	Achievement with Merit	Achievement with Excellence
ONE				
(a) (b)	<i>See Appendix.</i>	Demonstrates understanding by:	Provides a detailed explanation, which includes:	Provides a comprehensive explanation, which includes:
(c)	<p>At \$14, there would be a shortage of 6 000 (large) bottles of vitamin C, because the quantity demanded would be 12 000, which is greater than the quantity supplied at 6 000.</p> <p>Consumers would fear missing out and so would bid up the price of bottles of vitamin C.</p> <p>As the price rises, quantity demanded would fall (from 12 000 to 10 000 bottles), ceteris paribus, as vitamin C would then be less affordable to all consumers.</p> <p>Meanwhile, producers would increase the quantity supplied of vitamin C (from 6 000 to 10 000 (large) bottles), ceteris paribus, as Vitamin C would then be more profitable.</p> <p>Equilibrium is restored at \$16 ($P_e$) and 10 000 bottles ($Q_e$).</p>	<ul style="list-style-type: none"> • completing schedule accurately • plotting points correctly • identifying equilibrium point • identifying a shortage • explaining the shortage • explaining the rise in price. 	<ul style="list-style-type: none"> • using data to identify a shortage • explaining the shortage, i.e. $Q_d > Q_s$ • explaining why price would rise (i.e. vitamin C consumers would fear missing out, so bid the price up) • using law of demand to explain the restoration of equilibrium • using law of supply to explain the restoration of equilibrium. <p>Provides detailed explanations, mostly uses correct data, and in context.</p>	<ul style="list-style-type: none"> • fully explaining shortage, using data correctly • explaining why price would rise (i.e. vitamin C consumers would fear missing out, so bid the price up) • applying law of demand (i.e. as price rises, Q_d falls, ceteris paribus) with links to less affordability • applying law of supply (i.e. as price rises, Q_s rises, ceteris paribus), with links to increased profitability • equilibrium restored at P_e (\$16) and Q_e (10 000 bottles). <p>Uses integrated explanations in context, with specific reference to correct data / graph and economic terminology.</p>

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, with partial explanations.	Most Achievement evidence, with at least one explanation.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

N0 = No response; no relevant evidence.

Question	Sample Evidence	Achievement	Achievement with Merit	Achievement with Excellence
TWO				
(a) (b)	<i>See Appendix.</i>			
(c)	<ul style="list-style-type: none"> • The price would fall from \$8 to the maximum price of \$7. This is because \$7 has been set as the highest price per small bottle at which vitamin C is legally allowed to be sold. • The quantity demanded would increase from 3 million bottles to 4 million bottles per month. Consumers would be willing and able to buy more because at \$7 a bottle, Vitamin C would then be more affordable. • Even though consumers' quantity demanded had increased, their actual consumption would have decreased because the quantity supplied had decreased from 3 million bottles to 2 million bottles. Because only 2 million bottles would have been supplied, consumers would then consume only 2 million bottles of vitamin C. Consumer spending on vitamin C would, therefore, be $(2\,000\,000 \times \\$7) = \\$14\,000\,000$, a decrease of $\\$10\,000\,000$ from $(3\,000\,000 \times \\$8) \\$24\,000\,000$. 	<p>Demonstrates understanding by:</p> <ul style="list-style-type: none"> • labelling P_e and Q_e correctly • labelling Q_d correctly • labelling Q_s correctly • labelling shortage correctly • stating price decreases • identifying <ul style="list-style-type: none"> - quantity demanded by consumers (before and after) - quantity supplied by producers (before and after) - price received by producers (before and after) - revenue received by producers (before and after) 	<p>Provides a detailed explanation, which includes:</p> <ul style="list-style-type: none"> • correct labelling of P_e, Q_e, Q_d, Q_s and shortage • identifying <ul style="list-style-type: none"> - quantity demanded by consumers (before and after) - quantity supplied by producers (before and after) - price received by producers (before and after) - revenue received by producers (before and after) <p>AND some of:</p> <ul style="list-style-type: none"> • explaining the change in price paid by consumers • explaining why quantity demanded increases • explaining that consumer spending decreases since quantity supplied and consumed decreases • explaining flow-on effect(s) on society. <p>Makes some reference to the data from the graph.</p>	<p>Provides a comprehensive explanation, which includes fully explaining:</p> <ul style="list-style-type: none"> • change in price paid by consumers • change in quantity demanded • change in consumer spending • TWO flow-on effects on society. <p>Makes specific reference to correct data and economic terminology.</p>

Question	Sample Evidence	Achievement	Achievement with Merit	Achievement with Excellence
Two (d)	<p><i>Possible flow-on effects:</i></p> <ul style="list-style-type: none"> • black market might develop – some producers would illegally sell vitamin C at a price higher than maximum price, as some consumers would be willing and able to pay a higher price to obtain the limited quantities • some consumers would miss out, as Q_d is greater than Q_s. Consumers might switch to other substitutes, such as fruit or Echinacea (or other vitamin supplement) • rationing might happen – consumers are limited to a certain amount of vitamin C • producers might switch to other more profitable products / vitamins (or related goods) • more people might get sick because they can't obtain vitamin C. 			

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence, with partial explanations.	Most Achievement evidence, with at least one explanation.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

N0 = No response; no relevant evidence.

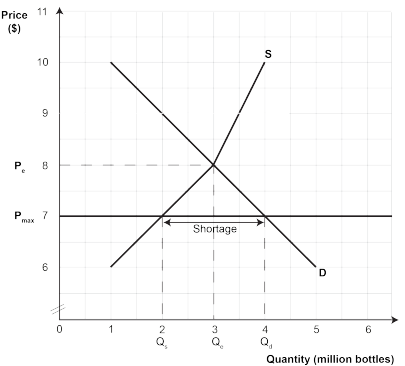
Question	Sample Evidence	Achievement	Achievement with Merit	Achievement with Excellence
THREE				
(a)	<i>See Appendix.</i>	Demonstrates understanding by: <ul style="list-style-type: none"> • shifting the supply curve to the right correctly • labelling the original equilibrium price and quantity • labelling the new equilibrium price and quantity • identifying the immediate financial effect of the subsidy on the government • explaining ONE possible long-term benefit to society • identifying the change in price received by producers • explaining the change in producer revenue. 	Provides a detailed explanation, which includes: <ul style="list-style-type: none"> • shifting the supply curve to the right correctly, and identifying the original and new equilibrium points AND some of: <ul style="list-style-type: none"> • explaining the immediate financial effect of the subsidy on the government • fully explaining ONE possible long-term benefit to society • explaining shift of supply curve to the right and the effect on equilibrium quantity • fully explaining the change in producer revenue. Makes some reference to data from the graph.	Provides a comprehensive explanation, which includes: <ul style="list-style-type: none"> • fully explaining the change in price to producers, and the effect on producers' revenue (with calculations). • fully explaining the shift of the supply curve to the right and the effect on equilibrium quantity. Uses integrated explanations in context, and uses correct data and economic terminology.
(b)	The immediate financial effect on the government is that it would have to pay ($\$20 \times 100\,000$) \$2 000 000 each year towards subsidising the flu vaccine.			
(c)	<i>Possible long-term benefits for society</i> <ul style="list-style-type: none"> • A healthier society, so less money needed to be spent on health care • Life expectancy would increase because fewer people would be getting sick • Less money spent on other areas of government spending such as education, roading, etc • Fewer workers calling in sick to work, so producers could have less sick leave / decrease costs of production • Increased productivity because workers would be less likely to have sick leave • Fewer children missing school, improving life outcomes. 			
(d)	<ul style="list-style-type: none"> • The subsidy would increase producers' revenue, which would increase producers' supply of flu vaccine. This would increase the quantity supplied of flu vaccines at each and every price. This is shown by shifting the supply curve to the right to S_1 and would result in an increase in equilibrium quantity from 90 000 vaccines to 100 000 vaccines. • Producers would then be receiving an increase of \$10 per vaccine (an increase from \$50 to \$60 per vaccine), meaning producers' revenue would then increase from ($\\$50 \times 90\,000$) \$4 500 000 to ($\\$60 \times 100\,000$) \$6 000 000. The total increase in producer revenue would be \$1 500 000. 			

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N0 = No response; no relevant evidence.

Appendix

Question One (a)				Question One (b)	
Market demand for vitamin C tablets (large bottle) in New Zealand (monthly)				Market for vitamin C tablets (large bottle) in New Zealand (monthly)	
Price (\$)	South Island (000s)	North Island (000s)	Market demand (000s)		
24.00	0.5	1.5	2		
22.00	1	3	4		
20.00	2	4	6		
18.00	3	4	7		
16.00	4.5	5.5	10		
14.00	5.3	6.7	12		
12.00	7	8	15		

Question Two (a)	Question Two (b)															
<p>New Zealand market for vitamin C (small bottle) annually</p> 	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Before maximum price</th> <th style="text-align: center;">After maximum price</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Quantity demanded by consumers</td> <td style="text-align: center;">3 million (small bottles)</td> <td style="text-align: center;">4 million (small bottles)</td> </tr> <tr> <td style="text-align: center;">Quantity supplied by producers</td> <td style="text-align: center;">3 million (small bottles)</td> <td style="text-align: center;">2 million (small bottles)</td> </tr> <tr> <td style="text-align: center;">Price received by producers</td> <td style="text-align: center;">\$8</td> <td style="text-align: center;">\$7</td> </tr> <tr> <td style="text-align: center;">Revenue received by producers</td> <td style="text-align: center;">$\\$8 \times 3\,000\,000 = \\$24\,000\,000$</td> <td style="text-align: center;">$\\$7 \times 2\,000\,000 = \\$14\,000\,000$</td> </tr> </tbody> </table>		Before maximum price	After maximum price	Quantity demanded by consumers	3 million (small bottles)	4 million (small bottles)	Quantity supplied by producers	3 million (small bottles)	2 million (small bottles)	Price received by producers	\$8	\$7	Revenue received by producers	$\$8 \times 3\,000\,000 = \$24\,000\,000$	$\$7 \times 2\,000\,000 = \$14\,000\,000$
	Before maximum price	After maximum price														
Quantity demanded by consumers	3 million (small bottles)	4 million (small bottles)														
Quantity supplied by producers	3 million (small bottles)	2 million (small bottles)														
Price received by producers	\$8	\$7														
Revenue received by producers	$\$8 \times 3\,000\,000 = \$24\,000\,000$	$\$7 \times 2\,000\,000 = \$14\,000\,000$														

Question Three (a)
<p>New Zealand market for flu vaccines (annually)</p> 