Assessment Schedule – 2018

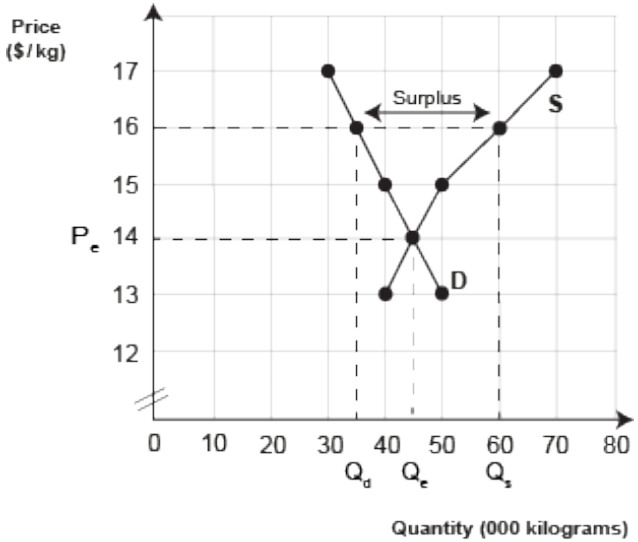
Economics: Demonstrate understanding of how consumer, producer and/or government choices affect society, using market equilibrium (90986)

Assessment Criteria

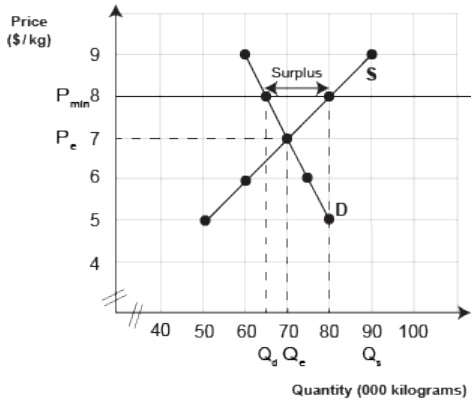
Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding involves: • identifying, describing, or providing an explanation of how producer, consumer, and/or government choices affect market equilibrium • identifying, describing, or providing an explanation of how changes in market equilibrium affect different sectors • clearly illustrating changes using the supply and demand model.	*Demonstrate in-depth understanding* involves: • 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.	*Demonstrate comprehensive understanding* involves: • 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.

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.

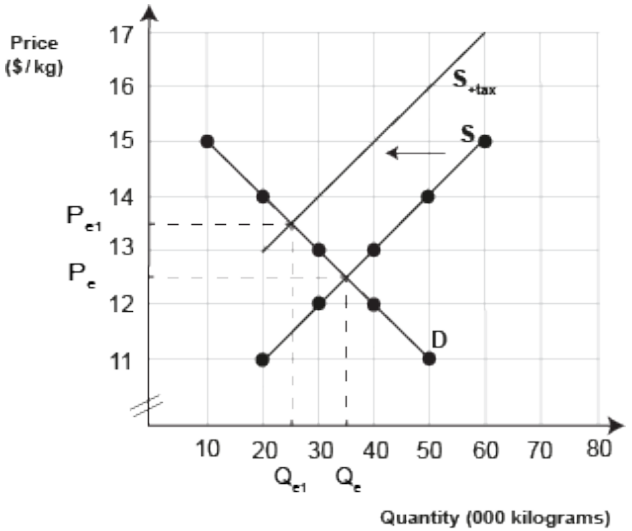
NB: Each question should be read as a whole before awarding a grade.

<table>
<tr><th>Question</th><th>Sample answers / Evidence</th></tr>
<tr><td>ONE
(a) (i)</td><td>
<table>
<tr><th colspan="3">Market for New Zealand beef (per month)</th></tr>
<tr><th>Price ($ per kg)</th><th>Market Supply (kilograms)</th><th>Market Demand (kilograms)</th></tr>
<tr><td>13</td><td>40 000</td><td>50 000</td></tr>
<tr><td>14</td><td>45 000</td><td>45 000</td></tr>
<tr><td>15</td><td>50 000</td><td>40 000</td></tr>
<tr><td>16</td><td>60 000</td><td>35 000</td></tr>
<tr><td>17</td><td>70 000</td><td>30 000</td></tr>
</table>
</td></tr>
<tr><td>(a) (ii) & (iii)
(b)</td><td>Market for New Zealand beef (per month)
 
</td></tr>
<tr><td>(c)</td><td>At $16 per kilogram, there is a surplus (where quantity supplied is greater than quantity demanded) of 25 000 kilograms of New Zealand beef. This is because there is 60 000 kilograms of New Zealand beef supplied but only 35 000 kilograms of New Zealand beef demanded.</td></tr>
<tr><td>(d)</td><td>In order to clear the surplus, the New Zealand farmers / producers would lower the price of New Zealand beef in order to sell the excess stock. As the price decreased, quantity demanded would increase from 35 000 kilograms to 45 000 kilograms as New Zealand beef became more affordable. As the price decreased, quantity supplied would decrease from 60 000 kilograms to 45 000 kilograms as New Zealand beef became less profitable.</td></tr>
</table>

(e)	The price would continue to fall until it reached $14 per kilogram, where quantity demanded equalled quantity supplied of 45 000 kilograms of New Zealand beef and equilibrium was restored / the market was cleared.	
Achievement	**Achievement with Merit**	**Achievement with Excellence**
Demonstrates understanding by: • completing table accurately • plotting points correctly • identifying equilibrium • identifying a surplus • explaining a surplus • explaining a fall in price.	Detailed explanation that includes: • using data to identify a surplus • explaining the surplus, i.e. $\mathbf{Q_s > Q_d}$ • fully explaining why price would fall (i.e. farmers / producers would reduce the price in order to clear excess beef / stock) by referring to the surplus • using the law of demand OR law of supply to fully explain the restoration of equilibrium. Candidate uses detailed explanations, mostly uses correct data and in context.	Comprehensive explanation that includes: • fully explaining surplus, using correct data • integrating law of demand (i.e. P decreases, $\mathbf{Q_d}$ increases) and law of supply (i.e. P decreases, $\mathbf{Q_s}$ decreases), as well as data, into full explanation of the price decrease (farmers / producers would reduce the price in order to clear excess beef / stock), and the equilibrium being restored at a price of $14 and quantity of 45 000 kilograms. Candidate uses integrated explanations in context, and uses correct data and economic terminology.

Question	Sample answers / Evidence
TWO (a)	**Market for New Zealand lamb (per month)** 
(b)	The price on New Zealand lamb would increase from $7.00 per kilogram to $8.00 per kilogram. This is because the government has set a price minimum of $8.00 per kilogram as the lowest price for which farmers can legally sell New Zealand lamb. Due to the increase in price, the quantity supplied increased from 70 000 kg to 80 000 kg per month. New Zealand farmers are willing and able to sell more at $8.00 per kilogram because New Zealand lamb would be more profitable because the gap between the cost and selling price would be greater. Even though consumers' quantity demanded / consumption has decreased from 70 000 kg to 65 000 kg, their actual consumer spending has increased. This is because their cost per kilogram has increased by $1.00 per kilogram. Consumers will now consume 65 000 kg of New Zealand lamb at a price of $8.00 per kilogram ($520 000); previously, they had consumed 70 000 kg at a price of $7.00 per kilogram ($490 000). This is an increase in consumer spending of $30 000 per month.
(c)	**Possible flow-on effects:** • New Zealand farmers would have a surplus of 15 000 kg of lamb that they might not be able to sell overseas because of lower competitive prices • some New Zealand consumers decide to buy Australian lamb instead, which is cheaper but may be of a lower quality than New Zealand lamb. The lower quality could lead to increased fat in people's diets • consumers may switch to substitute foods that are cheaper (for example, processed tinned meat or beef) but the quality of the substitute meat might not be as high, and people might get sick from eating too little protein or low-quality meat • if consumers get sick (iron deficiency) from consuming too little or low-quality lamb, this would put pressure on government health spending. This would leave less for other areas such as housing, roading, and education • beef or chicken sales would increase as consumers switched to these substitute forms of protein • lamb farmers left with surplus stock that they cannot get rid of because of lower demand may switch to farming dairy instead of meat • the Government might become unpopular for introducing the minimum price and get voted out • black market might develop where illegal sales occur in order to sell excess / surplus lamb.

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrates understanding by: • labelling **P_{min}** correctly • labelling **P_e** and **Q_e** correctly • labelling **Q_d** correctly • labelling **Q_s** correctly • labelling the surplus correctly • stating that price would increase • explaining that quantity supplied would increase • stating that actual quantity consumed would decrease • explaining that consumer spending would increase.	Detailed explanation that includes: • correct labelling of **P_e**, **Q_e**, **Q_d**, **Q_s** and surplus AND some of: • explaining why price would increase • explaining why quantity supplied would increase • explaining that consumer spending would increase despite a decrease in quantity demanded • explaining flow-on effect(s) on society. Candidate makes some reference to the data from the graph.	Comprehensive explanation that includes explaining: • change in price • change in quantity supplied • change in consumer spending • TWO flow-on effects to society. Candidate makes specific reference to correct data and economic terminology.

Question	Sample answers / Evidence
THREE (a)	**Market for Australian meat (per month)** 
(b)	(i) Quantity consumers buy before and after the tax Before: 35 000 kilograms After: 25 000 kilograms (ii) Price consumers pay before and after the tax Before: $12.50 per kg After: $13.50 per kg (iii) Price Australian farmers receive before and after the tax Before: $12.50 per kg After: $11.50 per kg (iv) Total revenue per month to the New Zealand Government as a result of this tax (show working). $2 × 25 000 = $50 000
(c)	The price paid by consumers would rise as Australian farmers pass some of the tax ($1) onto the consumer. Consumers of Australian meat would be worse off because they would be paying $1.00 more per kilogram of Australian meat but they would also be demanding 10 000 kg less. Consumer spending on Australian meat would decrease from $437 500 to $337 500. (It would have been $12.50 * 35 000 before and $13.50 * 25 000 after the tax.)

(d)	The Australian farmers' price would fall because the tax would be paid to the New Zealand Government and, therefore, the Australian farmers would be worse off. Their revenue would decrease because they would sell 10 000 kg less meat to New Zealand consumers and receive $1.00 less per kilogram. Australian farmers' revenue would decrease by $150 000 (It would have been $12.50 *35 000 = $437 500 before the tax and $11.50 *25 000 = $287 500 after the tax.)
(e)	In the short term, the New Zealand Government would gain tax revenue of $2.00 per kilogram of Australian meat sold in New Zealand. Since the sales of Australian meat would be 25 000 kilograms, the New Zealand Government would receive revenue of $50 000 ($2.00*25 000). In the long term, the New Zealand Government would have $50 000 more to spend on other areas such as keeping New Zealand rivers clean, which would, in turn, further benefit the New Zealand farmers (or other reasonable government expenditure – not a subsidy to farmers).
(f)	New Zealand farmers would be likely to benefit from a tax placed on Australian meat because Australian meat would then be relatively less affordable / more expensive, which would effectively decrease the number of competitors. Australian meat and New Zealand meat are substitute goods, so New Zealand consumers would switch to buying the cheaper New Zealand meat and the New Zealand farmers' sales would increase.

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrates understanding by: • shifting **S** to the left correctly • labelling a higher price • labelling a lower quantity • identifying quantity consumers buy before and after • identifying price consumers pay before and after • identifying price Australian farmers receive before and after • identifying government revenue. (Allow for carry-through errors.)	Detailed explanation that includes: • shifting **S** to the left correctly, with labels AND • correctly identifying: - quantity consumers buy before and after - price consumers pay before and after - price Australian farmers receive before and after - government revenue AND SOME of: • explaining the change in price to consumers and the effect on consumer spending • explaining the change in price to Australian farmers and the effect on their revenue • explaining the financial effect on the government in the short term • explaining the financial effect on the government in the long term • explaining the effect on New Zealand farmers. Detailed explanation uses some correct data and in context.	Comprehensive explanation that includes: • using data to explain change in price to consumers and effects on consumer spending • using data to explain changes in price to Australian farmers and the effect on their revenue • using data to explain the financial effect on the government in the short term • explaining the financial effect on the government in the long term • explaining the effect on New Zealand farmers. Figures and economic terms are correct and at **least two figures cited** in paragraph – one of which needs to be a calculation of consumer spending OR Australian farmers' revenue.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 6	7 – 13	14 – 18	19 – 24