Assessment Schedule – 2015

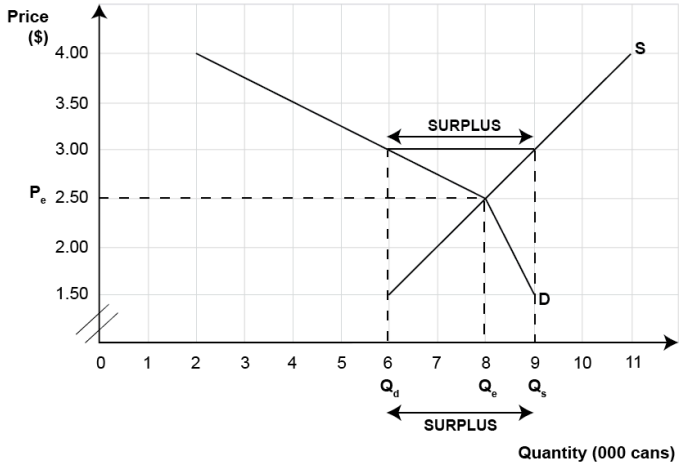
Economics: Demonstrate understanding of how consumer, producer and / or government choices affect society, using market equilibrium (90986)

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.

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

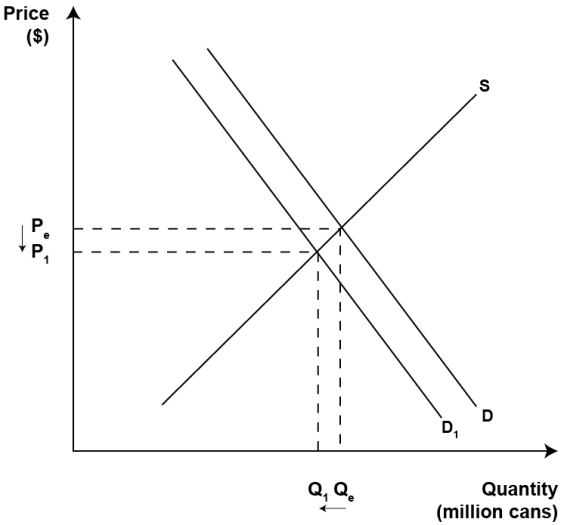
Evidence

Q ONE	Sample answers / Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a) and **(b)**	**Auckland market for fizzy drinks (per day)** **Price ($ per can) / Market Supply (cans) / Market Demand (cans)** 1.50 — **6 000** — 9 000 **2.00** — 7 000 — 8 500 2.50 — **8 000** — 8 000 3.00 — 9 000 — 6 000 3.50 — **10 000** — **4 000** 4.00 — 11 000 — **2 000** **Auckland market for fizzy drinks (per day)**  	Demonstrates understanding by: • six possible correct answers in schedule • identifying equilibrium point • identifying a surplus • explaining the surplus • explaining the fall in price.	Detailed explanation, which includes: • using data to identify a surplus • explaining the surplus, i.e. $\mathbf{Q_s > Q_d}$ • explaining why price will fall (i.e. fizzy drink producers will reduce price to get rid of unsold stock) • using law of demand to explain the restoration of equilibrium • using law of supply to explain the restoration of equilibrium. Detailed explanations, mostly uses correct data, and in context.	Comprehensive explanation, which includes: • fully explaining surplus using data correctly • explaining why price will fall (fizzy drink producers will reduce price to get rid of unsold stock) • applying law of supply (i.e. $\mathbf{P\downarrow Q_s\downarrow}$) with links to less profitability • applying law of demand (i.e. $\mathbf{P\downarrow Q_d\uparrow}$) with links to better affordability • equilibrium restored at $\mathbf{P_e}$ $2.50 & $\mathbf{Q_e}$ 8000 cans. Candidate uses integrated explanations in context, with specific reference to correct data / graph and economic terminology.

(c)	At $3.00 there is a surplus (where quantity supplied is greater than quantity demanded) of 3000 cans of fizzy drink, as there are 9000 cans of fizzy drink supplied – but only 6000 cans of fizzy drink demanded. Producers will lower the price of cans of fizzy drink in order to clear the excess stock. As the price falls, quantity demanded will increase (from 6000 cans to 8000 cans) as cans of fizzy drink become more affordable. This is the law of demand. Meanwhile, fizzy drink producers will decrease the quantity supplied (from 9000 cans to 8000 cans), as producing cans of fizzy drink will now be less profitable. This is the law of supply. The price of cans of fizzy drink will stop falling when the price reaches $2.50, at which the quantity demanded will equal quantity supplied of 8000 cans of fizzy drink, and equilibrium is restored / the market has cleared.						

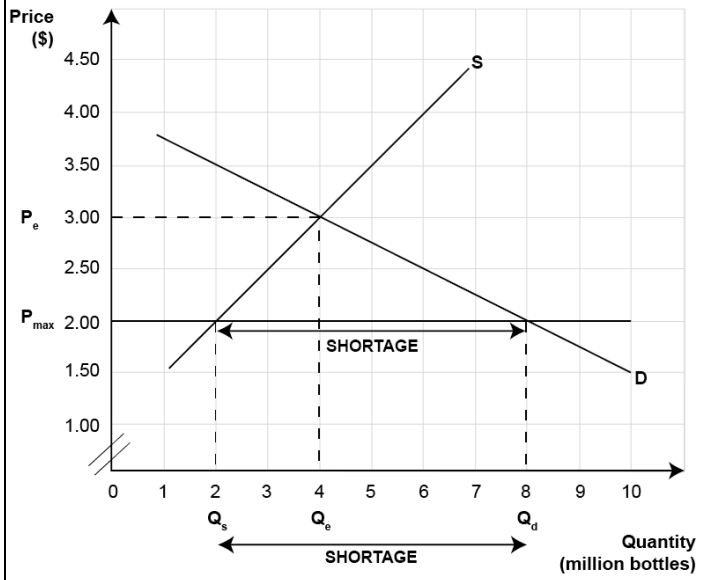
N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence	Some Achievement evidence, partial explanations.	Most Achievement evidence. At least one explanation.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Excellence evidence. One part may be weaker.	All points covered.

N0 = No response; no relevant evidence.

Q TWO	Sample answers/Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for fizzy drinks (per annum)**  	Demonstrates understanding by: • shifting **D** to the left • labelling a new equilibrium • explaining a decrease in the market demand • explaining a decrease in price • labelling a decrease in **Q**. • stating that suppliers' revenue decreases.	Detailed explanation, which includes: • shifting **D** to the left and labelling the new equilibrium *AND* • explaining the decrease in demand (consumers finding out about negative effects) • explaining the decrease in price (producers clearing surplus) • explaining that decreased prices or quantity lead to decreased suppliers' revenue. Candidate makes some reference to the graph.	Comprehensive explanation, which includes: • linking reasons for decreased market demand to shift of demand to left • linking decrease in price to excess supply / surplus, producers lowering prices and change in equilibrium quantity • linking decreased prices and decrease in quantity supplied to the decrease in revenue. Candidate uses integrated explanations in context, with specific reference to the graph and correct economic terminology, e.g. demand, quantity demanded, and quantity supplied – not supply.
(b)	The information supplied by the University of Auckland has meant that consumers' tastes (or preferences) have been negatively affected; thus, there has been a decrease in demand for fizzy drinks, shown by a shift of the demand curve to the left from **D** to $\mathbf{D_1}$. The decreased demand will mean there is a surplus of fizzy drinks at the original price. In order to reduce this surplus (or clear excess stock), suppliers of fizzy drinks will reduce the price ($\mathbf{P_e}$ to $\mathbf{P_1}$). Suppliers of fizzy drinks will now have reduced revenue because they are selling a lower quantity of cans of fizzy drink at a lower price.			

N1	N2	A3	A4	M5	M6	E7	E8
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.

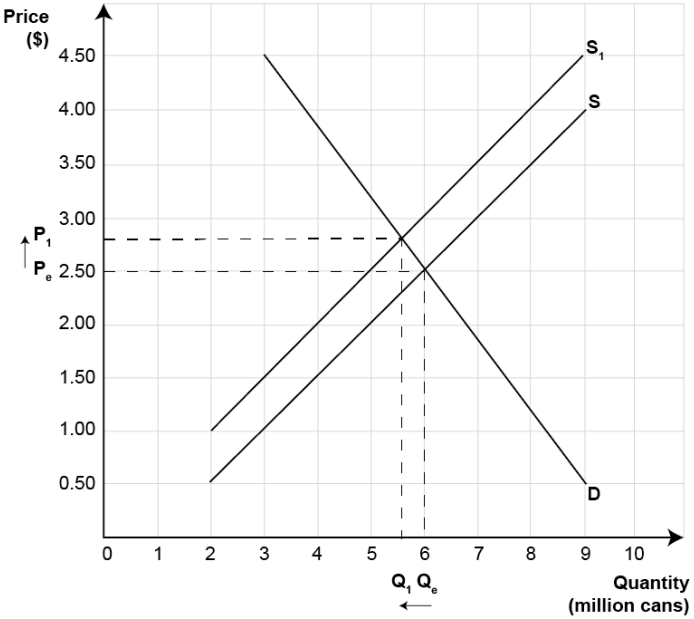
N0 = No response; no relevant evidence.

Q THREE	Sample answers / Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for bottled water (per month)**  	Demonstrates understanding by: • labelling P_e, and Q_e correctly • labelling Q_d correctly • labelling Q_s correctly • labelling shortage correctly • stating that fizzy drinks and bottled water are substitutes • stating price decreases • explaining that quantity demanded increases • stating that actual quantity consumed decreases • explaining that consumer spending decreases.	Detailed explanation, which includes: • correct labelling of P_e, Q_e, Q_d, Q_s and shortage *AND some of:* • explaining the relationship between fizzy drinks and bottled water • explaining why price decreases • explaining why quantity demanded increases • explaining that consumer spending decreases since quantity supplied and consumed decreases • explaining flow-on effect(s) on society. Candidate makes some reference to the data from the graph.	Comprehensive explanation, which includes explaining: • change in price • change in quantity demanded • change in consumer spending • TWO flow-on effects to society. Candidate makes specific reference to correct data and economic terminology.
(b)	• Fizzy drinks and bottled water are substitutes (goods that can be used instead of one another / goods that satisfy similar wants). • The price will fall from $3 to the maximum price of $2. This is because $2 has been set as the highest price per bottle at which bottled water is allowed to be sold. • The quantity demanded increases from 4 million bottles to 8 million bottles per month. Consumers are willing and able to buy more because at $2 a bottle, bottled water is now more affordable. • Even though consumers' quantity demanded has increased, their actual consumption has decreased because the quantity supplied has decreased from 4 million bottles to 2 million bottles. Because only 2 million bottles have been supplied, consumers will consume only 2 million bottles of bottled water. Consumer spending on bottled water is, therefore, (2 000 000 × $2) = $4 000 000, a decrease of			

	$8 000 000 from (4 000 000 × $3) $12 000 000. **Possible flow-on effects**: • black market might develop – some producers will illegally sell bottled water at a price higher than maximum price, as some consumers will be willing to pay a higher price to obtain the limited quantities • some consumers will miss out, as $\mathbf{Q_d}$ is greater than $\mathbf{Q_s}$. Consumers might switch to other substitutes, such as juice • rationing might happen – consumers are limited to a certain amount of bottled water • producers might switch to other more profitable drinks (or related goods) • government might become unpopular for introducing the maximum price and get voted out • more people getting sick because they can't obtain bottled water, and start drinking tap water, which has not been filtered. • more people have better teeth, as they can't obtain bottled water, so start drinking tap water, which has fluoride in it. • consumers may resort back to drinking fizzy drinks (or other unhealthy substitutes), as they can't obtain bottled water.			

N1	N2	A3	A4	M5	M6	E7	E8
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.

N**0** = No response; no relevant evidence.

Q FOUR	Sample answers / Evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for fizzy drinks (per month)**  	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 sellers receive before and after • identifying government revenue. (Allow for carry-through errors.)	Detailed explanation, which 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 sellers 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 sellers and the effect on sellers' revenue • explaining the financial effect on the government in the short term • explaining ONE possible long-term benefit to society. Detailed explanation uses some correct data and in context.	Comprehensive explanation, which includes: • using data to explain change in price to consumer and effects on consumer spending • using data to explain changes in price to sellers and the effect on sellers' revenue • using data to explain the financial effect on the government in the short term • explaining ONE possible long term benefit to society. 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* producer revenue.
(b)	(i) Quantity consumers buy before and after tax Before: 6 000 000 cans After: 5 500 000 cans (5 600 000) (ii) Price consumers pay before and after tax Before: $2.50 (per can) After: $2.75 ($2.80) (per can) (iii) Price sellers receive before and after tax Before: $2.50 (per can) After: $2.25 ($2.30) (per can) (iv) Total revenue per month to the government of this tax (show working) (5 500 000 × 0.50) = $2 750 000 ($5 600 000 x 0.5 = $2 800 000)			

(c)	The price paid by consumers will rise from $2.50 to $2.75 ($2.80) as fizzy drink suppliers pass some of the tax onto the consumer. Fizzy drink consumers will be worse off because they must now pay 25 (30) cents more for each can and there are 500 000 (400 000) fewer drinks being purchased / demanded. Consumer spending on fizzy drinks increases from $15 000 000 to $15 125 000 (or by $125 000) ($15 000 000 to $15 680 000 (or by $680 000)) The price that sellers' receive will fall (from $2.50 to $2.25 ($2.30)) as tax is paid to the government. Sellers are worse off. Their revenues fall as they sell 500 000 (400 000) fewer drinks and receive 25 (20) cents less per can. Sellers' revenue decreases from $15 000 000 to $12 375 000 (or by $2 625 000). ($15 000 000 to $12 880 000 (or by $2 120 000)) The government will gain tax of 50c per can of fizzy drink sold and now that 5 500 000 (5 600 000) cans are sold per month they will get revenue of $2 750 000 ($2 800 000) per month. In the long term, this is money that can be used to help reduce the health costs related to people who get addicted to fizzy drinks or battle with obesity, or perhaps, also be used to fund programmes that get young people active, e.g. sports, dance … or the Government may decide to put this tax into other areas of spending that benefits others, e.g. welfare payments, so society will benefit. *OR* Consumers may reduce their consumption of fizzy drinks and choose healthier alternatives, so long-term health improves with lower costs to society.			

N1	N2	A3	A4	M5	M6	E7	E8
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.

N**0** = No response; no relevant evidence.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 9	10 – 17	18 – 24	25 – 32