Assessment Schedule – 2021

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

Assessment Criteria

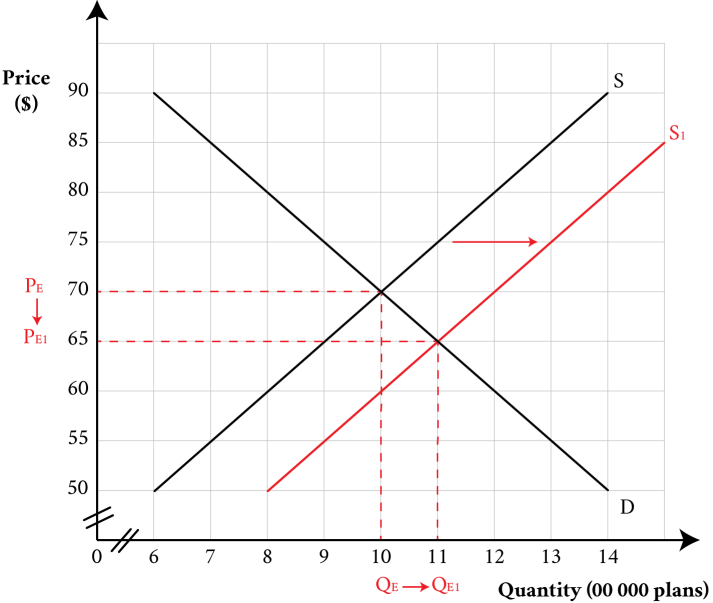| Achievement	Achievement with Merit	Achievement with Excellence
*Demonstrate **understanding** involves:* • identifying, describing, or providing an explanation of how producer, consumer, and / or government choices affect market equilibrium • identifying, describing, or providing an explanation of 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

Q1	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for fibre broadband (monthly)** *[graph: Price ($) on vertical axis (60–140), Quantity (00 000 plans) on horizontal axis (3–13). Supply curve S (red) upward sloping, Demand curve D (black) downward sloping. Equilibrium at P_E = 80, Q_E = 8. Surplus shown at price 100 between Q_D = 5 and Q_S = 10.]*	• Plots points correctly. • Identifies equilibrium. • Identifies quantity demanded. • Identifies quantity supplied. • Labels surplus.		
(b)	At $100, there would be a surplus of 500 000 fibre plans because the quantity supplied would be 1 000 000, which is greater than the quantity demanded at 500 000.	Explains a surplus.	Uses data to identify and explain the surplus.	Fully explains the surplus, using correct data.

(c)	Producers will reduce the price in order to:
	  - clear excess stock of modems / fibre
	  - remain competitive
	  - attract more customers.
	Providers will keep up this reduction in price until they reach the price where the amount they want to sell is the same as what customers want to buy.
	As the price decreases from $100 to $80 per month for fibre broadband, quantity demanded would increase (from 500 000 to 800 000 plans), *ceteris paribus*, as fibre broadband plans would then be more affordable to all consumers.
		Explains a decrease in price (producers will decrease price).	• Explains why price will decrease (i.e. producers will decrease price in order to clear excess stock).
			• Uses the law of demand and law of supply to fully explain the restoration of equilibrium.
				• Integrates law of demand (i.e. P decrease, Q_D increase) as is now relatively more affordable and law of supply (i.e. P decrease, Q_S decrease), as is now relatively less profitable. Uses data to support conclusions.
				• Concludes that equilibrium is restored

Meanwhile, producers would also decrease the quantity supplied of fibre broadband plans (from 1 000 000 to 800 000 plans per month), *ceteris paribus*, as fibre broadband would then be less profitable. Equilibrium is restored at $80 ($P_E$) and 800 000 ($Q_E$) plans.			at a price of $80 and 800 000 plans.

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.

Candidate uses detailed explanations in context, and mostly uses correct data.	Candidate uses integrated explanations in context and uses correct data and economic terminology.

Q2	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for unlimited data plans (monthly)**	• Shifts S to the right correctly. • Shows a lower price. • Shows a higher quantity.	Shifts S to the right correctly, with appropriate labels.	

(b)			Before subsidy	After subsidy	Calculates some of (i) – (vi) correctly.	Calculates most of (i) – (vi) correctly.	Calculates all of (i) – (vi) correctly.
	(i)	Quantity consumers buy	1 000 000 plans	1 100 000 plans			
	(ii)	Price consumers pay	$70	$65			
	(iii)	Total consumer spending	$70 000 000	$71 500 000			
	(iv)	Price producers receive	$70	$75			
	(v)	Total producer revenue	$70 000 000	$82 500 000			
	(vi)	Total paid by government	███████	$11 000 000			

(c)	Consumers initially paid $70 per plan, which decreased to $65 per plan. Consumer spending increased from $70 000 000 to $71 500 000 (an increase of $1 500 000).		Explains the change in price to consumers *OR* the effect on consumer spending.	Fully explains (with correct data) the change in price to consumers and

					the effect on consumer spending.
(d)	Producers initially received $70 per plan, which increased to $75 per plan. Producer revenue increased from $70 000 000 to $82 500 000 (an increase of $12 500 000).			Explains the change in price to producers *OR* the effect on their revenue.	Fully explains (with correct data) the change in price to producers and the effect on their revenue.
(e)	A subsidy is a successful government intervention because the intention behind the subsidy was so that more people can obtain fibre internet in their home, and that is evident in the increase in quantity.			Recognises that it is successful intervention.	Links the increase in quantity as an indication of a successful intervention.
(f)	Due to the subsidy, more people will subscribe to fibre broadband plans, therefore (some possible flow-on effects for society): • Individuals / consumers / households spend less on fibre broadband, so could save more money / spend money on other complementary goods / spend money on other goods. • Producers receive more money for fibre broadband plans so may hire more workers / expand their business / invest in other technology (or research and development). • The government will need to reduce its spending in another area as it is paying to subsidise fibre broadband plans (indicates an area).			Explains an effect on society.	Fully explains TWO flow-on effects on 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.

N0 = No response; no relevant evidence.

Q3	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a)	**New Zealand market for routers (annually)** Price ($/unit) vs Quantity (000 units) graph showing supply curve S rising from (10, 10) to (100, 100), demand curve D falling from (10, 70) to (100, 10). Equilibrium at $P_E = 50$, $Q_E = 50$. A horizontal line P_{MAX} at price 40. At P_{MAX}, $Q_S = 40$ and $Q_D = 70$, with a shortage shown between Q_S and Q_D.	• Labels P_{E1} and Q_E correctly. • Labels Q_D correctly. • Labels Q_S correctly. • Labels shortage correctly.		
(b)	Internet connections and routers are complementary goods (goods that work well together) – or other suitable definition of complementary goods.	States that routers and internet connections are complementary goods.	Explains the relationship between routers and internet connections.	
(c)	The price will fall from $50 to the maximum price of $40. This is because $40 is the maximum prices that routers can be legally sold at.	States that price decreases.	Explains why price decreases.	Links change in price to legality of P_{MAX}.
(d)	The quantity demanded increases from 50 000 to 70 000, because as price decreases, quantity demanded increases, ceteris paribus (law of demand), because routers are now more affordable to consumers (or are more willing and able to purchase).	Explains that quantity demanded increases.	Explains why quantity demanded increases.	Fully explains the change in quantity demanded.

| (e) | Even though the consumers' quantity demanded has increased, their actual consumption has decreased because the quantity supplied has decreased. This is because suppliers (producers) are less willing and able to sell (due to decreased profitability) at the reduced price.

This has effectively created a shortage in the market for routers.

Consumer spending has therefore decreased from (50 x 50 000) $2 500 000 to (40 x 40 000) $1 600 000. | States that actual quantity consumed decreases. | • Explains that consumer spending decreases since quantity supplied and consumed decreases.
• Makes some reference to the data from the graph. | • Fully explains the decrease in consumer spending due to decreased quantity supplied.
• Makes specific reference to correct data and uses economic terminology. |

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.		Candidate uses detailed explanations in context, and mostly uses correct data.	Candidate uses integrated explanations in context and uses correct data and economic terminology.

Cut Scores

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