Assessment Schedule – 2020

Economics: Analyse inflation using economic concepts and models (91222)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Analyse inflation involves: • **explaining** the causes of changes in inflation using economic models • **explaining** the impacts of changes in inflation on various groups in New Zealand society • **identifying, defining** or **describing** inflation concepts.	Analyse inflation **in depth** involves: • **detailed explanation** of the causes of changes in inflation, using economic models • **detailed explanation** of the impacts of changes in inflation on various groups in New Zealand society.	Analyse inflation **comprehensively** involves: • **analysing** causes of changes in inflation by **comparing** and / or **contrasting** their impact on inflation • **analysing** the impacts of changes in inflation by **comparing** and / or **contrasting** the impact on various groups in New Zealand society • **integrating** changes shown on economic models into **detailed** explanations.

'Detailed explanation' involves giving an explanation with breadth (more than one reason for the answer) and / or depth (e.g. using flow-on effects to link the main cause to the main result).

Evidence

Q1	Achievement	Achievement with Merit	Achievement with Excellence
(a)(i)	Illustrates and labels an increase in aggregate demand. *See Appendix, Graph One.*		
(a)(ii)	**Explains** that removing all income tax on the first \$15 000 of income will: • increase consumption, OR • increase investment. Both options increase / shift the AD to the right; this results in an increase in price level / inflation.	**Fully explains** that removing all income tax on the first \$15 000 will: • increase disposable income, causing an increase in consumption, which is a component of AD, **OR** • as consumption increases, business will increase investment, which is a component of AD (as firms expand output to meet demand). Both options increase / shift the AD to the right from AD to AD_1; this results in an increase in price level / inflation from PL to PL_1.	**Fully explains** that removing all income tax on the first \$15 000 will: • increase disposable income, causing an increase in consumption, which is a component of AD, **AND** • as consumption increases, business will increase investment, which is a component of AD (as firms expand output to meet demand). Both options increase / shift the AD to the right from AD to AD_1; this results in an increase in price level / inflation from PL to PL_1.
(b)(i)	Illustrates and labels a decrease in aggregate supply. *See Appendix, Graph Two.*		
(b)(ii)	**Explains** that an increase in electricity prices will increase the costs of production, which decreases the AS. This results in the AS curve shifting to the left and an increase in price level / inflation.	**Fully explains** that an increase in electricity prices will increase the costs of production, which decreases the AS. To maintain profit margins, firms put up the price level, which decreases the AS. This results in the AS curve shifting to the left from AS to AS_1 and an increase in price level / inflation from PL to PL_1.	**Fully explains** that an increase in electricity prices will increase the costs of production, which decreases the AS. To maintain profit margins, firms put up the price level, which decreases the AS. This results in the AS curve shifting to the left from AS to AS_1 and an increase in price level / inflation from PL to PL_1.
(b)(iii)	Identifies that all households with workers will pay less tax or be able to increase consumption.		The increase in aggregate demand will have a larger impact on inflation compared to the increase in electricity prices, because the shift in aggregate demand includes consumers (consumption) and producers (investment) whereas electricity is a small part of producers' overall costs, AND / OR the increase in electricity prices, while large (29 or 39%), is spread over many years until 2035.

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Some Excellence evidence.	Most Excellence evidence.

N0 = No response; no relevant evidence.

Q2	Achievement	Achievement with Merit	Achievement with Excellence
(a)(i)	Identifies M: Money Supply, V: Velocity of Circulation, P: Price Level, Q: Output of Goods and Services (or similar). Two variables correctly identified can be used as evidence for N1 or N2 grades.		
(a)(ii)	MV = PQ		
(b)	**Explains** that in a recession, an increase in the quantity of money circulating (aggregate demand) will result in a relatively larger increase in real output compared to price level / inflation. **Explains** that in a boom, an increase in the quantity of money circulating (aggregate demand) will result in a relatively smaller increase in real output compared to price level / inflation.	**Fully explains** that in a recession an increase in the quantity of money circulating (or aggregate demand) will result in a relatively larger increase in real output compared to price level / inflation (referencing AS / AD Graph Three or MV = PQ model). In a recession, an expansion of the economy is possible, as production capacity is not being used and expansion can occur without causing inflationary pressure, **OR** **Fully explains** that in a boom, an increase in the quantity of money circulating (or aggregate demand) will result in a relatively smaller increase in real output compared to price level / inflation (using AS / AD Graph Four or MV = PQ model). In a boom, an expansion of the economy is restrained / limited by production capacity, resources or labour being almost fully utilised. Expansion cannot occur without causing inflationary pressure. Note: Candidates using the equation approach may use notation such as recession $MV = P_{\uparrow}Q\uparrow$ and for a boom $MV = P\uparrow Q_{\uparrow}$ to demonstrate relative changes in P and Q. This is also an acceptable approach for Excellence (arrows may be different lengths / bold).	**Fully explains** that in a recession, an increase in the quantity of money circulating will result in a relatively larger increase in real output compared to price level / inflation (referencing AS / AD Graph Three and MV = PQ model). In a recession, an expansion of the economy is possible as production capacity is not being used and expansion can occur without causing inflationary pressure, **AND** **Fully explains** that in a boom, an increase in the quantity of money circulating (or aggregate demand) will result in a relatively smaller increase in real output compared to price level / inflation (using AS / AD Graph Four or MV = PQ model). In a boom, an expansion of the economy is restrained / limited by production capacity, resources or labour being almost fully utilised. Expansion cannot occur without causing inflationary pressure. Clear reference to both Graphs One and Two is made, or a mathematical comparison of MV = PQ (where P and Q increase at different rates). Comparison/contrast of boom and recession required.

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Some Excellence evidence.	Most Excellence evidence.

N0 = No response; no relevant evidence.

<table>
<tr><th>Q3</th><th>Achievement</th><th>Achievement with Merit</th><th>Achievement with Excellence</th></tr>
<tr><td>(a)</td><td>Explains inflation is measured by a weight average of a basket of many goods and services. Tobacco is only a single market or good. The price of all the other goods in the basket will change at different rates.</td><td>Fully explains inflation is measured by a weight average of a basket of many goods and services. Tobacco is only a single market or good. The price of tobacco does not influence or predict the change in price of most of the other goods and services in the basket. The weighting given to tobacco is very small in the overall basket.</td><td></td></tr>
<tr><td>(b)</td><td>Explains that if NZ’s inflation rate is lower than its trading partners, our export industries will expand (or are better off).

Explains that if NZ’s inflation rate is lower than its trading partners, our import industries will contract (or are worse off).

Explains that workers in export industries should be better off (jobs and / or wages) as their industries expand.

Explains that workers in import industries should be worse off (jobs and / or wages) as their industries contract.</td><td>Fully explains that if NZ’s inflation rate is lower than its trading partners, then:
Our export industries will expand. Exports will become more competitive compared to foreign-made goods or services. Therefore, foreign consumers are more likely to purchase NZ-made products.
Our import industries will contract. Imports will become less competitive compared to NZ-made goods or services. Therefore, NZ consumers are more likely to purchase NZ-made products rather than imports.
Due to expansion, workers in NZ export industries should have increased job opportunities and / or wages. This should lead to increased consumption and workers being better off.
Due to contraction, workers in NZ import industries should have decreased job opportunities and / or wages. This should lead to decreased consumption and workers being worse off.</td><td>Fully explains that if NZ’s inflation rate is lower than its trading partners, then (ALL):
Our export industries will expand. Exports will become more competitive compared to foreign-made goods or services. Therefore, foreign consumers are more likely to purchase NZ-made products.
Our import industries will contract. Imports will become less competitive compared to NZ-made goods or services. Therefore, NZ consumers are more likely to purchase NZ-made products rather than imports.
Due to expansion, workers in NZ export industries should have increased job opportunities and / or wages. This should lead to increased consumption (or standard of living) and workers being better off.
Due to contraction, workers in NZ import industries should have decreased job opportunities and / or wages. This should lead to decreased consumption (or standard of living) and workers being worse off.
Comparison/contrast of export and import industries, and export workers and import workers required.</td></tr>
<tr><td></td><td colspan="3"><u>Note:</u> Candidates who explain that resources may shift from import industries to export industries AND / OR explain workers may shift from import industries to export industries can be rewarded any level of Achievement depending on the depth of their answers, once a link to the cause (differing inflation rates) is included.</td></tr>
</table>

N1	N2	A3	A4	M5	M6	E7	E8
Very little Achievement evidence.	Some Achievement evidence.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Some Excellence evidence.	All Excellence evidence.

N0 = No response; no relevant evidence.

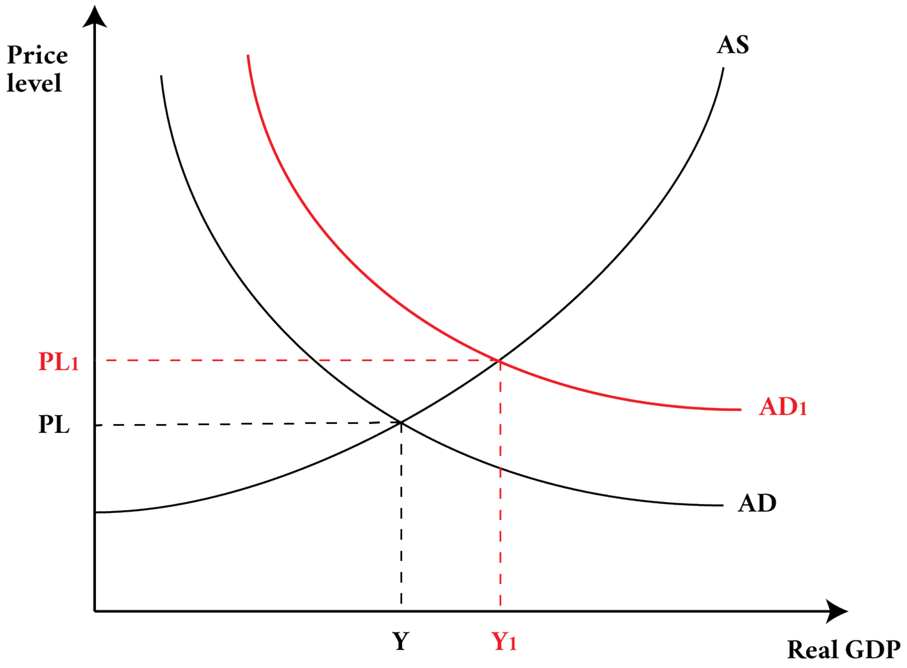
Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 7	8 – 12	13 – 18	19 – 24

Appendix

Question One (a) and (b)

Graph One: AD/AS model of the New Zealand economy



Graph Two: AD/AS model of the New Zealand economy