

**Assessment Schedule – 2018****Economics: Analyse inflation using economic concepts and models (91222)****Assessment Criteria**

<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
<p><i>Analyse inflation</i> involves:</p> <ul style="list-style-type: none"> <li>identifying, defining, or describing inflation concepts</li> <li>providing an explanation of causes of changes in inflation, using economic models</li> <li>providing an explanation of the impacts of changes in inflation on various groups in New Zealand society.</li> </ul> <p><i>Explanation</i> involves giving a reason for the answer.</p>	<p><i>Analyse inflation in depth</i> involves:</p> <ul style="list-style-type: none"> <li>providing a detailed explanation of causes of changes in inflation, using economic models</li> <li>providing a detailed explanation of the impacts of changes in inflation on various groups in New Zealand society.</li> </ul> <p><i>Detailed explanation</i> 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).</p>	<p><i>Analyse inflation comprehensively</i> involves analysing:</p> <ul style="list-style-type: none"> <li>causes of changes in inflation by comparing and / or contrasting their impact on inflation</li> <li>the impacts of changes in inflation by comparing and / or contrasting the impact on various groups in New Zealand society</li> <li>by integrating changes shown on economic models into detailed explanations.</li> </ul>

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

**Cut Scores**

<b>Not Achieved</b>	<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
0 – 6	7 – 12	13 – 18	19 – 24

**Evidence**

Question	Achievement			Achievement with Merit		Achievement with Excellence	
<b>ONE</b>							
(a) (i)	<ul style="list-style-type: none"> <li>Identifies <b>M</b>: Money Supply, <b>V</b>: Velocity of Circulation, <b>P</b>: Price Level, <b>Q</b>: Output of Goods and Services (<i>or similar</i>).</li> </ul>						
(ii)	<ul style="list-style-type: none"> <li>Provides the equation and explains how price level increases, e.g., the Quantity Theory of Money equation is <math>MV = PQ</math>. When the money supply (<math>M</math>) increases while <math>V</math> and <math>Q</math> are constant, the price level (<math>P</math>) will increase.</li> </ul>			<ul style="list-style-type: none"> <li>Provides the equation and explains that the price level increases proportionately, e.g., the Quantity Theory of Money equation is <math>MV = PQ</math>. When the money supply (<math>M</math>) increases by 4% while <math>V</math> and <math>Q</math> are constant, the price level (<math>P</math>) will increase by 4%.</li> </ul>		<ul style="list-style-type: none"> <li>Provides the equation and explains that the price level increases proportionately, e.g., the Quantity Theory of Money equation is <math>MV = PQ</math>. When the money supply (<math>M</math>) increases by 4%, while <math>V</math> and <math>Q</math> are constant, the price level (<math>P</math>) will increase by 4%.</li> </ul>	
(b) (i)(ii)	<ul style="list-style-type: none"> <li>Links a reduced increase in price level to the increase in output, e.g., when the money supply increases and output increases, the increase in the price level will be less.</li> </ul>			<ul style="list-style-type: none"> <li>Links the proportionately smaller increase in price level to the increase in output, e.g., during the recovery, output is forecast to grow. Therefore, when the money supply increases by 4% and <math>V</math> is constant, <math>P \times Q</math> will increase by 4%. With output increasing, the increase in <math>P</math> will therefore be less than 4%.</li> </ul>		<p><i>AND</i></p> <ul style="list-style-type: none"> <li>Links the proportionately smaller increase in price level to the increase in output, with reference to the resource material, e.g., during the recovery, output is forecast to grow. Therefore, when the money supply increases by 4% and <math>V</math> is constant, <math>P \times Q</math> will increase by 4%. With output increasing on average by 2.9%, the increase in <math>P</math> will therefore be around 1.1%.</li> </ul> <p><i>AND</i></p> <ul style="list-style-type: none"> <li>Therefore, an increase in the money supply during a recovery will have a smaller impact on the price level than an increase in the money supply when output and the velocity of circulation are constant. (<i>If the candidate discusses a possible increase in <math>V</math> during a recovery, and how that might raise <math>P</math> creating an uncertain outcome, then this is a valid additional point.</i>)</li> </ul>	
<b>N1</b>	<b>N2</b>	<b>A3</b>	<b>A4</b>	<b>M5</b>	<b>M6</b>	<b>E7</b>	<b>E8</b>
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.
<b>N0</b> = No response; no relevant evidence.							



<p>(b) (i)</p> <p>(ii)</p> <p>(iii)</p>	<ul style="list-style-type: none"> <li>Shifts <b>AS</b> to the right. <i>(See Appendix.)</i></li> <li>Explains that immigration will put downward pressure on wages. As nominal wages fall, productivity rises. The rise in <b>AS</b> will result in the price level falling OR skilled migrants increase productivity.</li> <li>Explains that the increase in the labour force is smaller than the increase in the household population, so shift in AD outweighs shift in AS.</li> </ul>	<ul style="list-style-type: none"> <li>Shifts AS to the right. <i>(See Appendix.)</i> <b>AND</b></li> <li>Fully explains that immigration will increase the size of the labour force and put downward pressure on wages. As nominal wages fall, real output rises. Producers can lower their prices on their output and still maintain their profit margin. <b>AS</b> increases from <b>AS</b> to <b>AS<sub>2</sub></b>. The rise in AS will result in the price level falling from <b>PL</b> to <b>PL<sub>2</sub></b>. OR skilled migrants increase productivity, thereby lowering costs of production and increasing <b>AS</b>.</li> <li>Fully explains that often the increase in the labour force is smaller than the increase in the household population, as some immigrants are dependents who do not work, so shift in <b>AD</b> outweighs shift in <b>AS</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Shifts AS to the right. <i>(See Appendix.)</i> <b>AND</b></li> <li>Fully explains that immigration will increase the size of the labour force and put downward pressure on wages. As nominal wages fall, real output rises. Producers can lower their prices on their output and still maintain their profit margin. <b>AS</b> increases from <b>AS</b> to <b>AS<sub>2</sub></b>. The rise in <b>AS</b> will result in the price level falling from <b>PL</b> to <b>PL<sub>2</sub></b>. OR skilled migrants increase productivity, thereby lowering costs of production and increasing <b>AS</b>. <b>AND</b></li> <li>Fully explains that often the increase in the labour force is smaller than the increase in the household population, as some immigrants are dependents who do not work.</li> </ul> <p><b>Other valid arguments</b></p> <p>Wages in New Zealand are sticky downwards, which means that if there is any downward movement in wages, it is usually very small. A small downward movement will result in a very small decrease in prices.</p> <p>Increased consumption increases tax revenue through GST, increasing Government spending and therefore <b>AD</b> further.</p> <p><i>(Or any other valid explanation.)</i></p>				
<b>N1</b>	<b>N2</b>	<b>A3</b>	<b>A4</b>	<b>M5</b>	<b>M6</b>	<b>E7</b>	<b>E8</b>
Very little Achievement evidence.	Some Achievement evidence, partial explanation.	Most Achievement evidence.	Nearly all Achievement evidence.	Some Merit evidence.	Most Merit evidence.	Some Excellence evidence.	Most Excellence evidence.
<b>N0</b> = No response; no relevant evidence.							

Question	Achievement	Achievement with Merit	Achievement with Excellence
<b>THREE</b>			
(a)(i)	<ul style="list-style-type: none"> <li>Shifts <b>AD</b> to the left. (<i>See Appendix.</i>)</li> </ul>	<ul style="list-style-type: none"> <li>Shifts <b>AD</b> to the left. (<i>See Appendix.</i>)</li> </ul> <p><i>AND</i></p> <ul style="list-style-type: none"> <li>Fully explains that a decrease in economic growth in China will reduce demand for New Zealand exports of goods and services, and as a result, export receipts (X) will fall. A decrease in X will result in <b>AD</b> decreasing from <b>AD</b> to <b>AD<sub>3</sub></b>, because X is a component of <b>AD</b>. The fall in <b>AD</b> will result in the price level falling from <b>PL</b> to <b>PL<sub>3</sub></b>.</li> </ul> <p><i>Note: If a candidate shifts the <b>AD</b> outwards, the graph and an appropriate explanation that the GROWTH RATE in China has declined are required, resulting in a relatively small increase in demand from China and a small increase in exports receipts (X). Since X has increased, <b>AD</b> will increase from <b>AD</b> to <b>AD<sub>3</sub></b> (appropriate corresponding graph), because X is a component of <b>AD</b>. The increase in <b>AD</b> will result in the price level increasing from <b>PL</b> to <b>PL<sub>3</sub></b>. This outwards shift <b>MUST</b> be accompanied by an appropriate detailed explanation with referencing to gain Merit.</i></p>	<ul style="list-style-type: none"> <li>Shifts <b>AD</b> to the left. (<i>See Appendix.</i>)</li> </ul> <p><i>AND</i></p> <ul style="list-style-type: none"> <li>Fully explains that a decrease in economic growth in China will reduce demand for New Zealand exports of goods and services, and as a result, export receipts (X) will fall. A decrease in X will result in <b>AD</b> decreasing from <b>AD</b> to <b>AD<sub>3</sub></b>, because X is a component of <b>AD</b>. The fall in <b>AD</b> will result in the price level falling from <b>PL</b> to <b>PL<sub>3</sub></b>.</li> </ul> <p><i>AND (see next page)</i></p>
(ii)	<ul style="list-style-type: none"> <li>Explains that a decline in economic growth in China will result in X falling and <b>AD</b> will decrease. The fall in <b>AD</b> will result in the price level falling. (<i>See Note in Merit.</i>)</li> </ul>		

<p>(b)</p>	<ul style="list-style-type: none"> <li>Explains that exporters will increase the total dollar value of their sales and be better off, OR importers have an increase in the dollar-cost of their purchases, and be worse off.</li> <li>Explains that firms that have a high labour content are using locally sourced resources, and therefore will experience a smaller impact from the increased cost of imports and will be better off, OR firms with high value imported capital goods will experience a larger impact from the increased cost of imports, and will be worse off.</li> </ul>	<ul style="list-style-type: none"> <li>Fully explains that when inflation is lower in New Zealand than in our trading partners, the price of locally made goods in our trading partners is rising faster than the price of New Zealand-made goods.                         <ul style="list-style-type: none"> <li>Therefore, our export goods are becoming more price-competitive. This will mean that our exporters will be able to make greater export sales, and earn greater income.</li> <li>In addition, overseas goods will become less price-competitive in New Zealand. It will become harder for importers to compete with New Zealand produced goods. Sales of imports will fall, and the incomes of importers will fall.</li> </ul> </li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Fully explains that when inflation is lower in New Zealand than in our trading partners, the price of locally made goods in our trading partners is rising faster than the price of New Zealand-made goods.                         <ul style="list-style-type: none"> <li>This also means that the cost of goods with a high local labour content will not be rising as quickly, whereas firms that use a high percentage of imported capital goods will face more rapid increasing costs of production. The firms with high local labour content will therefore be more price-competitive than firms using imported capital goods.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Fully explains that when inflation is lower in New Zealand than in our trading partners, the price of locally made goods in our trading partners is rising faster than the price of New Zealand-made goods.                         <ul style="list-style-type: none"> <li>Therefore, our export goods are becoming more price-competitive. This will mean that our exporters will be able to make greater export sales, and earn greater income.</li> <li>In addition, overseas goods will become less price-competitive in New Zealand. It will become harder for importers to compete with New Zealand produced goods. Sales of imports will fall, and the incomes of importers will fall.</li> </ul> </li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>Fully explains that when inflation is lower in New Zealand than in our trading partners, the price of locally made goods in our trading partners is rising faster than the price of New Zealand-made goods.                         <ul style="list-style-type: none"> <li>This also means that the cost of goods with a high local labour content will not be rising as quickly, whereas firms that use a high percentage of imported capital goods will face more rapid increasing costs of production. The firms with high local labour content will therefore be more price-competitive than firms using imported capital goods.</li> </ul> </li> </ul>				
<p><b>N1</b></p>	<p><b>N2</b></p>	<p><b>A3</b></p>	<p><b>A4</b></p>	<p><b>M5</b></p>	<p><b>M6</b></p>	<p><b>E7</b></p>	<p><b>E8</b></p>
<p>Very little Achievement evidence.</p>	<p>Some Achievement evidence, partial explanations.</p>	<p>Most Achievement evidence.</p>	<p>Nearly all Achievement evidence.</p>	<p>Some Merit evidence.</p>	<p>Most Merit evidence.</p>	<p>Some Excellence evidence.</p>	<p>Most Excellence evidence, with some weakness in one detailed explanation in (b).</p>
<p><b>N0</b> = No response; no relevant evidence.</p>							

**Appendix: Graphs**

