Question 1

12 points \( (4 + 4 + 2 + 2) \)

(a) 4 points:
One point is earned for a correctly labeled graph.
One point is earned for showing a rightward shift in New Zealand’s AD curve.
One point is earned for the explanation that New Zealand’s exports to Australia increase.
One point is earned for concluding that New Zealand’s output increases.
Question 1 (continued)

(b) 4 points:
One point is earned for a correctly labeled graph of the money market.
One point is earned for showing a rightward shift of the money demand curve.
One point is earned for the explanation that higher income means more volume of transactions.
One point is earned for concluding that the nominal interest rate increases.

(c) 2 points:
One point is earned for stating that the real interest rate is indeterminate.
One point is earned for the explanation that the real interest rate is eroded by inflation but increases as a result of the increase in money demand.

(d) 2 points:
One point is earned for stating that the aggregate supply curve will shift to the right.
One point is earned for stating that the aggregate demand curve is unaffected.
Question 1

a)

i) Aggregate Demand in New Zealand will increase. Australia recovering from its recession will result in Australians demanding more goods, both at home and abroad, which will result in New Zealand's net exports New Zealand National Economy (NX) increasing. Since net exports are a component of aggregate demand, aggregate demand in New Zealand will in turn increase.

ii) Output in New Zealand will increase, due to an increased aggregate demand and an unchanged Short-run aggregate supply.
b) Demand for Money ($M_d$)

- Will increase. Increased
- Aggregate Demand and increased
- Output will result in more
- People wanting to buy goods,
  which they will require more
  money to do.

ii) The nominal interest rate

- Will increase, due to
- An increased $M_d$ demand
- Money Market for New Zealand
- For money and a fixed
  Supply of money.

c) Depending on how much price level increases relative to rising
nominal interest rates, real interest rates may rise, fall or remain
unchanged. According to the Fisher effect, real interest rates
are equal nominal interest rates minus inflation. If inflation, also known as the increase in the price level, is greater than
the rise in the nominal interest rate, the real interest rate will
actually fall. Conversely, if nominal interest rate rises are
greater than inflation, then real interest rates rise. If nominal
interest rate rises equal inflation, then the real interest
rate is unchanged.
Write in the box the number of the question you are answering on this page as it is designated in the exam.

i) In the long run, short run aggregate supply will increase as shown. Unemployment will enable firms to drive wages down, which will result in a cost of production, down, short run supply increasing.

This is a classical or self-correcting view of how the market will be corrected.

ii) Aggregate Demand will remain unchanged, but the quantity of goods demanded will increase with the falling price level, due to the wealth and net-export effects.
1 - (a)

Aggregate demand and aggregate supply in New Zealand (short-run)

(i) As Australia's income is rising, now Australians can afford more imports from their trade partner New Zealand. Because the share of imports of Australia from New Zealand increases exports in New Zealand and in New Zealand, AD curve shifts to the right. That is definitely shift to the right because there's no reason for the imports of New Zealand to increase in this situation, whereas exports rise. This change, in turn, result in surplus in Net exports of AD curve.

(ii) Because AD curve shifts to AD', due to rising income in Australia, output in New Zealand will change from Q1 to Q2 as indicated in the graph above. Thus, output in New Zealand increases.
4-(b) 

Nominal interest rate: $a_1 \rightarrow a_2 \rightarrow a_3 \rightarrow a_4 \rightarrow a_5$ 

Quantity of New Zealand money: $ND \rightarrow MD \rightarrow END$ 

(i) Demand for money in New Zealand will increase. 

This is because Australians now need more New Zealand money to afford buying New Zealand's products. Moreover, as the output in New Zealand rises, or real GDP rises, people of New Zealand have more incomes than before. Then, they'll be likely to spend more than before, boosting demand for money.

(ii) As the demand for money is increased due to increased output, the MD curve will shift to the right to MD' curve. Thus, the nominal interest rate $g$ rises to $a_2$ from $a_1$. In short, the nominal interest rate increases.
1-(c) The equation below should be considered in this case:

The nominal interest rate = the real interest rate + inflation rate.

Therefore, if the price level in New Zealand rises, which indicates inflation, the real interest rate will increase. This is because according to the equation above (Fisher's hypothesis), the real interest rate equals the nominal interest rate plus inflation rate.

1-(d) Longrun Aggregate supply and aggregated demand in Australia.

<table>
<thead>
<tr>
<th>Price Level</th>
<th>LRAS</th>
<th>AD'</th>
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(c) Aggregate supply in the long run in Australia will remain still. This is because long run aggregate supply curve is only affected by two channels; availability of resources and technology (productivity). As long as these two are not changed aggregate supply curve doesn't move.

(c1) Aggregate demand curve will move to the right to AD' curve. In recession, inventories are likely to bulge, so suppliers will start to cut off prices of their products. Thus, then, this lower price level will encourage more demand, shifting AD curve to the right.
1. (a) Assuming that Australia's economy is in recession, and begins to recover from it, we could have a graph looking like this.

![Graph showing economic recovery](image)

Recovering from the recession the price level rises and so do the incomes.

(i) Aggregate demand in New Zealand decreases.

![Graph showing decrease in aggregate demand](image)

As the aggregate demand increases for Australia the opposite happens for New Zealand decreasing the aggregate demand (ii) and therefore decreasing in the total output and price level as well.

(b) Price Level  AD  AS  (i) (ii) The recovering of Australia from the recession leads the aggregate demand curve to shift to the left meaning the aggregate supply and demand decreasing. Since the supply of money decreases, the demand for money will increase because there is not as much money from the past and the people would know that the purchase power of the money has increased. The interest rate will increase because it is the same for the
government. The government also needs money, but the supply has decreased so the government wants people to put their money in banks so the government and business can use it for investment and getting help by the money multiplier.

(c) Prices have risen. The nominal interest rates would seem like they have risen (but the real crop real interest rate would decrease). The purchase power of the same money would have decreased.

(b) Shown in the graph, to cure the recession, the AD curve can shift to the right, or the AS curve can also shift to the right giving an equilibrium point of the long run aggregate supply curve.
Question 1

Sample: 1A
Score: 12

The student earned all points in this question.

Sample: 1B
Score: 8

The student earned all points in parts (a) and (b) and lost all points in parts (c) and (d).

Sample: 1C
Score: 3

In part (a) the student earned 1 point for the correctly labeled graph and 1 point for the assertion that output decreases, which is consistent with a leftward aggregate demand shift. The student earned 1 point in part (d) for recognizing that aggregate supply increases.