A1

(i) Yes, a monetary expansion shifts the LM curve downwards to the right and in the long run the economy must revert to the long-run equilibrium so prices adjust and increase in the same size of the growth in money supply.(**5**)
(ii) Stock prices have led the business cycle over this period and no links can be made with the severity of the business cycle.(**3**)

A2

Money would not be neutral in the medium-run, a shift of the AD curve upwards results in a level of output above its potential (**2**), but money remains neutral in the long-run (**2**). Since the speed of price adjustment is slower for Keynesians, the addition of a MRAS supports their reasoning (**2**). Appropriate graphs (**2**)

A3

(i)
$$y = K^{\alpha_K} N^{-\alpha_N}$$
$$\frac{\Delta y}{y} = \alpha_K \frac{\Delta K}{K} - \alpha_N \frac{\Delta N}{N}$$

If $\frac{\Delta K}{K} = \frac{\Delta N}{N}$, then for $\frac{\Delta y}{y} = 0$ it must be the case that $\alpha_K + \alpha_N = 1$.(**5**)

(ii) Since it does not enter the production neither in N nor in K, it is captured by the Solow residual, A (**3**).

A4

There are two major benefits of the fixed system: (i)stable exchange rates reduce uncertainty and make goods and asset trade easier (**2.5**) and (ii)it would discipline the Bank of Canada from running expansionary monetary policy constantly(**2.5**). It would be less beneficial for Alberta. If we assume from the open-economy trilemma that capital flows freely, then a fixed exchange rate means that the Bank of Canada has its hands tied a cannot react to any local(provincial) shocks.(**3**)

B1

a) It can be instructive to do the maths, even though the question did not specify it. Y_1 is your grandma's income and Y_2 is your income. First, let us see what is the real money demand for the economy before your grandma's death.

$$L_a = Y_1 + 0.6Y_2 i^{-\frac{1}{2}}$$

After her death:

$$L_b = 0.6(Y_1 + Y_2)i^{-\frac{1}{2}}$$

Comparing L_a and L_b.

$$
\begin{aligned}
L_a &= L_b \\
Y_1 + 0.6Y_2 i^{-\frac{1}{2}} &= 0.6(Y_1 + Y_2)i^{-\frac{1}{2}} \\
Y_1 &= 0.6Y_1 i^{-\frac{1}{2}} \\
\sqrt{i} &= 0.6 \\
i &= 0.36
\end{aligned}
$$

If $i < 36\%$, which is a reasonable assumption for industrialized economies, then real money demand increases after your grandma's death. Lower the interest is on non-monetary assets so does your demand for these assets. Then, higher your demand for real balances is. Money demand is greater because your grandma did not consider the interest rate in her decision of liquidity (**2**). Graph: Money supply is fixed, and money demand increases. Therefore, the new equilibrium interest rate is higher (**2**).

b) First, calculate the return of the nominal bond and then use the Fisher equation to find the expected inflation rate ($\pi^e = 6.11\%$)

c) From the growth accounting equation: $\frac{\Delta Y}{Y} = 3\%$ and using $\frac{\Delta M}{M} = \pi + \eta_Y \frac{\Delta Y}{Y} = 7.31\%$

d) Use the same equation as in part c), then money should grow at 1.2%.

e) According to the quantity theory of money, $\frac{M}{P} = L = kY$, where k is a constant, since the MPk is not constant then we know that the nominal interest fluctuates as well, so the quantity theory of money only holds if $\sigma = 0$.

B2

a) IS curve:

$$
\begin{aligned}
Y &= C^d + I^d \\
Y &= 4350 - 800r
\end{aligned}
$$

Or $r = 5.4375 - \frac{0.5}{400}Y$.

b) LM curve: $r = i = -0.875 + \frac{Y}{400}$

c) $Y^* = 1683.33$ and $r^* = 3.33$.

d) $\bar{N} = 38.48$ (**2**) and $\bar{Y} = 1480.48$ (**2**). Two graphs: the first one should show the labour

market where labour demand shifts downwards and the second one from the IS-LM-FE framework, where FE shifts to the left and LM shifts upwards since prices have increased to attain the long-run equilibrium (**3**).

e) Under these two assumptions, it is possible to get cyclical unemployment for the economy in the short-run (**2**). Graph: unemployment would correspond to the horizontal distance between the old and new labour demand curves at the first equilibrium real wage (**2**).