Question: Economics **(35 points)**

The New Zealand economy has a population of 4.4 million (May 2012, National Statistics Bureau). Though a small country, it engaged in a series of reforms beginning in the mid-1980s and lasting through the 1990s that relaxed regulations and diversified and liberalized trade and finance. These efforts transformed it into a typical small open economy, in which exports and imports account for a large percentage of GDP.

Its major exports are primary goods, and it imports machinery and energy. The Canterbury Earthquake of February 2011 did significant damage to infrastructure, especially in Christchurch, one of its largest cities. This produced reconstruction demand, and economic management attempted to prevent overheating, which would have worsened inflation and the current account.

New Zealand therefore adopted a tight monetary policy, in contrast to the easy money of major developed countries, and continued to tighten in 2014 until the official cash rate reached 3.5% at the end of the year. During this process, its currency, the New Zealand dollar (NZ dollar) began to shift on foreign-exchange markets, and the Reserve Bank of New Zealand, its central bank, moved to restrain markets.

	2007	2008	2009	2010	2011	2012	2013	2014
Real growth rate (%)	3.4	−0.5	−1.4	1.6	1.8	2.4	2.2	3.2
Per capita GDP (US dollars)	31,787	31,488	28,001	33,085	37,580	39,246	41,490	43,837
Total Investment to GDP (%)	24.8	23.7	19.8	20.5	20.2	21.6	22.5	23.1
CPI growth rate (%))	2.4	4.0	2.1	2.3	4.0	1.1	1.1	1.2
Unemployment rate (%)	3.7	4.1	6.1	6.5	6.5	6.9	6.2	5.4
Current account to GDP ratio (%)	−6.8	−7.7	−2.3	−2.3	−2.8	−4.0	−3.2	−3.5

(Source) IMF World Economic Outlook April 2015; including estimates for 2014

a) Consider the IS-LM model if New Zealand were a closed economy. Explain briefly the IS curve and draw a graph of the impact that expansionary fiscal policy for reconstruction would have on income and interest rates. Comment briefly. (5 points)

b) In reality, New Zealand economy is a small open economy and a floating foreign exchange rate. Use in b1) and in b2) a graph to answer the following questions assuming that the Marshall-Lerner condition is satisfied. You still consider the IS-LM model.

  b1) Explain briefly the impact of expansionary fiscal policy in the case of perfect capital mobilitytaking account of the Mundell-Fleming model. (5 points)

  b2) Explain whether an expansionary monetary policy is effective in the case of perfect capital mobilitytaking account of the Mundell-Fleming model. (5 points)

c) Answer the following questions within the framework of AD-AS analysis.

c1) Use a graph to explain the impact of deregulation. Comment briefly. (5 points)

c2) Rising oil prices during the 2007-2008 period produced stagflation; in 2008, the country's economy grew by -0.5%, but its CPI rose 4.0%. Use a graph to explain the impact of the shock from rising oil prices. Comment briefly. (5 points)

d) As its current account turned red, the Reserve Bank of New Zealand intervened in the foreign exchange market to counter the appreciation of its currency, selling 1 billion NZ dollars and buying an equivalent amount in US dollars. Answer the following questions.

d1) Explain very briefly the impact of foreign-exchange intervention on the monetary base assuming that no sterilization operations are taken. (4 points)

d2) Explain the impact on LM (money market equilibrium) of increases in the monetary base through the money multiplier (interest rates are not near zero, as described above). (6 points)