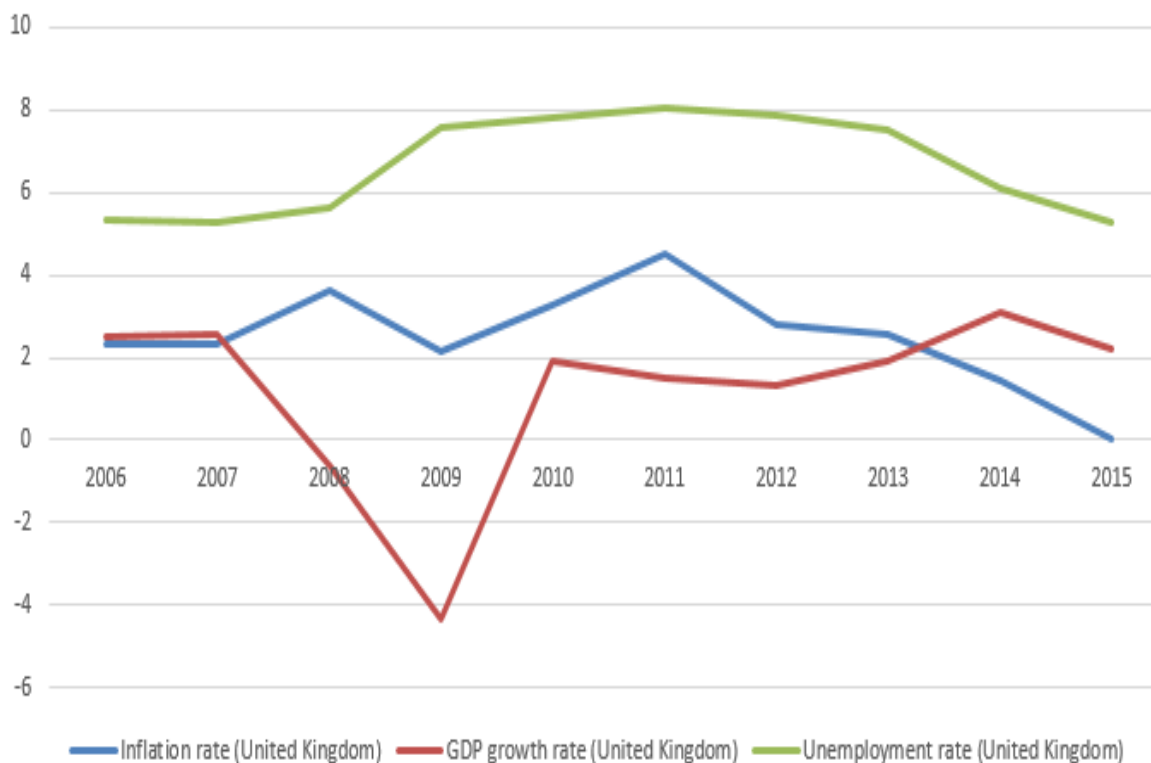## Answer (Part A Question 1)

The graphs show the real GDP growth rates, unemployment rates and inflation rates for the United Kingdom, Australia and Germany separately. On the Y axis, the GDP growth rates, inflation rates and unemployment rates are plotted. On the x-axis the time period from 2006 to 2015 has been plotted. The data for the inflation rate (Consumer Price index), unemployment rate (national estimates) and real GDP growth rates for Australia, United Kingdom and Germany (selected European Union country) is taken from the World Bank website (World Bank, 2017).
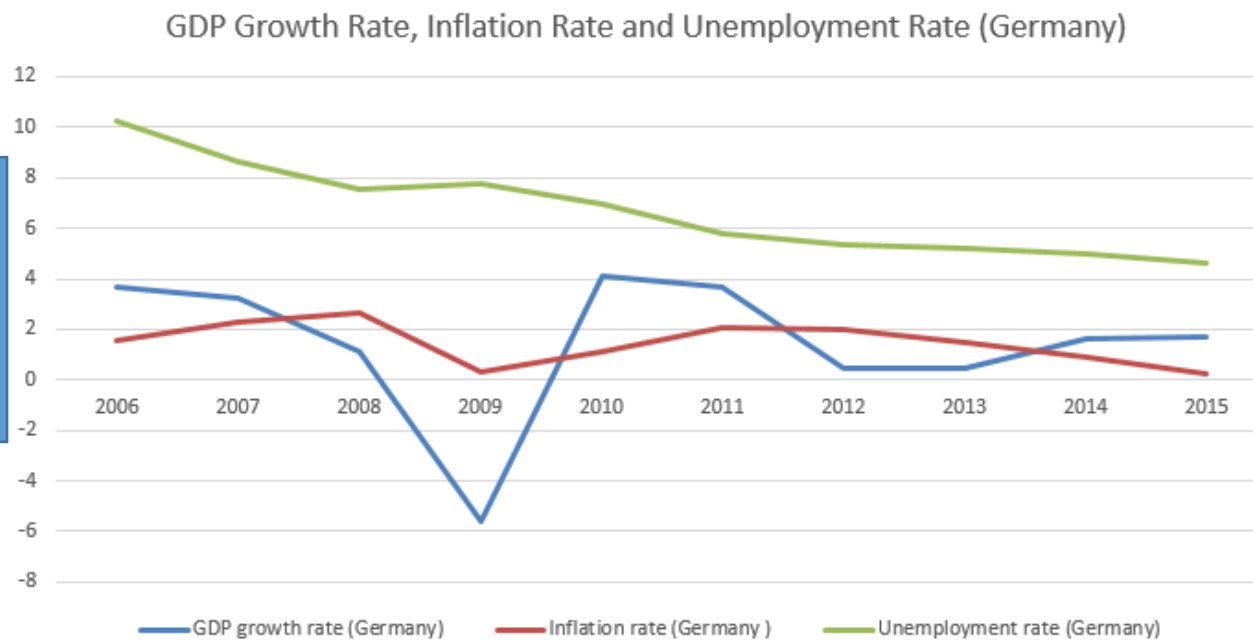
Graph 1

Source: (World Bank, 2017)

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Graph 2

GDP Growth Rate, Inflation Rate and Unemployment Rate (Germany)

Inflation rate/unemployment rate/GDP growth Rate

Time Period

Source: (World Bank, 2017)

Graph 3

GDP Growth Rates, Inflation Rates and Unemployment Rates (Australia)

Inflation rate/unemployment rate/GDP growth Rate

Time Period

Source: (World Bank, 2017)

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Answer Part A question 2

Graph 4

GDP growth rate

GDP Growth Rates (United Kingdom, Germany and Australia

Chart Area

— GDP growth rate (United Kingdom) — GDP growth rate (Germany) — GDP growth rate (Australia)
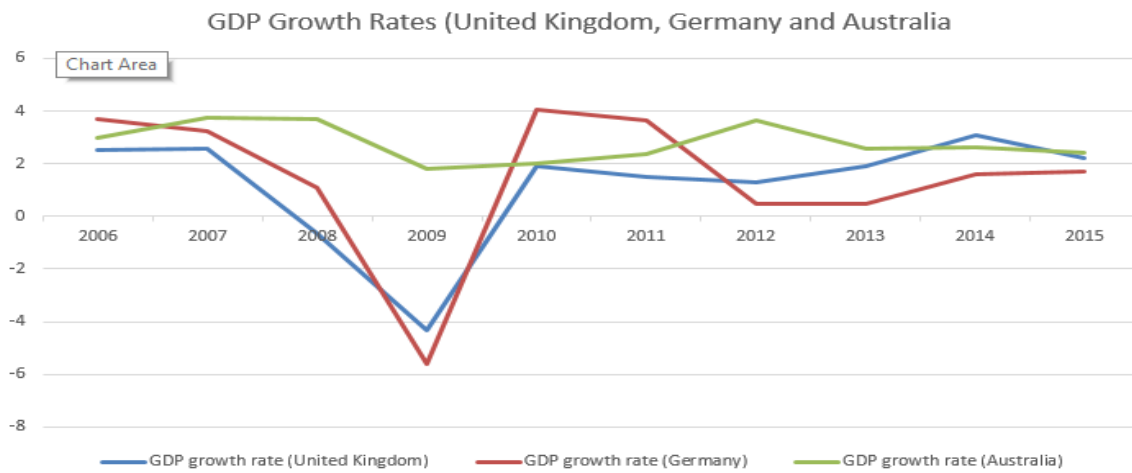
Source: (World Bank, 2017)

Time period

Graph 5

Unemployment rate

Unemployment Rate United Kingdom, Germany and Australia

— Unemployment rate (United Kingdom) — Unemployment rate (Germany)
— Unemployment rate (Australia)

Time Period

Source: (World Bank, 2017)

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Graph 6

Inflation Rate (United Kingdom, Germany and Australia)

Inflation rate

Time Period
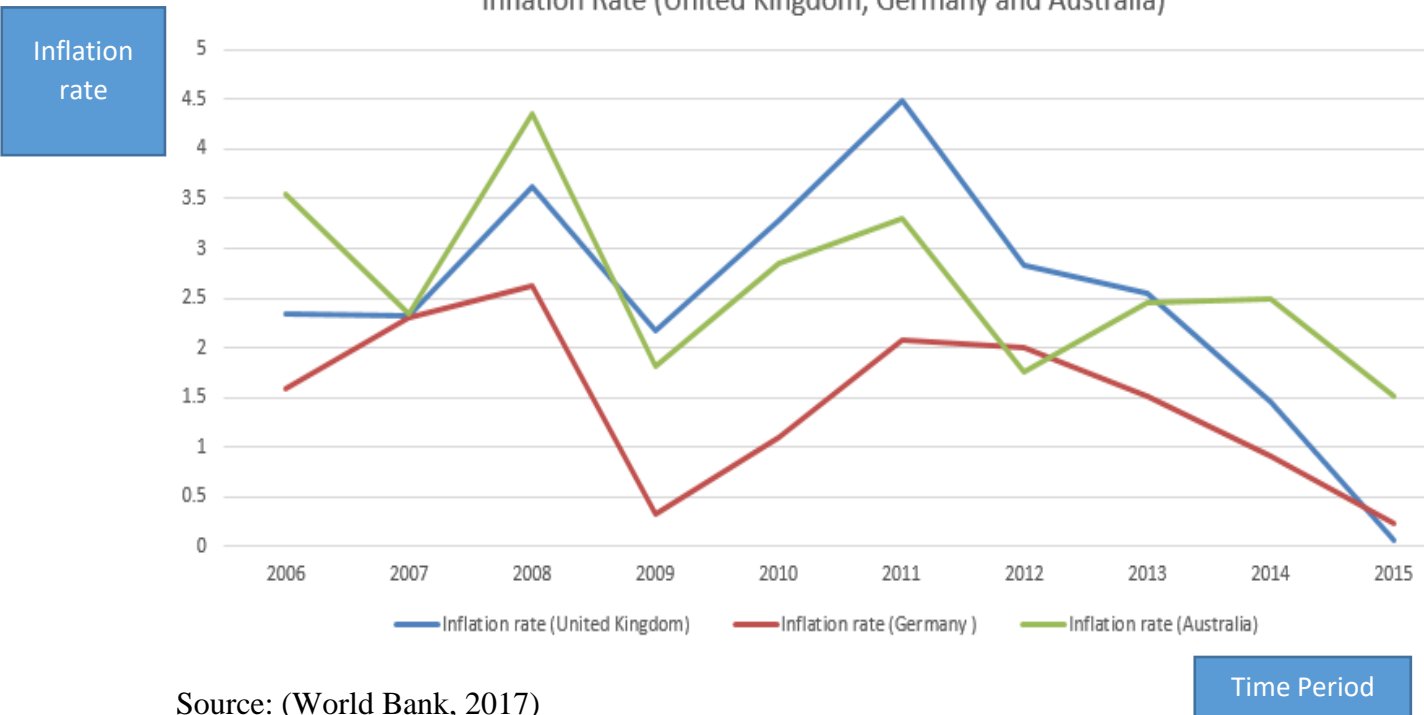
Source: (World Bank, 2017)

The graphs show the variations in inflation rates, unemployment rates and the GDP growth rates. The data chosen is from 2006 to 2015 for Germany, Australia and United Kingdom. The line graph of Germany's unemployment rate reveals that there is a gradual declining trend from 2006 to 2015 as compared to the United Kingdom where after the occurrence of the Global Financial Crisis in 2007/08 there were rising trends of the unemployment rate until 2013 where the unemployment rate started declining. Australia in comparison was rather less affected by the global financial crisis. Although the trends reveal a slight and gradual increase in the rates of unemployment, but there is a little rise in the unemployment rates at the time of the financial crisis.

The graph of the real GDP growth rates for Germany, Australia and United Kingdom reveal that the GDP growth rates for Germany and United Kingdom declined drastically at the time of the global financial crisis. Whereas, the growth rates of the GDP for Australia remained unaffected by the global financial crises that occurred between 2007 and 2009. After 2009, the growth rates of United Kingdom and Germany rose considerably revealing that they have been able to hedge themselves from the aftershocks of the financial crisis effectively. The graph for the GDP shows that Germany and United Kingdom went into a period of recession at the time of global financial

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crisis after which they recovered. The United Kingdom which was most affected by the crises was the fastest to come out of it. The reason behind this was the moderate expansionary fiscal policy implemented by the government (Serricchio, et al., 2013). The growth rate of Australia was virtually least affected by the crisis. The reason behind it was appropriate policies at point of crisis were implemented by the government. Furthermore, reliance of the economic growth was on the real sector rather than the financial sector (Greenglass, et al., 2014).

The inflation rate for Australia, Germany and United Kingdom reveal erratic trends. According to the Philips curve, there is an inverse relationship between the unemployment and inflation rates (Anghelache, et al., 2017). This holds true with the graph. The inflation rates declined during the Global financial crises after which they increased and then again showed declining trends. As of 2015, the inflation rate has declined below 0.5 for Germany and United Kingdom and up to 1.5 for Australia.

In 2008, there was a major decline in the real GDP growth rates. The banking crisis caused a severe decline in the normal bank lending resulting in a decreased investment and consumer spending. Furthermore, the major fall in the house prices also led major economies towards recession. The financial crises was largely associated with the United States and Europe (Serricchio, et al., 2013). The graphs for the GDP growth rates reveal that the two of the European countries (United Kingdom and Germany) as the more severe victims of the financial crisis as compared to Australia. Furthermore, an in increase in the oil prices caused cost push inflation. This further led to lower consumer spending because of a reduced discretionary income. The Central banks were reluctant to cut the rate of interests because of the cost push inflation. In order to get out of the global financial crisis, the United Kingdom introduced a moderate expansionary fiscal policy with a temporary cut in VAT. This led to an increase in the GDP growth rates and the United Kingdom recovered from recession at a faster rate (Serricchio, et al., 2013). The financial recession also caused downsizing by major businesses due to which there was a drastic increase in the unemployment in Europe (as seen from the graphs of Germany and United Kingdom) and the United States. Australia on the other hand was least hit by the financial crisis because the dependence of the country's economic growth was on real output rather than driven by finance. Furthermore, economic stimulus packages were announced by the government of 10.4 billion dollars in order to hedge from the financial crisis. These payments were made at the time of

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Christmas spending. This resulted in strong Christmas sales. Furthermore, the grant for first home buyers was doubled to 14000 dollars and 21000 dollars for the new home buyers (Greenglass, et al., 2014).

Answer Part B Question 3

Answer 3.1
The value for equilibrium for real GDP is $ 1200 Billion.

Answer 3.2
Marginal propensity to consume= slope of AE (Aggregate Expenditure) (Mankiw, 2014)

$$= (1360\text{-}1040)/(1400\text{-}1000)$$

$$=0.8$$

Answer 3.3
Multiplier= 1/ (1-mpc)

$$= 1/ (1\text{-}0.8)$$

$$=1/ 0.2$$

$$=5$$

Answer 3.4
The value of unplanned changes in inventory when GDP has a value of $1400 billion= $1400-$1360=$40 billion.

The value of unplanned changes in inventory when GDP has a value of $1200 billion= $1200-$1200= $0 billion.

The value of unplanned changes in inventory when GDP has a value of $1000 billion= $1000-1040= $-40 billion (Mankiw, 2014).

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Answer Part B Question 4

Answer 4.1

Figure 1
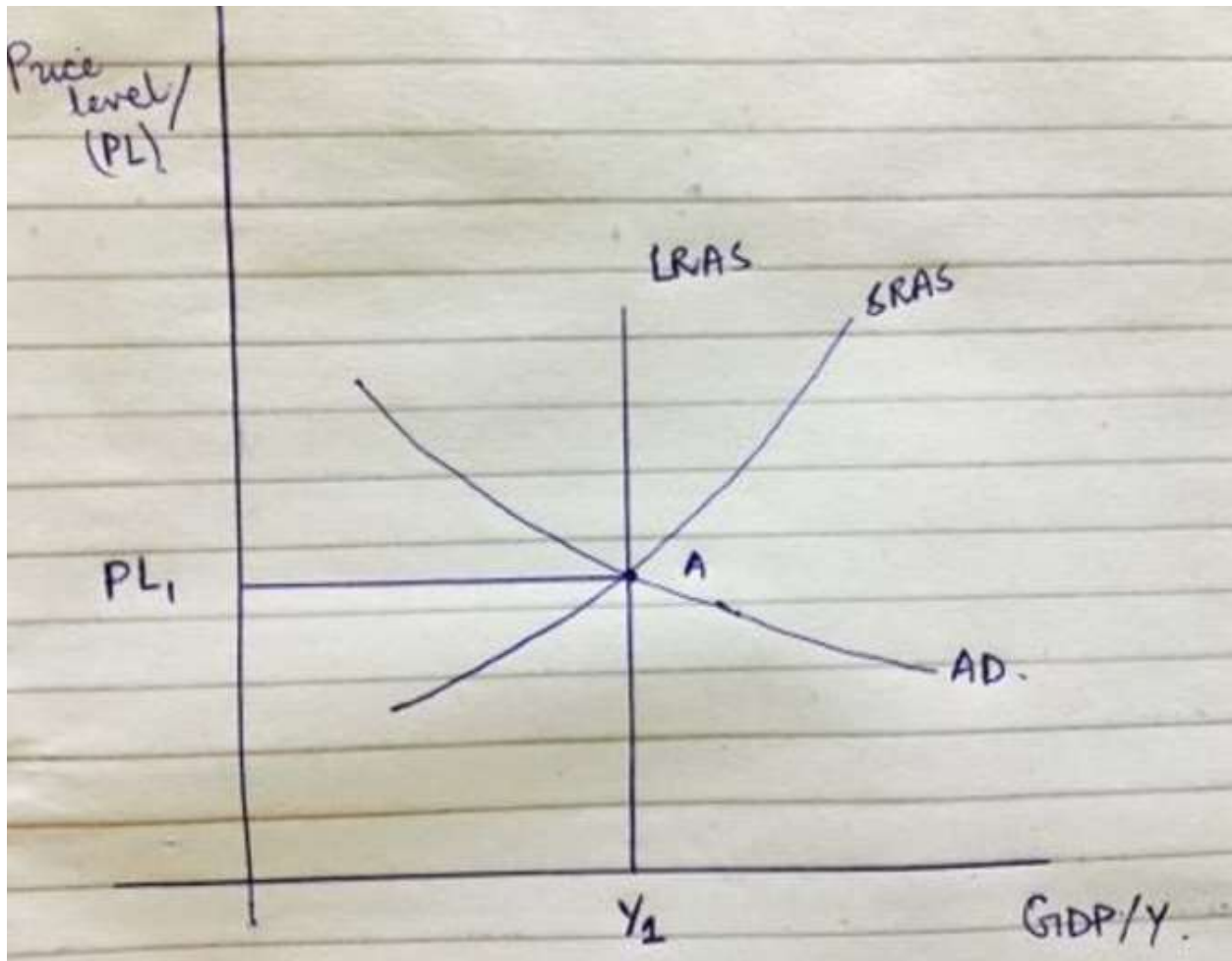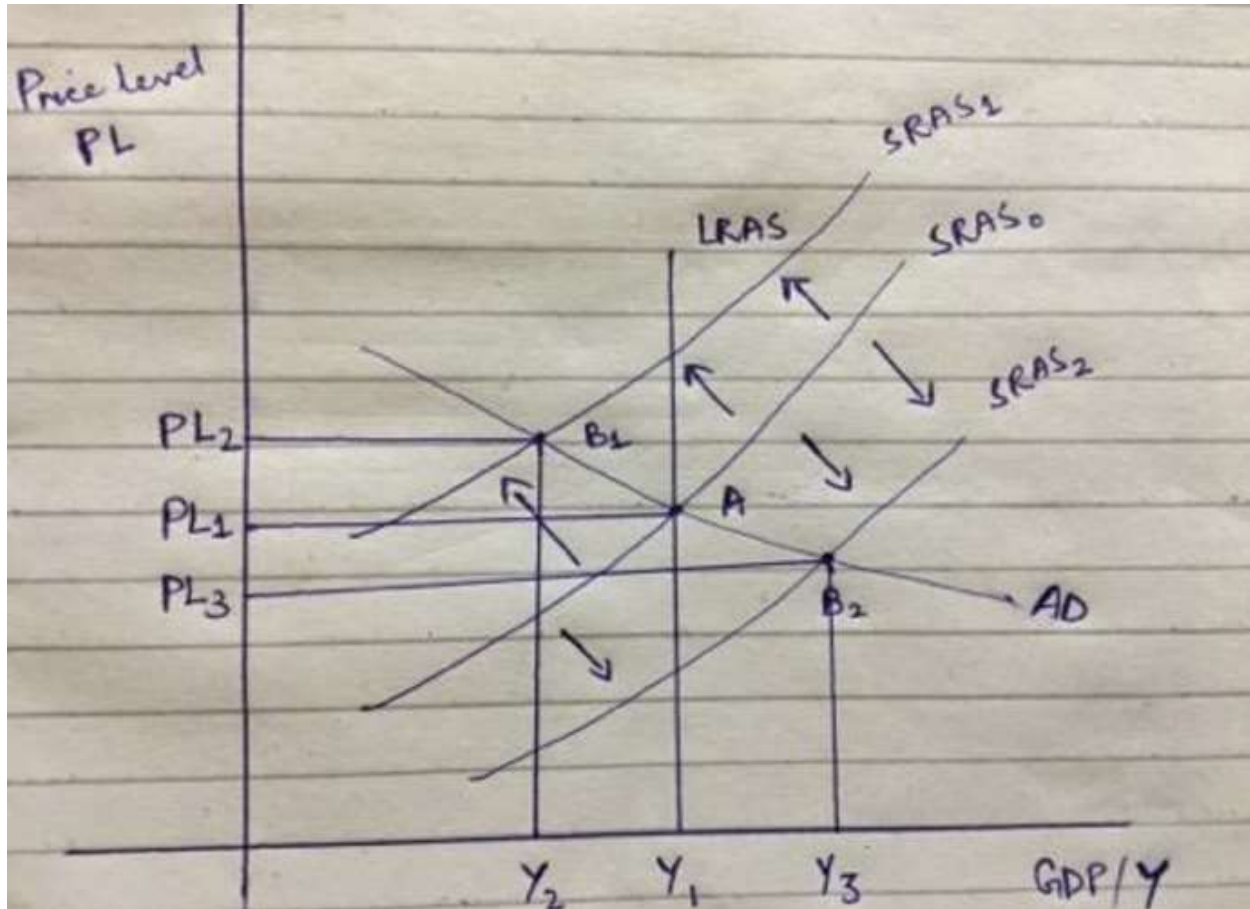

Figure 1 shows equilibrium at point A (Price Pl_1 and output Y_1). This is the point of equilibrium where long run aggregate supply curve (LRAS), Short run aggregate supply curve (SRAS) and aggregate demand curve (AD) intersects (Mankiw, 2014). On the Y-Axis, price level (PL) is plotted and on the x-axis GDP (Y) is plotted (Mankiw, 2014).

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Answer 4.2,

Figure 2

The economy is in equilibrium at point A with price PL_1 and GDP value Y_1 dollars. There are two kinds of supply shock that can occur in the economy and they are contractionary and expansionary supply shock. With the contractionary supply shock there is a shift of short run aggregate supply to the left from $SRAS_0$ to $SRAS_1$ resulting in the equilibrium to shift from point A to point B_1 at price PL_2 and quantity Y_2. This supply shock results in a decrease in the value of GDP to Y2 because of an increase in the prices from PL_1 to PL_2. The second type of supply shock is an expansionary supply shock. This results from a decrease in the prices of factor of production. This causes a rightward shift in the supply curve. With this shift, a new equilibrium is formed at point B_2 with reduced price PL_3 and increased output value of GDP at Y_3 from the original equilibrium

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point A. The examples of contractionary supply shock is stagflation which generally occurs because of an increase in the input prices such as rise in oil prices. Expansionary supply shock occurs when there is a decrease in the input prices (Mankiw, 2014).

Answer 4.3

Figure 3
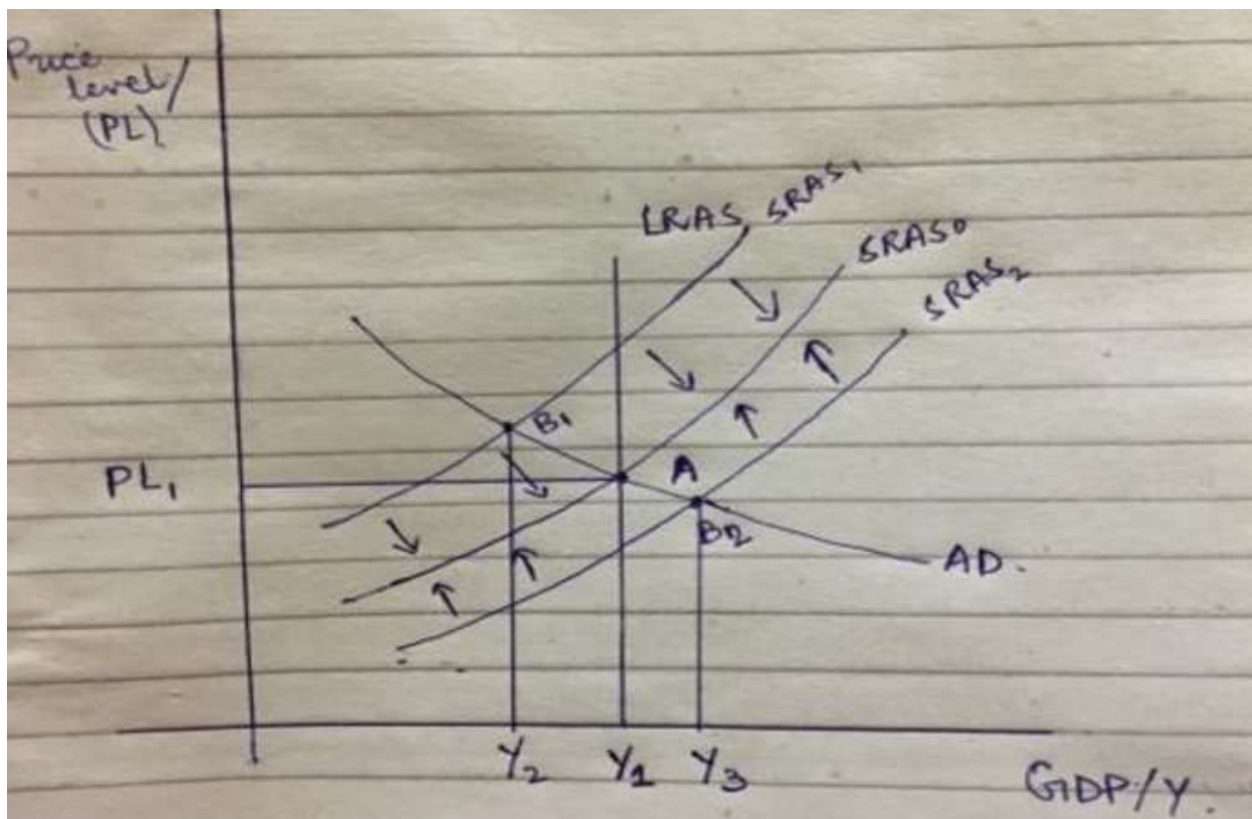
When there is an occurrence of expansionary supply shock, inflationary gap appears. From this inflationary gap, there will be a rise in the wages and factor inputs. In the long run SRAS$_2$ curve shifts backwards to its original equilibrium position A with price PL$_1$ and GDP value Y$_1$ in the long run. When there is an occurrence of contractionary supply shock, there is a new equilibrium at point B$_1$ with higher prices and reduced output. In the long run, the equilibrium will come back to its normal position from point B$_2$ to point A. Note however that this readjustment will take more

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time than the expansionary supply shock because of the sticky wage effect. As per theory, it takes more time for the wages to fall when there is a period of recession as compared to the rise in the wages in an inflationary period (Mankiw, 2014).

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[Accessed 28 8 2017].

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