Distinguish between GDP and GNP/GNI as measures of economic activity.

GDP is the monetary value of all goods and services produced in an economy. GNP/GNI is the monetary value of all goods and services produced in an economy, including net factor inflow from abroad.

Distinguish between the nominal value of GDP and the real value of GDP

The nominal value of GDP is simply the monetary value of GDP at the time of measurement, however its true value is masked by inflation. Real GDP adjusts GDP for inflation between years, such that annual GDP figures can be compared.

Distinguish between total GDP and GDP per capita

Total GDP is simply the complete total of GDP in an economy. GDP per capita is the total GDP, divided by the population of the economy.

Examine the output approach, the income approach and the expenditure approach when measuring national income.

Output approach:

- National income measured by calculating the monetary value of all final goods and services produced in an economy during a year.

Income approach:

- National income measured by totalling all flows of income (wages, interest, profit, rent, etc). Expenditure approach:
 - National income measured as a flow of expenditure. GDP is the sum of private consumption expenditure.

Evaluate the use of national income statistics, including their use for making comparisons over time their use for making comparisons between countries and their use for making conclusions about standards of living.

National income statistics are useful for seeing average wealth, but don't she income equality. I.e. National income per capita may be high, but the gini coefficient may be close to 1.

Evaluate the meaning and significance of green GDP.

Green GDP is simply GDP, but with an added factor that subtracts the cost of environmental degradation. It is useful as it reflects sustainability of a country's economy.

Explain, using a business cycle diagrams, that economies typically tend to go through a cyclical pattern characterized by the phases of the business cycle.

The business cycle describes overall trends in GDP.

 $\text{Boom} \rightarrow \text{Recession} \rightarrow \text{Slump} \rightarrow \text{Recovery}$

Boom: High demand and high production. Consumer confidence. Businesses invest and expand. Recession: Output and labour costs reduced as incomes and demand fall. Unemployment high.

Explain the long-term growth trend in the business cycle diagram as the potential output of the economy

In the long term, economies are always expected to expand in productive potential. This is because of technology improvements and an expansion in the size of the labour force. Thus, regardless of the oscillations in GDP of the business cycle, potential long-term growth rises.

Distinguish between a decrease in GDP and a decrease in GDP growth

A decrease in GDP is characterised by the value of Real GDP decreasing between years. A decrease in GDP growth is a decrease in the rate at which GDP is growing each year.

Define Economic Growth

- An increase in Real GDP.

Economic growth can also refer to an increase in actual output. This can be illustrated by a point inside a PPC curve moving closer to the PPC. This form of growth would be caused by a reduction in unemployment and increases in productive efficiency.

Equally, economic growth can refer to an increase in potential output. This can be illustrated by an expansion in the PPC curve. This form of growth would be caused typically by improvements in the quantity and quality of resources.

Economic growth as represented by expanding potential output can also be seen on an LRAS diagram. An LRAS diagram shifting to the right demonstrates an increase in potential output.

Explain the importance of investment for economic growth, referring to investment in physical capital, human capital and natural capital.

Investment is important for economic growth as it can help to improve the quality of resources available - most notably for labour and capital. For example, investment in worker training or education improves education. Investment into technology improves capital. As such, investment can result in improvement in the quality of resources available, which equals to growth in potential output.

Improved productivity

Productivity refers to output per unit input. An improvement in productivity means that more output can be produced per unit input, hence an economy has the potential for more output with a given input.

Discuss the possible consequences of economic growth, including the possible impacts on living standards, unemployment, inflation, the distribution of income, the current account of the balance of payments and sustainability.

Living standards - typically improve as income per capita rises. The only time living standards will not improve is if growth is achieved at the exploitation of lower classes in favour of the richer classes.

Unemployment - Typically falls. Since more output is higher, there is need for more production and hence firms will have a greater demand for labour.

Inflation - Growth can be inflationary or non inflationary. Growth will be inflationary if AD is rising particularly faster than AS. If supply is expanding similarly to meet AD, however, then the additional demand will not cause prices to rise.

Distribution of income - Growth may help improve income equality as growth helps to improve the incomes of members of an economy.

Distinguish between the microeconomic concept of demand for a product and the macroeconomic concept of aggregate demand.

Microeconomic demand refers to demand within a market for a single good or service. Aggregate demand refers to the complete demand of society of all goods and services.

Explain why the aggregate demand curve has a negative slope

At a lower price level, with fixed wages, consumers have greater disposable wealth, hence can buy more. In contrast, at higher price levels, consumers feel like their money is worth less so they are less eager to spend it.

A lower price level also means that exports are more competitive abroad and imports are less desirable, hence aggregate demand is greater at lower price levels.

Finally, since at lower price levels, less money is being disposed on purchases. As such, the demand for money is lower and the interest rates are correspondingly lower. Lower interest rates means higher AD as it encourages consumer spending and investment.

Describe consumption, investment, government spending and net exports as the components of aggregate demand.

AD = C + I + G + (X-M).

What factors can shift AD?

Changes in:

- Consumer confidence/expectation. If consumers expect prices to fall in the future, they may delay purchases even further for example.
- Interest rates. Low interests increase consumer spending as consumers can borrow money for less, and have less indebtedness = more disposable income. Lower interest rates also encourage investment.
- Wealth. If wealth increases, consumers have more disposable income. Investments may also rise as people can invest smaller proportions of their total wealth for the same effect.
- Personal income taxes. Low taxes give consumers more disposable income. In contrast, high income taxes lower disposable incomes and limit consumer propensity to spend as they feel as though they have significantly less money.
- Household indebtedness. If many families are in debt, then more of their wealth must go towards repaying debt hence they have less disposable income.

Explain how the AD curve can be shifted by changes in investment

- Interest rates make investment less costly.
- Business confidence. High confidence in the economy and the business sector means a more reliable investment and less risk to lose money.
- Technology. Technology is a fast growing industry that generates quick returns on investment. Moreover, technological developments typically increase long-run potential output.
- Business taxes. Lower business taxes mean businesses have more profit leftover for investment.
- Corporate indebtedness. If firms are in debt, they must pay a proportion of their profit towards this debt, leaving less profit for investment. By corollary, decreasing corporate debt leads to increased investment.

Explain how the AD curve can be shifted by changes in government spending due to factors including political and economic priorities.

- Governments may increase spending if they seek political support.
- Governments may increase spending on supply-side policies, investing in LRAS and long term growth.

Explain how the AD curve can be shifted by changes in net exports due to factors including the income of trading partners, exchange rates and changes in the level of protectionism.

- If incomes of trading partners falls, demand for a country's exports will decrease, and therefore so will that country's AD.
- If a currency depreciates, or is devalued, this nation's exports can be bought for less money abroad. This makes the country's exports more competitive as they are cheaper, hence exports increase. Similarly, imports decrease as they become comparatively more expensive. As such, a lowering in the exchange rate will likely caused AD to increase.
- If countries erect protective barriers, their imports will decrease, hence AD will rise. Note however that trading partners may erect similar barriers in retaliation, and this will cause a decrease in exports, thus decreasing AD.

Describe the term aggregate supply

- The total supply of all goods and services within an economy.

Explain, using a diagram, why the short-run aggregate supply curve is upward sloping.

- As price level rises, real wages decrease, however firms can sell their goods for a higher price. Since wages are fixed in the short run, this allows firms to make high profits in the short run. Firms will take advantage of this and produce higher quantities in order to maximise profits.

Explain, using a diagram, that the monetarist model of the LRAS is vertical at the level of potential output (full employment output) because aggregate supply in the long run is independent of the price level.

In the long run, monetarists believe that the economy will always reach full employment. Moreover, in the long-run, real wages are fixed, hence firms cannot take advantage of a rising price level to achieve additional profit at the expense of workers. As such, there exists a maximum level of output of an economy - the level at which employment is full and real wages are fixed. This maximum level of output can be illustrated with a vertical line.

Explain, using a diagram, that the Keynesian model of the aggregate supply curve has three sections because of "wage/price" downward inflexibility and different levels of spare capacity in the economy. In section 1, the AS curve is near horizontal. This is because, at low levels of output, there is a large amount of spare capacity in the economy. As such, firms can employ more labour without causing an increase in wage level, and therefore there is no increase in price level.

In section 2, skilled labour becomes somewhat more scarce as firms begin to compete to attract the skilled labourers. They must put wages up to attract the skilled workers to their firm, which elevates the price level.

In section 3, no spare capacity exists, meaning firms cannot employ more factors of production and so are producing at their maximum possible output. As such, an increase in demand only results in the inflation of the price level.

Explain, using the two models above, how factors leading to changes in the quantity and/or quality of factors of production can shift AS over the long term.

- Efficiency, technology, reductions in unemployment and infrastructure changes will all increase potential output.
- An improvement in the quality or quantity of factors of production will always increase potential output.

Explain, using a diagram, the determination of short-run equilibrium, using the SRAS curve.

Short-run equilibrium is determined by the intersection of the AD and SRAS curve.

Explain, using diagrams, the impact of changes in short-run equilibrium.

In the short run, a change in the short run equilibrium will cause the price level to either increase or decrease, and the quantity of output in an economy - and hence its GDP - to either increase or decrease too.

Explain, using a diagram, the determination of long-run equilibrium, indicating that long-run equilibrium occurs at the full employment level of output.

In the short run, any shift in AD or SRAS will cause the equilibrium to move away from the LRAS curve. In the long run, however, the SRAS will shift such that the equilibrium rests on the LRAS curve.

If demand increases, shifting equilibrium output to the right of the full employment level of output, workers will eventually realise that their real wage has decreased due to the increase in price level. This results in increased demands for higher wages. Eventually, in the long-run, nominal wages will increase such that the real wage is the same as it was previously. This shifts supply to the left, as production costs increase, thus resetting the output to the full employment level of output.