

EXAMINATIONS

April 2000

Subject 107 — Economics

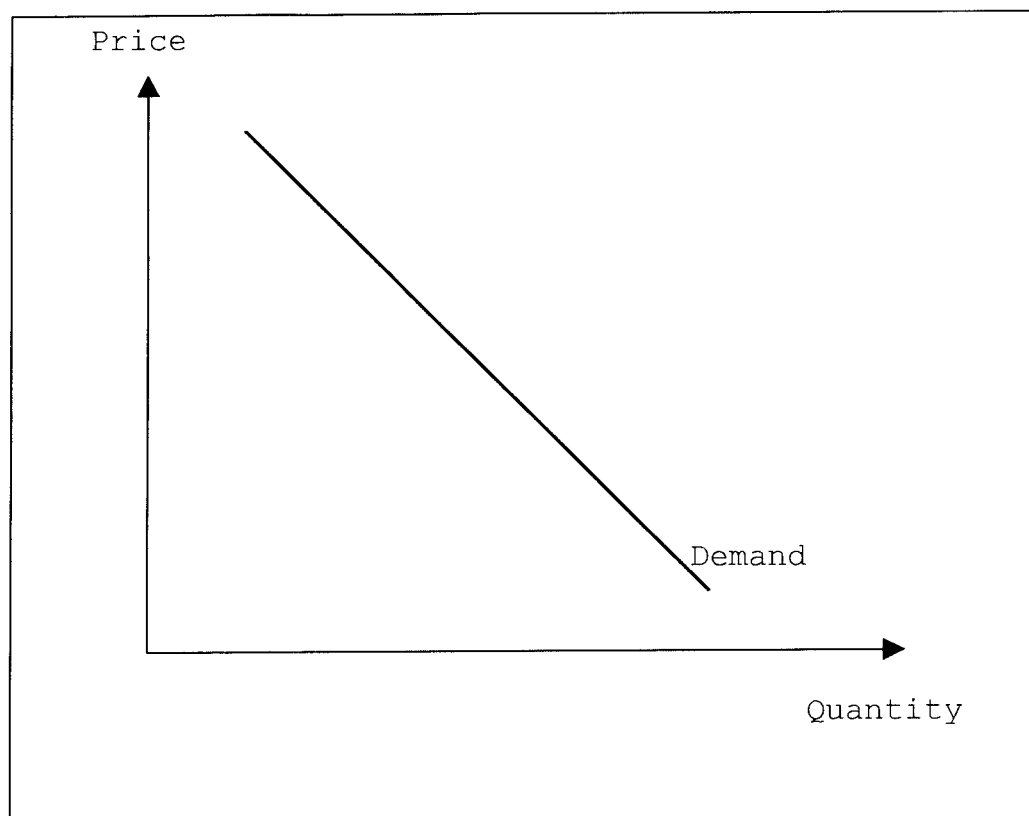
EXAMINERS' REPORT

1	D
2	C
3	B
4	C
5	C
6	A
7	D
8	B
9	C
10	D
11	A
12	C
13	C
14	A
15	D
16	C
17	D
18	B
19	D
20	C
21	B
22	C
23	D
24	D
25	D
26	B

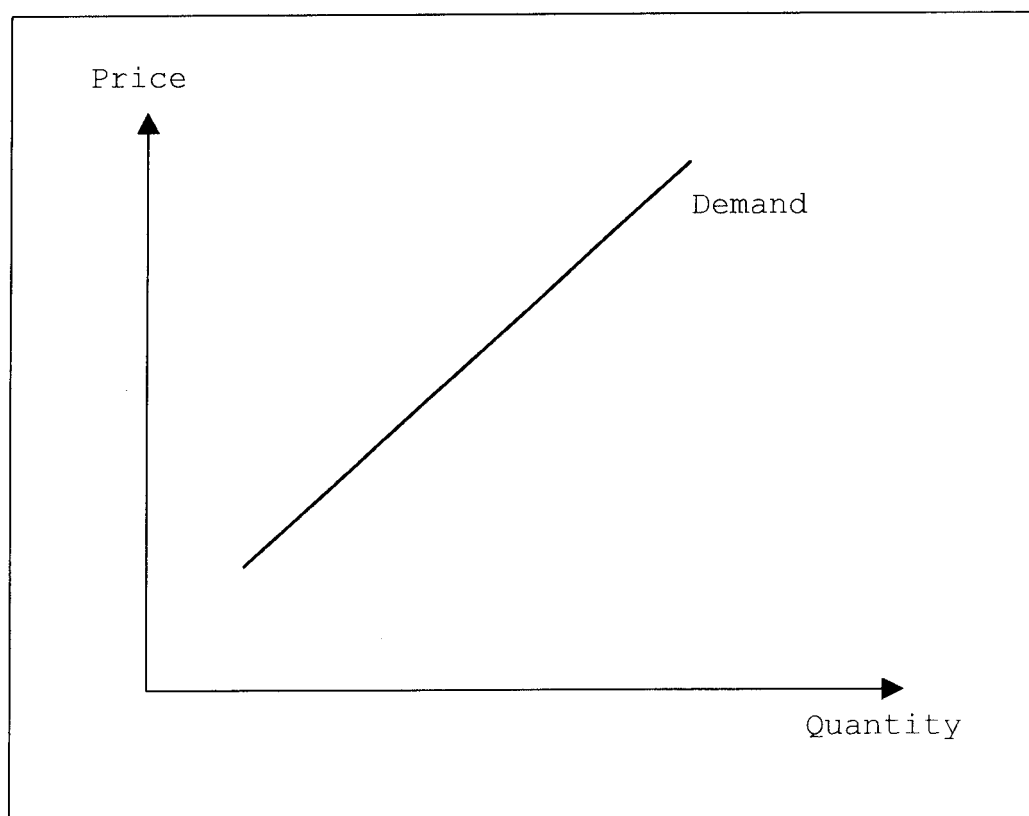
The multiple choice questions were generally well answered.

27

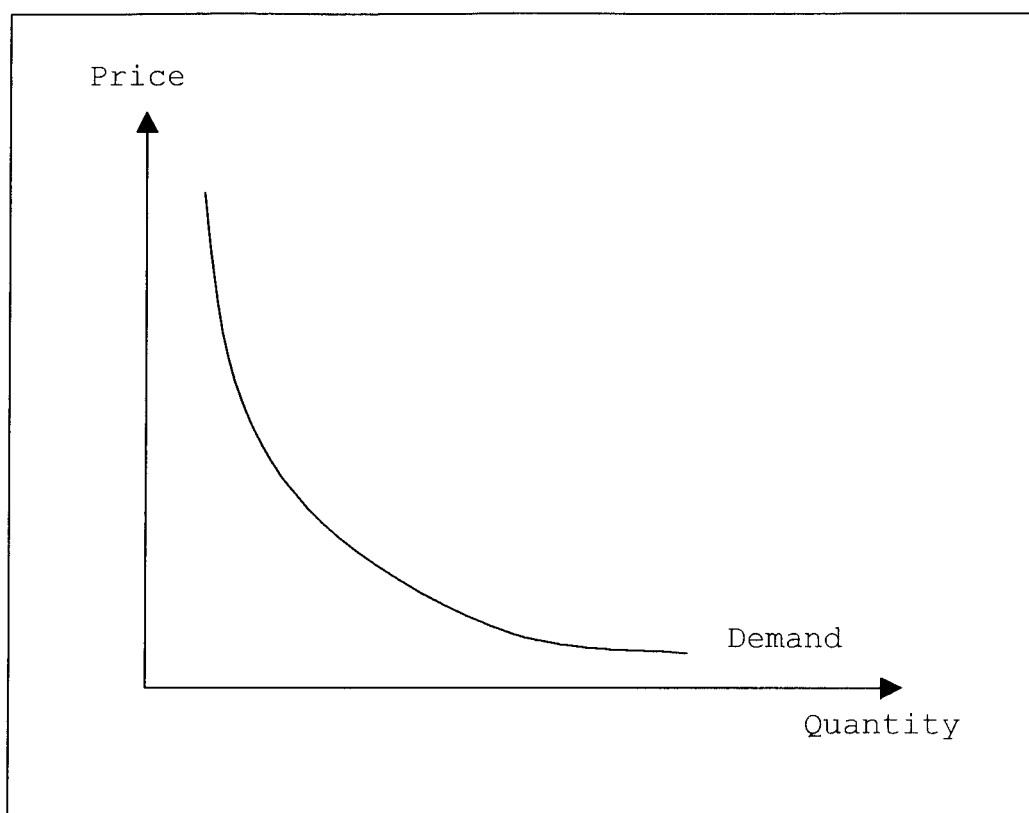
(i)



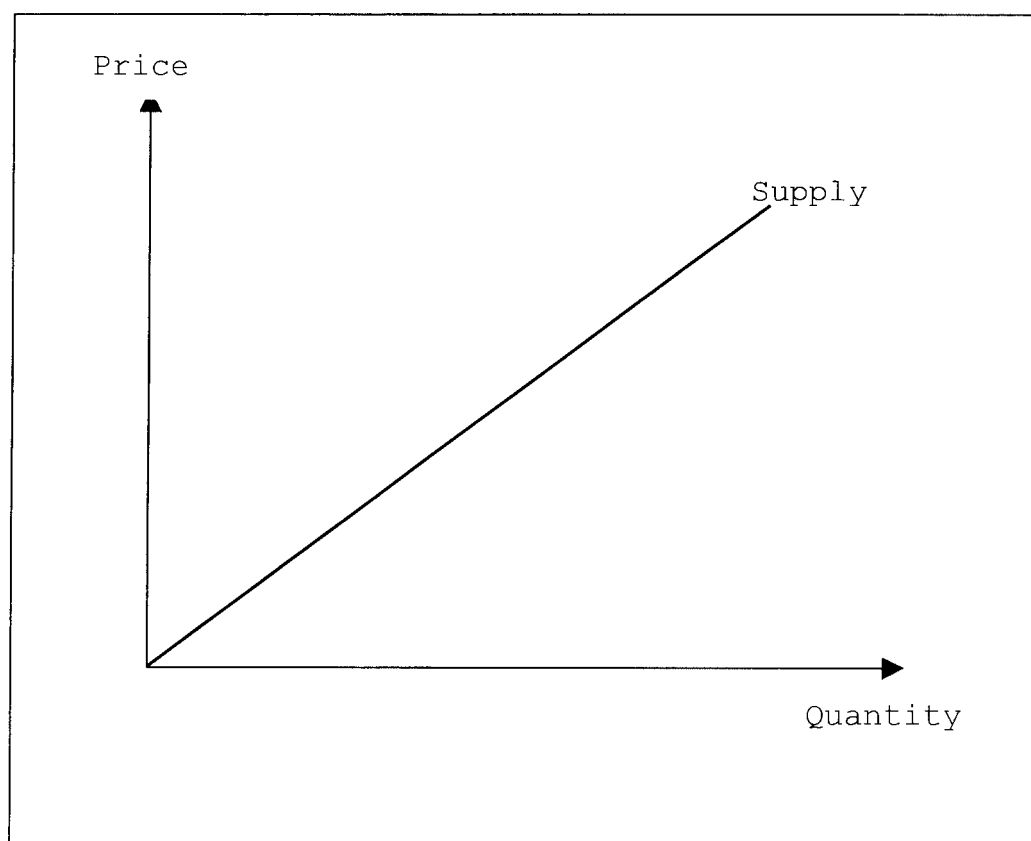
(ii)



(iii)

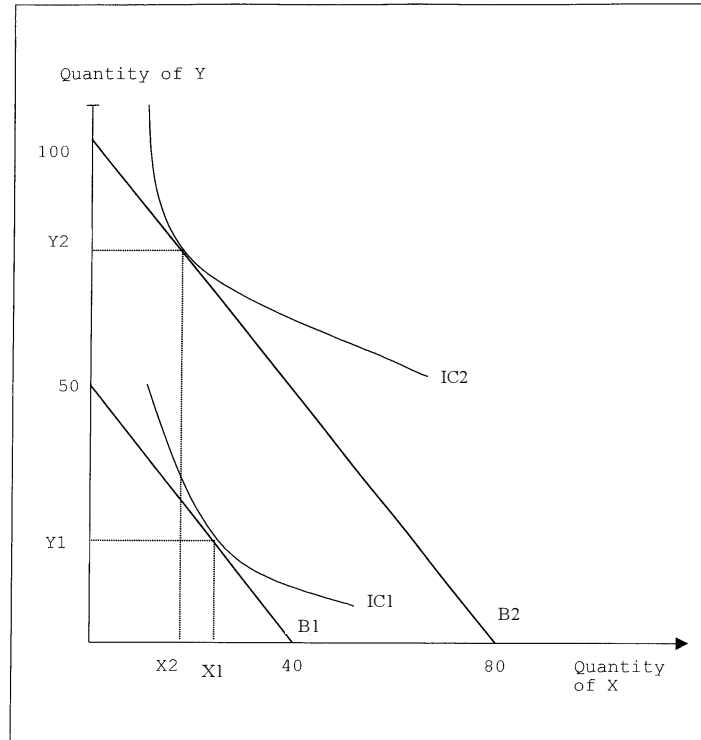


(iv)



Quite a few candidates failed to correctly answer parts (iii) and (iv).

28



It seems that a number of candidates did not read the question correctly and assumed Good X to be a normal good, when the question states that it is an inferior good.

- 29**
- (i) c
 - (ii) B, C
 - (iii) E
 - (iv) A

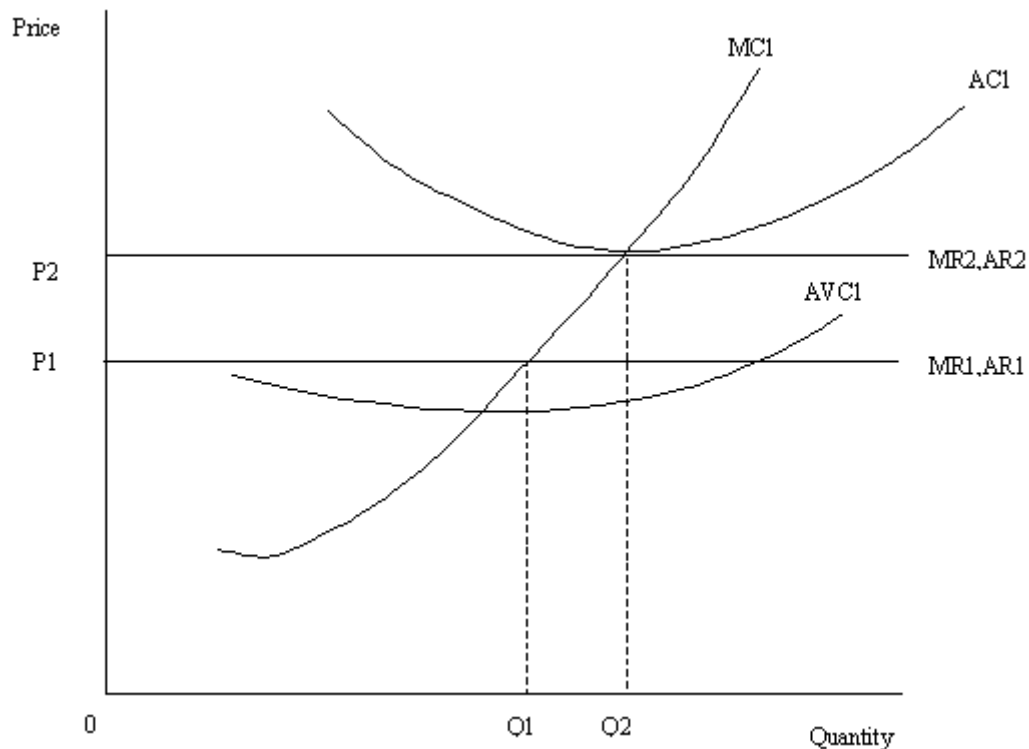
Generally well answered.

30 There are numerous factors that may make demand for a product more price elastic these include:

- (i) a rise in the number of substitute products available.
- (ii) a lengthening of the time horizon.
- (iii) the higher the proportion of income that is spent on the good.
- (iv) the less necessary the good is.

Quite a few candidates could only identify 2 or 3 factors that make demand for a product more price elastic.

31



Part (i) of this question was not well answered, with the correct placing of the $AVC1$ curve being a problem. Also the gap between the average variable cost curve and average total cost curve was not shown as narrowing as output expands by a significant number of candidates.

- 32** (i) Diminishing marginal productivity is applicable only to the short run when one has one fixed factor of production (usually capital) and one variable factor of production (usually labour). It says that after a certain point as you add more of the variable factor to a given amount of the fixed factor of production then the marginal product and the average product of the variable factor will decline. It leads to U - shaped short run costs curves. By contrast, diseconomies of scale concerns increases in long run average costs. Diseconomies of scale occur when output increases less than proportionately to increases in all inputs. Diseconomies of scale will give upward sloping long run average cost curves and thus help to explain U shaped long run cost curves.
- (ii) The law of diminishing marginal utility in consumption states that as you increase consumption of a good then marginal utility derived from the good will decline.

In part (i) the distinction between the short and the long run needed to be brought out more fully in the answers to this question.

Part (ii) was generally well answered.

- 33** (i) $Y = C + I + G + X - Z$
- $$Y = 0.8 (Y - 0.5Y) + 20 + 70 + 50 - 0.1Y$$
- $$Y = 0.3 Y + 140$$
- $$0.7 Y = 140$$
- $$Y = \text{£}200 \text{ million}$$
- (ii) Exports = £50m
Imports = $0.1(200) = \text{£}20\text{m}$
Hence current account is in surplus of £30m
- (iii) Tax revenue = $0.5 (200) = 100$ million
Government expenditure = £70 million
Hence budget is in surplus of £30 million
- (iv) The increase in government expenditure will increase Y to £220m.
Exports = £50m
Imports = $0.1(220) = \text{£}22\text{m}$.
Hence the current account surplus will fall by £2m to £28m.

The calculations in this question seemed to present a number of candidates with problems particularly in relation to parts (iii) and (iv).

- 34**
- (i) A lower but still positive rate of inflation will mean a higher level of nominal wages in the long term as workers will require positive rises in wage levels to compensate for inflation. However wages will rise by less than they would have done had the fall in inflation not taken place.
 - (ii) The exchange rate of the domestic currency should depreciate as this will help maintain purchasing power parity over the long run and maintain the competitiveness of the currency. However the exchange rate will fall by less than it would have done had the fall in inflation not taken place.

Lower but still positive expected rate of inflation while assuming inflation in the rest of the world was zero means that nominal wage rates will grow more slowly than otherwise and the exchange rate depreciate more slowly than otherwise. Too many candidates answered this question as if it was phrased "examine the effects of inflation on wage growth and the exchange rate of the domestic currency" rather than in the spirit of the effects of lower inflation.

- 35**
- (i) The PSBR is the excess of the government expenditure over the income from taxation.
 - (ii) The National Debt is a debt of the public sector. The debt may be owed to citizens and organisations within the country or to overseas citizens or organisations.
 - (iii) A direct tax is a tax on a payment made to a factor of production, e.g. wages, rent, dividends, interest, profit.
 - (iv) A tax is said to be progressive if it takes an increasing proportion of a persons income as income rises.

All four parts were generally well answered.

- 36** (i) An increase in an injection to the national income flow (e.g. an increase in investment spending), causes an increase in the equilibrium level of national income greater than the increase in the injection.

The multiplier is the ratio of the increase in equilibrium national income to the original increase in the injection.

In the special case where I,G,X and Z are all exogenous and there are no direct taxes the value of the multiplier is

$$\frac{1}{1 - \text{MPC}}$$

Where: MPC = Marginal Propensity to consume.

If MPC = 0.8 then the multiplier = 5.

- (ii) According to the accelerator principle, investment is determined by the rate of change of national income.

The capital stock is the current amount of capital equipment available in the economy. The capital output ratio is the amount of capital needed to produce one unit of output. If national income falls the required capital stock is reduced and investment demand will fall. Similarly a rise in national income will increase the required capital stock causing a rise in investment demand. Therefore, the demand for investment will change when national income changes.

The combination of the accelerator principle and the multiplier can explain the business cycle. An increase in investment will cause national income to rise (the multiplier effect) which in turn causes a further increase in investment (the accelerator effect) and an upward trend in the business cycle. A fall in investment will cause national income to fall (the multiplier effect) which in turn causes a further fall in investment (the accelerator effect) and a downward trend in the business cycle.

Part (i) was very poorly answered with many students failing to include a simple numerical example as the question asked.

Part (ii) few candidates were able to make a good explanation of the relationship between the accelerator and the business cycle.

- 37** (i) Inflation is the annual percentage rate of change in the price of a weighted bundle of goods and services. There are numerous harmful effects to the economy that are caused by inflation. Inflation can arbitrarily redistribute the national income for example, it hits those on fixed incomes, debtors who borrow at fixed rates of interest gain while lenders who lend at fixed rates lose. Inflation erodes the real value of savings. In addition, inflation hits business planning and investment with businesses finding it harder to forecast costs, revenues, interest rates etc. Inflation will harm a country's international competitiveness especially if the currency is part of a fixed exchange rate regime. Inflation will also have the effect of placing upward pressure on interest rates, and long term bond yields may have a high inflation risk premium if a country has a poor inflation performance, this will undermine long term investment in the economy. Finally, inflation is an average of price rises which means that while some firms with above average price increases will be able to meet higher wage demands other firms that raise their prices by less than the inflation rate will not. These firms may suffer from strikes and industrial disruption as workers seek compensation. Most economists today recognise that there is a need to distinguish between anticipated and unanticipated inflation. To the extent that inflation is anticipated then it will generally speaking be less harmful than when it is unanticipated.

Inflation is sometimes blamed on cost push factors, that is higher production costs, which are then passed onto the consumer in the way of higher prices. There are numerous possible causes of these cost push pressures, excessive wage demands (wages rises not justified by productivity increases), rises in commodity and raw material prices, a rise in imported input costs due to a depreciation of the currency and attempts by firms to raise their profit margins.

Demand pull pressures are where increases in aggregate demand (consumer expenditure, government expenditure, investment and exports) exceed the output potential of the economy resulting in upward pressure on prices. Excess aggregate demand is especially likely to result in inflationary pressures as the economy approaches full employment. The causes of demand pull pressures are numerous but expansionary monetary and fiscal policies are usually cited. On occasions excessive domestic demand factors are reinforced by a booming world economy.

- (ii) Contractionary monetary policy can prove to be a powerful weapon in controlling inflation. According to the quantity theory of money which assumes a stable money demand function and a fixed level of real domestic output a fall in the rate of growth of the money supply will lead to a similar fall in the rate of inflation. For example a 10% increase in the money supply leads to 10% inflation whereas a 5% increase in the money supply will lead to only 5% inflation. A contractionary fiscal policy helps to reduce inflationary pressures in the economy by reducing aggregate demand in the economy.

A contractionary monetary policy operates through government sales of treasury bills and bonds which places downward pressure on bond prices

implying higher short term interest rates. A contractionary open market operation means that the public holds more bonds and less money which in turn will reduce the broad money supply measure associated with the money multiplier. A lower level of money will in turn imply a reduced demand for goods and services which will then translate into a lower inflation rate. The higher short term interest rates will discourage consumption and investment thereby reducing aggregate demand in the economy. The quantity theory of money makes it clear that there is a link between the rate of growth of the money supply and the rate of inflation, slower monetary growth will have the effect lowering current and expected inflation rates.

A further benefit of contractionary monetary policy is that the exchange rate will tend to appreciate in value (sometimes quite significantly) which will lower the cost of imports. Since most economies are fairly open this can represent a significant contribution to inflation control especially as lower prices for goods will in turn encourage wage moderation.

In practice, however, monetary policy is more difficult to implement than the quantity theory of money suggests. Firstly money demand can be unstable especially in the short run so that reductions in the money supply might not have the intended impact if money demand is falling at the same time. Then there is the question of defining the appropriate monetary aggregate to target, should it be a narrow definition of the money supply or a broad monetary aggregate? The financial sector is always innovating and this too complicates the process of controlling the monetary aggregates the monetary authorities might succeed in controlling their intended monetary aggregate but find that other monetary aggregates are not under control. There is also a problem of time lags in the economic system. The precise time it will take for monetary tightening to cool the economy is quite uncertain and there is a danger that a monetary tightening will be enacted at a time when the economy is slowing of its own accord leading to the possibility of a policy induced recession. Finally, policy makers cannot be sure about the degree of monetary tightening that will be required to keep inflation under control, some economists advocate a gradual approach to the tightening of monetary policy so that it gives economic agents time to adjust their wages and price setting, behaviour while other economists advocate a more hawkish approach to the implementation of monetary policy in which a significant monetary tightening is implemented in a short period of time as the best means of controlling inflation.

This was by the poorest section of the paper with the quality of handwriting and legibility of some of the answers being below what can reasonably be expected.

In part (i) many candidates failed to make a distinction between anticipated and unanticipated inflation with the latter being by far the most harmful aspect of inflation.

In part (ii) many candidates failed to make mention of the quantity theory of money. The answers on the difficulty of implementing monetary policy in practice were often quite weak such as the problem of defining the appropriate monetary aggregate, instability in money demand, uncertainty and time lags often not mentioned.