

# **EXAMINATIONS**

September 2001

**Subject 107 — Economics**

**EXAMINERS' REPORT**

## **Overall comments**

Many candidates wasted time by writing answers which were too long and which lacked focus. Candidates who did well tended to have short, clear text supported by simple and accurate diagrams.

Once again the general standard of diagrams was poor. Many diagrams were drawn freehand (without a ruler). Sloppy work can lead to deduction of marks for lack of clarity. Many diagrams were also too small for the answers to be clear. Candidates should use rulers, and diagrams should be of a sufficient size to show movements clearly.

## **Individual comments**

Q1-Q26 The multiple choice questions were generally well answered. The questions which caused the main problems were numbers 4, 6, 18, 19 and 21. Of these, 4 was answered incorrectly most often.

Q27 Reasonably answered. Many candidates failed to give a clearly reasoned response. Many did not distinguish between net and gross price, often only discussing 'price'.

Q28 Reasonably answered. Most candidates defined the terms correctly (although most students missed the assumption of all other factors remaining constant) but few were able to answer part (iii). Some students were unable to distinguish between marginal product and marginal revenue product.

Q29 Badly answered. The most common mistake was for candidates to waste time talking in general about monopolies, spending too little time talking about the question on price discrimination. While most candidates were able to describe price discrimination, few gave a comprehensive explanation of its effects on a monopolist's revenue and profits.

Q30 Well answered by most. Some students just gave examples of the different types of unemployment rather than defining.

Q31 Very well answered.

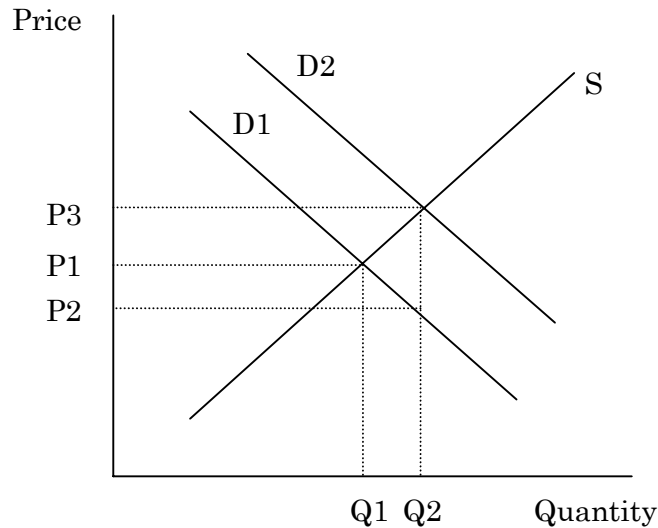
Q32 Reasonably answered. Many candidates failed to describe the free market situation fully.

Q33 Well answered by most, though some candidates described a shift, rather than a movement, in demand. Some candidates gave either a description of the factor, or an example, rather than both.

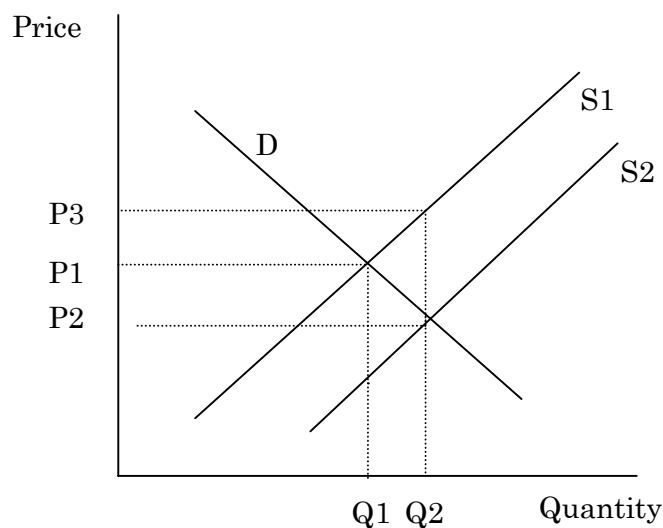
- Q34 Reasonably answered. In part (i), most candidates produced a good diagram though many failed to explain fully their abbreviations. The most common errors were mixing up direct and indirect taxes, and the flow directions of exports and imports. In part (ii), there were many cryptic answers and few got the correct definitions. Reference to the domestic economy was usually missed.
- Q35 While part (ii) was reasonably answered, part (i) and particularly part (iii) were badly answered.
- Q36 Poorly answered. Candidates getting high marks divided the question and gave well thought out, structured answers. Candidates getting lower marks tended to use more of a 'scattergun' approach. In part (i), many candidates wasted time describing the terms used rather than discussing the effects. Part (ii) was usually answered slightly better.

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

- 27** (i) A subsidy given to consumers per unit of the good purchased will encourage consumers to increase demand. This is shown by an upward shift in the demand curve (D1 to D2). The price paid by consumers (the net price) will decrease (P1 to P2), the price received by producers (the gross price) will increase (P1 to P3). The equilibrium quantity traded will increase (Q1 to Q2).



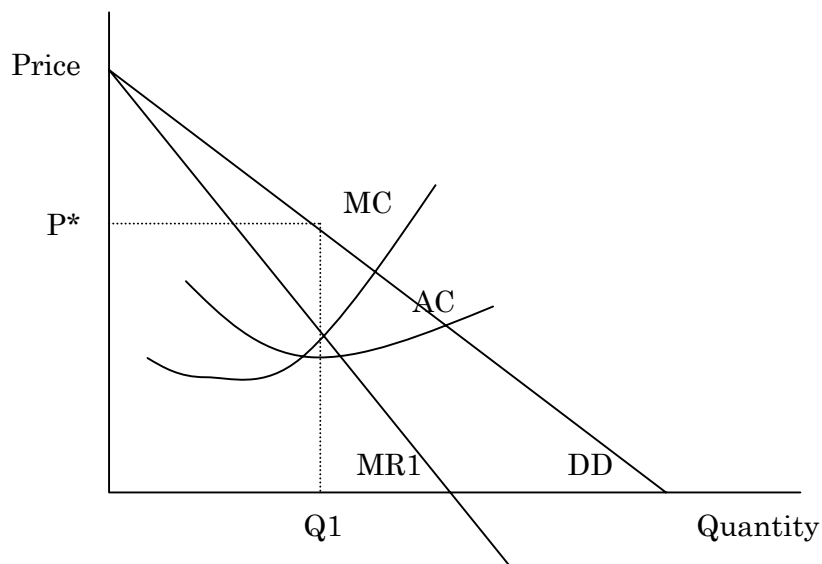
- (ii) A subsidy given to producers per unit of the good supplied will encourage producers to increase supply. This is shown by a downward shift in the supply curve (S1 to S2). The price paid by the consumer (net price) will decrease (P1 to P2), the price received by the producers (gross price) will increase (P1 to P3). The equilibrium quantity traded will increase (Q1 to Q2).



- 28**
- (i) The marginal product of labour is the increase in total output obtained by employing one extra worker, holding the amount of other factor inputs constant.
  - (ii) Assuming that labour is the only variable input, there is a direct inverse relationship between the marginal productivity of labour and short run marginal costs.
  - (iii) The marginal revenue product of labour is the change in the firm's total revenue when it sells the output of each extra worker.

Diminishing marginal productivity means that marginal productivity falls. Additionally, as output rises, the price has to fall so marginal revenue may be quite low. Therefore marginal revenue product of labour can fall quite steeply.

**29**

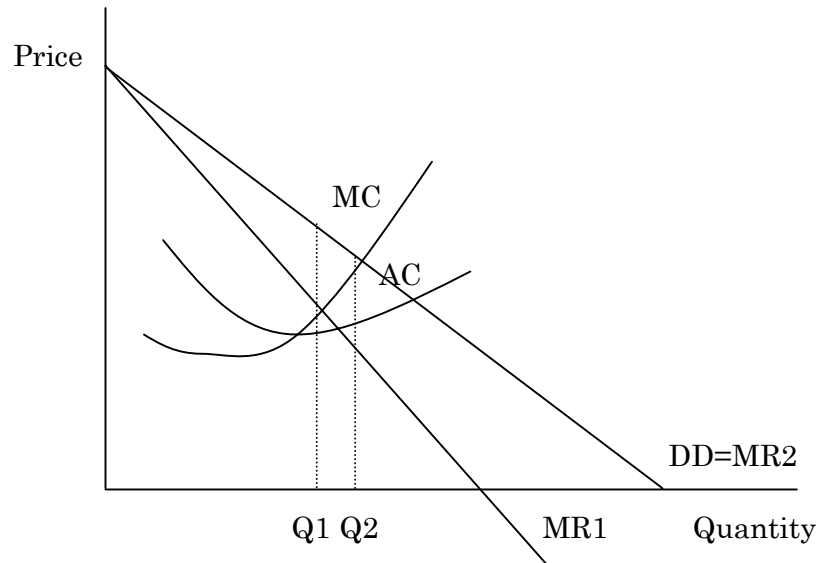


A monopolist who cannot price discriminate will maximise profits by equating marginal cost with marginal revenue and producing this output.

However, because monopolies face no competition, they may be able to charge different prices to different consumers or groups of consumers. This is known as price discrimination.

If it is possible for a firm to use price discrimination, it will be profitable for the firm to do so. The monopoly will be able to expand its output and increase its profits.

Perfect price discrimination would allow a monopolist to operate at the socially optimal point increasing output to  $Q_2$  in the diagram below. The old demand curve now becomes the new marginal revenue curve ( $MR_2$ ). The perfectly price discriminating monopolist makes additional profit on the quantity of goods he used to sell, consisting of the triangle bounded by the area between  $MR_1$ ,  $MR_2$  and the vertical line going through  $Q_1$ . He also makes profit from the extra quantity now produced, from the triangle bounded by  $MR_2$ ,  $MC$  and the vertical line going through  $Q_1$ .



- 30**
- (i) Structural unemployment arises because of a mismatch between the skills that employers require, and the skills that the unemployed possess. This can be caused by the fact that at any time, some industries are in decline, while others are growing.
  - (ii) Demand-deficient unemployment arises due to fluctuations in national output that occur due to the business cycle giving temporary periods of deficient demand.
  - (iii) Technological unemployment arises when the need to employ workers with certain skills declines even if the industry as a whole is not in decline.
  - (iv) Frictional unemployment refers to the level of unemployment that would still exist in a well functioning economy in the absence of any other problems. It will include, for example, people who have left one job to look for another one.

**31** Any five of the following.

Spreading of fixed costs: for example doubling output is unlikely to require double the number of administrative staff; marketing and R&D costs are often independent of output levels.

Specialisation: division of labour allows people to become experts at small parts of the production process, increasing output per person. Similarly with machines.

Physical economies: these can arise because an increase in the volume of a physical object, e.g. a storage tank, requires a less than proportionate increase in surface area.

Finance: larger firms may be seen as being more credit worthy, and should face lower interest costs.

Bulk purchases: a larger firm is able to exert more pressure on suppliers to set low prices.

By-products: some production processes produce small amounts of potentially useful by-products. It may not be worthwhile selling this unless the scale of production is sufficiently large.

The principle of multiples: different machines needed in the production process may have different capacities. In this case full use of all machines' capacities may only be possible at high output levels.

**32** In a centrally controlled economy, a central agency decides what is to be produced, how it is to be produced, and for whom it is to be produced. In this context a central agency is a government department, staffed by economists and administrators, who will try to make sure that the decisions they make produce a consistent plan. In practice, some local control may exist over the method of production and consumers retain some choice as to which goods they consume.

In a free market economy there is no government intervention. The interaction of supply and demand, driven by individuals acting in their own self interest, solves all the allocation questions. The goods produced are those for which the amount that consumers are willing to pay exceeds the cost of production. The methods of production are the ones that minimise the costs of production. Consumption patterns are determined by which goods and services consumers are willing and able to pay for.

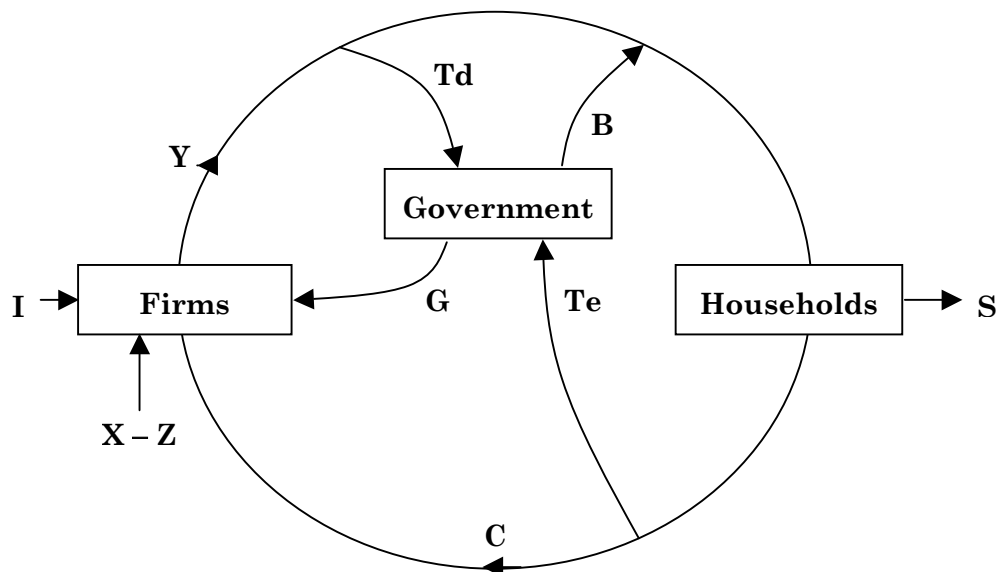
- 33** Broadness of product definition: it is easier to find a substitute for a product which is narrowly defined, for example the elasticity of demand will be greater for one particular chocolate bar than it will be for chocolate as a whole.

The length of time considered: it is easier to find and make use of a substitute in the long run than in the short run. For example, in the short run the elasticity of demand for petrol will be less than it will be in the long run, as people can switch to vehicles that use different fuels.

The degree of brand loyalty or addiction: if people are very loyal to a particular brand, or are addicted to a particular product, the elasticity of demand will be less. For example, if people are loyal to a particular type of jeans, there will be a lower elasticity of demand.

The proportion of consumers' incomes spent on the good: if people spend a large proportion of their income on a good the elasticity of demand will be lower than if they spend a small proportion. For example, if somebody spends a large proportion of their income on food the elasticity of demand will be lower than somebody who spends a small proportion.

- 34** (i) The circular flow is the flow of money from firms to households (in return for the factor services provided) and from households to firms (in return for goods and services provided).



Firms pay income ( $Y$ ) to households. Direct taxes ( $T_d$ ) are paid out of this income to the government, but transfer benefits ( $B$ ) are also paid from the government to supplement households' incomes.

Households spend all their income on either consumption ( $C$ ) or savings ( $S$ ). Indirect taxes ( $T_e$ ) are paid to the government on what they consume.

Firms receive government expenditure (G) and also investment expenditure (I) and payment for exports (X), but pay out for imports (Z).

- (ii) Expenditure in the domestic economy.

The value added by all firms located in the domestic economy.

The factor incomes of all factors of production located in the domestic economy.

**35** (i)  $S = Y - T_d + B - C$

$$S = 300b - 50b + 10b - 200b$$

$$= 60b$$

$$I = 30b$$

$$S - I = 30b$$

Private sector surplus = £30b

(ii) Tax revenues =  $T_d + T_e$

$$= 50b + 30b$$

$$= 80b$$

$$\text{Government expenditure} = G + B$$

$$= 40b + 10b$$

$$= 50b$$

Government sector surplus = £30b

(iii)  $Y = C + I + G + X - Z - T_e$

$$300b = 200b + 30b + 40b + 80b - Z - 30b$$

$$Z = 20b$$

$$Z - X = 20b - 80b$$

$$= -60b$$

Foreign sector deficit of £60b

**36 (i) Monetary policy with floating exchange rates**

A reduction in the money supply increases interest rates (by shifting the LM curve to the left) and reduces price inflation (as explained by the quantity theory of money).

Under floating exchange rates, higher interest rates will increase the value of the currency.

A higher exchange rate will reduce both cost push inflation and demand pull inflation (by reducing net exports).

Thus, floating exchange rates make monetary policy more effective at controlling price rises.

**Monetary policy with fixed exchange rates**

If interest rates are higher in country A than in country B, with a fixed exchange rate money from abroad will flood in from country B to country A, as there is no possibility of exchange rate depreciation.

To maintain the fixed exchange rate the government will have to sell the domestic currency to meet the demand for money.

Selling the domestic currency increases the money supply and pushes interest rates down, towards the level in country B.

Thus, an independent monetary policy is not possible under fixed exchange rates.

**Fiscal policy with floating exchange rates**

An increase in government expenditure tends to increase interest rates (as the IS curve shifts to the right).

Under a floating exchange rate the rise in interest rates will lead to an increase in the value of the currency.

The increase in the value of the domestic currency will reduce net exports, worsening the effects of crowding out.

Thus fiscal policy is less effective with floating exchange rates.

**Fiscal policy with fixed exchange rates**

With fixed exchange rates, interest rates must be maintained at the world level.

Normally, when an expansionary fiscal policy is introduced, private sector consumption and investment is crowded out by higher interest rates and higher prices.

Under fixed exchange rates interest rates cannot be allowed to rise, which limits the amount of crowding out that can occur.

Hence fiscal policy is more effective with fixed exchange rates.

(iii) **Advantages of fixed exchange rates**

Fixed exchange rates give greater certainty, and hence encourage foreign trade, allowing the potential gains from trade to be realised.

Fixed exchange rates can lead to lower inflation when the domestic currency is fixed relative to a low inflation currency.

Under fixed exchange rates, interest rates must stay at the world level, so Keynesian crowding out is less likely to occur. (Although the government could just increase money supply which would have the same effect.)

Fixed exchange rates may in some circumstances add to political, social and economic harmonisation.

**Disadvantages of fixed exchange rates**

If there is a balance of payments deficit, the level of domestic aggregate demand must be reduced, which can have serious effects in terms of higher unemployment and lost output.

Usually a balance of payments deficit can be corrected by reducing the value of the domestic currency, which is not an option with fixed exchange rates.

The government may find it difficult in practice to maintain a fixed exchange rate, as there may be a lot of money speculating in case of a devaluation.

Fixed exchange rates can be maintained by imposing controls on capital flows, together with quotas and tariffs. This is economically inefficient as it prevents a globally pareto optimal allocation of resources.

**Advantages of floating exchange rates**

Monetary policy can be conducted independently of other countries without the need for controls on the movement of capital.

A floating exchange rate will tend to move to automatically offset a balance of payments deficit or surplus.

There is no need for the central bank to hold large amounts of gold and foreign currencies, as the government need not intervene in foreign exchange markets.

**Disadvantages of floating exchange rates**

The major disadvantage of floating exchange rates is that they introduce uncertainty into foreign trade transactions.

However, traders can alternatively use financial markets to carry out forward exchange deals to protect themselves against unexpected movements.