

**ADV/S**

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ECONOMICS  
*Monday*  
**13 JUNE 1983**  
*1½ hours*  
Afternoon

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**General Certificate of Education**

SUMMER EXAMINATION 1983

ADVANCED LEVEL

**ECONOMICS**

**MULTIPLE-CHOICE TEST**

*Time allowed: 1½ hours*

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO**

Read these notes carefully

*There are fifty questions in this test. For each question five suggested answers are given: you are to choose the most appropriate one and indicate it on the separate answer sheet.*

*Read the instructions on the separate answer sheet very carefully.*

*Attempt all the questions. Marks will not be deducted for wrong answers: your total score on this test will be the number of correct answers given.*

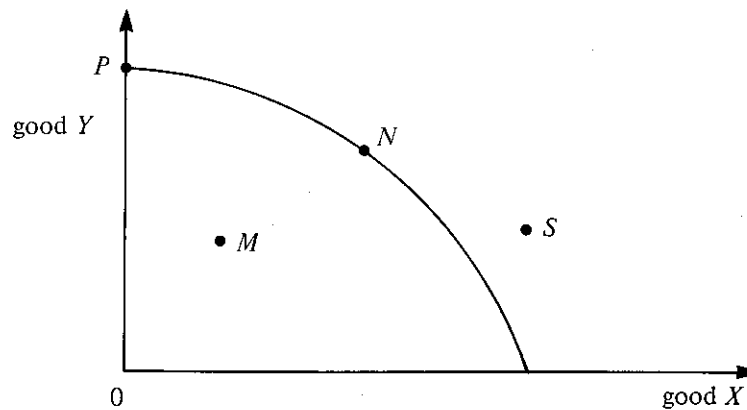
1 What is a free good?

- A one provided freely by the Government
- B one which is not relatively scarce
- C one whose total utility is zero
- D one whose fixed costs are zero
- E one paid for by taxation

2 Mr Gamble pays £1 for a ticket in a raffle in which the prize is a day-trip to Paris by Concorde. The regular price for this trip is £300, but the organisers of the raffle are offering a cash sum of £200 to the winner as an alternative to the trip itself. If Mr Gamble wins the raffle, what will be his opportunity cost if he decides to go on the trip?

- A £1
- B £100
- C £199
- D £200
- E £299

3 The production possibility curve for an economy producing goods  $X$  and  $Y$  is shown below.



Which of the points would be attainable?

- A  $M$  only
- B  $N$  only
- C  $N$  and  $P$  only
- D  $M$ ,  $N$  and  $P$  only
- E  $S$  only

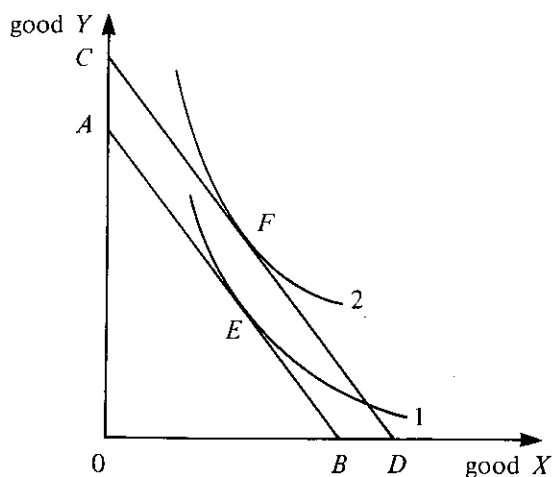
4 The following table shows a linear demand schedule for a particular commodity.

<i>price</i> (pence)	<i>quantity demanded</i> (units)
2	12000
3	10000
4	8000
5	6000
6	4000

Within what range does the value of price elasticity of demand (defined as a positive number), at a price of 4 pence, lie?

- A 0.0 to 0.6
- B 0.7 to 1.3
- C 1.4 to 1.6
- D 1.7 to 2.0
- E 2.1 to 2.5

5 The indifference curves, 1 and 2, are part of an individual's indifference map for two goods X and Y. The budget lines AB and CD which relate to different levels of income are parallel.



What is implied between the initial equilibrium position *E* and the new one *F*?

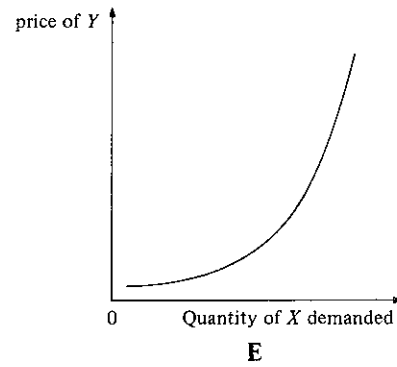
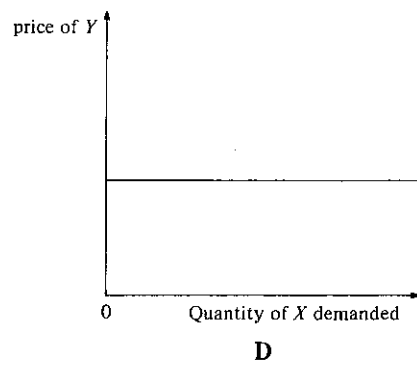
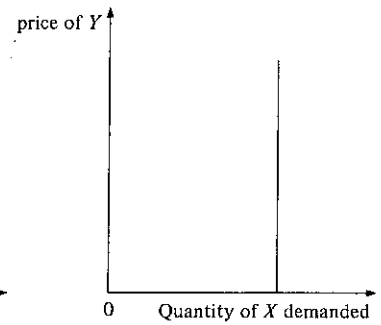
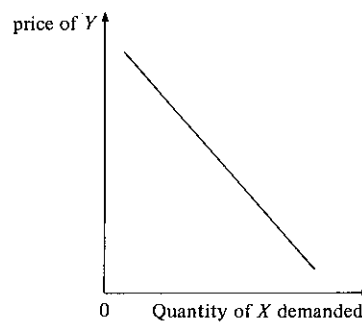
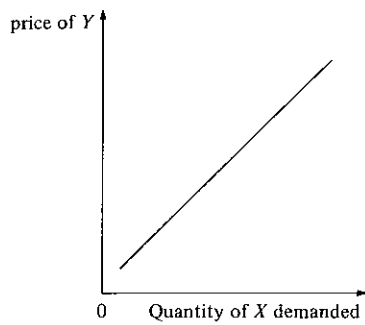
	<i>income</i>	<i>relative price</i>	<i>tastes</i>
A	Rise	Change	Change
B	Fall	Change	No change
C	Fall	No change	Change
D	Rise	Change	No change
E	Rise	No change	No change

[Turn over

6 A basic assumption of demand theory is that households allocate their incomes in order to maximise

- A present consumption.
- B the quantities of all goods bought.
- C their wealth.
- D total utility.
- E marginal utility.

7 A certain good  $Y$  has a normal demand curve and good  $X$  is a complement to it. Which one of the diagrams below illustrates this situation?



- 8 A consumer would be willing to pay the following prices for successive cans of beer.

cans	first	second	third	fourth	fifth
price (pence)	140	100	60	40	30

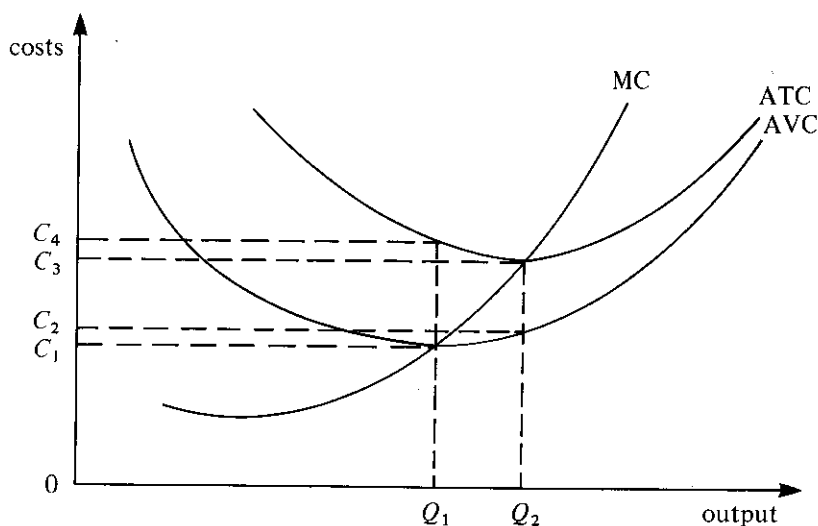
If the price of a can of beer is 40 pence and the consumer buys four cans, what is the monetary value of his consumer's surplus?

- A 160 pence  
 B 180 pence  
 C 210 pence  
 D 300 pence  
 E 340 pence
- 9 In the diagram below

MC = short-run marginal cost,

ATC = average total cost,

AVC = average variable cost.

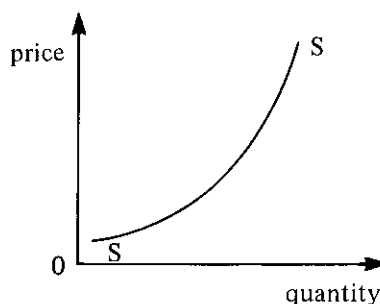


Which one of the following areas indicates total fixed costs?

- A  $OQ_1 \times OC_1$   
 B  $OQ_2 \times OC_2$   
 C  $(OQ_1 \times OC_4) - (C_2C_3 \times Q_1Q_2)$   
 D  $OQ_2 \times C_2C_3$   
 E  $OQ_1 \times C_2C_4$
- 10 A firm discovers that if it either increases or reduces output, its short-run average cost increases. It follows that
- A the firm is maximising its profits at its present output.  
 B the firm is minimising its marginal costs at its present output.  
 C the firm is producing at the point where marginal cost equals average cost.  
 D diseconomies of scale are present.  
 E total costs are at a minimum.

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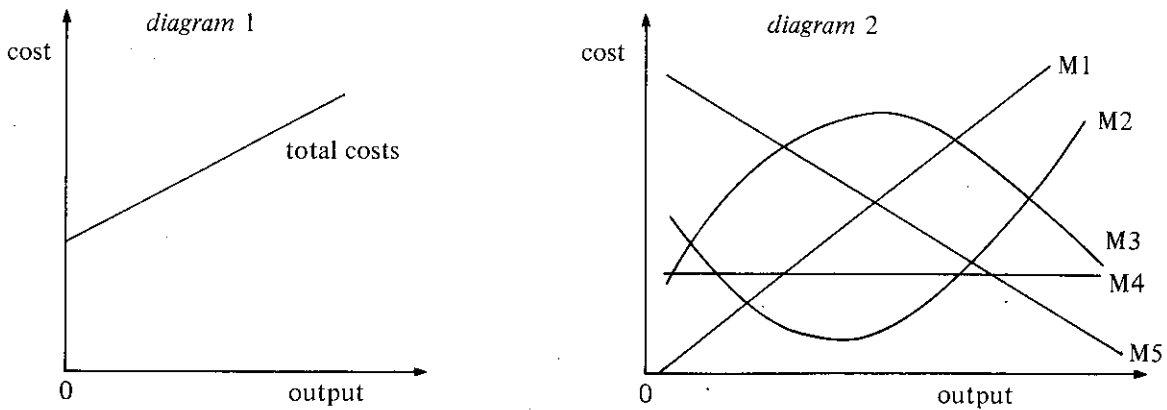
- 11 The diagram below represents a supply curve for beef.



Other things being equal, the supply curve slopes upward because

- A farmers enjoy higher profits as price rises.
  - B farmers charge more to cover a rise in the price of cattle feed.
  - C farmers are willing to produce more beef as price rises.
  - D a rise in beef prices will inevitably bring a proportionate increase in quantity supplied.
  - E an increase in the demand for beef will bring about an increase in supply.
- 12 Which one of the following provides a possible explanation of why a firm's long-run average cost curve is U-shaped?
- A There is a change in the state of technology.
  - B There are economies and diseconomies of scale.
  - C There are rising factor prices beyond a certain level of output.
  - D There is an increase in capacity utilisation as output expands.
  - E Average fixed costs decline as output expands.
- 13 A perfectly competitive firm produces  $X$  and a by-product  $Y$  in equal quantities. Its marginal cost schedule is  $MC = £[10 + \frac{1}{2}x]$ , where  $x$  is the amount of  $X$  produced. If  $Y$  can be sold in unlimited quantities at a unit price of £3, and variable costs are covered, the firm's supply schedule of  $X$  will be
- A  $£13 + \frac{1}{2}x$
  - B  $£10 + \frac{1}{2}x$
  - C  $£10 + \frac{1}{3}x$
  - D  $£7 + \frac{1}{2}x$
  - E indeterminate.

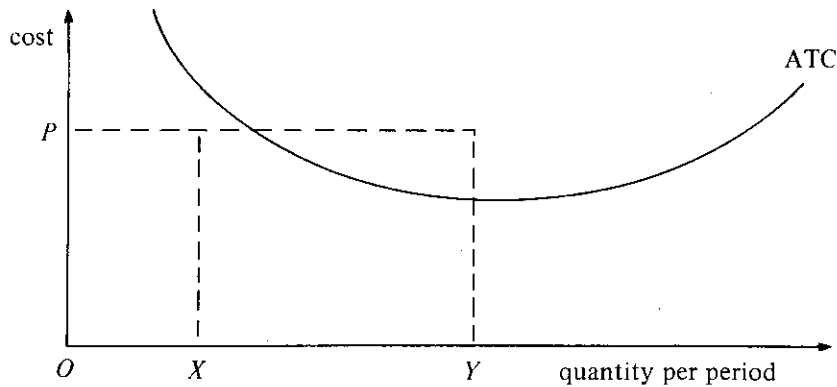
- 14 A total cost curve and various possible marginal cost curves are shown below.



If a firm has the total cost curve of the shape depicted in diagram 1, then which of the curves in diagram 2 represents the corresponding marginal cost curve?

- A M1
- B M2
- C M3
- D M4
- E M5

- 15 The diagram below shows the average total cost curve of a firm entering a new market.



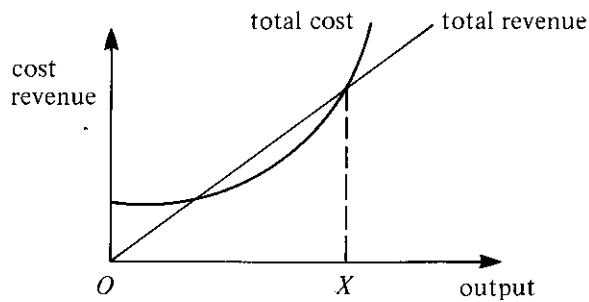
The firm is unsure of the demand for its good, but decides initially to market quantity  $OY$  and to sell this at price  $OP$ . However, at price  $OP$  sales only reach level  $OX$ . Assuming demand for the good is normal, which one of the following policies offers the firm the possibility of making a profit?

- A reducing output to below  $OX$  and reducing price
- B reducing output to  $OX$  and keeping price at  $OP$
- C reducing output to between  $OX$  and  $OY$  and keeping price at  $OP$
- D reducing output to between  $OX$  and  $OY$  and increasing price
- E reducing output to between  $OX$  and  $OY$  and reducing price

[Turn over

- 16 Which one of the following conditions is necessary for successful price discrimination?
- A the presence of import controls
  - B separability of the markets involved
  - C identical elasticities of demand in the separate markets in which the product is sold
  - D the absence of government control over monopolies
  - E totally elastic supply of the product
- 17 In the standard model of perfect competition, a profit-maximising entrepreneur will close down in the short run if
- A marginal cost is greater than average revenue.
  - B average cost is greater than average revenue.
  - C average fixed cost is greater than average revenue.
  - D average revenue is less than average variable cost.
  - E total revenue is less than total cost.

- 18 The total cost and total revenue conditions of a profit-maximising firm are represented in the diagram below and it is at present producing and selling quantity  $OX$

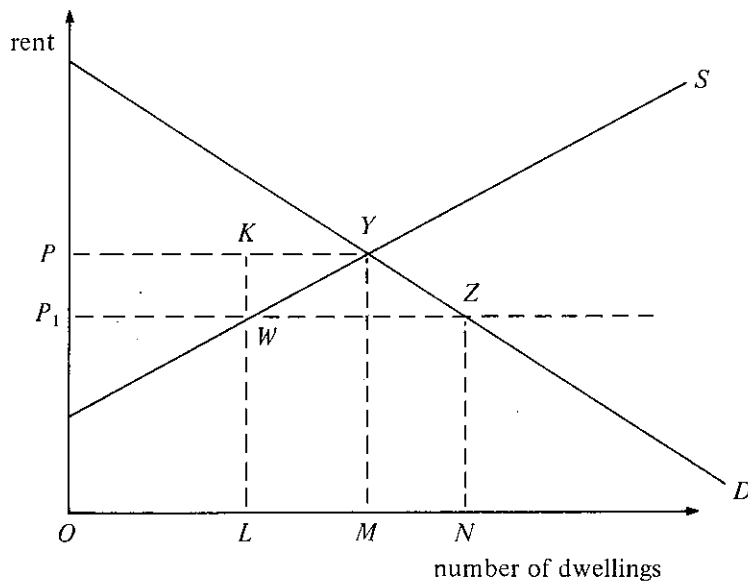


The firm is

- A in a perfectly competitive market and in short-run equilibrium.
- B in a perfectly competitive market and in long-run equilibrium.
- C in a perfectly competitive market and not in equilibrium.
- D a monopoly and in long-run equilibrium.
- E a monopoly and in short-run equilibrium.



19. The diagram below illustrates the market for rented housing which is initially in equilibrium at a rent  $OP$ .

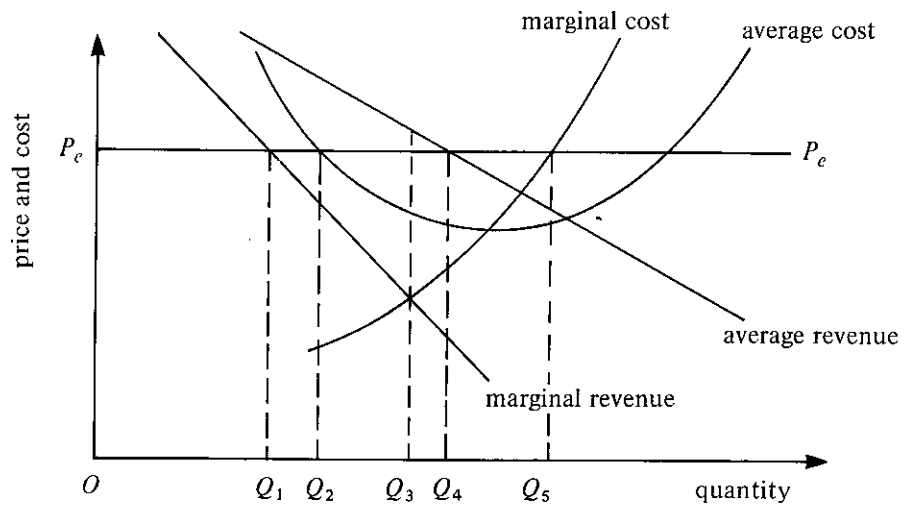


Subsequently a law fixes the maximum rent at  $P_1$ . Other things being equal, theory predicts

- A a decrease in landlords' receipts equal to area  $KYML$ .
- B a reduction of  $MN$  in the number of tenancies.
- C a reduction in the total rent paid by households who retain their tenancies equal to the area  $PKWP_1$ .
- D an increase in consumer surplus equal to area  $PYZP_1$ .
- E a shortage of  $MN$  in the number of dwellings.

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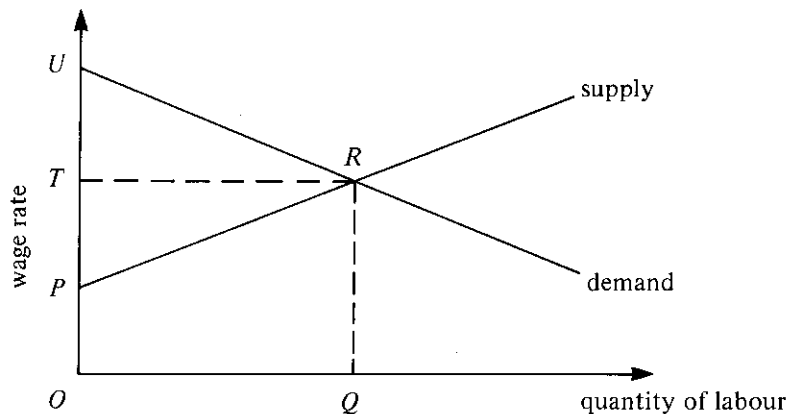
20 The diagram below shows the cost curves and short-run average and marginal revenue curves of a profit-maximising monopolist who is concerned about the long-term possibility of competition from new entrants into his market. The monopolist believes that by holding his price at  $P_e$  the entry of new competitors will be forestalled.



At which level of output does the monopolist achieve maximum profit compatible with preventing the entry of competitors?

- A  $OQ_1$
- B  $OQ_2$
- C  $OQ_3$
- D  $OQ_4$
- E  $OQ_5$

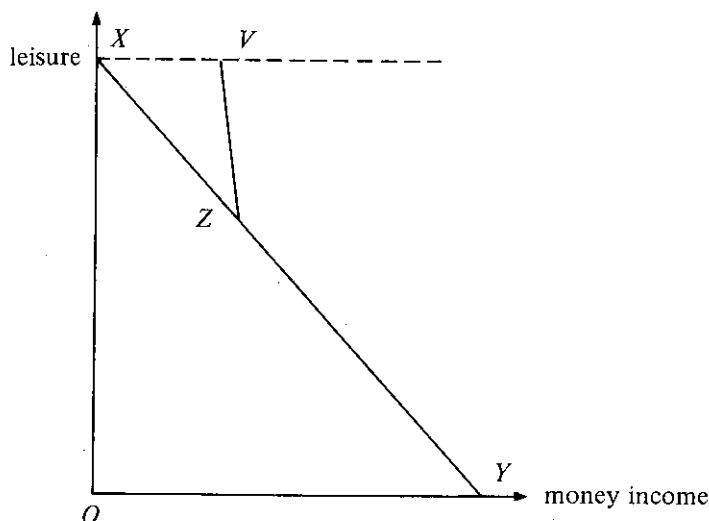
21 The diagram below illustrates the demand and supply situation in a particular labour market.



When the market is in equilibrium, the amounts of economic rent and transfer earnings received by the employees are shown by the

- A distances  $OT$  and  $TU$  respectively.
- B areas  $PTR$  and  $OQRP$  respectively.
- C areas  $PTR$  and  $UTR$  respectively.
- D areas  $PRU$  and  $OQRP$  respectively.
- E area  $OQRT$  in each case.

22 The opportunity curve  $XY$  in the diagram below indicates the rate at which an individual can initially sacrifice leisure for money income, and the point  $Z$  denotes his chosen position. A government introduces a social security scheme which results in the kinked opportunity curve  $VZY$ .



If the individual has indifference curves convex to the origin, he will necessarily choose

- A to work longer hours.
- B to work shorter hours.
- C to work the same number of hours.
- D to work longer or shorter hours depending on specific tastes.
- E not to work at all.

23 The marginal revenue product of a factor of production employed by a firm operating in an imperfectly competitive product market must eventually decline as more of the factor is employed because

- A its marginal physical product alone declines.
- B its marginal physical product and the marginal revenue of the product both decline.
- C the marginal revenue of the product alone declines.
- D its supply price alone rises.
- E its supply price rises and its marginal product declines.

24 The table below shows the income and deductions from income for a man in two successive weeks.

	<i>week 1</i>	<i>week 2</i>
	£	£
Earnings	45.00	46.00
Income Tax	1.00	1.50
National Insurance contribution	2.00	2.50

What is the change in his disposable income from week 1 to week 2?

- A -£1.00
- B -£0.50
- C zero
- D +£0.50
- E +£1.00

[Turn over

25 The following table contains information about a country's economy during three years. All other factors remained unchanged.

<i>year</i>	<i>national income (£ millions)</i>	<i>population (millions)</i>	<i>index of retail prices (year 1 = 100)</i>	<i>average working week (hours)</i>
1	40	5	100	40
2	50	6	110	45
3	80	7	120	40

How do the above years rank in descending order of average real standard of living?

- A year 1 year 3 year 2
- B year 2 year 1 year 3
- C year 2 year 3 year 1
- D year 3 year 1 year 2
- E year 3 year 2 year 1

26 The following table relates to an economy in a particular year.

	<i>£ millions</i>
Gross National Product at market prices	50 000
Indirect taxes	9 000
Subsidies	1 000
Exports	5 000
Imports	6 000
Capital consumption	5 000

From the above table, what is the value of Net National Product at factor cost?

- A £36 000 million
- B £37 000 million
- C £42 000 million
- D £45 000 million
- E £53 000 million

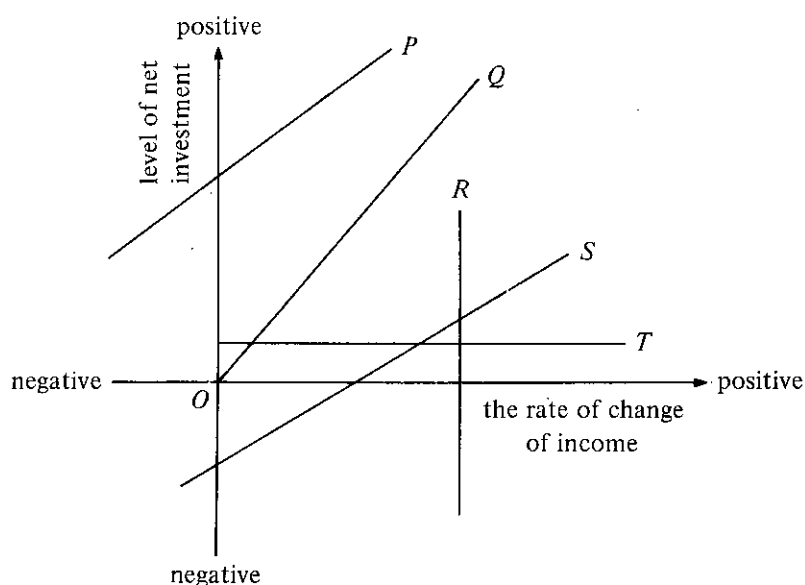
27 Which one of the following is a necessary condition for the national income of any economy to be in equilibrium?

- A There is full employment.
- B The budget of the central government is planned to balance.
- C Planned savings equal planned investment.
- D There is neither a surplus nor a deficit in the balance of payments.
- E Planned withdrawals from the circular flow are equal to planned injections into it.

28 In an economy in which there are unemployed resources, if the government finances an increase in its expenditure on goods and services by an equivalent increase in income tax this will cause the national income to

- A remain the same, because the amount of extra government expenditure is exactly offset by the reduction in the disposable income of consumers.
- B fall, because the negative multiplier effect from reducing disposable incomes will outweigh the positive multiplier effect from the increase in government expenditure.
- C fall, since the reduction in disposable incomes will lead to a fall in savings and, hence, in investment.
- D rise, since some of the reduction in disposable incomes would otherwise have been saved and, hence, there is a positive net multiplier effect from increased government spending.
- E rise, because the increase in government expenditure will lead to an increase in private investment via a rise in interest rates.

29



On the graph above, which line illustrates the case where net investment is entirely explained by a simple accelerator relationship?

- A line *P*
- B line *Q*
- C line *R*
- D line *S*
- E line *T*

30 A closed economy with no government sector is made up of two groups of consumers, whose marginal propensities to consume are 0.9 and 0.8 respectively. If the economy has unemployed resources, by how much will income rise following an increase in investment of £25 million?

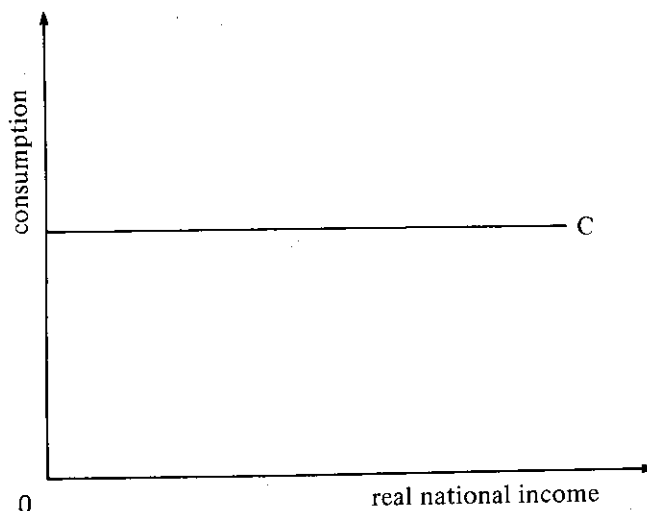
- A £25 million exactly
- B between £25 million and £100 million
- C £100 million exactly
- D between £125 million and £250 million
- E £250 million exactly

[Turn over

31 In which one of the following circumstances would an increase in aggregate demand be least likely to result in inflation in the economy?

- A There are substantial unemployed resources in the economy.
- B It is the result of an increase in government expenditure.
- C It is the result of an increase in exports.
- D It is the result of an increase in expenditure on capital goods.
- E There is an increase in the volume of money in circulation.

32 The diagram below shows a consumption schedule.



Which one of the following describes the behaviour of the average propensity to consume (APC) and the marginal propensity to consume (MPC) as income increases?

- A APC and MPC both fall.
- B APC and MPC are both constant.
- C APC falls and MPC is constant.
- D APC rises and MPC falls.
- E APC and MPC both rise.

33 If the amount of money in circulation is £20 million and the economy's Gross National Product is £80 million, then

- A the income velocity of circulation is  $\frac{1}{4}$ .
- B the income velocity of circulation is 4.
- C the average price of goods and services is £4.
- D the money expansion multiplier is  $\frac{1}{4}$ .
- E the banks' reserve ratio is 25 %.

34 In which one of the following ways can the commercial banks create money?

- A selling securities to the general public
- B selling Treasury Bills to the central bank
- C accepting deposits of currency from the general public
- D increasing their cash reserves with the central bank
- E making advances to private customers

35 In calculating a simple retail price index, all goods and services are placed in one of the three categories shown in the table below.

<i>item</i>	<i>weighting</i>	<i>current prices</i> (base year = 100)
Food	5	110
Clothing	3	120
Housing and fuel	2	130

What is the current value of the retail price index?

- A 120    B 119    C 117    D 115    E 114
- 36 Which one of the following is most likely to cause an expansion of the money supply?
- A a budget deficit financed by borrowing from the central bank  
 B an increase in the public demand for notes and coins  
 C open-market sales of government securities by the central bank to the public  
 D intervention by the government to support the external value of the pound  
 E calls by the central bank for additional Special Deposits from the commercial banks
- 37 Which one of the following is included in money supply as measured by  $M_3$  but not by  $M_1$ ?
- A building society deposits  
 B current accounts  
 C deposit accounts  
 D notes in circulation  
 E Treasury Bills
- 38 In Keynesian monetary theory, an increase in the supply of money will **not** cause a fall in interest rates if
- A bond prices are expected to rise.  
 B investment demand is interest inelastic.  
 C the velocity of circulation of money increases.  
 D the liquidity preference schedule is perfectly elastic.  
 E the liquidity preference schedule is perfectly inelastic.
- 39 If the elasticity of demand for British exports is 2.5, other things being equal, a devaluation of sterling would result in
- A a fall in the total volume of British goods bought by foreigners.  
 B a rise in the total volume of foreign goods bought in Britain.  
 C a rise in unemployment in exporting industries.  
 D a rise in the total foreign currency expenditure on British goods.  
 E no change in total foreign currency expenditure on British goods.

[Turn over

40 In a simple model of international trade there are two countries, *X* and *Y*, and two commodities, wheat and wool. When each country divides its resources equally between the two products, they produce as follows:

<i>country</i>	<i>wheat (units)</i>	<i>wool (units)</i>
<i>X</i>	300	200
<i>Y</i>	400	100

If each country were to specialise in the production of the commodity in which it has a comparative advantage, by how much would total output be increased? Assume constant returns to scale.

- A 100 units wheat
  - B 100 units wool
  - C 100 units wheat and 100 units wool
  - D 100 units wheat and 200 units wool
  - E 200 units wheat and 100 units wool
- 41 The monetary authorities of a country, whose currency is floating freely, raise the market rates of interest. Other things being equal, the exchange rate of the currency is likely to
- A fall, as domestic fixed capital formation declines in response to higher rates of interest.
  - B fall, because the quantity of money must be reduced to cause rates of interest to rise.
  - C remain unchanged, because the supply and demand for the currency in world markets will be unchanged.
  - D rise, as foreigners buy the domestic currency in order to acquire assets with a higher yield.
  - E rise, as exporters increase the volume of exports to acquire foreign currency.
- 42 Which one of the following would appear as a debit item on the invisible trade account of the U.K. Balance of Payments?
- A the sale to foreigners of shares in U.K. oil companies
  - B the payment of dividends to foreigners on shares they already hold in U.K. oil companies
  - C the purchase of oil rigs from foreigners by U.K. oil companies
  - D the payment of dividends by foreigners to U.K. citizens on shares held abroad
  - E the purchase of oil from foreigners for re-export from the U.K.



43 In year 1, countries *X* and *Y* are each in balance of payments equilibrium. In year 2, country *X*, an exporter of oil, raises the price of its oil, which increases its foreign earnings by £500 million, half of which is deposited with banks in country *Y*. Country *Y* is an important buyer of *X*'s oil and the price rise increases its foreign expenditure by £300 million. Other things remaining equal, what are the total currency flows for *X* and *Y*?

	<i>X</i>	<i>Y</i>
A	-£50 million	+£200 million
B	+£250 million	-£50 million
C	+£250 million	+£250 million
D	+£500 million	-£300 million
E	+£550 million	-£300 million

44 The following table shows the terms of trade for a particular country (1970 = 100).

1969	97.3
1970	100.0
1971	100.8
1972	101.3
1973	90.2
1974	74.9

Which one of the following explanations could account for the post 1972 figures?

- A Export prices rose faster than export volumes.
  - B Import volumes rose more slowly than before.
  - C Import prices rose more rapidly than before, and export prices did not change.
  - D Export prices rose more slowly than before, and import prices fell.
  - E Export prices did not change and import prices fell.
- 45 A distinguishing characteristic of a progressive tax is that it takes
- A a larger amount from a rich person than from a poor person.
  - B a smaller amount from a rich person than from a poor person.
  - C a larger proportion of income from a rich person than from a poor person.
  - D a smaller proportion of income from a rich person than from a poor person.
  - E an equal proportion of income from a rich person and from a poor person.
- 46 The National Debt is the
- A public sector borrowing requirement.
  - B outstanding debt of the central government.
  - C outstanding debt of the nationalised industries.
  - D central government's budget deficit.
  - E outstanding debt of the country to non-residents.

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- 47 Which one of the following comes closest to being a 'pure' public good?
- A defence
  - B education
  - C electricity supply
  - D health services
  - E postal services

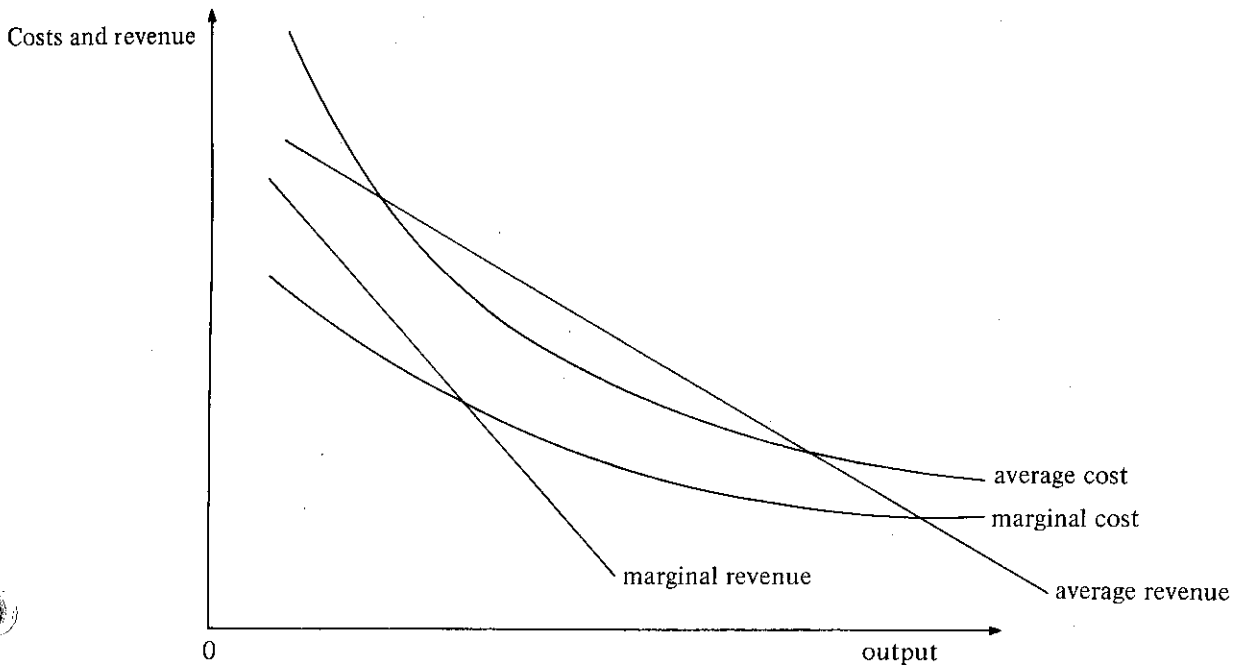
48 In producing its output, a factory creates an external diseconomy in the form of river pollution. Data relevant to the problem are shown below.

<i>output (units)</i>	<i>marginal private cost (£)</i>	<i>marginal revenue (£)</i>	<i>marginal social cost of river pollution (£)</i>
1	6	12	2
2	6	11	3
3	6	10	4
4	6	9	5
5	6	8	6
6	6	7	7
7	6	6	8
8	6	5	9

At first the firm maximises profits ignoring the social cost of river pollution. If the government levies pollution charges on the firm equal to the marginal social costs involved output will

- A fall by 4 units
  - B fall by 2 units
  - C fall by one unit
  - D remain constant
  - E rise by one unit
- 49 Which one of the following taxes, other things being equal, is **least** likely to produce an increase in tax revenue in a period of inflation? (All tax rates and allowances are assumed constant.)
- A value added tax
  - B personal income tax
  - C capital gains tax
  - D corporation tax
  - E a specific excise tax

50 The diagram below shows the cost and revenue curves of a nationalised industry.



The major drawback of a government requirement that the industry should set its price equal to marginal cost is that

- A the industry would produce a greater output than consumers are prepared to consume.
- B the industry would be producing beyond the technical optimum.
- C the socially optimal output would be where marginal cost equals marginal revenue.
- D the industry would make a loss.
- E the industry would not be maximising its revenue.