

EXAMINATIONS

6 September 2001 (am)

Subject 107 — Economics

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Write your surname in full, the initials of your other names and your Candidate's Number on the front of the answer booklet.*
2. *Mark allocations are shown in brackets.*
3. *Attempt all 36 questions. From question 27 onwards begin each answer on a separate sheet.*

Graph paper is not required for this paper.

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet and this question paper.

<p><i>In addition to this paper you should have available Actuarial Tables and an electronic calculator.</i></p>
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For questions 1–26 indicate in your answer booklet which one of the answers A, B, C or D is correct.

- 1** In a particular economy the value added by all firms is the same in 2001 as in 2000. However, consumption is £100m lower. Compared with 2000:
- A GDP will be £100m lower in 2001
 - B expenditure on final goods and services will be lower in 2001
 - C incomes will be lower in 2001
 - D investment in inventories will be higher in 2001
- [1½]
- 2** Assume that the actual rate of unemployment is above the natural rate of unemployment because the expected rate of inflation is above the actual rate of inflation. If the expected rate of inflation falls to equal the actual rate of inflation then real wages will:
- A fall and real output will rise
 - B fall and real output will fall
 - C rise and real output will rise
 - D rise and real output will fall
- [1½]
- 3** The top rate of income tax is cut from 50% to 45%. Other things remaining the same, the effect on the multiplier will be:
- A a rise
 - B a fall
 - C no change
 - D uncertain
- [1½]
- 4** The government is planning an increase of £100m in public spending on goods and services. By choosing to finance the increase with extra taxation rather than public borrowing, the resulting equilibrium level of national income would be:
- A higher
 - B lower
 - C the same
 - D uncertain
- [1½]
- 5** Which of the following is not part of the measure of money supply known as sterling M3?
- A £1 held as a coin by an individual.
 - B £1 held in a private sector building society account.
 - C £1 held in a private sector sterling time deposit.
 - D £1 held in a private sector cheque account.
- [1½]

- 6** An increase in the money supply will have a bigger impact on real output the more:
- A interest elastic is the demand for money and the more interest elastic is the level of investment
 - B interest inelastic is the demand for money and the less interest elastic is the level of investment
 - C interest elastic is the demand for money and the less interest elastic is the level of investment
 - D interest inelastic is the demand for money and the more interest elastic is the level of investment [1½]
- 7** The relationship between planned investment and the rate of interest is:
- A positive because at higher interest rates the returns to investment are higher
 - B negative because at higher interest rates the returns to investment are higher
 - C negative because the interest rate is the opportunity cost of capital
 - D positive because the interest rate is the opportunity cost of capital [1½]
- 8** If both government spending and the money supply are increased:
- A national income and interest rates will both rise
 - B national income and interest rates will both fall
 - C the effect on both national income and interest rates is uncertain
 - D national income will rise but the effect on interest rates is uncertain [1½]
- 9** Which of the following does not cause a shift in the demand curve for Good X?
- A A change in the price of Good X.
 - B A change in the price of a substitute Good Y.
 - C A change in consumer incomes.
 - D A change in consumer tastes. [1½]

- 10** Which of the following is not correct?
- A A Giffen good is a good for which the income elasticity of demand is positive.
 - B An inferior good is a good for which the income elasticity of demand is negative.
 - C A normal good is a good for which the income elasticity of demand is positive.
 - D A luxury good is a good for which the income elasticity of demand is greater than 1.
- [1½]

- 11** A consumer can spend his or her entire income by buying either 28 units of Good X or 35 units of Good Y. If the quantity of Good X is represented on the vertical axis, and the quantity of Good Y is represented on the horizontal axis, the slope of his or her indifference curve at maximum utility is:
- A -1.25
 - B -0.80
 - C 1.25
 - D 0.80
- [1½]

- 12** A consumer's demand curve for Good X is represented by the equation

$$Q_x = 50 - 0.2P_x$$

where Q_x is the quantity of Good X demanded and P_x is the price of Good X.

A producer's supply curve for Good X is represented by the equation

$$Q_x = 10 + 0.6P_x$$

where Q_x is the quantity of Good X supplied and P_x is the price of Good X.

Demand and supply are in equilibrium when:

- A Q_x is 20 and P_x is 150
 - B Q_x is 30 and P_x is 100
 - C Q_x is 35 and P_x is 75
 - D Q_x is 40 and P_x is 50
- [1½]

- 13** For a profit maximising firm fixed costs are £20 and the owner's opportunity cost is £10. The marginal costs of production are shown in the table below. The firm faces a horizontal demand curve where price is £50. How much supernormal profit does the firm make?

<i>Quantity Produced</i>	<i>Marginal cost (£)</i>
1	20
2	30
3	40
4	50
5	60
6	70

- A £30
 B £40
 C £50
 D £60
- [1½]

- 14** Which of the following views will be held by a typical Keynesian?

- A Markets work efficiently.
 B Most individuals suffer from money illusion.
 C Increased government spending will do little to influence the level of economic growth.
 D Supply side policies should be used to improve the efficiency of markets.
- [1½]

- 15** Other things being equal, in the long run higher government expenditure:

- A will reduce demand for money
 B will increase net exports
 C will reduce interest rates
 D will increase the rate of inflation
- [1½]

- 16** The socially optimal output for a monopoly is at the point where:

- A the marginal cost curve cuts the marginal revenue curve
 B the marginal cost curve cuts the demand curve
 C the average cost curve cuts the marginal revenue curve
 D the average cost curve cuts the demand curve
- [1½]

- 17** Which of the following features is not a typical characteristic of oligopoly?
- A A kinked demand curve.
 - B Supernormal profits.
 - C A belief that one firm's actions have little influence on the actions of other firms.
 - D Advertising. [1½]
- 18** Other things remaining the same, the effect of an increase in the Public Sector Debt Repayment is:
- A lower short term interest rates because the IS curve shifts to the left
 - B higher short term interest rates because the IS curve shifts to the right
 - C lower short term interest rates because the LM curve shifts to the right
 - D higher short term interest rates because the LM curve shifts to the left [1½]
- 19** All other things being equal, which of the following will not increase the Public Sector Borrowing Requirement:
- A an increase in local government expenditure
 - B an increase in grants from central government to nationalised industries
 - C an increase in transfer payments
 - D an increase in the interest rate paid on the national debt [1½]
- 20** A consumer spends all her income on Good X and Good Y in such a combination that the marginal utility of Good X is one third of the marginal utility of Good Y. If the price of Good X is £30 and the price of Good Y is £10 then:
- A the consumer cannot increase her total utility
 - B to maximise total utility the consumer needs to increase the consumption of Good X so that the marginal utility from Good X is equal to the marginal utility from Good Y
 - C to maximise total utility the consumer needs to decrease the consumption of Good X so that the marginal utility from Good X is equal to the marginal utility from Good Y
 - D to maximise total utility the consumer needs to rearrange consumption so that the marginal utility from consuming Good X is three times the marginal utility from consuming Good Y [1½]

- 21** When taxes on all income are regressive:
- A the marginal tax rate will initially be less than but eventually be greater than the average tax rate
 - B the marginal tax rate will initially be greater than but eventually be less than the average tax rate
 - C the marginal tax rate will always be greater than the average tax rate
 - D the marginal tax rate will always be less than the average tax rate [1½]
- 22** Which of the following cases is true?
- A Where demand is price elastic, the effect of a price change on the quantity demanded will tend to be small.
 - B If demand is price inelastic, a cut in price will increase revenue.
 - C Demand is said to have unit elasticity when the own price elasticity of demand is 1.
 - D Where demand is elastic, the own price elasticity of demand is more negative than -1 . [1½]
- 23** Which of the following assumptions is usually made when drawing indifference curves?
- A It is difficult for consumers to choose between two different bundles of goods.
 - B Indifference curves nearer to the origin yield higher utility.
 - C The prices of goods are fixed.
 - D Consumer preferences exhibit diminishing marginal substitution. [1½]
- 24** Which of the following is not a direct tax?
- A A tax on interest.
 - B A tax on professional fees.
 - C A tax on rent.
 - D A tax on company profits. [1½]

- 25** The following table gives a breakdown of a firm's average cost and average revenue at various levels of output.

<i>Output</i>	<i>Average cost</i>	<i>Average revenue</i>
1	15	20
2	13	19
3	12	18
4	12	15
5	14	12
6	16	9

Which of the following is true?

- A The marginal cost of producing the fourth item is greater than that of producing the first item.
- B The marginal cost of producing the fourth item is less than the marginal revenue from selling the fourth item.
- C The marginal revenue from selling the sixth item is negative.
- D The marginal revenue from selling the fifth item is the same as that from selling the fourth item. [1½]

- 26** In perfect competition:

- A the price charged to customers is equal to marginal cost
- B the demand curve faced by each firm is inelastic
- C there may be difficulty for some firms in exiting the industry
- D there are no supernormal profits in the short run [1½]

- 27** Explain, with the use of demand and supply curves, how a per unit subsidy on a good will affect the price paid by consumers (the net price), the price received by producers (the gross price) and the equilibrium quantity traded when the subsidy is given to:

- (i) consumers [3]
 - (ii) producers [3]
- [Total 6]

- 28**
- (i) Define the marginal product of labour. [1]
 - (ii) State the relationship between the marginal productivity of labour and short run marginal costs. [1]
 - (iii) Define the marginal revenue product of labour and explain its relationship with the marginal productivity of labour. [2]
- [Total 4]

- 29** Discuss, with the aid of diagrams, why monopolists may engage in price discrimination. [6]
- 30** Define the following types of unemployment:
- (i) structural unemployment [1]
 - (ii) demand-deficient unemployment [1]
 - (iii) technological unemployment [1]
 - (iv) frictional unemployment [1]
- [Total 4]
- 31** Describe briefly five different reasons why long run average costs might fall as output is increased. [5]
- 32** Explain the differences between a centrally controlled economy and a free market economy. [4]
- 33** Discuss briefly, with examples, four factors which influence price elasticity of demand. [4]
- 34** (i) Explain briefly, with the use of a diagram, the circular flow of income in an open economy with a government. [4]
- (ii) State three equivalent ways of defining Gross Domestic Product. [1]
- [Total 5]
- 35** You are given the following information on an economy.
- | | |
|--------------------------------|--------|
| National income at factor cost | £300bn |
| Consumption | £200bn |
| Transfer benefits | £10bn |
| Direct taxes | £50bn |
| Indirect taxes | £30bn |
| Government spending | £40bn |
| Investment | £30bn |
| Exports | £80bn |
- (i) Calculate the surplus or deficit in the private sector. [1]
 - (ii) Calculate the surplus or deficit in the government sector. [1]
 - (iii) Calculate the surplus or deficit in the foreign sector. [1]
- [Total 3]

- 36** (i) Discuss the effectiveness of monetary and fiscal policy with fixed and floating exchange rates. [10]
- (ii) Discuss the advantages and disadvantages of fixed and floating exchange rates which a government would take into consideration when deciding which system to operate. [10]
- [Total 20]