EXAMINATION

27 April 2009 (am)

Subject CT7 — Economics
Core Technical

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1.   Enter all the candidate and examination details as requested on the front of your answer booklet.

2.   You must not start writing your answers in the booklet until instructed to do so by the supervisor.

3.   Mark allocations are shown in brackets.

4.   Attempt all 35 questions. From question 27 onwards begin each answer on a separate sheet.

5.   Candidates should show calculations where this is appropriate.

Graph paper is required for this paper.

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

For questions 1–26 indicate in your answer booklet which one of the answers A, B, C or D is correct.

1   The main categories of economic resources are:

     A   natural resources, labour and money.
     B   labour, money and factories.
     C   natural resources, capital and factories.
     D   natural resources, labour and capital.

              [1½]

2   In economics the concept of scarcity means:

     A   all resources will eventually be exhausted.
     B   there are unlimited resources, we just have an allocation problem.
     C   there are unlimited wants and limited resources.
     D   all of the above.

              [1½]

3   The UK economy is:

     A   a free-market economy.
     B   a centrally planned economy.
     C   a traditional market economy.
     D   a mixed economy.

              [1½]

4   If the government chooses to use resources to build a nuclear power plant instead of building new wind farms, this illustrates the concept of:

     A   a market system.
     B   macroeconomics.
     C   competition.
     D   opportunity cost.

              [1½]

5   Which one of the following will have no impact on the position of the production possibility frontier?

     A   increased expenditure on research and development
     B   a reduction in the unemployment rate
     C   increased immigration of skilled workers
     D   the discovery of new natural resources

              [1½]

6   Assume two countries, with the same level of technology and resources, do not presently trade. In Country X one unit of labour and one unit of capital can produce 20 units of Good A or 15 units of Good B. In Country Y one unit of labour and one unit of capital can produce 50 units of Good A or 25 units of Good B.

Country	Good A	Good B
X	20	15
Y	50	25

Which of the following is TRUE?

A   Country Y has a comparative advantage in the production of Good A.
B   Country X has an absolute advantage in the production of Good B.
C   Country X has an absolute advantage in the production of Good A.
D   Country Y has a comparative advantage in the production of Good B.

[1½]

7   An increase in the price of eggs will:

A   decrease the demand for eggs.
B   increase the demand for eggs.
C   increase the quantity of eggs demanded.
D   decrease the quantity of eggs demanded.

[1½]

8   Which of the following statements is TRUE?

A   Cross price elasticity of demand is positive for complementary goods.
B   Elasticity of supply is zero along a horizontal supply curve.
C   Price elasticity of demand varies along a straight-line demand curve.
D   Income elasticity of demand is positive for inferior goods.

[1½]

9   Wheat is an essential input in the production of pasta. An increase in the price of wheat would have an impact on the demand and supply of pasta by:

A   shifting the demand curve to the left.
B   shifting the supply curve to the left.
C   shifting the supply curve to the right.
D   shifting the demand curve to the right.

[1½]

10 If ice cream is a substitute for fruit sorbet and strawberries are a complement to ice-cream but not sorbet then a fall in the price of ice cream will:

A   increase the demand for fruit sorbet and strawberries.
B   decrease the demand for fruit sorbet and increase the demand for strawberries.
C   decrease the demand for fruit sorbet and strawberries.
D   increase the demand for fruit sorbet and decrease the demand for strawberries.

[1½]

11 According to the law of diminishing marginal utility, the total satisfaction that a consumer receives from consuming Good X will:

A   rise at an increasing rate as the consumption of Good X increases.
B   rise at a decreasing rate as the consumption of Good X increases.
C   fall at an increasing rate as the consumption of Good X increases.
D   fall at a decreasing rate as the consumption of Good X increases.

[1½]

12 In relation to insurance, the term moral hazard:

A   suggests people who know they are a bad risk are more inclined to take out insurance.

B   suggests people who know they are a bad risk are less inclined to take out insurance.

C   suggests a policyholder may act in a way which makes an insured event less likely to occur.

D   suggests a policyholder may act in a way which makes an insured event more likely to occur.

[1½]

13 Which of the following is a feature of an oligopolistic market structure?

A   There are many firms supplying the market.
B   There are no barriers to entry.
C   Supernormal profits can be made in the long run.
D   A firm need not consider the reaction of other firms in the industry.

[1½]

14 A profit maximizing monopolist is currently operating at a level of output where marginal revenue is greater than marginal cost. The monopolist should:

A   increase output and reduce price.
B   reduce price and output.
C   increase price and output.
D   reduce output and increase price.

[1½]

15 In long-run equilibrium under monopolistic competition:

A   each firm's marginal revenue curve is tangential to the average total cost curve.

B   each firm's marginal revenue curve is tangential to the marginal cost curve.

C   each firm's demand curve is tangential to the marginal cost curve.

D   each firm's demand curve is tangential to the average total cost curve.

[1½]

16 Gross National Income is equal to:

A   Gross Domestic Product – depreciation.
B   Net Domestic Product + net property income from abroad.
C   Gross Domestic Product + net property income from abroad.
D   Net National Income + depreciation.

[1½]

17 Which one of the following is NOT true?

A $I + S + T = G + X + Z$
B $Y = C + S + T_d$
C $I + G + X = S + T + Z$
D $Y = C + I + G + X - Z - T_e$

[1½]

18 If a household's disposable income increases from £35,000 to £40,000 and its consumption expenditure increases from £30,000 to £32,000 then the marginal propensity to consume is:

A   0.4
B   0.6
C   0.7
D   0.8

[1½]

19   If the marginal propensity to consume is 0.8 and there are no taxes or trade what is the simple autonomous expenditure multiplier?

   A   1.25
   B   0.8
   C   5
   D   0.2

<div align="right">[1½]</div>

20   A country with a population of 38 million has 32 million in employment and 2 million unemployed. What is the unemployment rate?

   A   5.9%
   B   5.3%
   C   5.0%
   D   6.3%

<div align="right">[1½]</div>

21   Which one of the following statements about the demand for money is FALSE?

   A   The demand for money is negatively related to the interest rate.
   B   The demand for money is positively related to national income.
   C   The demand for money is negatively related to the price level.
   D   The demand for money is positively related to real income.

<div align="right">[1½]</div>

22   Which of the following is a potential source of cost push inflation?

   A   an increase in value added tax
   B   an increase in imported commodity prices
   C   an increase in consumer expenditure
   D   an increase in direct taxes

<div align="right">[1½]</div>

23   The record of a country's transactions in goods and services and assets with the rest of the world is referred to as its:

   A   balance of trade.
   B   capital account.
   C   balance of payments.
   D   current account.

<div align="right">[1½]</div>

24 The US has been running a large current account deficit, and China has a large current account surplus. If their exchange rates were both flexible, how would such imbalances be eliminated?

A   The US dollar would appreciate and the Chinese renminbi depreciate.
B   The US dollar would depreciate and the Chinese renminbi depreciate.
C   The US dollar would appreciate and the Chinese renminbi appreciate.
D   The US dollar would depreciate and the Chinese renminbi appreciate.

[1½]

25 The idea that exchange rates adjust so that standard goods, such as a BIG MAC$^©$, will cost the same in the USA as in the UK is called:

A   floating exchange rates.
B   terms of trade.
C   purchasing power parity.
D   exchange equalisation.

[1½]

26 With a floating exchange rate system, monetary policy is:

A   very effective.
B   not effective.
C   equally effective as fiscal policy.
D   less effective than fiscal policy.

[1½]

PLEASE TURN OVER

27 Calculate the nominal GDP (at basic prices) of an economy, using the information contained in the table below.

[2]

Item	£m
Wages and salaries	900,000
Consumption expenditure	640,000
Mixed income	90,000
Government transfer payments	50,000
Investment	400,000
Government purchases of goods and services	240,000
Export earnings	300,000
Depreciation	240,000
Import payments	220,000
Taxation	210,000

28 (i)   Define the money multiplier.   [1]

(ii)   Provide, using the following notation, an equation for the money multiplier:

m = the money multiplier
c = the proportion of deposits held by the public as cash
r = the proportion of deposits held by the banks as cash

[1]

(iii) Calculate the value of the money multiplier given the following data:
$c = 0.5$ and $r = 0.2$.   [1]

(iv)   Calculate the resulting increase in the total quantity of money (M4) if the monetary base (MO) increased by £200m.

[1]
[Total 4]

29   In 2008, with a given quantity of resources and technology, Country X is capable of producing combinations of consumer goods and capital goods as set out below.

Consumer Goods (C)	120	100	80	50	0
Capital Goods (K)	0	30	60	80	100

(i)   Using the data in the table, sketch a production possibility frontier.   [3]

(ii)   Which of the following combinations can Country X produce?

     A   100(C) 50(K)
     B   90(C) 40(K)
     C   30(C) 100(K)
     D   10(C)130(K)

   [1]

(iii) Country X is making full use of its resources and producing 80 units of consumer goods. Calculate the opportunity cost to Country X, in terms of capital goods, of producing 20 more units of consumer goods.   [2]

                                                    [Total 6]

30   Draw a diagram which illustrates the argument that monopolies are bad for society. Show clearly consumer surplus, producer surplus and social cost.   [4]

31 Given the diagram below, state:

(a) what type of market this might represent
(b) the profit maximising level of output
(c) the output where revenue is maximised
(d) the price where the firm would maximise profit
(e) the largest output that can be produced without incurring a loss
(f) the area of total revenue at profit maximising output and price

Price

Quantity (Scale 1 = 10 units)
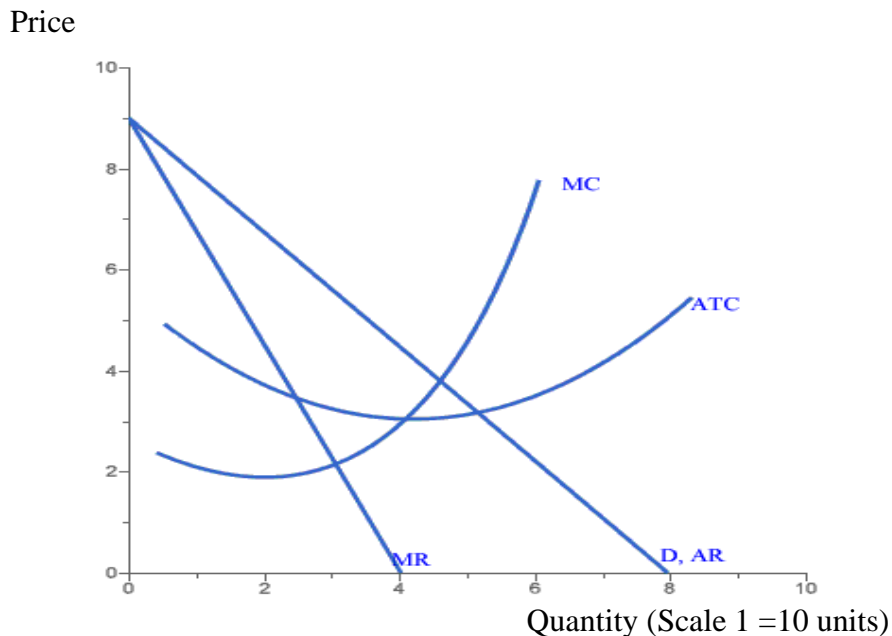
[6]

32 The following information is given for an open economy:

Consumer expenditure = $0.6Y_d$
Investment expenditure = £200 million
Government expenditure = £400 million
Exports = £300 million
Imports = $0.3Y$
The rate of taxation is 50% of all income.

(i) Calculate the equilibrium level of GDP. [3]

(ii) Calculate the equilibrium level of consumption expenditure. [1]
[Total 4]

33 List six sources of long run growth. [3]

34 In a large city there are many pizza restaurants serving similar but not the same products. Initially the market is in long run equilibrium, then a change in taste and fashion increases demand for eating out at pizza restaurants.

  (i)   State the market structure and use diagrams to illustrate:

      (a)   initial equilibrium in this market
      (b)   the short run impact of a change in demand
      (c)   the long run impact of a change in demand

[8]

  (ii) Explain what you would expect to happen to economic profit, price and output in the short run and long run assuming no change in costs.   [6]

[Total 14]

35 (i)   Using an appropriate diagram, illustrate the aggregate demand and supply model.   [4]

The sources of global macroeconomic instability in 2008 included rising commodity prices, increased energy costs and the collapse of the housing market.

  (ii) Explain, using the aggregate demand and supply model, the macroeconomic policy dilemmas which followed the global financial crisis. In your answer you should make reference to employment, inflation and investment.   [14]

[Total 18]

END OF PAPER