# EXAMINATION

April 2007

## Subject CT7 — Economics
## Core Technical

EXAMINERS' REPORT

**Introduction**

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

M A Stocker
Chairman of the Board of Examiners

June 2007

**Comments**

Comments on solutions presented to individual questions for this April 2007 paper are given below.

| | |
|---|---|
| *Questions 1–26* | *Generally well answered. Questions 5, 6, 8, 13, 14, 16 and 23 were the most frequently incorrectly answered questions. Sometimes this was by batch which would suggest incorrect understanding of a particular topic.* |
| *Question 27* | *Well answered, but many students listed factors that affect the elasticity of demand.* |
| *Question 28* | *Well answered but detail and diagrams varied. For parts (ii) and (iii), many students didn't explicitly quantify the effect of setting a price ceiling/floor.* |
| *Questions 29* | *Quality of answers varied and most knew three methods but explanations were often inaccurate or incomplete.* |
| *Question 30* | *Part (i) Some variation in the quality and accuracy of definitions. Part (ii) well answered.* |
| *Question 31.* | *Part (i) Well answered. Part (ii) Instead of discussing the difficulties involved in placing a value on national income, such as the existence of depreciation, inflation etc, some candidates discussed why using GDP as a measure of national income may not fully reflect the standard of living in a country. Other students did answer correctly by listing various unreported transactions such as DIY, babysitting, but relatively few students talked about depreciation, inflation and exchange rates as factors that made national income difficult to measure.* |
| *Question 32* | *Well answered.* |
| *Question 33* | *Well answered, part (iii) caused most problems.* |
| *Question 34* | *Well answered.* |
| *Question 35* | *Definitions of IS and LM were poor. Not fully explained e.g. IS = only mentioned equilibrium in the goods market and not I=S or injections = leakages. Quality of diagrams and explanation varied.* |
| *Question 36* | *Most had firm diagram and explained SR and LR but again diagrams could be better. Many only used a firm diagram. Area of profit not shown by many.* |

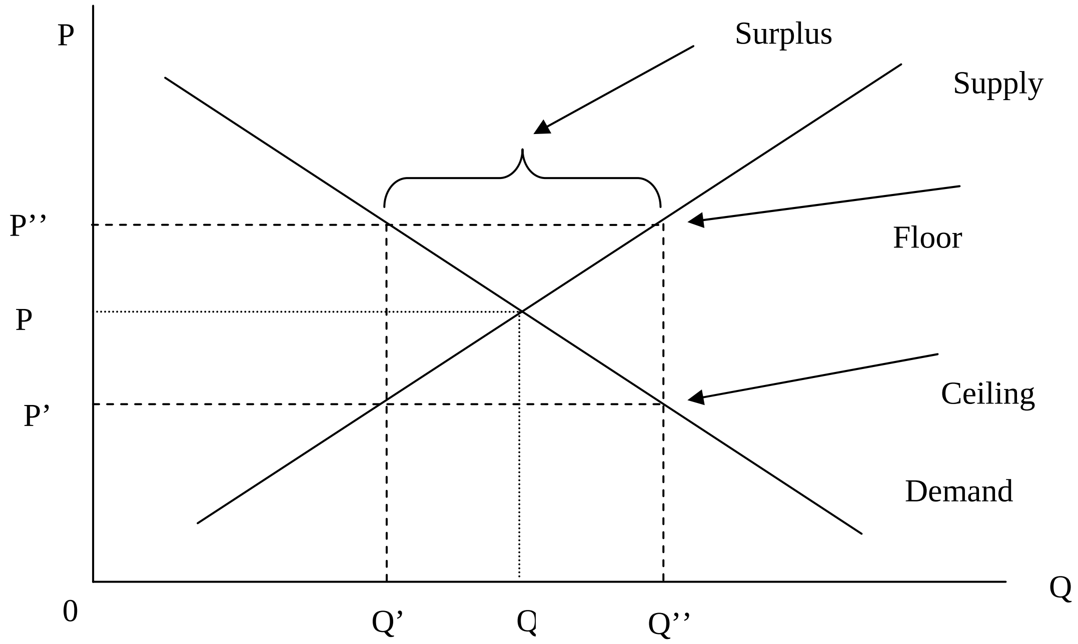
*Question 37* *Most defined price discrimination but many students could not explain it. Many were able to draw a monopolistic market diagram but the explanation for price discrimination was poor and based on examples of discrimination without explanation of the conditions required. Very few students attempted to explain how the practice of price discrimination can turn producer surplus into consumer surplus*

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

**27** (i) the price of the good
the price of other goods
consumer incomes
consumer tastes

(ii) the price of the good
the cost of inputs
the level of technology

**28** (i)




(ii) In the case of the price ceiling below the equilibrium price/quantity combination [P,Q], demand will exceed supply by the quantity Q'' - Q' at price P'.

(iii) In the case of the price floor above the equilibrium price/quantity combination [P,Q], supply will exceed demand by the quantity Q'' - Q' at price P''.

(iv) Quotas, illegality, taxation.

**29** Three alternative methods to measure national income are:

- The expenditure approach: summing total expenditure on final goods in the economy, making sure to exclude intermediate goods to avoid double counting.
- The output method: summing the value added by all firms, where value added is the difference between the price a good is sold for and the cost of the intermediate goods used in its construction.
- The income method: summing the income of all factors of production.

**30** (i) Keynesian unemployment: persistent demand deficient unemployment where both the goods and labour markets are operating below their equilibrium levels.

Classical unemployment: wages are above the labour market clearing rate. Wages can be above the market clearing rate due to trade union power or minimum wage laws.

Frictional unemployment: will exist even when the labour market is operating at equilibrium and is accounted for by those people who have left one job to look for another.

(ii) May exist for any of the following reasons:

trade union power to resist cuts in wages;
minimum wage laws;
wage contracts;
insider-outsider employment theories;
efficiency wages.

**31** (i) (a) Multiplier = 1/MPS = 1/0.25 = 4
(b) Multiplier = 1/(1 − MPC) = 1/(1 − 0.6) = 1/0.4 = 2.5

(ii) Depreciation: wear and tear of productive assets needs to be accounted for.

Inflation: the correct level of price changes in the contributory factors to national income must be used.

Exchange rates: when comparing national incomes between countries it is important to use the correct exchange rate between countries.

Net economic welfare: economic activity may not accurately represent inter-personal comparisons of welfare.

**32** (i) £400m

(ii) Increased by 0.5

(iii) Open market operations — buying or selling government securities.

Reserve requirement — banks are required to keep a cash reserve deposited with the central bank .

Discount rate — controlling the rate at which the central bank lends to banks as lender of last resort.

**33** (i) 1.5 units of good X

(ii) Country A forgoes 1.5 of a unit of good X to make a unit of Good Y
Country B forgoes 2 of a unit of good X to make a unit of Good Y

Country A has the comparative advantage in producing Good Y as it has the lower opportunity cost.

(iii) Tariffs
Transportation costs
Returns to scale may not be constant

(iv) The terms of trade for a country is the quantity of domestically produced goods forgone to obtain a unit of imported goods.

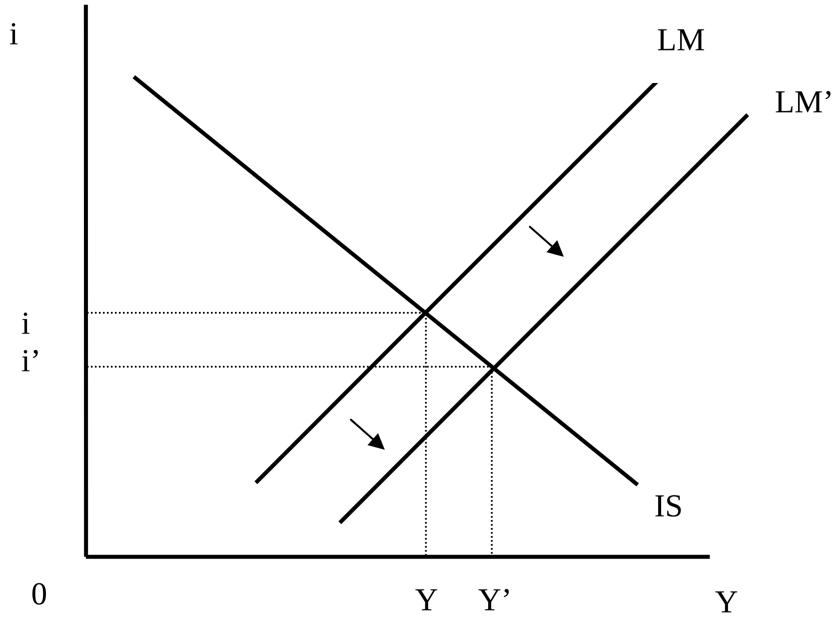
Terms of Trade = [(Index of export prices) / (Index of import prices)] *100

**34** (i) 2.

(ii) £400m

(iii) transactions motive; precautionary motive; asset motive.

**35** (i)

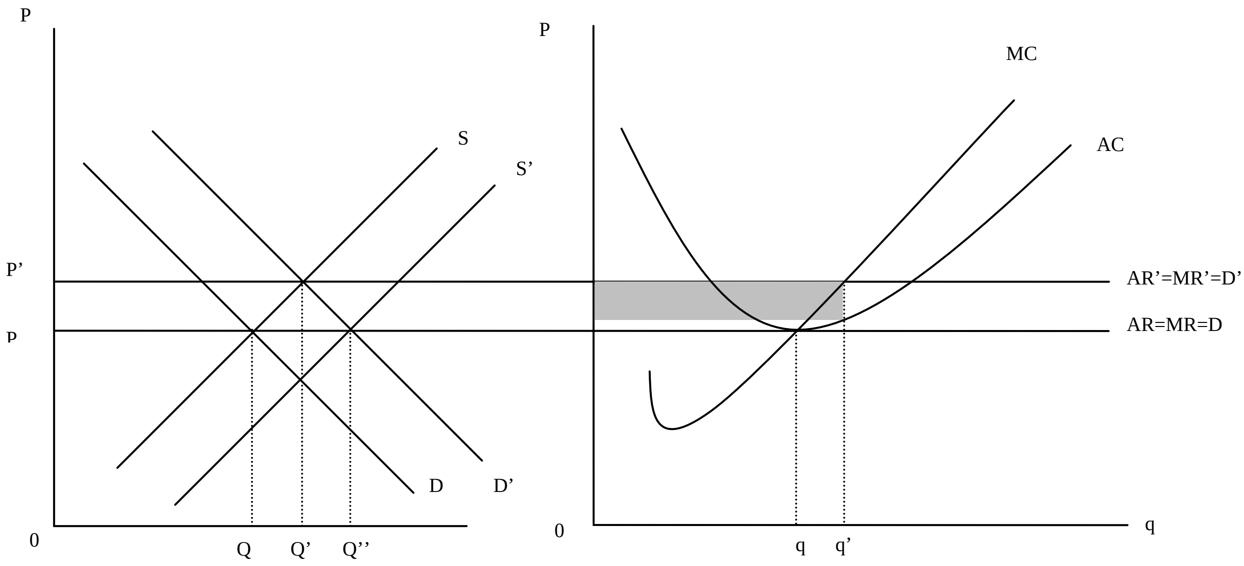



(ii) The IS curve shows the combination of income and the interest rate at which investment demand is equal to savings.

The LM curve shows the combination of income and the interest rate at which the demand for liquidity equals the supply of liquidity.

(iii) An increase in the nominal money supply causes the LM curve to move to the right to LM' and equilibrium from Y to Y'. The interest rate falls from i to i' while the price level remains the same.

**36**




An increase in demand for the product of the industry will cause the market demand function to move to the right, increasing the market price from P to P'.

The increase in industry price causes the demand curve for each individual producer, since they are price-takers, to move from AR=MR=D to AR'=MR'=D'. Since at this point MC=AR above AC each firm makes supernormal profits equal to the shaded area and each produce quantity q' at price P'. Multiplying q' by the number of firms in the market equals Q'.

As firms are making supernormal profits other firms are attracted to the market. The increase in the number of firms increases total industry supply from Q' until it reaches Q'', a movement of the supply function from S to S'. The effect is a reduction in price back to P and a new equilibrium quantity of Q''.

While industry supply has increased, this is entirely a function of the number of new entrants to the market, and as each firm enters D' falls back towards D and firms reduce supply along their supply function (MC).

The final equilibrium position for firms is a return to price level P and output q, at which each firm makes only normal profits.

**37** Price Discrimination.

Discussion should define price discrimination.

Charging different prices to different customers for the same good or service. Credit given for appropriate illustration.

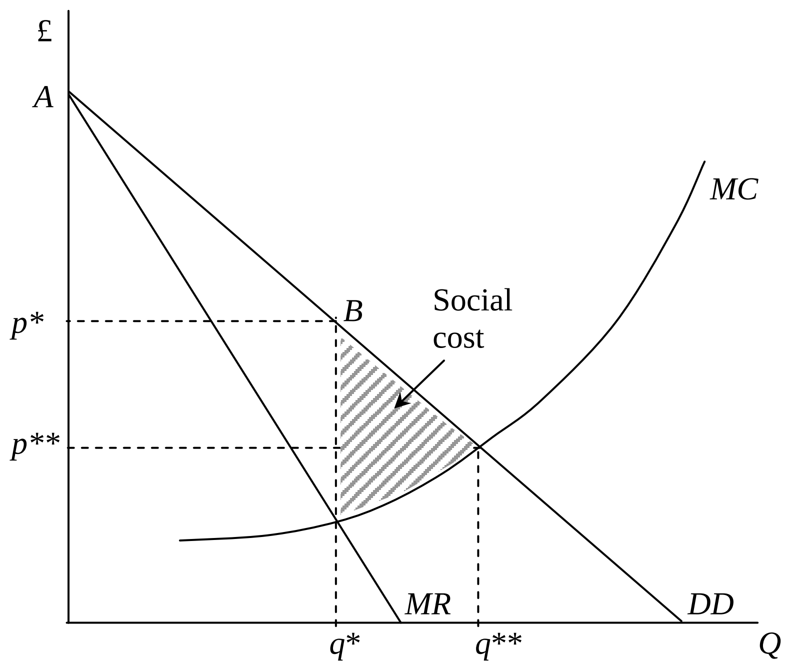
Discuss conditions under which it is possible, and analyse the issue of price discrimination under monopoly (Core Reading Unit 6).

e.g. The supplier has some monopoly power, and can identify the customer, and if the customer cannot resell the good, or if it is expensive to do so. Credit given for appropriate illustration.

Price discrimination is profitable for a monopolist if different customers have different elasticities of demand.

The following material (from Core Reading) is relevant and may be used in the discussion.

**Social Cost of Monopoly**




Because monopolies do not face any competition (actual or potential) they may be able to charge different prices to different groups of customers. Price discrimination exists where a monopoly firm charges different prices to different sections of the market. If it is possible for a firm to employ price discrimination, it will be profitable to do so. The monopoly will be able to expand its output and increase its profits. Perfect price discrimination would allow the monopoly to produce the socially efficient level of output, *q***. (where the sum of consumer and producer surplus is maximized) Contrast this with the usual position where there is a social cost of monopoly and the monopolist produces $q^*$, at market price $p^*$.

## END OF EXAMINERS' REPORT