

OLLSCOIL NA hÉIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS 2002

PAPER 2

ECONOMICS (EC100)

1st B.A., 1st B.A. (Public & Social Policy),
 1st B.Comm., 1st B.Comm. International,
 1st B. Corp. Law, 1st B.Sc. in Financial Mathematics and Economics

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 Professor M. Keane
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TIME ALLOWED: 3 Hours

NB: PLEASE ALLOCATE YOUR TIME IN PROPORTION TO THE VALUE OF EACH QUESTION.

INSTRUCTIONS - PLEASE READ CAREFULLY

Sections	No. of Questions to be attempted	Total number of marks
A	15 out of 15	60
B	3 out of 5	165
C	3 out of 4	150
All questions within each section carry equal weight		
Attempt the correct number of questions in each section: If you attempt MORE THAN the correct number indicate clearly those questions which you wish to be graded. If you make no such indication the appropriate number of lowest-numbered questions of those you answered will be graded.		

Write your Name, Student Number and Examination Number on each answer book.

The use of calculators is permitted - programmable calculators may not be used.

SECTION A

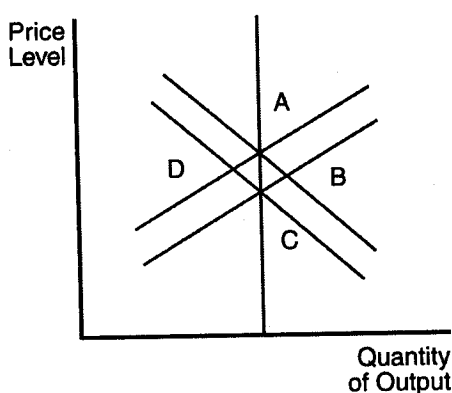
Macroeconomics: Multiple Choice Questions

Important: The answers to the multiple-choice questions must be indicated clearly in your answer book. Do not write your answers on this section of the exam paper itself.

Instructions: Answer ALL of the following questions by choosing the best answer from those given. Negative marking will be used in this section. For each question, you will receive **FOUR** marks for a correct answer, a score of **-1.0** for an incorrect answer and a score of **0** if the question is not answered.

This section is worth 60 marks.

Consider the graph below for the following two questions

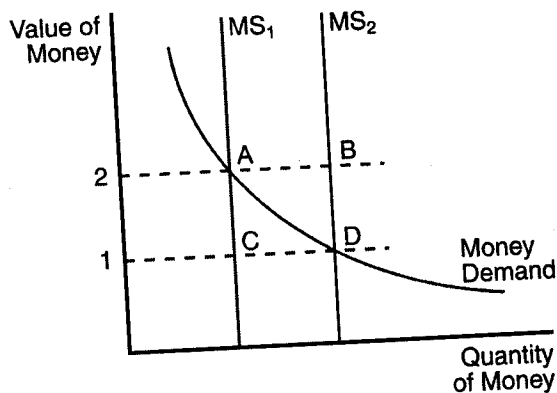


- A1.** An increase the money supply would move the economy from C to
- (a) A in the long run.
 - (b) B in the long run.
 - (c) return to C in the long run.
 - (d) D in the long run.
- A2.** An adverse shift in aggregate supply would move the economy from
- (a) A to B.
 - (b) B to C.
 - (c) C to D.
 - (d) D to A.
- A3.** If e represents the nominal exchange rate given as foreign currency per unit of domestic currency, P represents the domestic price index, P^* represents a price index for prices abroad, and purchasing-power parity holds, then
- (a) $eP^*/P = 1$.
 - (b) $eP/P^* = 1$.
 - (c) $eP/P^* = 0$.
 - (d) $P - P^* = 0$.

- A4.** Your cousin buys a television set produced in Ireland by a German company that hires Irish workers. As a result of the purchase
- (a) GNP and consumption both increase by the amount of the sale, but GDP increases by a smaller amount.
 - (b) GDP and consumption both increase by the amount of the sale, but GNP does not increase.
 - (c) GDP and consumption both increase by the amount of the sale, but GNP increases by a smaller amount.
 - (d) GNP and consumption both increase by the amount of the sale, but GDP does not increase.
- A5.** Which of the following is correct according to liquidity preference theory?
- (a) If there is excess money demand, the interest rate falls.
 - (b) If there is excess money supply, the interest rate falls.
 - (c) Excess money supply can only be corrected by a decrease in the money supply.
 - (d) None of the above is correct.
- A6.** Liam Power earns £3,000 from his farm operation in 1945. In 2005, Liam's grandson Joe earns £30,000 from the same farm. The price index for 1945 is 10, and the price index for 2005 is 150. What was the ratio of Joe's real to Liam's real income?
- (a) 10:1
 - (b) 15:1
 - (c) 1:1
 - (d) 2:3
- A7.** Most spells of unemployment are
- (a) short, but most unemployment observed at any time is long term.
 - (b) short, and most unemployment observed at any time is short term.
 - (c) long, and most unemployment observed at any time is long term.
 - (d) long, but most unemployment observed at any time is short term.
- A8.** Which of the following is not correct?
- (a) A country's standard of living and its productivity are closely related.
 - (b) Productivity refers to output produced per hour of work.
 - (c) Increases in productivity can be used to increase output or leisure.
 - (d) Countries that have had higher output growth per person have typically not experienced higher productivity growth.
- A9.** If reserve requirements are decreased, the reserve ratio
- (a) increases, the money multiplier increases, and money supply increases.
 - (b) increases, the money multiplier increases, and money supply decreases.
 - (c) decreases, the money multiplier increases, and money supply decreases.
 - (d) decreases, the money multiplier increases, and money supply increases.

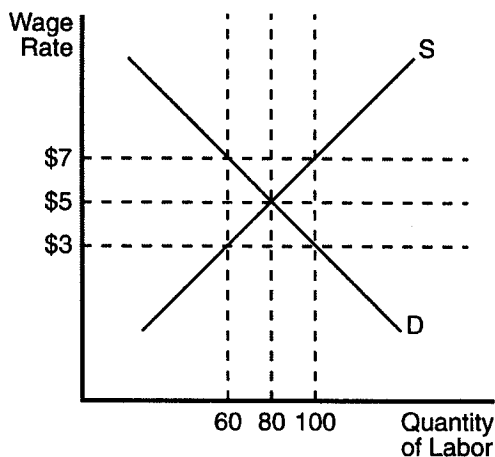
- A10.** According to classical macroeconomic theory,
- (a) and liquidity preference theory, the interest rate adjusts to balance the supply and demand for loanable funds.
 - (b) and liquidity preference theory, the interest rate adjusts to balance the supply and demand for money.
 - (c) the interest rate adjusts to balance the supply and demand for money. While according to liquidity preference theory, the interest rate adjusts to balance the supply and demand for loanable funds.
 - (d) the interest rate adjusts to balance the supply and demand for loanable funds. While according to liquidity preference theory, the interest rate adjusts to balance the supply and demand for money.

Use the figure below for the following questions



- A11.** If the money supply is MS_2 and the value of money is 2, there is excess
- (a) demand equal to the distance between A and C.
 - (b) demand equal to the distance between A and B.
 - (c) supply equal to the distance between A and C.
 - (d) supply equal to the distance between A and B.
- A12.** A decrease in the money supply
- (a) is represented by moving from MS_2 to MS_1 .
 - (b) creates excess demand equal to the distance between C and D.
 - (c) eventually causes the price level to rise.
 - (d) all of the above are correct.
- A13.** Suppose that a ton of coal costs 840 British pounds in the UK and \$1400 in the United States. If the nominal exchange rate is .6 pounds per dollar, the real exchange rate is
- (a) $5/3$ tons of British coal per ton of U.S. coal.
 - (b) 1 ton of British coal per ton of U.S. coal.
 - (c) $3/5$ tons of U.S. coal per ton of British coal.
 - (d) none of the above is correct.

The following two questions are based on the figure below which shows the effect of a minimum wage law.



- A14.** Which of the following is incorrect? If a minimum wage started at \$5 and
- (a) and fell to \$3, in this market there would be no affect on the unemployment rate
 - (b) and remained there, in this market there would be 80 workers employed.
 - (c) and rose to \$7, unemployment would rise by 20 workers.
 - (d) and rose to \$7, there would be a surplus of workers.
- A15.** If there were no minimum wage and then the government instituted a wage of \$7, in this market
- (a) employment would rise by 40.
 - (b) employment would fall by 40.
 - (c) unemployment would increase by 40.
 - (d) there would be a surplus of 20.

SECTION B
Macroeconomics

Instructions: Answer THREE questions.

This section is worth 165 marks.

- B1.** (a) Outline briefly two ways in which a central bank can increase the money supply. Is the central bank's control over the money supply precise? Explain (15 marks).
- (b) Suppose the European Central Bank sells government bonds. Using a graph of the money market, show what this does to the price level and the value of money (15 marks).
- (c) Many economists believe that increases in the money supply growth rate increase inflation and that inflation is undesirable.
- (i) Define 'hyperinflation' and explain why it is so damaging to the economy (10 marks).
- (ii) Why have hyperinflations occurred and how have they been ended? Use examples where possible (15 marks).

- B2.** *The Economist's Big Mac index* offers an informal guide as to whether currencies are at their correct levels, according to the notion of purchasing-power parity. Use the data in the table to answer the questions below:

<i>Country</i>	<i>Big Mac Price</i>	<i>Actual Exchange Rate</i>
Britain	1.99 £sterling	£0.70/\$
Japan	307 yen	133 yen/\$
Hungary	474 forint	282 forint/\$
South Africa	9.27 rand	11.31 rand/\$

- (i) What is meant by purchasing-power parity? What does purchasing-power parity imply about the real exchange rate? (12 marks).
- (ii) For each country, compute the predicted or implied purchasing-power parity exchange rate of the local currency per U.S. dollar if the U.S. price of a Big Mac is \$2.59 (18 marks).
- (iii) According to purchasing-power parity, what is the relationship between changes in price levels between two countries and changes in nominal exchange rates? (10 marks).
- (iv) Although purchasing-power parity provides a simple model of the determination of exchange rates, it often does not hold in practice. Describe at least three reasons why this is the case (15 marks).

B3. (a) What is the theory of liquidity preference? Use this theory to explain how a contractionary monetary policy affects the aggregate demand curve. Use diagrams where appropriate (20 marks).

(b) Suppose that in 2002, the U.K. enters a recession and the authorities decide to react with counter-cyclical policies.

Why, even if the policies change output, might fiscal policy and monetary policy to end the recession destabilise output? (18 marks).

(c) Suppose that, perhaps for political reasons before an election, the U.K. government decides to increase expenditures and cut taxes.

What does this do to the interest rate?

How might the Bank of England respond?

Explain your answers as fully as possible (17 marks).

B4. (a) Explain concisely the difference between frictional and structural unemployment (15 marks).

(b) Why might a favourable change to the economy such as technological change or a decrease in the price of imported oil be associated with an increase in frictional unemployment? (10 marks).

(c) How does frictional unemployment differ from the unemployment that results from the minimum wage? Use diagrams where appropriate (15 marks).

(d) Teenage unemployment in Ireland - among people ages 16 to 19 – is higher than unemployment among people ages 20 and over.

Explain why economists would attribute at least part of this difference to minimum wage legislation.

What other economic reasons for this difference in unemployment rates do you consider important? (15 marks).

B5. (a) List and explain any two of the three theories for why the short-run aggregate supply (AS) curve is upward sloping (18 marks).

(b) For each of the two theories chosen in part (a), carefully explain the following:

(i) how the economy recovers from a recession and returns to its long-run equilibrium without any policy intervention and

(ii) what determines the speed of that recovery (17 marks).

- (c) Suppose that firms become very optimistic about future business conditions and invest heavily in new capital investment.
- (i) Use an aggregate-demand (AD) / aggregate-supply (AS) diagram to show the short-run effect of this optimism on the economy. Label the new levels of prices and real output. Explain in words why the aggregate quantity of output *supplied* changes (10 marks).
 - (ii) Use the diagram from part (i) to show the new long-run equilibrium of the economy. Assume there is no change in the long-run AS curve. Explain in words why the aggregate quantity of output *demand* changes between the short run and the long run (10 marks).

SECTION C
Applied Macroeconomics

QUESTION C1 is COMPULSORY.

Answer TWO of the THREE remaining questions. Each question is worth equal marks. If you answer more than three questions in total, please clearly indicate which answers you wish to be corrected. Otherwise the first three answers will be corrected.

This section is worth 150 marks.

- C1.** Various explanations have been forwarded for the turnaround in the Irish economy from its near-crisis situation in the mid-1980s.

Suppose that you have been commissioned by a foreign newspaper to explain this transformation to their readers.

Write a short report outlining your understanding and analysis of the Irish economy's recent performance.

- C2.** "The New Economy, defined as the post-1995 acceleration in the rate of technical change in information technology together with the development of the Internet, has been both a great success and a profound disappointment," Robert J. Gordon, 'Does the "New Economy" Measure up to the Great Inventions of the Past,' *Journal of Economic Perspectives* 14(4), 2000, p. 71.

To what extent do you agree or disagree with Professor Gordon's conclusion about the 'New Economy'? Justify your answer.

- C3.** 'Although real Gross Domestic Product (GDP) is an imperfect measure of economic well-being, it is nevertheless a better indicator than recent alternatives such as the UNDP's Human Development Index (HDI).'

Discuss.

- C4.** In 2002, oil is arguably the most important and most valuable commodity of international trade. In the 1970s, some researchers believed that the world would have run out of oil by the 1990s.

However, relative to the 1970s, oil consumption has increased significantly, known reserves are higher, and the real price of oil has fallen.

Using your understanding of economics and the nature of the international oil industry, can you explain these apparently contradictory findings?