

*OLLSCOIL NA hÉIREANN, GAILLIMH*  
NATIONAL UNIVERSITY OF IRELAND, GALWAY

AUTUMN EXAMINATIONS 2002

**EC217 – MACROECONOMICS**

2<sup>nd</sup> Arts (Economic and Social Studies), St. Angela's College, Sligo

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**INSTRUCTIONS**

**Time Allowed: 3 Hours**

There are two sections to this exam for a total of 360 marks.

In Section A, answer **15 out of the 24** short-answer questions (12 marks per question for a total of 180 marks).

In Section B, choose **3 out of the 6** questions to answer (60 marks per question for a total of 180 marks).

**Please use a separate Answer Book for each of the two sections.**

Note: 3 hours = 180 minutes. 360 marks in 180 minutes equals 2 marks per minute. Allocate your time efficiently.

## SECTION A

Answer **15 out of the 24** short-answer questions (12 marks per question or 6 minutes per question).

1. What is meant by Personal Disposable Income? Write down an equation for Personal Disposable Income and explain the four terms in the equation.
2. What is meant by the Production function? Sketch a typical production function.
3. Explain, using an example, how a perfectly competitive firm decides how much capital and labour to hire, given the nominal wage rate, the nominal cost of capital, and the price level?
4. What is meant by “crowding out”?
5. What is the “Solow Decomposition”?
6. In terms of the Solow growth model, describe the convergence hypothesis.
7. In the Solow model of economic growth, what are the effects of a higher savings rate on the level of output and on the long-run growth rate of output?
8. Describe two sources of real wage rigidity.
9. Why do some firms pay “efficiency wages”?
10. What is meant by frictional unemployment?
11. What is unemployment insurance? How might unemployment insurance affect the level of frictional unemployment?
12. What is meant by “hysteresis”? How does the concept of hysteresis apply to European unemployment rates since the mid 1970s?
13. Briefly discuss two effects of a rising nominal exchange rate.
14. What is a trade-weighted, or effective, exchange rate index?
15. Write down the equation for the real exchange rate. Explain the four terms in the equation.
16. What is meant by Purchasing Power Parity? Describe the implications of this theory for a country like Ireland within the eurozone.
17. List and briefly explain the three principal functions of money.
18. Discuss how the quantity of money is measured.
19. What causes each of the IS and the LM curves to shift?
20. Explain two of the assumptions underlying the Mundell-Fleming model.
21. What is Okun’s Law?
22. What is meant by disinflation and the sacrifice ratio?
23. In the context of stabilisation policy, distinguish between activist and passive policymaking.
24. What is Ricardian Equivalence?

## SECTION B

Choose **3 out of the 6** questions to answer. Each question is worth 60 marks. The numbers in brackets refer to the marks for the parts of each question.

- 1 (a) Explain fully the following terms:
  1. Gross Domestic Product
  2. Net Factor Income sent Abroad
  3. Investment
  4. growth in real GDP (20 marks)

(b) Briefly discuss the three methods of measuring the GDP of a country. (10)

(c) Explain how deficits/surpluses in the private sector, the government sector and the foreign sector relate to each other. Use an equation to illustrate the links between these three sectors. (15)

(d) In terms of measuring inflation, distinguish between each of the following two measures:
  1. Consumer Price index
  2. GDP Deflator (15)
- 2 (a) In the Solow model of economic growth, explain how each of the following affect the level of capital stock per-worker:
  1. investment
  2. depreciation
  3. population growth (20)

(b) In the Solow model of economic growth, explain what is meant by a “steady-state”. Illustrate an economy at a steady-state. (20)

(c) Suggest two ways by which a government might promote stronger economic growth. (10)

(d) Suppose that country A initially has a lower income-per-head than country B. Then country A experiences faster increases in its rate of technological progress than B. Explain and illustrate the effect of this growth over time. (10)
- 3 (a) Explain the link between money supply, money demand and inflation. In particular, show how changes in the money supply may lead to inflation. (20)

(b) Explain the long run link between inflation rates and nominal interest rates. Write down an equation that illustrates this relationship (15)

(c) Describe the long run effect of excessive inflation rates on the nominal exchange rate. (15)

(d) Briefly describe two of the three instruments that a Central Bank can use to influence the money supply. (10)

- 4 (a) In the context of the long run equilibrium position in an economy, explain what are meant by “money neutrality” and the “classical dichotomy”. Also explain how output may be said to be “supply-determined”. (20)
- (b) Consider a closed economy that is operating at an output level that is below the equilibrium output level. Assuming “sticky” prices, illustrate and explain fully how output may be said to be “demand-determined”. (40)
- 5 (a) On one diagram, draw the typical short-run and long-run Aggregate Supply curves. Also explain the shape of both curves. (15)

“There is always a temporary tradeoff between inflation and unemployment; there is no permanent tradeoff” – Milton Friedman.

In the context of the above quote, consider an economy where output is at its long-run equilibrium level. Inflation and unemployment are also at their long-run equilibrium rates. The government then introduces expansionary demand policies.

- (b) Illustrate and explain the initial effects of this policy on the Aggregate Supply diagram. (15)
- (c) Illustrate and explain the initial effects of this policy on a basic Phillips Curve diagram. (15)
- (d) Explain fully the long-run consequences of this action. Illustrate this outcome on a Phillips Curve diagram. (15)
- 6 (a) In terms of stabilisation policy, what are “inside lags” and “outside lags”? (15)
- (b) How might these lags affect the ability of fiscal and monetary policies to stabilise the economy? (15)
- (c) How does fiscal policy act as an automatic stabiliser during recessions and expansions? (15)
- (d) In the context of a sustained economic expansion, explain the advantages of the adjusted budget Balance over the conventional Budget Balance as an indicator of fiscal stance. (15)