

*Ollscoil na hÉireann, Gaillimh*  
*National University of Ireland, Galway*

**Semester II Examinations 2004 / 2005**

**Exam Code(s)** 2BA5  
**Exam(s)** 2<sup>nd</sup> Arts (Economic and Social Studies)  
 St. Angela's College, Sligo

**Module Code(s)** EC217  
**Module(s)** Macroeconomics

Paper No.  
 Repeat Paper No

**External Examiner(s)** Professor Vincent Munley  
**Internal Examiner(s)** Professor Micheal Cuddy  
 Mr. Stephen McNena

**Instructions:** There are two sections to this exam for a total of 360 marks.  
 Answer any fifteen questions from Section A and any three questions from Section B.  
 Please use separate Answer Books for Section A and for Section B.

**Duration** 3 hours  
**No. of Pages** 4  
**Department(s)** Economics  
**Course Co-ordinator(s)** Stephen McNena, St. Angela's College, Sligo

**Requirements:**

MCQ  
 Handout  
 Statistical Tables  
 Graph Paper  
 Log Graph Paper  
 Other Material

## SECTION A (180 marks)

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

1. What is the difference between GDP and GNP? Explain why there is a large gap between GDP and GNP in Ireland.
2. What is meant by Personal Disposable Income? Explain the three factors that determine the Personal Disposable Income in an economy.
3. What is meant by the Production function? Write down an equation of a typical Production function. Sketch a typical production function.
4. Suppose there is an improvement in technology, leading to a rise in productivity. Explain, and illustrate, how this will affect the real wage rate.
5. What is meant by “crowding out”?
6. In terms of the Solow growth model, explain 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. Write down, and explain, the five terms in the equation that breaks down output-per-person into both productivity and dependency components.
9. Imagine a country with a population of 10m people, with 5m workers, and output-per-worker of €60,000 per year. Calculate the income-per-capita.
10. Distinguish between a bilateral exchange rate and an effective exchange rate index.
11. Discuss two economic effects of a rising effective (or trade-weighted) exchange rate.
12. Write down the formula for the real exchange rate. Explain the four terms in the equation.
13. Carefully explain what has happened to Ireland’s real exchange rate during the past few years, particularly within the eurozone.
14. Explain three different measures of the quantity of money in an economy.
15. Discuss two of the three factors that affect the demand for money balances.
16. Explain one reason why Central Banks tend to be independent from Governments.
17. What causes each of the IS and the LM curves to shift?
18. What is Okun’s Law?
19. Distinguish between adaptive expectations and rational expectations.
20. In terms of stabilisation policy, distinguish between “passive” and “active” policymaking.
21. Distinguish between policymaking based on rules and policymaking based on discretion.
22. How does fiscal policy act as an automatic stabiliser during recessions and expansions?
23. What is meant by the cyclically-adjusted Budget Balance?
24. What is Ricardian Equivalence?

## SECTION B      (180 marks)

Choose **3 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. GNP at factor cost
  2. Investment(10 marks)
- (b) Discuss two of the three ways 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. Write down an equation to illustrate the links between these three sectors. (15)
- (d) Carefully explain the difference between nominal GDP and real GDP. (10)
- (e) Contrast the following two measures of inflation:
  1. The Consumer Price Index
  2. The GDP Deflator(15)
2. (a) Explain each of the following terms:
  1. physical capital
  2. human capital
  3. technological progress(15)
- (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) What is the central conclusion of the Solow model of Economic Growth? (7)
- (d) Suggest two ways by which a government might promote stronger economic growth. (8)
- (e) Suppose that country A initially has a lower income-per-head than country B. Then for several years country A experiences faster increases in its rate of technological progress than country B. Explain and illustrate the effect of this growth over time. (10)
3. (a) Define both the Unemployment Rate and the Labour Force Participation Rate. (12)
- (b) Illustrate on a diagram the effects of trade unions on the labour market. (12)
- (c) What is meant by unemployment insurance? How might it affect the level of frictional unemployment? (12)
- (d) How might the natural, or equilibrium, rate of unemployment be reduced on a permanent basis? (12)
- (e) What is meant by hysteresis? How does this concept apply to European unemployment rates since the mid 1970s? (12)

4. (a) In each of the three cases below, explain fully the long run relationships between the relevant variables. In each case, use numerical examples in your explanation. (50)
1. the link between the growth of the money supply and inflation
  2. the link between the demand for money, inflation rates and nominal interest rates
  3. differences in inflation rates and the changes in the nominal exchange rate
- (b) Briefly describe two of the three instruments that a Central Bank can use to influence the money supply. (10)
5. (a) In the context of the long-run equilibrium position in an economy, explain how money can be said to be “neutral”. (12)
- Also explain how output may be said to be “supply-determined”. (8)
- (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)
6. “There is always a temporary tradeoff between inflation and unemployment; there is no permanent tradeoff” – Milton Friedman.
- (a) In the context of the above quote, consider an economy where output is at its long-run equilibrium level. The government then introduces contractionary demand policies.
- Explain, in detail, both the short-run and long-run consequences of this action. (16)
- Also illustrate the effects of this policy, during both the short-run and the long-run, on two separate AD/AS diagrams. (17)
- Also illustrate the effects of this policy, during both the short-run and the long-run, on two separate Phillips Curve diagrams. (17)
- (b) What is meant by the sacrifice ratio? (10)