

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

**Semester II Examinations, 2004/2005**

Exam Code(s)	2BA1, 2BA6, 2FM1
Exam(s)	2 <sup>nd</sup> Arts, 2 <sup>nd</sup> Arts (Public & Social Policy), 2 <sup>nd</sup> B.Sc. in Financial Mathematics and Economics
Module Code(s)	EC217
Module(s)	Macroeconomics
Paper No. Repeat Paper	1 Special Paper
External Examiner(s) Internal Examiner(s)	Professor Vincent Munley Mr. Brendan Kennelly Dr. Gerard Turley

**Instructions:**

Section A and Section B: Please answer **FIVE** questions. Answer **two** questions from Section A and **three** questions from Section B. All questions carry equal marks. Please use a separate answer book for each section.

Duration	3 hrs.
No. of Answer books	2

**Requirements:**

Handout  
MCQ  
Statistical Tables  
Graph Paper  
Log Graph Paper  
Other Material

No. of Pages	3
Department(s)	Economics

## Section A

1. Consider a model of an economy with the following equations

$$C = 220 + 0.75Y_d$$

$$I = 165 - 10i$$

$$\bar{G} = 490$$

$$TR = 300$$

$$T = .15Y$$

$$L = .2Y - 3i$$

$$\bar{M}/\bar{P} = 550$$

- (a) Define the IS schedule. Using the above data, derive the equation for the IS curve. (20)
- (b) Define the LM schedule. In this example, what is the equation for the LM curve? (20)
- (c) Calculate the equilibrium level of income and interest rates. (20)
- (d) What is the value of the monetary policy multiplier with respect to income and interest rates? If the money supply is reduced by 50, what are the new market-clearing income and interest rate levels? (30)
- (e) What are the differences between the assumptions of the Keynesian income-spending model and those of the IS/LM model? (10)

[All calculations to two decimal points]

2. A simple Keynesian income determination model of the economy is described by the following equation

$$AE = C + I + G + NX$$

where

$$C = \bar{C} + cY_d$$

$$Y_d = Y + TR - T$$

$$TR = \bar{TR}$$

$$T = \bar{T} + tY$$

$$I = \bar{I}$$

$$G = \bar{G}$$

$$X = \bar{X}$$

$$M = mY$$

- (a) Derive, from first principles, the equilibrium level of income. (20)
- (b) What is the equilibrium condition in the Keynesian model? What is the mechanism that brings about equilibrium? Give an example of how this works. (20)
- (c) Define and derive the Keynesian expenditure multiplier. For a given change in autonomous expenditure, use the Keynesian cross diagram to illustrate the multiplier and the resulting change in income. What factors, in the context of this model, determine the size of the multiplier? (20)
- (d) What are the behavioural assumptions underlying each of the equations in this model? (20)
- (e) What are the assumptions of the Keynesian model of income determination? (20)

3. (a) State and prove the Balanced Budget Multiplier (assuming  $G = \bar{G}$  and  $T = \bar{T}$ ). (50)
- (b) Prove that an increase in government spending will reduce the budget surplus but by an amount less than the increase in government purchases. Explain your answer. (NB: treat  $T = tY$ ) (30)
- (c) What are automatic stabilisers? Explain their role in the macroeconomy. (20)

### Section B

4. (a) Explain the main differences between the Classical and Keynesian schools of economics. (40)
- (b) In terms of macro policy prescriptions, how do they differ? (20)
- (c) Explain how the Keynesian cross diagram reflects the assumptions of the Keynesian model of income determination. (20)
- (d) Write a brief note on Keynes' contribution to macroeconomic theory. (20)
5. (a) Using the liquidity preference theory, show how the LM curve is derived. What factor determines the position of the LM curve? Show how a change in this factor will alter the position of the LM curve. (40)
- (b) The monetary authorities decide to expand the supply of money. Show, using the IS/LM model, the effect of this monetary policy change on both income and interest rates. (20)
- (c) What factors determine the slope of the IS and LM curves? What relevance does this have for the effectiveness of monetary and/or fiscal policy? (20)
- (d) Explain crowding out. Use the IS/LM model to depict the case of full crowding out. (20)
6. (a) What are the assumptions and conclusions of the Mundell-Fleming model? (30)
- (b) Illustrate, using the IS/LM/BP model, a fiscal policy expansion under a flexible exchange rate regime. How do these results differ from a similar fiscal policy change under the simple IS/LM model? (50)
- (c) What implications are there for the use of an independent monetary policy under fixed exchange rates? (20)
7. (a) What is aggregate supply? Explain the differences between the alternative AS curves. (30)
- (b) What are supply-side policies? Explain and illustrate, using the AD/AS model, the effect of positive supply-side policies on income and price levels. (40)
- (c) Using the AD/AS model, outline the effect of a negative supply-side shock on equilibrium prices and output. (30)