Examination: 5017

Principles of Economics II

Winter Semester 2006 / 2007

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You are allowed to use a non-programmable calculator (in accordance with the instructions given by the examination office) and a translating dictionary from your native language to English (without any notes written into it). **All** of the **twelve** (12) examination questions must be answered (the estimated time to spend on each question is provided). This examination consists of **four** (4) pages and must be completed within 120 minutes.

Question 1 (10 Minutes)

The management of macroeconomic activity is considered to be a key responsibility of the governments in the world today.

(a) Name and explain the three major Macroeconomic goals for an economy.

(b) What is Fiscal Policy? Explain using an AD / AS curve analysis how Fiscal Policy can be used to achieve the economic goals desired by the government.

(c) What does the term "Political Business Cycle" mean and why does the possibility of its existence create skepticism among many economists concerning the effectiveness and appropriateness of Fiscal Policy?

Question 2 (8 Minutes)

The Economist's Big Mac Index is based on the theory of purchasing-power parity.

The **Big Mac index** is an informal way of measuring the purchasing power parity (PPP) between two currencies and provides a test of the extent to which market exchange rates result in goods costing the same in different countries. As stated in the Economist, it "seeks to make exchange-rate theory more digestible".

(a) Explain the PPP theory.

(b) Explain the concept of the real exchange rate. How is this concept related to the "law of One Price" and what is the relationship between the real exchange rate and the PPP exchange rate.

Question 3 (15 Minutes)

Answer all of the following short-answer questions:

(a) What is the "Discount Rate", how is it determined, and how can it be used to alter M1?

(b) The Expenditure Multiplier plus the Tax Multiplier equals the Balanced Budget Multiplier. Show mathematically the value of the Balanced Budget Multiplier.

(c) In a book published in 1957, Professor Milton Friedman proposed the permanent income hypothesis. Explain the main elements of his theory.

(d) What happened in July of 1944 at Bretton Woods, New Hampshire? How was the international financial system changed to meet the world's post war needs?

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Question 4 (10 Minutes)

Please answer the following questions about the money supply.

(a) Define these three monetary concepts: the cash holding ratio (cr), the excess reserves ratio (xr), and M1.

(b) What is the difference between Total Cash Reserves in the banks and the Monetary Base.

(c) If: cr = 3%, xr = 5%, and rr = 12%, what would be the value of the money multiplier? What is the maximum value that the money multiplier can attain (explain carefully under what set of circumstances that this could happen)?

Question 5 (10 Minutes)

Year	Nominal GDP	Real chained GDP (2000 US$)	CPI 1982-1984 = 100	Unemployment Rate
2002	10,469.6	10,048.8	130.7	6.0
2003	10,960.8	10,301.0	136.2	5.7
2004	11,712.5	10,703.5	140.3	5.4
2005	12,455.8	11,048.6	144.5	4.9

(billions of US$)

Using the data in the table above, calculate the following:

(a) The consumer price inflation rate in 2005.

(b) The output growth in 2005.

Question 6 (10 Minutes)

Assume that in the foreign exchange market in Paris US dollars are selling for € 0.78095 / $ and in Chicago the exchange rate is US $ 1.2793 / €.

(a) If you are a foreign exchange trader in New York with $ 25 million, could you make an arbitrage profit today? If it is possible for you to make some money, show exactly how you would do it and what would be the resulting profit (loss).

(b) What is the difference between arbitrage and speculation?

Question 7 (8 Minutes)

The effect of a change in exogenously determined investment spending upon equilibrium GDP can be calculated by using the expenditure multiplier.

(a) How does the open economy multiplier differ from the closed economy multiplier?

(b) What does the concept of "leakage" mean in terms of the open economy multiplier?

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Question 8 (8 Minutes)

In 1987 Professor Robert Solow was awarded the Nobel Prize for Economic Science for his contributions to our understanding of economic growth.

(a) Summarize the contribution made by the Solow Model of economic growth.

(b) The "endogenous growth theory" was developed in the 1980s and is attributed to Professor Paul Romer. Explain in detail this contribution to our understanding of economic growth and how does it differ from the Solow Model?

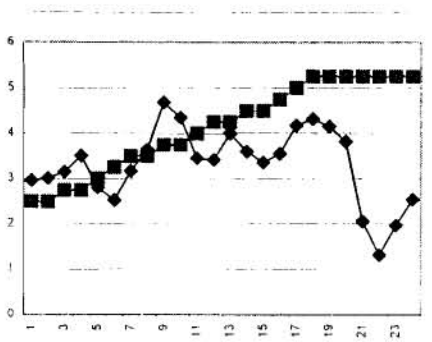
Question 9 (15 Minutes)

Press Release: FED, December 12, 2006

"The Federal Reserve's Open Market Committee decided today to keep its target for the federal funds rate at 5-1/4 percent.

Economic growth has slowed over the course of the year. Inflation pressures seem likely to moderate over time, however, the Committee judges that some inflation risks remain. The extent and timing of any additional firming (raising the Fed Funds target rate) will depend on the evolution of economic growth and inflation." [The table at the right shows the annual inflation rate and the federal funds rate target set by the U.S. Federal Reserve in percentages.]

2005	U.S. Inflation	Fed Funds	2006	U.S. Inflation	Fed Funds
1	2.97	2.50	1	4.00	4.25
2	3.01	2.50	2	3.60	4.50
3	3.15	2.75	3	3.36	4.50
4	3.51	2.75	4	3.55	4.75
5	2.8	3.00	5	4.17	5.00
6	2.53	3.25	6	4.32	5.25
7	3.17	3.50	7	4.15	5.25
8	3.64	3.50	8	3.82	5.25
9	4.69	3.75	9	2.06	5.25
10	4.35	3.75	10	1.31	5.25
11	3.46	4.00	11	1.97	5.25
12	3.42	4.25	12	2.54	5.25



(a) Explain the relationship that you see in the table between the U.S. inflation and the target for the federal funds rate set by the Open market Committee.

(b) Why has the Open Market Committee stopped raising the Federal Funds target rate in June 2006? Explain the "why" in detail.

(c) Explain how Open Market Operations are conducted by central banks.

Question 10 (10 Minutes)

Consider an economy where the Marginal Propensity to Consume has been estimated as: 0.88

(a) Explain how the concept of Macroeconomic Equilibrium is defined?

(b) Assume that this economy is currently in equilibrium at a GDP = \$ 13.5 trillion. Now assume that government expenditures, G, are increased from their previous level by ΔG = \$ 275 billion. What is the new level of equilibrium GDP?

(c) The economy is currently at equilibrium at this "new" level of GDP, but a treasury official says, "We need some additional tax revenue to pay for the increase in expenditures." They raise taxes by ΔT = \$ 185 billion. What is the resulting level of equilibrium GDP?

Question 11 (8 Minutes)

One of America's greatest mathematical economists, Professor Irving Fisher, developed what later became known as the "Fisher Equation."

(a) The Fisher Equation shows that the nominal interest rate is made up of two components. What are these two components and what does the Fisher Equation tell us about nominal interest rates?

(b) Explain in detail why the nominal interest rate measures the monetary cost per unit of holding money per unit of time.

Question 12 (8 Minutes)

Of all the concepts in Macroeconomics the single most important measure of economic performance is gross domestic product.

(a) What is the difference between GDP, GNP, and NNP?

(b) What is included in Gross Private Domestic Investment, I?

(c) What is the term (X – M) and why is it included in the equation?

<u>This is the End of the Examination.</u>

<u>GOOD LUCK!</u>