Examination: 11049

Principles of Economics

Winter Semester 2012 / 2013

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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. This examination consists of **three** (3) pages and must be completed within 120 minutes.

Question 1

At Market Equilibrium the quantity of good x demanded, Q_x^d, equals the quantity supplied, Q_x^s, $Q_x^d = Q_x^s$.

(a) If the supply curve remains constant and there is an increase in demand, what will happen to the equilibrium price and quantity?

(b) If the demand curve remains constant and there is a decrease in supply, what will happen to the equilibrium price and quantity?

(c) What is "Comparative Statics" analysis?

Question 2

Using the data from the table shown below, calculate the following:

Year	NGDP ($ billion)	RGDP Chained (2000)	CPI 1982 = 100
2006	13,398.9	12,976.2	201.823
2007	14,061.8	13,228.9	210.036
2008	14,369.1	13,228.8	210.228
2009	14,119.0	12,880.6	215.949

(a) The growth rate of output in 2007.

(b) The Price Inflation in 2007 as measured using the Implicit GDP Deflator.

(c) The Price Inflation in 2007 using the CPI.

Question 3

The impact of fiscal policy can be analyzed using the multipliers. If MPC = 0.85:

(a) Calculate the expenditure and tax multipliers.

(b) Explain why the Balanced Budget Multiplier is equal to 1.0?

Please turn to Page 2

Question 4

The Foreign Exchange Market (FOREX) is where currencies are traded. In Frankfurt am Main the US dollar exchange rate is € 0.74631 / US$ and in New York City the exchange rate is US$ 1.34552 / €.

(a) Can a foreign exchange trader in London with € 100 million make a trading profit today? Explain exactly what you would do if it is possible to earn a profit from trading.

(b) There are two kinds of trades: "arbitrage" and "speculation". Explain the difference between these two types of trading.

Question 5

The Central Bank is responsible for Monetary Policy.

(a) Explain how Open Market Operations are conducted by the central bank and how this affects the supply of money in the economy.

(b) How can Open Market Operations be used to improve a situation of severe inflation?

Question 6

A company's pricing behavior depends upon the structure of the market that it operates in.

(a) Explain the difference between Monopolistic Competition and Monopoly.

(b) Give three examples of effective Barriers to Entry that can limit the number of producers.

Question 7

The Average and Marginal Cost Curves are U-Shaped.

(a) Explain the relationship between the ATC curve and the MC curve.

(b) Why are these cost curves U-Shaped?

Question 8

A producer has a Cobb-Douglas production function: $Q^s_x = \tau L^{0.45} K^{0.55}$ with $\bar{\tau} = 1.1$

(a) Explain the "Law of Diminishing Returns" in terms of the input Labor.

(b) Explain "Returns to Scale" using this production function as an example.

Question 9

Of all the concepts in Macroeconomics the single most important measure of economic performance is Gross Domestic Product (GDP).

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

(b) What is the difference between GNP and NNP?

Please turn to Page 3

Question 10

Economic growth is an important subject for all countries because increases in GDP per person is generally taken as an increase in the standard of living of its inhabitants.

(a) The Solow growth model predicts that in the long run the economy enters an equilibrium steady state in which the capital stock fails to grow further. Explain this statement.

(b) Professor Paul Romer developed the "new" growth theory. How does it differ from the original Solow growth model?

Question 11

The Economist's Big Mac Index is based on the theory of Purchasing-Power Parity.

The Economist Big Mac Index

	Big Mac prices in local currency	Big Mac prices in dollars	Implied PPP* of the dollar	Actual dollar exchange rate	Under (-)/ over (+) valuation against the dollar, %
United States†	$3.73	$3.73	-	-	-
Argentina	Peso 14.0	$3.56	3.75	3.93	– 5
Australia	A$ 4.35	$3.84	1.17	1.13	3
Brazil	Real 8.71	$4.91	2.33	1.77	31
Britain	£2.29	$3.48	1.63	1.52	– 7
Canada	C$ 4.17	$4.00	1.12	1.04	7
Chile	Peso 1,750	$3.34	469	524	– 10

(a) In Canada a Big Mac costs C$ 4.17, which would seem a bit expensive to an American tourist. Explain this statement in terms of the actual and PPP exchange rates.

(b) What is the relationship between the Real Exchange Rate and the PPP exchange rate?

Question 12

Professor Irving Fisher of Yale University developed 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.

This is the End of the Examination.

GOOD LUCK!