

Economics 227: Intermediate Macroeconomics
Final Exam
Fall 2010-2011

Multiple Choice / Fill in the Blanks

65 points (25 questions, 2.6 points each)

1. Gross domestic product is the _____ of all _____ goods and services produced in an economy in _____

2. Suppose the government increases both spending and taxes by the same amount. In the long run, we would expect consumption to _____ and the real interest rate to _____
 - (a) fall, rise
 - (b) stay the same, rise
 - (c) rise, rise
 - (d) rise, fall
 - (e) None of the above

3. If the interest rate in the U.S. is 5.5% and in Europe is 3%, then we should expect the Euro to _____ by _____ percent if uncovered interest parity holds.

4. Which of the following transactions will change the GDP of the Lebanese economy?
 - (a) Bank Med issues \$1 million of new shares.
 - (b) Your Lebanese grandmother wins \$1 million in the lottery.
 - (c) A.U.B. parents give A.U.B. students \$1 million.
 - (d) A.U.B. students buy \$1 million Guinness beer from Ireland.
 - (e) None of the above

5. Fiscal and monetary policy are both effective in:
- (a) An open economy with fixed exchange rates
 - (b) The classical case
 - (c) The long run
 - (d) None of the above
6. In the Solow Model with $\alpha = 0.6$, $s = 0.3$, $n = 0.05$, $g = 0.02$, and $\delta = 0.01$, what is the very-long run capital to output ratio $\frac{K}{Y}$?
- (a) 5
 - (b) 8.33
 - (c) 3.75
 - (d) 11.18
 - (e) 25
7. If the Central Bank increases the money supply, then the _____ curve shifts _____
- (a) Short run aggregate supply, right
 - (b) Long run aggregate supply, left
 - (c) Aggregate demand, right
 - (d) Aggregate demand, left
 - (e) None of the above
8. In the endogenous growth model, $Y = F(K, (1 - u)LE)$ where u represents
- (a) The unemployment rate
 - (b) Research intensity
 - (c) The level of technology
 - (d) The effectiveness of capital.
 - (e) Capital per effective worker.

9. An increase in inflation shifts the

- (a) LM* curve
- (b) Phillips curve
- (c) IS curve
- (d) AD curve
- (e) None of the above

Fill in the blanks with the words rise, fall, or stay the same:

10. Currently the Banque du Liban (BdL) maintains a peg of LL 1508 per \$1. If the BdL revalues, then output should _____ and dollar reserves will _____

11. Suppose $\pi = \pi_{-1} - 0.25(u - 0.02)$. Okun's law suggests that 1 percentage point of additional unemployment leads to 2 percentage points of lower GDP. What is the sacrifice ratio?

- (a) 2
- (b) 4
- (c) 6
- (d) 8
- (e) 10

12. Suppose a malicious computer virus destroys half the Lebanese capital stock. The real interest rate / rental price of capital will _____ and the real wage will _____ .

13. In the long run, all of the following will result in an appreciation in a country's exchange rate EXCEPT:
- (a) An increase in government spending
 - (b) Increased taxes
 - (c) An increase in autonomous consumption
 - (d) Increased demand for investment ("animal spirits").
 - (e) None of the above
14. During the Great Depression in the U.S.,
- (a) Interest rates were high
 - (b) Inflation was very high
 - (c) The money supply M rose.
 - (d) The exchange rate was high
 - (e) None of the above

Fill in the blanks with the words rise, fall or stay the same:

15. Suppose the demand for money increases in a closed economy. In the short run, real interest rates will _____ and prices will _____. Over the long run, output will _____ and prices will _____.
16. In the short run, GDP will fall in a country which investors perceive is riskier if the increase in risk prompts people to
- (a) Invest abroad
 - (b) Sell domestic currency to the Central Bank
 - (c) Expect lower inflation
 - (d) Reduce investment demand
 - (e) Increase money demand.

17. If $Y = K^{\frac{1}{3}}L^{\frac{2}{3}}$, then labor's share of output is _____. If $K = 1600$ and $L = 25$, then the real wage is _____.
18. Consider the simple AS/AD model based on the quantity theory of money from Chapter 9 / Lecture 11. Following an adverse _____ shock, the Central Bank faces a tradeoff between stable _____ and stable output.
- (a) demand, interest rates
 - (b) demand, prices
 - (c) supply, interest rates
 - (d) supply, prices
19. The Phillips Curve implies that a Central Bank may bring about "painless disinflation" if expectations are
- (a) Adaptive
 - (b) Cyclical
 - (c) Inertial
 - (d) Rational
 - (e) Structural
20. Suppose a pair of Scarbini designer shoes costs €85 in Milan and LL 150,000 in Beirut. If Purchasing Power Parity holds, the nominal exchange rate is _____ .

Consider an economy described the Solow Growth Model with $Y = K^\alpha (LE)^{1-\alpha}$, $\alpha = 0.2$, $\delta = 0.03$, a population growth rate of $n = 10\%$, and a savings rate of 50%.

21. What savings rate would maximize long-run per-worker consumption?
- (a) 10%
 - (b) 20%
 - (c) 30%
 - (d) 40%
 - (e) 50%
22. Suppose that every semester at A.U.B., 4% of economics non-majors become economics majors, and 12% of economics majors switch to another major. What is the long-run, steady state fraction of A.U.B. students who are economics majors?
- (a) 8%
 - (b) 16%
 - (c) 25%
 - (d) 40%
 - (e) 75%
23. If you want to engage in the carry trade, you would:
- (a) Borrow in countries where interest rates are low, and use the money to lend where interest rates are high.
 - (b) Buy bonds, driving down the interest rate.
 - (c) Sell dollars to the Central Bank when the market exchange rate is higher than the peg.
 - (d) Exploit the failure of purchasing power parity to hold.
 - (e) None of the above

24. If the world interest rate rises, then the IS* curve shifts _____ and the LM* curve shifts _____.

- (a) right, left
- (b) right, right
- (c) left, right
- (d) left, left
- (e) None of the above.

25. It is impossible for a country to have fixed exchange rates, independent monetary policy, and

- (a) Low inflation
- (b) Low unemployment
- (c) Free capital flows
- (d) Free trade
- (e) No arbitrage

Short-Answer Questions: 35 points

1. (20 points) Suppose firms become optimistic about the domestic economy, and increase investment spending at any interest rate (so the investment demand function shifts to the right). In this problem, you will analyze the effect of a change in policy on various endogenous variables using several of the models we studied in class. For each model, write whether the indicated variables rise, fall, or don't change. An arrow is sufficient, you don't need to explain your reasoning
 - (a) In the long-run, classical, closed economy model of Ch. 3 / Lecture 3, what happens to consumption, investment, output, the real interest rate, and national saving?
 - (b) In the long-run, small open economy of Ch. 8 / Lecture 6, what happens to consumption, investment, net exports, output, the real interest rate, and the real exchange rate?
 - (c) In the short-run closed-economy IS/LM model with fixed prices, what happens to consumption, investment, output, and the real interest rate?
 - (d) In the Mundell-Fleming model under floating exchange rates, what happens to consumption, investment, net exports, output, the real interest rate, and the nominal exchange rate?
 - (e) In the Mundell-Fleming model under fixed exchange rates, what happens to consumption, investment, net exports, the real interest rate, and the nominal exchange rate?

2. (15 points) The U.S. economy fell into a serious recession in September, 2008 following a collapse in real estate prices. To mitigate the recession, in February, 2009 the U.S. government increased its spending by \$787 billion. Economists call this additional government spending "the stimulus." In the following questions, you may assume that the U.S. economy is closed.
- (a) Economist Valerie Ramey estimates that if interest rates are held constant, the expenditure multiplier is 1.4. Explain what the expenditure multiplier is and why it exists. If Ramey is correct, what effect should the stimulus have had on GDP? Why is it important that interest rates be held constant?
 - (b) Some economists argued that monetary policy would be a better tool to fight the recession. In response, economist Paul Krugman argued for the stimulus on the grounds that "the whole advanced world, including the U.S., is in a liquidity trap." What is a liquidity trap? Why does it exist? Why does the presence of a liquidity trap lead Krugman to support the stimulus?
 - (c) In response to Krugman, Scott Sumner said, first, "The historical record shows that rapid inflation can be achieved through monetary policy in a liquidity trap," and second, "Monetary expansion is preferable to massive budget deficits." How do these two statements explain Sumner's opposition to the stimulus?