

SCHOOL OF ECONOMICS
FACULTY OF ARTS AND SOCIAL SCIENCES

ECON 5002 Macroeconomic Theory

Practice Questions for the Final Exam

Some points to note about the final exam:

- You will have 2 hours to complete the exam.
- The exam will consist of two sections: Section A comprises 25 multiple-choice questions, worth 50 marks, based on the entire course. Section B contains short-answer questions or problems, worth 50 marks, based on the post midterm material.
- Bring a pencil for the multiple-choice questions and a pen for the written answers.
- You may bring a non-programmable calculator (exam invigilators will check).
- Exam questions are drawn from the entire course, including the lectures, textbook, and tutorials.
- Primary focus will be on models, concepts, and theories emphasized in lectures and/or covered in tutorial questions.
- For the main models covered in the course, consider the following:
 - What are their key assumptions?
 - How is the model solved?
 - What type of economic issues/behaviours do they explain?
 - What are their limitations?
 - Can you apply them in simple examples?
- Keep your written answers brief and write neatly. Extraneous answers will be penalized and answers that are difficult to read will be deemed to be incorrect.

Caveat:

- Answers to the sample exam paper will NOT be available.
- This practice exam is just to indicate the style of the exam, and to provide extra practice questions beyond tutorial problems and quiz questions.
- The actual exam questions can be quite different and may bear no resemblance.

SECTION A: Example Multiple Choice Questions

1. The chain-weighted measure of real GDP uses prices from:
 - (a) a constant base year.
 - (b) a constantly changing base year.
 - (c) a base year that changes every five years.
 - (d) a base year that changes every ten years.
 - (e) none of the above

2. If the production function is given by $Y_t = \bar{A}K_t^{1/3}L_t^{2/3}$, the savings rate, s , is 20 percent, the depreciation rate, $\bar{d}$, is 5 percent, and $\bar{A} = \bar{L} = 1$, the steady-state level of output in the Solow model is:
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
 - (e) 8

3. Potential output is best defined as:
 - (a) the amount of total output produces if all inputs are utilized at their long-run, sustainable levels
 - (b) what an economy can produce when it is at maximum capacity
 - (c) the current level of output
 - (d) the level of output when inflation is zero
 - (e) none of the above

4. Suppose that the central bank raises its target interest rate. This implies that
 - (a) short-run output will rise as the economy moves along the IS curve
 - (b) short-run output will fall as the economy moves along the IS curve
 - (c) short-run output will fall as the IS curve shifts to the left
 - (d) short-run output will rise as the IS curve shifts to the right
 - (e) there will be no change in short-run output

5. If the current capital stock in South Korea is greater than the current capital stock in China, according to the principle of transition dynamics,
 - (a) China initially will grow faster than South Korea, but each will have the same steady state.
 - (b) China initially will grow slower than South Korea, but each will have the same steady state.
 - (c) China initially will grow faster than South Korea and will have a higher steady state.
 - (d) China initially will grow faster than South Korea and will have a lower steady state.
 - (e) Both South Korea and China initially will grow at the same rate and have the same steady state.

6. Because, in many industries, the cost of generating new ideas is so high, firms must:
 - (a) charge a price equal to the marginal cost.
 - (b) charge a price higher than the marginal cost.
 - (c) charge a price lower than the marginal cost.
 - (d) charge a price equal to the average fixed cost.
 - (e) charge a price lower than the average fixed cost.

7. If the income taxes on wages increase, the labor supply curve will shift left, but what happens to the unemployment rate?
- (a) It unambiguously falls because the labor participation rate changes.
 - (b) It unambiguously falls because some workers drop out of the workforce.
 - (c) It unambiguously rises because some workers drop out of the workforce.
 - (d) It is ambiguous because some workers drop out of the workforce.
 - (e) None of the above is correct.
8. In growth accounting, the residual, $\bar{A}$, is so named because:
- (a) the economy is complicated.
 - (b) economists know exactly what contributes to growth.
 - (c) it is a way to measure *observed* TFP growth.
 - (d) it is a way to measure *unobserved* TFP growth.
 - (e) it measures labor composition.
9. With unanticipated inflation,
- (a) creditors are hurt unless they have an indexed contract, because they get less than they expected in real terms.
 - (b) creditors with indexed contracts gain, because they receive more than they contracted for in nominal terms.
 - (c) debtors with an unindexed contract lose, because they pay exactly what they contracted for in nominal terms.
 - (d) debtors with an indexed contract are hurt, because they pay more than they contracted for in nominal terms.
 - (e) debtors with an indexed contract are hurt, because they pay more than they contracted for in real terms.
10. Okun's law shows the _____ relationship between _____ and _____.
- (a) negative; unemployment gap; economic fluctuations
 - (b) positive; unemployment gap; economic fluctuations
 - (c) negative; unemployment gap; inflation
 - (d) positive; unemployment gap; inflation
 - (e) negative; inflation; economic fluctuations
11. In the months following the collapse of Lehman Brothers, banks became increasingly worried about:
- (a) rising real estate prices.
 - (b) lending money via commercial paper.
 - (c) the rapid loss of reserves.
 - (d) spikes in the federal funds rate.
 - (e) exchange rate volatility.
12. If the central bank targets the interest rate, the:
- (a) money demand curve is flat.
 - (b) money supply curve is vertical.
 - (c) money supply curve slopes upward.
 - (d) money supply curve is flat.
 - (e) money demand curve is vertical.

13. When the central bank pursues expansionary monetary policy and all other economic agents build this into their decision making, _____ with no economic benefit; this is called the _____ problem.
- (a) output rises; policy lag
 - (b) unemployment rises; time inconsistency
 - (c) expectations rise; adaptive expectations
 - (d) inflation rises; time inconsistency
 - (e) inflation rises; discretionary
14. If moving an extra unit of today's consumption to future consumption improves your lifetime utility, you are not
- (a) equalizing consumption over time.
 - (b) satisfying the Euler equation.
 - (c) satisfying your intertemporal budget constraint.
 - (d) putting enough into increasing your family wealth.
 - (e) paying enough taxes to finance Social Security.
15. If the government lowers taxes to stimulate the economy, but then raises taxes in the future, according to the neoclassical consumption model, _____ because of _____.
- (a) consumption will rise today, but fall in the future; the lack of consumption smoothing
 - (b) savings in each period rises; precautionary saving
 - (c) transitory income rises; falling discount factors
 - (d) tax revenues will rise; the Laffer curve
 - (e) present value of wealth remains unchanged and consumption today does not change; Ricardian equivalence
16. In the arbitrage equation a profit maximizing firm can choose between _____ and _____.
- (a) investing in capital; investing in human capital
 - (b) investing new capital; hiring more labor
 - (c) buying new capital; buying a new car
 - (d) putting money in a bank; investing in new capital
 - (e) allocating resource toward production; allocating resources toward inventory
17. If firms "production smooth" they:
- (a) produce the same amount each month.
 - (b) use "just in time" inventory control.
 - (c) overproduce in bad times and underproduce in good times.
 - (d) keep the growth of their production constant, regardless of the business cycle.
 - (e) produce just enough to meet their orders.
18. The economic meaning of the intertemporal budget constraint is that:
- (a) the government's budget never has to balance.
 - (b) the government's budget must balance period by period.
 - (c) the present discounted value of the government's budget must balance.
 - (d) the government can *always* push its debt on future generations.
 - (e) every generation faces the *same* tax schedule.

19. If inflation is higher in the United States than in the United Kingdom,
 - (a) the dollar should appreciate to the pound.
 - (b) the dollar should depreciate to the pound.
 - (c) real interest rates should be higher in the United States than in the United Kingdom.
 - (d) the U.S. net exports to the United Kingdom should fall.
 - (e) pounds will flow to the United States from the United Kingdom.

20. The Mexican peso, Asian financial, and Argentinean financial crises had which of the following in common?
 - (a) All countries involved attempted to maintain a fixed exchange rate.
 - (b) There was an increase in country and economic risk.
 - (c) All countries experienced a steep decline in their foreign exchange reserves.
 - (d) All countries had relatively open financial markets.
 - (e) All of these answers are correct.

21. Under a fixed exchange rate regime, a tax increase will, in short run:
 - (a) cause a reduction in output.
 - (b) require a reduction in the money supply.
 - (c) cause no change in the domestic interest rate.
 - (d) all of the above

22. Assume that the current exchange rate between the Australian dollar and the U.K. pound is 0.5 ($E = 0.5$). If interest parity holds, and the Australian interest rate is 6% while the U.K. interest rate is 8%, the expected exchange rate in one year is _____.
 - (a) 0.40
 - (b) 0.48
 - (c) 0.49
 - (d) 0.51
 - (e) 0.52

23. If the real exchange rate for the Australian dollar against the United States dollar depreciates in a given year by 1% while the inflation rate in the United States is 4% per annum and that in Australia is 5% per annum, the nominal value of the Australian dollar over that year will have,
 - (a) appreciated by 2% against the US dollar
 - (b) appreciated by 8% against the US dollar
 - (c) depreciated by 2% against the US dollar
 - (d) depreciated by 8% against the US dollar

24. Under a fixed exchange rate regime, a tax increase will, in short run:
 - (a) cause a reduction in output.
 - (b) require a reduction in the money supply.
 - (c) cause no change in the domestic interest rate.
 - (d) all of the above

25. Assume that exchange rates are flexible and that the exchange rate expected to occur in one year is NOT constant. Suppose that individuals now expect that the foreign central bank will pursue expansionary monetary policy in one year. This expected future monetary expansion by the foreign central bank will cause which of the following to occur?
 - (a) the current nominal exchange rate will decrease
 - (b) the current nominal exchange rate will increase
 - (c) the current nominal exchange rate will not change
 - (d) the effects on the current nominal exchange rate are ambiguous

SECTION B: Example Multiple Choice Questions.

Answer any (and **only**) 2 questions in this section

Question 1.

Because deflation is so costly, some have argued that setting an inflation target at 2 percent is too low and it should be set higher, to 3 percent, especially in the economic environment of 2007–2010. Consider the impact of such an increase in the inflation target using the AD/AS framework in the short and long runs. Begin your analysis in the long-run equilibrium.

Question 2.

Suppose that the government wishes to increase output by a policy mix. The government runs a budget deficit to expand spending, and the central bank chooses to accommodate the fiscal expansion by purchasing government debt.

- How would this policy mix affect output and inflation in the economy? Use the IS-MP and AS-AD model.
- Suppose that the central bank chooses to cut interest rates independently, rather than buying government debt. How would it affect the economy? Use the IS-MP and AS-AD model.

Question 3.

Consider the following simple monetary rules estimated for two different periods: 1969–1985 and 1985–2005, and interpret each rule. During which period does the Fed appear to be most anti-inflation? Explain.

Period	Monetary Policy Rule
1969–1985	$R_t = 6.35 + 0.67 - (\pi_t - \pi)$
1985–2005	$R_t = 1.35 + 1.34 - (\pi_t - \pi)$

(Source: Estimated using FRED II data)