

科目：總體經濟學 適用：經濟系三

編號：722

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

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This exam for Macroeconomics contains two parts and amounts to 100 points. Please start from a new page for each of essay questions and make sure that your answers are legible and coherent.

Part I. Multiple Choice Questions (45 points, 3 points for each)

1. A juice company buys oranges for \$20,000 from farmers. It pays its workers \$34,000, pays \$1000 in taxes, and has profits of \$4000. What is its value added?
 - (a) \$19,000
 - (b) \$30000
 - (c) \$59,000
 - (d) \$39,000
2. What happens to current employment and the real wage rate in the labor market if an adverse oil-price shock occurs?
 - (a) Both employment and the real wage rate would increase.
 - (b) Both employment and the real wage rate would decrease.
 - (c) Employment would increase and the real wage would decrease.
 - (d) Employment would decrease and the real wage would increase.
3. The Ricardian equivalence proposition argues that a government deficit caused by a tax cut
 - (a) causes inflation.
 - (b) causes a current account deficit.
 - (c) decreases interest rates.
 - (d) doesn't affect national saving.
4. In the Solow model, if $f(k) = 3k^{0.5}$, $s = 0.2$, $n = 0.05$, and $d = 0.15$, what is the value of k at equilibrium?
 - (a) 1
 - (b) 3
 - (c) 6
 - (d) 9
5. In the Solow model, a decrease in population growth will lead to a _____ in the steady-state capital-labor ratio and a _____ in consumption per worker.
 - (a) fall; fall

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- (b) fall; rise
(c) rise; rise
(d) rise; fall
6. A decrease in the real interest rate would cause a decrease in the real demand for money
- (a) no matter what the change in expected inflation.
(b) if expected inflation rise by less than the decrease in the real interest rate.
(c) if expected inflation rise by the same amount as the decrease in the real interest rate.
(d) if expected inflation rise by more than the decrease in the real interest rate.
7. Which of the following macroeconomic variables is procyclical and leads the business cycle?
- (a) Business fixed investment
(b) Money supply
(c) Nominal interest rates
(d) Unemployment
8. An increase in wealth would cause the *IS* curve to
- (a) shift up and to the right.
(b) shift down and to the left.
(c) remain unchanged.
(d) shift up and to the right only if people face borrowing constraints.
9. A tax cut on capital would cause the *IS* curve to _____ and the *LM* curve to _____.
- (a) shift down and to the left; be unchanged
(b) shift down and to the left; shift up and to the left
(c) shift up and to the right; be unchanged
(d) shift up and to the right; shift up and to the left
10. In the classical model, a temporary decrease in government purchases causes
- (a) a decrease in output and the real interest rate.
(b) a decrease in output and an increase in the real interest rate.
(c) an increase in output and a decrease in the real interest rate.

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- (d) an increase in output and the real interest rate.
11. In the Keynesian model in the short run, an increase in the money supply will cause
- (a) an increase in output and a decrease in the real interest rate.
 - (b) an increase in the real interest rate but no change in output.
 - (c) a decrease in the real interest rate and a decrease in output.
 - (d) no change in either the real interest rate or output.
12. Suppose purchasing power parity holds. If the price level in the United States is 100 dollar per good and the price level in Japan is 500 yen per good, then the nominal exchange rate is _____ yen per dollar.
- (a) 0.5
 - (b) 0.2
 - (c) 5.0
 - (d) 2.0
13. If the expected rate of inflation decreases at the same time the natural rate of unemployment also decreases, the Phillips curve
- (a) would shift down.
 - (b) would shift up.
 - (c) would not move.
 - (d) might shift up or down or not move, depending on which effect was larger.
14. Which of the following changes shifts the aggregate demand curve down and to the left?
- (a) A decrease in the nominal money supply
 - (b) A decrease in income taxes
 - (c) A decrease in the risk on nonmonetary assets
 - (d) An increase in the future marginal productivity of capital
15. Which of the following changes shifts the long-run aggregate supply curve to the left?
- (a) A demographic change that decreases the labor supply
 - (b) An increase in the demand for labor
 - (c) A decrease in government purchases
 - (d) An increase in taxes (assuming Ricardian equivalence doesn't hold)

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Part II. Essay Questions (55 points)

1. (30 points) Consider the following misperceptions model of the economy.

AD: $Y = 600 + 10(M/P)$

SRAS: $Y = \bar{Y} + P - P^*$

Okun's Law: $(Y - \bar{Y})/\bar{Y} = -2(u - \bar{u})$

Let $\bar{Y} = 750$, $\bar{u} = 0.05$, $M = 600$, and $P^* = 40$

- (a) (5 points) What is the price level?
- (b) (15 points) Suppose there is an unanticipated increase in the nominal money supply to 800. What is the short-run equilibrium level of output, the unemployment rate, and the price level?
- (c) (5 points) What is the slope of the expectations-augmented Phillips curve in this economy?
- (d) (5 points) When price expectations adjust fully, what is the price level?

2. (15 points) Analyze a game played by two players. Player I can choose of two actions, A and B. Player II also has two actions from which to choose, C and D. Assume players don't care how many points the other player receives. The points that each player assigns to each possible outcome are listed below.

Outcome	Points	
	Player I	Player II
(A, C)	15	15
(A, D)	5	20
(B, C)	20	5
(B, D)	10	-10

If player II can threaten player I, she can say "If you choose A, I'll choose C; but if you choose B, I'll choose D."

- (a) (10 points) What is the outcome of the game?
 - (b) (5 points) Compare your answer in part (a) to the case in which player II cannot be threaten.
3. (10 points, 5 points for each) Explain the economic significance or relevant argument for any **TWO** of the following:
- (a) Real business cycle
 - (b) Time inconsistency
 - (c) Permanent income hypothesis
 - (d) Inflation tax