

ECONOMICS 152a (14) X3632
MACDONALD FINAL DEC '99

NAME: _____

STUDENT NO.: _____

THE UNIVERSITY OF WESTERN ONTARIO

L. MacDonald

ECONOMICS 152a-003

Intramural

FINAL EXAM -version 1

INSTRUCTIONS:

1. The exam is two hours long.
2. The exam consists of 40 multiple choice questions, and each question is weighted equally.
3. Record your name and student number on the exam paper, Scantron sheet and the work booklet. Answers to the multiple choice should go on the Scantron sheet provided IN PENCIL ONLY. On the Scantron sheet, you must fill in your student number, section **003, and code 001**. The code is very important. If you do not fill it in correctly, this will affect your grade on the exam. The work booklet is for your reference only, **it will not be marked**.
4. Please round to TWO decimal places and indicate negative signs where necessary.
5. Please hand in all materials to the proctors. The course grades will be posted in the Economics department in January.
6. Calculators are allowed.
7. GOOD LUCK!

CU.W.O. "This material has been copied with permission of this Faculty. Any resale or further copying of this material is strictly prohibited."

MULTIPLE CHOICE. CHOOSE THE BEST ANSWER. EACH QUESTION IS WEIGHTED EQUALLY.

- 1) In the short run, a decrease in inventory investment by business firms would cause output to _____ and the price level to _____.
 - A) fall; stay constant
 - B) rise; stay constant
 - C) fall; rise
 - D) rise; rise
 - E) fall; fall.

- 2) In the long run, an increase in government purchases of military equipment would cause output to _____ and the aggregate price level to _____.
 - A) rise; stay constant
 - B) fall; fall
 - C) stay constant; rise
 - D) stay constant; stay constant
 - E) rise; rise.

- 3) Which of the following would shift the FE line to the left?
 - A) A beneficial supply shock
 - B) A decrease in the future marginal productivity of capital
 - C) A decrease in labour supply
 - D) An increase in the capital stock
 - E) A decrease in the money supply.

- 4) A decline in expected future output would cause the IS curve to _____ and interest rates to _____ in the short run.
 - A) remain unchanged; remain unchanged.
 - B) shift up; increase.
 - C) shift down, decrease.
 - D) shift up only if people face borrowing constraints; rise
 - E) shift up; decrease.

- 5) The IS curve would unambiguously shift **up** if there were
- A) an increase in the expected future marginal product of capital and a decrease in expected future output.
 - B) a decrease in both corporate taxes and the expected future marginal product of capital.
 - C) an increase in both government purchases and corporate taxes.
 - D) an increase in both government purchases and the expected future marginal product of capital.
 - E) none of the above.
- 6) You have just read that the Bank of Canada has increased the money supply to avoid a recession. In the short run, you would expect the LM curve to _____ and interest rates to _____.
- A) shift up as the real money supply rises; rise.
 - B) shift down as the real money supply falls; fall
 - C) shift up as the real money supply falls; rise
 - D) shift down as the real money supply rises; fall.
 - E) shift down as the real money supply rises; rise.
- 7) Which curves adjust to **restore** general equilibrium after a shock to the economy?
- A) The labour supply curve and the FE line.
 - B) The FE line and the LRAS curve.
 - C) The LM curve and the SRAS curve.
 - D) The IS curve and the SRAS curve.
 - E) The LM curve and the AD curve.
- 8) The IS-LM model predicts that a temporary **adverse** supply shock
- A) reduces output, national saving, investment, and the real interest rate.
 - B) reduces the real interest rate, investment, and output, but not national saving.
 - C) reduces output, national saving, and investment, but not the real interest rate.
 - D) reduces output, national saving, and the real interest rate, but not investment.
 - E) increases the real interest rate and increases investment.

- 9) You have just read that Australia has suffered a drought, destroying its wheat crop for this year. The effect of this adverse supply shock in the long run on Australia would probably be
- A) an increase in prices, an increase in nominal interest rates, but a decrease in real interest rates.
 - B) a decrease in prices and an decrease in real interest rates.
 - C) an increase in prices and an increase in real interest rates.
 - D) a decrease in prices, a decrease in nominal interest rates, but an increase in real interest rates.
 - E) an increase in output.
- 10) Which market adjusts the **most** quickly in response to shocks to the economy?
- A) The goods market
 - B) The asset market
 - C) The asset, labour, and goods markets adjust at about the same speed to eliminate a disequilibrium in the macroeconomy.
 - D) The labour market
 - E) The asset market and the labour market.
- 11) Under an assumption of monetary neutrality, a change in the nominal money supply has
- A) a proportionate effect on the price level.
 - B) a more than proportionate effect on the price level.
 - C) no effect on the price level.
 - D) a less than proportionate effect on the price level.
 - E) a more than proportionate effect on output.
- 12) Which of the following changes shifts the AD curve to the **left**?
- A) A decline in the nominal money supply
 - B) An increase in the future marginal productivity of capital
 - C) A decrease in the risk on nonmonetary assets
 - D) A decrease in income taxes
 - E) both (a) and (c) are true.
- 13) Which of the following changes shifts the SRAS curve down?
- A) A decrease in firms' costs
 - B) An increase in government purchases
 - C) A decrease in the labour force
 - D) A decrease in the money supply
 - E) an increase in firms' costs.

- 14) Which of the following changes shifts the long-run aggregate supply curve to the right?
- A) An increase in consumer confidence
 - B) A decrease in taxes (assuming Ricardian equivalence doesn't hold)
 - C) A decrease in the demand for labour
 - D) A demographic change that increases the labour supply
 - E) none of the above.
- 15) In the Keynesian model, an increase in the money supply will cause
- A) a decrease in the real interest rate but no change in output in the short run.
 - B) an increase in the real interest rate and an increase in output in the short run.
 - C) no change in either the real interest rate or output in the long run.
 - D) an increase in output and a decrease in the real interest rate in the short run.
 - E) both (c) and (d) are true.
- 16) In the Keynesian model, an increase in government purchases affects output by
- A) increasing aggregate demand as national saving declines.
 - B) increasing saving to pay for future taxes, lowering the real interest rate and shifting the IS curve to the left.
 - C) increasing the real interest rate due to crowding out, reducing aggregate demand.
 - D) increasing labour supply, because workers feel effectively poorer.
 - E) both (c) and (d)
- 17) Suppose the government decided to tighten monetary policy and decrease government expenditures. In the short run in the Keynesian model, the effect of these policies would be to _____ the real interest rate and _____ the level of output.
- A) raise; decrease
 - B) have an ambiguous effect on; decrease
 - C) lower; decrease
 - D) lower; have an ambiguous effect on
 - E) raise; increase.

- 18) Suppose the government decided to increase the money supply, then increase taxes. In the short run in the Keynesian model, the effect of these policies would be to _____ the real interest rate and _____ the level of output.
- A) lower; have an ambiguous effect on
 - B) lower; increase
 - C) have an ambiguous effect on; increase
 - D) lower; decrease
 - E) raise; increase.
- 19) In the Keynesian model, the difference between using monetary and fiscal policy to eliminate a recession is that
- A) fiscal policy will eliminate a recession quicker than monetary policy will.
 - B) an expansionary monetary policy will leave the economy with a lower real interest rate than an expansionary fiscal policy.
 - C) monetary policy will eliminate a recession quicker than fiscal policy will.
 - D) an expansionary fiscal policy will leave the economy with a lower real interest rate than an expansionary monetary policy.
 - E) none of the above.

- 20) A Keynesian economy is described by the following equations:

$$\begin{aligned}
 C^d &= 250 + 0.5(Y - T) - 250r \\
 I^d &= 250 - 250r \\
 G &= 300 \\
 T &= 300
 \end{aligned}$$

Calculate the equation to the IS curve.

- A) $Y = 800 - 500r$
- B) $Y = 1300 - 500r$
- C) $Y = 1300 - 1000r$
- D) $Y = 1600 - 1000r$
- E) $Y = 1600 - 500r$

- 21) A Keynesian economy is described by the following equations:

$$\begin{aligned} M^d/P &= 0.5Y - 500r \\ M^s &= 3000 \\ P &= 5 \end{aligned}$$

What is the equation to the LM Curve?

- A) $Y = 1200 + 1000r$
 B) $Y = 1200 - 1000r$
 C) $Y = 600 + 500r$
 D) $Y = 600 - 500r$
 E) $Y = 3000 - 500r$

- 22) The following equations describe a Keynesian model of the economy:

$$\begin{aligned} \text{IS curve:} & \quad Y = 1500 - 1000r \\ \text{LM curve:} & \quad Y = 1000 + 1000r \end{aligned}$$

Calculate the values for the equilibrium real interest rate and level of output.

- A) $r = 0.10, Y = 4$
 B) $r = 0.05, Y = 1250$
 C) $r = 0.25, Y = 1250$
 D) $r = 1.25, Y = 2250$
 E) $r = 4, Y = 5000$

- 23) You are given the following information for an economy:

$$\begin{aligned} \text{IS curve:} & \quad Y = 1900 - 400r \\ \text{Money Supply:} & \quad M^s = 3600 \\ \text{Money Demand:} & \quad M^d/P = 0.5Y - 200r \end{aligned}$$

Calculate the equilibrium interest rate and price level if full-employment output equals 1850.

- A) $r = 0.125, P = 4$
 B) $r = 8, P = 5.33$
 C) $r = 9.375, P = 3.79$
 D) $r = 0.125, P = 1.97$
 E) $r = 0.10, P = 1$

- 24) An economic variable that moves in the opposite direction as aggregate economic activity (down in expansions, up in contractions) is called
- A) countercyclical.
 - B) a leading variable.
 - C) procyclical.
 - D) acyclical.
 - E) a lagging variable.
- 25) You observe that in the short run, the price level is unchanged and output rises. Which of the following best explains what happened?
- A) the SRAS curve shifted down.
 - B) the LRAS curve shifted to the right.
 - C) the aggregate demand curve shifted to the right.
 - D) the aggregate demand curve shifted to the right and the SRAS curve shifted down.
 - E) (a), (c) and (d) are true.
- 26) Sun State has the following aggregate demand, and aggregate supply curves,

AD curve: $Y = 1200 - 50P$

SRAS curve: $P = 16$

LRAS curve: $Y = 600$

Which of the following are true?

- A) current output equals 400.
- B) current output equals 600.
- C) the long run price will be $P = 12$.
- D) both (a) and (c) are true.
- E) both (b) and (c) are true.

- 27) The country of Arctic Blast has the following aggregate demand and aggregate supply curves:

AD curve: $Y = 600 - 50P$

SRAS curve: $P = 8$

LRAS curve: $Y = 300$

Now there is an increase in the money supply so that the AD curve shifts to the right by 50 units. Which of the following is true?

- A) output in the short run increases from 200 to 250.
- B) output remains at 300 in the long run for both AD curves.
- C) in order to reach the long run, the SRAS curve must shift down.
- D) After the shift in AD, the long run price increases from $P = 6$ to $P = 7$.
- E) All of the above.

- 28) The classical approach to macroeconomics assumes that

- A) prices, but not wages, adjust quickly to balance quantities supplied and demanded in markets.
- B) wages, but not prices, adjust quickly to balance quantities supplied and demanded in markets.
- C) neither wages nor prices adjust quickly to balance quantities supplied and demanded in markets.
- D) wages and prices adjust quickly to balance quantities supplied and demanded in markets.
- E) the economy will always be in a recession.

- 29) If there is an improvement in productivity, which of the following occurs?

- A) the demand for labour curve shifts to the right.
- B) the marginal product of labour increases.
- C) the real wage increases.
- D) all of the above are true.
- E) none of the above are true.

- 30) In the **expenditure** approach to GDP, which of the following would be **excluded** from measurements of GDP?
- A) government payments for goods produced by foreign firms
 - B) government payments for welfare
 - C) government payments for goods produced by firms owned by state or local governments
 - D) **all** government payments are included in GDP
 - E) none of the above.
- 31) The real interest rate is equal to the
- A) nominal interest rate / inflation rate.
 - B) nominal interest rate - inflation rate.
 - C) nominal interest rate + inflation rate.
 - D) nominal interest rate x inflation rate.
 - E) none of the above.
- 32) If the price level is 100 in 1996 and 105 in ~~1992~~ ¹⁹⁹⁷, the inflation rate is
- A) 5%
 - B) 100%
 - C) 50%
 - D) 105%
 - E) 0.
- 33) A **favourable** supply shock, such as a fall in the price of oil, would
- A) decrease the real wage
 - B) cause the labour demand curve to shift to the left
 - C) increase the marginal product of labour
 - D) cause firms to demand less labour at any given real wage
 - E) decrease the marginal product of labour.
- 34) The country of Timbuktoo is introducing a minimum wage for the first time in its history. It is above the market clearing real wage. The effect is to
- A) reduce the equilibrium real wage.
 - B) shift the labour supply curve to the left.
 - C) reduce the level of output.
 - D) shift the labour demand curve to the right.
 - E) shift the labour supply curve to the right.

- 35) The Ricardian equivalence proposition states that
- A) **any** budget deficit generated by the government has no effect on the economy.
 - B) a budget deficit entirely financed by a current tax cut has not effect on the economy.
 - C) an increase in government spending accompanied by an equivalent increase in taxes has no effect on the economy.
 - D) a budget deficit caused entirely by an increase in government purchases has no effect on the economy.
 - E) none of the above.
- 36) In 1990 your firm's capital stock equalled \$10 million, and in 1991 it equalled \$15 million. The average depreciation rate on your capital stock is 20%. Net investment in 1991 equalled
- A) \$4 million
 - B) \$5 million
 - C) \$3 million
 - D) \$7 million
 - E) \$15 million.
- 37) An increase in the depreciation rate will lead to a(n) _____ in the steady-state capital-labour ratio and a _____ in output per worker.
- A) increase; rise
 - B) decrease; fall.
 - C) increase; fall.
 - D) decrease; rise
 - E) no change in either.

- 38) A country has the following production function

$$Y/N = 6K/N^{0.5}$$

Where Y/N is output per worker and K/N is the capital labour ratio. The depreciation rate is 0.2 and the population growth rate is 0.05. The savings rate is 0.3. Calculate the golden rule level of the capital labour ratio.

- A) 12.
- B) 144
- C) 3.46
- D) 0.75
- E) 0.56

- 39) All of the following are included in the definition of M2+ *except*:
- A) currency in circulation
 - B) currency in the banks.
 - C) personal chequing accounts.
 - D) personal savings accounts.
 - E) all of the above are included in the definition of M2+.
- 40) All of the following lead to an increase in current consumption **except**
- A) an increase in wealth
 - B) an increase in expected future income
 - C) a decrease in taxes if Ricardian equivalence doesn't hold
 - D) an increase in current income
 - E) an increase in the real interest rate.

Happy Holidays!

152 Final Exam
Answer Key.

Dec 99

- | | | |
|-------|---------|---------|
| 1) a | 15) d | 29) d |
| 2) e | 16) e | 30) b |
| 3) c | 17) b | 31) b |
| 4) c | 18) a | 32) a |
| 5) d | 19) b | 33) c |
| 6) d | * 20) c | 34) c |
| 7) c | * 21) a | 35) b |
| 8) c | * 22) c | * 36) b |
| 9) c | * 23) a | 37) b |
| 10) b | 24) a | * 38) b |
| 11) a | 25) c | 39) b |
| 12) a | * 26) d | 40) b |
| 13) a | * 27) e | |
| 14) d | 28) d | |

20) $Y = C + I + G$

21) $\frac{M^s}{P} = \frac{M^d}{P}$

22) set $15 = LM$.

23) Step 1: plug $Y = 1850$ into 15 curveStep 2: set $\frac{M^s}{P} = \frac{M^d}{P}$ plugging in Y & r