

MACROECONOMIC THEORY I  
ECO2142 B  
Fall 2015

Instructor: Francesca Rondina

PRACTICE MIDTERM 1

Name\_\_\_\_\_

Student ID\_\_\_\_\_

This exam is closed book/closed notes.

The use of NONPROGRAMMABLE calculators is permitted. Cellular phones and all other electronic devices must be turned off and put away during the exam.

The exam consists of 25 questions, each worth 4 points for a total of 100 points. Questions 21 – 25 will give you 2 extra points each if answered correctly.

You have 1 hour and 30 minutes to complete the 25 questions.

Good luck!

1. The Government of Canada buys two new BMW cars for official use. The cars are produced in a factory near Munich, Germany. This transaction
  - a. Increases GDP for both Canada and Germany.
  - b. Increases GDP for Germany only.
  - c. Increases GDP for Canada only.
  - d. Does not affect GDP in either Canada or Germany.
  
2. The Government of Canada buys two new BMW cars for official use. The cars are produced in a factory near Munich, Germany. In the National Identity for Canada, in which expenditure group is this transaction recorded?
  - a. In consumption ( $C$ ) and government spending ( $G$ ).
  - b. In investment ( $I$ ) and imports ( $M$ ).
  - c. In government spending ( $G$ ) and in imports ( $M$ ).
  - d. In exports ( $X$ ).
  
3. In 2000, the CPI was 80. If the base year for the CPI is 2010, the overall inflation rate between 2000 and 2010 was:
  - a. 10%
  - b. 25%
  - c. 40%
  - d. we don't have enough information to answer this question.
  
4. This morning Paul purchased \$4,000 worth of shares of a bond fund. The transaction was completed through a financial broker in a TD branch in Ottawa, Canada. The broker charged a fee equal to 1% of the total amount invested. In the National Identity for Canada, which expenditure group was affected by this transaction?
  - a. Consumption ( $C$ ).
  - b. Investment ( $I$ ).
  - c. Government spending ( $G$ ).
  - d. Imports ( $M$ ).
  
5. Assume that the economy is closed. In the Classical model, a decrease in taxes will:
  - a. increase both public saving and private saving.
  - b. increase public saving and decrease private saving.
  - c. decrease public saving and increase private saving.
  - d. decrease both public saving and private saving.
  
6. Assume that the economy is closed. In the Classical model, an increase in government spending will:
  - a. increase national saving and increase the real interest rate.
  - b. increase investment demand and increase the real interest rate.
  - c. decrease public saving and increase the real interest rate.
  - d. decrease private saving and increase the real interest rate.

7. If the production function is  $Y = 5K^{0.6}L^{0.4}$ , the share of income paid to labor is equal to:
- 0
  - 0.4
  - 0.6
  - 5
8. In the Classical model, if the real interest rate increases, the quantity of investment demanded
- will increase.
  - will not change.
  - will decrease.
  - will increase or decrease depending on the magnitude of the change in the real interest rate.
9. Assume that the average marginal propensity to consume in the economy is 0.7. If disposable income increases by \$100,000, private savings will
- increase by \$30,000.
  - increase by \$70,000.
  - increase by \$100,000.
  - decrease by some amount between \$70,000 and \$100,000.
10. Suppose that the marginal productivity of labor is  $MPL = (1 - \alpha)A(K/L)^\alpha$ . What will you observe in the market for labor if a technological advance increases the parameter  $A$ ?
- There will be no change in the market for labor.
  - The demand for labor will shift up.
  - The labor supply will shift to the right.
  - The labor demand will shift down.
11. In the Classical model, the real interest rate:
- is determined in equilibrium in the loanable funds market.
  - is decided by the central bank.
  - is determined in equilibrium in the markets for the factors of production.
  - is computed from the Quantity Equation.
12. If you withdraw \$500 from your savings account and ask your bank to pay you the amount in cash, this will cause:
- M1 to increase and M2 to decrease.
  - M1 to decrease and M2 to stay the same.
  - M1 to increase and M2 to stay the same.
  - M1 to stay the same and M2 to decrease.
13. Which of the following policies could the Bank of Canada implement to increase the money supply?
- An open market purchase of federal government bonds.
  - An increase in the Bank rate.
  - A switch of government deposits away from chartered banks.
  - An open market sale of federal government bonds.

14. If the average reserve-deposit ratio  $rr$  increases:
- the money multiplier will increase.
  - banks will use a larger fraction of their deposits to make loans.
  - people will hold a larger fraction of their money as currency.
  - the money multiplier will decrease.
15. According to the Quantity Equation, if the quantity of money in the economy is \$4 billion and nominal GDP is \$8 billion, the velocity of money is equal to:
- 2
  - 4
  - 8
  - we don't have enough information to answer this question.
16. The price of holding money rather than alternative financial assets is equal to:
- the real rental price of capital.
  - the real interest rate  $r$ .
  - the nominal interest rate  $i$ .
  - the Bank Rate.
17. If the Bank of Canada increases the monetary base by \$2 million and the money multiplier is  $m$ , the money supply will:
- decrease by \$2 million.
  - increase by  $(\$2 \text{ million})/m$ .
  - increase by  $(\$2 \text{ million}) \times m$ .
  - increase by \$2 million.
18. The money demand equation  $M/P = L(i, Y)$  together with the Fisher equation imply that if people expect higher money growth in the future
- the nominal interest rate will increase and the demand for real money balances will increase.
  - the nominal interest rate will increase and the supply of money will fall.
  - the nominal interest rate will increase and the demand for real money balances will decrease.
  - expected inflation will decrease and the nominal interest rate will decrease.
19. An increase in the benefits that workers receive from employment insurance programs
- might decrease the job separation rate and increase the steady-state rate of unemployment.
  - might decrease the job separation rate and decrease the steady-state rate of unemployment.
  - might decrease the job finding rate and decrease the steady-state rate of unemployment.
  - might decrease the job finding rate and increase the steady-state rate of unemployment.
20. Which of the following events or policies would contribute to decrease the Natural rate of unemployment?
- The creation of a new online Government employment agency, which allows unemployed workers to obtain prompt information about openings for jobs that match their skills.
  - An increase in the legal minimum wage.
  - A major sectorial shift caused by technological progress.
  - An increase in the percentage of unionized workers.

21. In 2008, many industrialized countries experienced a decrease in real GDP. However, in the same year the inflation rate measured using the GDP deflator was around 3% in these countries. Which of the following statements is consistent with this information? In 2008
- the GDP deflator was decreasing by around 3% in these countries.
  - real GDP in these countries might have been negative.
  - nominal GDP in these countries might have been increasing.
  - the growth rate of real GDP in these countries was around 3%.
22. Sporty&Co produces a line of t-shirts in its factory in Vancouver that is entirely exported and only sold in stores in the U.S. An increase in the price of these t-shirts would:
- increase the CPI in Canada.
  - increase the GDP deflator in Canada.
  - increase the GDP deflator in the U.S.
  - increase the GDP deflator in Canada and in the U.S.
23. Consider the following production function:  $Y = C + K^{0.6}L^{0.4}$ , where  $C$  is a constant. A change in  $C$  will:
- affect the MPL and MPK.
  - affect the MPL only.
  - affect the MPK only.
  - it will not affect the MPL or the MPK.
24. Assume that firms produce output according to a Cobb-Douglas production function. A major natural disaster significantly reduces the stock of capital in the country, but miraculously does not cause anybody bodily harm. Which of the following will you observe?
- the real rental price of capital and the real wage will both decrease.
  - the real rental price of capital will decrease and the real wage will increase.
  - the real rental price of capital will increase and the real wage will decrease.
  - the real rental price of capital and the real wage will both increase.
25. The equilibrium real wage in the labor market for plastic surgeons is \$120 per hour. If the government increases the minimum wage to \$10 per hour
- plastic surgeons will experience an increase in structural unemployment.
  - plastic surgeons will experience a decrease in frictional unemployment.
  - there will be some plastic surgeons available to work but not working at the current real wage.
  - nothing will happen in the labor market for plastic surgeons.

## Answers

1. b
2. c
3. b
4. a
5. c
6. c
7. b
8. c
9. a
10. b
11. a
12. c
13. a
14. d
15. a
16. c
17. c
18. c
19. d
20. a
21. c
22. b
23. d
24. c
25. d