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BPE_MAC1 Macroeconomics 1 – Spring Semester 2011

Midterm Exam - 08.04.2011, 10:30-11:30 Test B

Guidelines and Rules:
1. The test setup has 4 pages. It is your responsibility to check that you have all the pages.
2. The time limit is 60 minutes.
3. The exam is worth 30 points.
4. You are NOT allowed to use any books or notes.
5. Any violation of academic honesty will be punished to the fullest extent possible.
6. At most one exam-taker is allowed to be outside the room at one time.
7. When ready, **submit** the filled setup sheet with **your name** written on the first page.

Completion

Complete each statement.

1. The deviation of the unemployment rate from its natural rate represents _________________ .
2. According to the theory of ___________________ a unit of a country's currency should buy the same quantity of goods in all countries
3. Risk that affects only a single economic agent is ____________________ .
4. The group of financial institutions through which savers can indirectly lend to borrowers are called ________________ while the ones through which savers can lend directly to borrowers are called ________________ .
5. The practice of a government raising revenue by printing money is known as _________________ .
6. Sectoral shifts in demand for output create __________________ and minimum-wage laws sustain _________________ .
7. ___________________ shows the amount of money today that would be needed to produce a required future amount of money at the prevailing interest rate.
8. _________________ are expenditures by government for which they receive no goods or services
9. The rate at which money circulates is measured by ________________ .
10. When used to purchase goods and services money perform its functon of _________________.

Multiple Choice

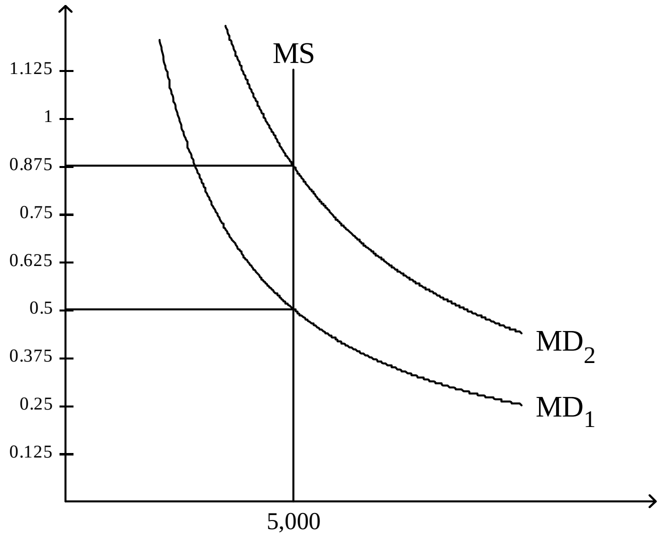
Identify the choice that best completes the statement or answers the question.

____ 11. Which of the following is a correct way to measure productivity?
   a. Divide the quantity of output by the number of hours worked.
   b. Divide the change in the quantity of output by the change in the number of hours worked.
   c. Divide the quantity of output by the quantity of physical capital.
   d. Divide the number of hours worked by the quantity of output.

____ 12. The market basket used to calculate the CPI in Aquilonia is 4 loaves of bread, 6 gallons of milk, 2 shirts, and 2 pairs of pants. In 2005, bread cost $1.00 per loaf, milk cost $1.50 per gallon, shirts cost $6.00 each, and pants cost $10.00 per pair. In 2006, bread cost $1.50 per loaf, milk cost $2.00 per gallon, shirts cost $7.00 each, and pants cost $12.00 per pair. Using 2005 as the base year, what was Aquilonia's inflation rate in 2006?

a. 19.6 percent
b. 24.4 percent
c. 4 percent
d. 11 percent

____ 13. **Figure 30-2**. On the graph, MS represents the money supply and MD represents money demand. The usual quantities are measured along the axes.



Refer to Figure 30-2. If the relevant money-demand curve is the one labeled MD_1, then the equilibrium value of money is

a. 0.5 and the equilibrium price level is 2.
b. 2 and the equilibrium price level cannot be determined from the graph.
c. 0.5 and the equilibrium price level cannot be determined from the graph.
d. 2 and the equilibrium price level is 0.5.

____ 14. **Refer to Figure 30-2**. Suppose the relevant money-demand curve is the one labeled MD_1; also suppose the velocity of money is 3. If the money market is in equilibrium, then the economy's real GDP amounts to

a. 7,500.
b. 5,000.
c. 10,000.
d. 15,000.

____ 15. If the U.S. government imposes a quota on toy imports, then net exports of U.S. toys would

a. rise, not change, or fall depending on what happened to the exchange rate.
b. not change.
c. fall.
d. rise.

____ 16. Suppose the U.S. offered a tax credit for firms that built new factories in the U.S.. Then

a. the demand for loanable funds would shift rightward, initially creating a shortage of loanable funds at the original interest rate.
b. the demand for loanable funds would shift rightward, initially creating a surplus of loanable funds at the original interest rate.
c. the supply of loanable funds would shift rightward, initially creating a surplus of loanable funds at the original interest rate.
d. the supply of loanable funds would shift rightward, initially creating a shortage of loanable funds at the original interest rate.

____ 17. Imagine that someone offers you $*X* today or $1,500 in 5 years. If the interest rate is 6 percent, then you would prefer to take the $*X* today if and only if

a. $X > 1{,}338.26$.
b. $X > 1{,}055.56$.
c. $X > 1{,}120.89$.
d. $X > 1{,}213.33$.

____ 18. If an economy's GDP rises, then it must be the case that the economy's

a. income rises and expenditure falls.
b. income and saving both rise.
c. income and expenditure both rise.
d. income rises and saving falls.

____ 19. Suppose you put $500 into a bank account today. Interest is paid annually and the annual interest rate is 5.5 percent. The future value of the $500 is

a. $653.48 after 5 years and $854.07 after 10 years.
b. $688.36 after 5 years and $915.56 after 10 years.
c. $637.50 after 5 years and $775.00 after 10 years.
d. $637.50 after 5 years and $822.09 after 10 years.

____ 20. If real GDP doubles and the GDP deflator doubles, then nominal GDP

a. triples.
b. remains constant.
c. quadruples.
d. doubles.

____ 21. Consider two countries. Country A has a population of 1,000, of whom 800 work 8 hours a day to make 128,000 final goods. Country B has a population of 2,000, of whom 1,800 work 6 hours a day to make 270,000 final goods.

a. Country A has higher productivity and higher real GDP per person than country B.
b. Country A has lower productivity and lower real GDP per person than country B.
c. Country B has lower productivity, but higher real GDP per person than country B.
d. Country A has higher productivity, but lower real GDP per person than country B.

____ 22. To compute GDP, we

a. add up the wages paid to all workers.
b. take the difference between the market values of all final goods and services and the costs of producing those final goods and services.
c. add up the costs of producing all final goods and services.
d. add up the market values of all final goods and services.

____ 23. A rise in the budget deficit

a. shifts both the demand for loanable funds in the market for loanable funds and the demand for dollars in the market for foreign-currency exchange right.
b. shifts both the demand for loanable funds in the market for loanable funds and the demand for dollars in the market for foreign-currency exchange left.
c. shifts both the supply of loanable funds in the market for loanable funds and the supply of dollars in the market for foreign-currency exchange right.
d. shifts both the supply of loanable funds in the market for loanable fund and the supply of dollars in the market for foreign-currency exchange left.

____ 24. Assuming the market for loanable funds is in equilibrium, use the following numbers to determine the quantity of loanable funds supplied.

GDP	$8.7 trillion
Consumption Spending	$3.5 trillion
Taxes Net of Transfers	$2.7 trillion
Government Purchases	$3.0 trillion

a. $2.5 trillion
b. $5.2 trillion
c. $2.2 trillion
d. $3.9 trillion

____ 25. In the economy of Wrexington in 2008, nominal GDP was $20 billion and the GDP deflator was 50. What was Wrexington's real GDP in 2008?

a. $2.5 billion
b. $10 billion
c. $40 billion
d. $100 billion

____ 26. Suppose a basket of goods and services has been selected to calculate the CPI and 2004 has been selected as the base year. In 2002, the basket's cost was $50; in 2004, the basket's cost was $52; and in 2006, the basket's cost was $54.60. The value of the CPI in 2006 was

a. 105.0.
b. 91.6.
c. 109.2.
d. 95.2.

____ 27. In an open economy, national saving equals

a. net capital outflow.
b. domestic investment plus net capital outflow.
c. domestic investment minus net capital outflow.
d. domestic investment.

____ 28. ***Table 28-2***

2009 Labor Data for Wrexington

Number of adults	20,000
Number of adults who are paid employees	8,000
Number of adults who work in their own businesses	1,600
Number of adults who are unpaid workers in a family member's business	1,000
Number of adults who were temporarily absent from their jobs because of an earthquake	400
Number of adults who were waiting to be recalled to a job from which they had been laid off	200
Number of adults who do not have a job, are available for work, and have tried to find a job within the past four weeks	1,400
Number of adults who do not have a job, are available for work, but have not tried to find a job within the past four weeks	780
Number of adults who are full-time students	3,000
Number of adults who are homemakers or retirees	3,620

Refer to Table 28-2. How many people were unemployed in Wrexington in 2009?

a. 2,780
b. 1,600
c. 2,000
d. 1,400

____ 29. **Refer to Table 28-2.** How many people were in Wrexington's labor force in 2009?

a. 20,000
b. 13,380
c. 12,600
d. 11,000

____ 30. Your financial advisor tells you that if you earn the historical rate of return on a certain mutual fund, then in three years your $20,000 will grow to $23,152.50. What rate of interest does your financial advisor expect you to earn?

a. 6 percent
b. 8 percent
c. 7 percent
d. 5 percent

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Answer Section

COMPLETION

1. ANS: cyclical unemployment

   PTS: 1
2. ANS: purchasing-power parity

   PTS: 1
3. ANS: idiosyncratic risk

   PTS: 1
4. ANS: financial intermediaries; financial markets

   PTS: 1
5. ANS: inflation tax

   PTS: 1
6. ANS: frictional unemployment; structural unemployment

   PTS: 1
7. ANS: present value

   PTS: 1
8. ANS: transfer payments

   PTS: 1
9. ANS: velocity of money

   PTS: 1
10. ANS: medium of exchange

    PTS: 1

MULTIPLE CHOICE

11. ANS: A PTS: 1 DIF: 1 REF: 25-2
    TOP: Productivity MSC: Definitional
12. ANS: B PTS: 1 DIF: 2 REF: 24-1
    TOP: Inflation rate MSC: Applicative
13. ANS: A PTS: 1 DIF: 1 REF: 30-1
    TOP: Money market | Price level MSC: Applicative
14. ANS: A PTS: 1 DIF: 2 REF: 30-1
    TOP: Velocity of money | Real GDP MSC: Applicative
15. ANS: D PTS: 1 DIF: 2 REF: 32-3
    TOP: Import quotas | Net exports MSC: Applicative
16. ANS: A PTS: 1 DIF: 2 REF: 26-3
    TOP: Investment tax credit | Market for loanable funds MSC: Applicative

17. ANS: C PTS: 1 DIF: 3 REF: 27-1
TOP: Present value MSC: Applicative
18. ANS: C PTS: 1 DIF: 2 REF: 23-1
TOP: Income | Expenditure MSC: Interpretive
19. ANS: A PTS: 1 DIF: 2 REF: 27-1
TOP: Future value MSC: Applicative
20. ANS: C PTS: 1 DIF: 2 REF: 23-4
TOP: Nominal GDP MSC: Applicative
21. ANS: B PTS: 1 DIF: 2 REF: 25-2
TOP: Productivity | Real GDP MSC: Applicative
22. ANS: D PTS: 1 DIF: 2 REF: 23-2
TOP: GDP MSC: Interpretive
23. ANS: D PTS: 1 DIF: 2 REF: 32-3
TOP: Budget deficits | Market for loanable funds | Market for foreign-currency exchange
MSC: Applicative
24. ANS: C PTS: 1 DIF: 2 REF: 26-3
TOP: Market for loanable funds MSC: Applicative
25. ANS: C PTS: 1 DIF: 2 REF: 23-4
TOP: Real GDP MSC: Applicative
26. ANS: A PTS: 1 DIF: 2 REF: 24-1
TOP: CPI MSC: Applicative
27. ANS: B PTS: 1 DIF: 1 REF: 32-1
TOP: National saving MSC: Definitional
28. ANS: B PTS: 1 DIF: 2 REF: 28-1
TOP: Unemployment MSC: Applicative
29. ANS: C PTS: 1 DIF: 2 REF: 28-1
TOP: Labor force MSC: Applicative
30. ANS: D PTS: 1 DIF: 2 REF: 27-1
TOP: Future value MSC: Applicative