

Name:
ID:

Department of Economics
Iowa State University
Principles of Macroeconomics
Spring 2011, Midterm 2

Do Not Open This Booklet Until Told To Do So.

Directions:

- Print your name and University ID number on this page
- Fill in your name, birth date, and ID on the bubble sheet, and write the exam version at the top of the bubble sheet. The exam version is listed at the bottom of the page.
- Answer multiple choice questions on the bubble-sheet, and answer the rest of the questions in this book.
- There are 55 points total on the exam.

Multiple Choice Questions: 2 points each. Please answer on your bubble sheet.

1. If in an open economy, a country imports more than it exports and the government budget deficit increases:
 - A) interest rates will increase, but the change in borrowing is ambiguous.
 - B) the change in interest rates is ambiguous, but the amount of borrowing will increase.
 - C) interest rates will decrease and the amount of borrowing will increase.
 - D) interest rates will increase and the amount of borrowing will increase.

2. Long-run economic growth will be sustainable:
 - A) if it can continue in spite of the limited supply of natural resources and the impact of growth on environment.
 - B) as the natural resource scarcity and other environmental issues are not really as serious as they seem.
 - C) as there are plenty of natural resources still left and these can be consumed in the future.
 - D) because pollution and urban sprawl are not real problems.

3. Among financial intermediaries are all of the following except:
 - A) insurance companies.
 - B) mutual funds.
 - C) the New York Stock exchange.
 - D) pension funds.

4. The budget balance is equal to:
 - A) imports minus exports.
 - B) consumption plus investment.
 - C) taxes plus government spending.
 - D) taxes minus government spending.

5. Human capital refers to:
 - A) funds available for investment spending.
 - B) changes in inventories.
 - C) spending on physical capital such as machines which aid workers.
 - D) changes in the level of education or training which workers possess.

6. All of the following impacts consumer spending EXCEPT:

- A) past disposable income.
- B) expected future disposable income.
- C) wealth.
- D) current disposable income.

7. Planned investment spending:

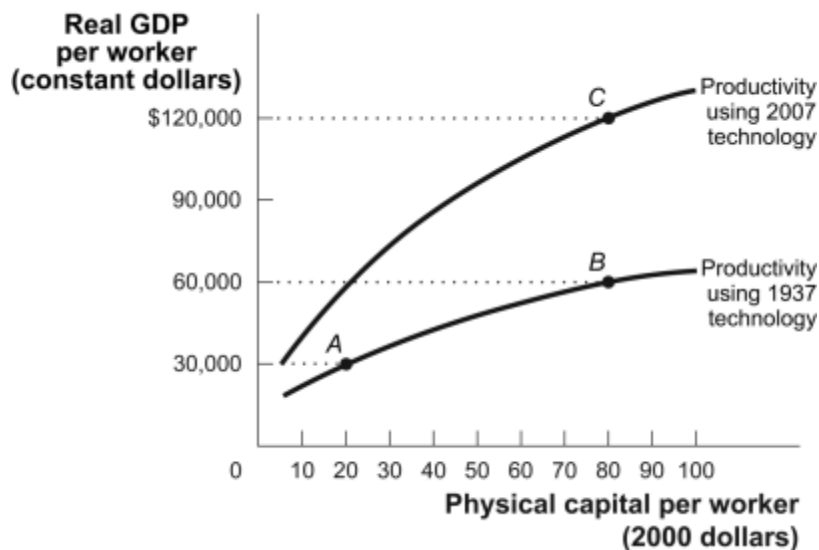
- A) moves in the same direction as does the market interest rate.
- B) is positively related to the interest rate.
- C) is negatively related to the interest rate.
- D) is independent of the interest rate.

8. If private savings increase:

- A) the supply of loanable funds will decrease, interest rates will increase, and the amount of borrowing will decrease.
- B) the supply of loanable funds will increase, interest rates will decrease, and the amount of borrowing will increase.
- C) the demand for loanable funds will increase, interest rates will increase, and the amount of borrowing will increase.
- D) the demand for loanable funds will decrease, interest rates will decrease, and the amount of borrowing will decrease.

Use the following to answer question 9:

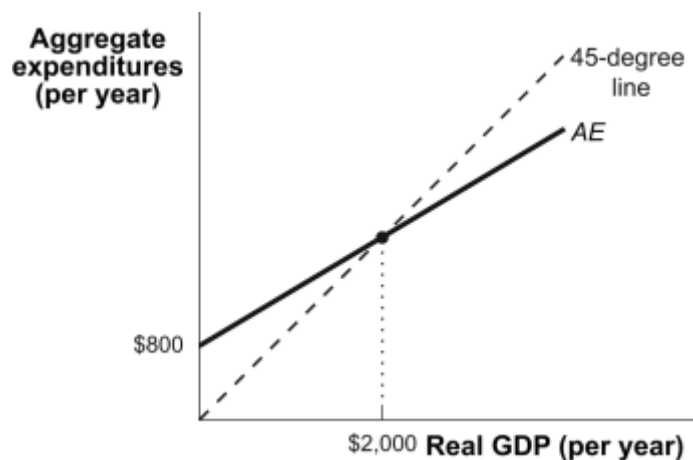
Figure: Technological Progress and Productivity Growth



9. (Figure: Technological Progress and Productivity Growth) Which of the following moves could have resulted from an increase in foreign investment spending?
- A) B to A
 - B) B to C
 - C) A to B
 - D) both A to B and B to C

Use the following to answer questions 10-12:

Figure: Aggregate Expenditures Curve II



10. (Figure: Aggregate Expenditures Curve II) The slope of the aggregate expenditures curve in the aggregate expenditures model shown in this figure is:
- A) 0.6.
 - B) 45° .
 - C) 0.5.
 - D) 0.25.
11. (Figure: Aggregate Expenditures Curve II) The equilibrium level of real GDP in the aggregate expenditures model shown in this figure is:
- A) \$1,000.
 - B) \$4,000.
 - C) \$800.
 - D) \$2,000.

12. (Figure: Aggregate Expenditures Curve II) Suppose that the consumption function in this figure rises by \$100. In the aggregate expenditures model shown here, the result would be an increase in the equilibrium level of real GDP of:
- A) \$200.
 - B) \$50.
 - C) \$100.
 - D) \$100 times the multiplier.

Use the following to answer questions 13-15:

Use this scenario to answer questions 33–36.

Scenario: Growth Rates

Suppose that the current real GDP per capita of the United States is \$32,000, and its growth rate is 2% per year. Assume that the real GDP per capita of China is \$4000, and its annual growth rate is 7%.

13. (Scenario: Growth Rates) How many years will it take for China's real GDP per capita to be larger than real GDP per capita in the United States?
- A) between 15 and 20 years
 - B) China's real GDP per capita will never be larger than that of the United States because the United States has superior technology and the best educated labor force in the world.
 - C) between 40 and 45 years
 - D) between 70 and 75 years
14. (Scenario: Growth Rates) How long will it take the real GDP per capita of the United States to double?
- A) 2.25 years
 - B) 35 years
 - C) 14 years
 - D) 50 years
15. (Scenario: Growth Rates) Using the rule of 70, how large will China's real GDP per capita be in 20 years?
- A) \$8,000
 - B) \$28,000
 - C) \$5,600
 - D) \$16,000

16. During the 1990s:
- A) low oil prices encouraged consumers to buy larger cars and SUVs that were generally less fuel efficient.
 - B) low oil prices led to decreases in real GDP.
 - C) high oil prices encouraged consumers to buy smaller, fuel-efficient cars.
 - D) high oil prices encouraged the development of alternative energy sources.

Use the following to answer question 17:

Scenario: Consumption Spending

Suppose that the consumption function is: $C = \$500 + 0.8 \times YD$ where YD is disposable income.

17. (Scenario: Consumption Spending) If disposable income is \$1000, saving is:
- A) -\$300.
 - B) \$300.
 - C) \$1300.
 - D) -\$500.
18. The Accelerator Principle states that:
- A) investment spending by the firms is positively related to the current level of real GDP.
 - B) investment spending by the firms is positively related to the expected future growth of real GDP.
 - C) investment spending by the firms is negatively related to the expected future growth of real GDP.
 - D) investment spending by the firms is negatively related to the current level of real GDP.
19. Efficient market hypothesis states that:
- A) at any time stock prices are fairly valued reflecting all currently available information.
 - B) stock prices move irrationally and rather unpredictably.
 - C) stock prices are easily manipulated by irrational exuberance.
 - D) stock prices fluctuate following the path of business cycles.
20. The convergence hypothesis is:
- A) not wrong but the poor nations are involved in so many destabilizing incidents like wars, disease, famines etc., they would never be able to catch up with the rest of

the world.

- B) wrong because the poorer nations seem to get worse over time and the richer nations get better.
- C) not wrong but education, infrastructure and rule of law are not equal among nations, after adjusting for these differences all the nations show reasonable growth.
- D) wrong because the Latin American and African countries have not been able to grow.

The next questions are from your homework. Answer in the space provided. Please give short answers and use complete sentences. If you do not explain your answer it will be marked wrong, even if you write down a correct number.

1. In an economy with no government and no foreign sectors, autonomous consumer spending is \$250 billion, planned investment spending is \$350 billion, and the marginal propensity to consume is $2/3$. **(1 point each)**
 - a. Plot the aggregate consumption function and planned aggregate spending.
 - b. What is unplanned inventory investment when real GDP equals \$600 billion?
 - c. What is Y^* , income–expenditure equilibrium GDP?
 - d. What is the value of the multiplier?
 - e. If planned investment spending rises to \$450 billion, what will be the new Y^* ?

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Answer Key

1. B
2. A
3. C
4. D
5. D
6. A
7. C
8. B
9. D
10. A
11. D
12. D
13. C
14. B
15. D
16. A
17. A
18. B
19. A
20. C