# MACROECONOMICS
Section I
Time—70 minutes
60 Questions
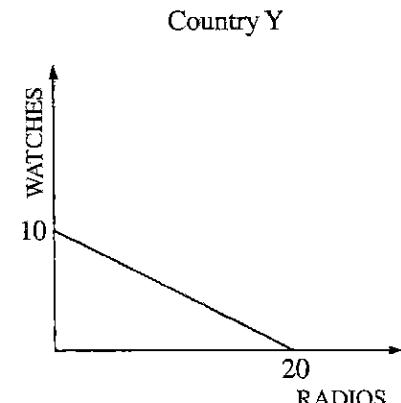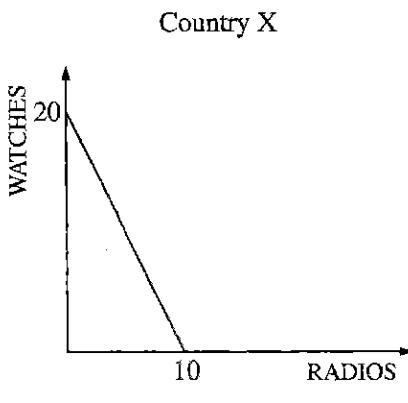
Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case and then fill in the corresponding oval on the answer sheet.

1. Economic growth is best defined as

   (A) a reduction in the infant mortality rate
   (B) a decrease in the unemployment rate
   (C) an increase in the labor force participation rate
   (D) a short-run increase in gross domestic product without inflation
   (E) a sustained increase in real gross domestic product per capita

2. The price of one nation's currency expressed in terms of another nation's currency is called

   (A) the world price
   (B) the exchange rate
   (C) the law of one price
   (D) terms of trade
   (E) purchasing-power parity


Country X   Country Y

3. Using equal amounts of labor hours, Country X and Country Y can each produce the number of watches and radios shown in the production possibilities curves above. Based on the information, which of the following is true?
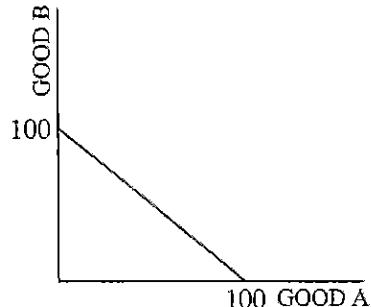
   (A) Country X has an absolute advantage in the production of both watches and radios and a comparative advantage in the production of watches.
   (B) Country Y has an absolute advantage in the production of both watches and radios and a comparative advantage in the production of radios.
   (C) Countries X and Y can engage in a mutually advantageous trade by exchanging 1 watch for 1 radio.
   (D) Country Y is willing to give up 2 watches in exchange for 1 radio from Country X.
   (E) Country X is willing to give up 2 radios in exchange for 1 watch from Country Y.

GO ON TO THE NEXT PAGE.

4. If a worker's nominal wage rate increases from $10 to $12 per hour and at the same time the general price level increases by 10 percent, the worker's real wage has

   (A) approximately decreased by 10%
   (B) approximately decreased by 20%
   (C) approximately increased by 10%
   (D) approximately increased by 20%
   (E) not changed

5. Which of the following is an example of fiscal policy?

   (A) Increasing government expenditures to build highways
   (B) Increasing the money supply to increase income
   (C) Decreasing the discount rate to lower unemployment and inflation
   (D) Decreasing the federal funds rate to stimulate investment
   (E) Decreasing the reserve ratio to increase bank reserves

6. The Federal Reserve can cause an increase in interest rates in an attempt to

   (A) reduce inflation
   (B) reduce cyclical unemployment
   (C) reduce structural unemployment
   (D) increase aggregate demand
   (E) increase investment spending

7. The value of which of the following is counted in the United States gross domestic product?

   (A) Clean air
   (B) Child care a father provides for his child
   (C) An automobile produced in Sweden by a United States firm
   (D) A car produced in the United States and sold in Europe
   (E) Medical services not provided due to preventative health care

8. Aggregate demand may be measured by adding

   (A) consumption, investment, savings, and imports
   (B) savings, government spending, and business inventories
   (C) consumption, investment, government spending, and net exports
   (D) domestic private expenditures and government spending
   (E) domestic expenditures and imports

9. According to the short-run Phillips curve, a decrease in unemployment is expected to be accompanied by

   (A) higher labor-force participation
   (B) an increase in inflation
   (C) an increase in the productivity of capital
   (D) an increase in the government deficit
   (E) a decrease in real gross domestic product

10. If labor costs rise in the automobile industry, which of the following will happen to car prices and the quantity of cars sold?

	Price	Quantity Sold
(A)	Decrease	Decrease
(B)	Decrease	Increase
(C)	Increase	Decrease
(D)	Increase	Increase
(E)	Increase	Not change

11. The annual inflation rate is expected to be 5 percent over the next 3 years. Juan plans to take out a 3-year loan to purchase an automobile. If Juan decides not to take out the loan if the real interest rate exceeds 3 percent, the highest nominal interest rate he is willing to pay is

   (A) 2 percent
   (B) 3 percent
   (C) 8 percent
   (D) 15 percent
   (E) 25 percent

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12. Which of the following is true about the national debt of the United States?

    (A) It is the debt owed to foreign investors.
    (B) It is the accumulation of past and current budget deficits and surpluses.
    (C) It increases when gross domestic product increases.
    (D) It increases when exports decrease, and decreases when exports increase.
    (E) It did not exist before 1980.

13. Which of the following most undermines the ability of a nation's currency to store value?

    (A) A decrease in the purchasing power of the currency
    (B) The use of credit and debit cards as mediums of exchange
    (C) An increase in the prices of federal bonds
    (D) Appreciation of the currency in the international money market
    (E) An increase in the supply of foreign currencies in the international money market

14. Assume that the inflation rate in Country X is very high relative to the inflation rates in all of its trading partners. Which of the following is likely to happen to Country X's currency on the foreign exchange market?

    (A) The demand curve for the currency will shift to the right, and the currency will appreciate.
    (B) The demand curve for the currency will shift to the left, and the currency will depreciate.
    (C) The supply curve for the currency will shift to the left, and the currency will appreciate.
    (D) The supply curve for the currency will shift to the left, and the currency will depreciate.
    (E) There will be no shift in the demand curve for the currency, but the currency will depreciate.

15. Comparative advantage implies that

    (A) no country should specialize completely in the production of any one good
    (B) every country should try to export more than it imports
    (C) developing countries should import raw materials and export manufactured goods
    (D) two countries should benefit from trade unless both have equal opportunity costs in every good
    (E) countries should impose tariffs to protect their domestic industries

16. If the velocity of money is stable, the quantity theory of money predicts that an increase in the money supply will lead to a proportional

    (A) increase in the nominal output
    (B) decrease in the price level
    (C) decrease in the nominal interest rate
    (D) decrease in the real interest rate
    (E) decrease in the unemployment rate

17. The diagram below shows a linear production possibilities curve for a country.

If the economy is currently producing 10 units of good A and 90 units of good B, the opportunity cost of increasing the production of good A from 10 units to 20 units is how many units of good B?

    (A) 0.5
    (B) 1
    (C) 5
    (D) 10
    (E) 20

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Item 18 was not scored.

19. Which of the following is most likely to occur when the Federal Reserve buys government bonds on the open market?

    (A) The demand for money will decrease.
    (B) The government's debt will decrease.
    (C) Interest rates will decrease.
    (D) The discount rate will increase.
    (E) Investment demand will decrease.

20. An industry historically used employees with specific skills. If this industry experiences technological advances that require new skills, there will most likely be

    (A) cyclical unemployment
    (B) frictional unemployment
    (C) seasonal unemployment
    (D) structural unemployment
    (E) no change in unemployment

21. If marginal business tax rates are decreased, how will aggregate supply and employment change in the long run?

	Aggregate Supply	Employment
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Decrease	Increase
(D)	Decrease	Decrease
(E)	Not change	Increase

22. Which of the following would cause the official unemployment rate to understate the problem of unemployment?

    (A) Workers receiving unemployment compensation
    (B) Cyclically unemployed workers
    (C) Discouraged workers
    (D) Recent college graduates looking for work
    (E) Retirees

23. Which of the following actions by the Federal Reserve reduces the ability of the banking system to create money?

    (A) Decreasing the federal funds rate
    (B) Decreasing the discount rate
    (C) Increasing the money supply
    (D) Increasing the reserve requirement
    (E) Buying government bonds on the open market

24. An increase in the international value of the United States dollar will tend to cause

    (A) United States exports to fall
    (B) the national income of the United States to increase
    (C) employment in the manufacturing sector of the United States to increase
    (D) the inflation rate in the United States to increase
    (E) the growth rate of the United States economy to increase

25. Which of the following statements about the simple circular flow model of a market economy is correct?

    (A) Households are on the demand side of the product market and the supply side of the resource market.
    (B) Business firms are on the supply side of both the product market and the resource market.
    (C) Households receive income in the form of wages, and business firms receive income in the form of investment.
    (D) Exports and investment expenditures are examples of leakage from the circular flow, whereas imports and savings are injections.
    (E) Circular flow models are used primarily to explain why money is necessary in any economic system.

26. Which of the following government policies can reduce the rate of inflation in the short run?

    (A) Providing investment tax credits for businesses
    (B) Reducing personal income tax rates
    (C) Selling bonds on the open market
    (D) Decreasing the reserve requirement
    (E) Decreasing the discount rate

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27. Crowding out occurs when

(A) increases in government spending become ineffective because tax revenues increase as income increases
(B) government borrowing to finance its spending decreases private sector investment
(C) monetary policy actions decrease the effectiveness of fiscal policy
(D) restrictive monetary policy causes the interest rate to increase
(E) government spending and private sector spending increase by the same percentage rate

28. Which of the following is true of a horizontal aggregate supply curve?

(A) It is the usual assumption made by classical economists analyzing the long run.
(B) It suggests that increases in output can occur without increases in price levels.
(C) It suggests that a shift in the aggregate demand curve will lead to a change in the price level.
(D) It is likely to occur only in highly industrialized economies.
(E) It cannot shift, therefore output remains constant.

29. Which of the following individuals is classified as unemployed?

(A) A fifteen-year-old high school student who is looking for a babysitting job
(B) A laid-off computer programmer who has given up looking for a new job
(C) A parent who works in an after-school day care center for 15 hours a week
(D) A recent college graduate who is looking for her first job
(E) A mayor who lost an election and retired

30. If an effective price floor is removed from a market for a good, then the price and quantity of the good sold will change in which of the following ways?

	Price	Quantity
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Decrease	Increase
(D)	Decrease	Decrease
(E)	No change	Increase

31. When the Federal Reserve increases the money supply to stimulate aggregate demand, workers believe that this action will cause inflation in the future and ask for higher wages to offset the expected increase in inflation. This is an example of

(A) adaptive expectations
(B) rational expectations
(C) the velocity of money
(D) the real balance effect
(E) the money multiplier

32. Which of the following would be included as a liability on a commercial bank's balance sheet?

(A) Consumer loans
(B) Demand deposits
(C) Net worth
(D) Bank reserves
(E) Treasury bonds

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33. Which of the following statements best describes the impact of a decrease in Japanese income on aggregate demand in the United States?

    (A) There will be no change in aggregate demand because United States aggregate demand depends only on the income of United States consumers.
    (B) Aggregate demand will decrease because the demand for United States exports decreases.
    (C) Aggregate demand will decrease because the value of the United States dollar decreases relative to the Japanese yen.
    (D) Aggregate demand will increase because a decrease in income in Japan causes an increase in income in the United States.
    (E) Aggregate demand will increase because interest rates in the United States decrease.

34. Suppose that the Federal Reserve is committed to keeping the nominal interest rate fixed. To maintain the interest rate target in the face of an expansionary fiscal policy, the Federal Reserve can do which of the following?

    (A) Increase the prime rate
    (B) Increase the discount rate
    (C) Increase the federal funds rate
    (D) Engage in open-market purchases
    (E) Engage in open-market sales

35. Which of the following is true of the quantity of money demanded?

    (A) It rises when interest rates rise, because the return from holding money increases.
    (B) It falls when interest rates rise, because the opportunity cost of holding money increases.
    (C) It remains constant when interest rates rise, as long as inflation remains constant.
    (D) It rises when interest rates rise, as long as inflation is declining.
    (E) It falls when the money supply increases, as long as inflation remains constant.

36. Which of the following would be a current account transaction?

    (A) India buys $10 billion of new United States Treasury bonds.
    (B) A United States firm buys 5 percent of the stock of another United States firm.
    (C) A United States firm builds a new factory in Kenya.
    (D) A United States firm sells $500 million of its products to a Chinese company.
    (E) The United States buys $8 billion worth of euros.

37. Which of the following will most likely occur if a government adopts an annually balanced budget rule that requires the government to eliminate any deficits or surpluses?

    (A) Unemployment will be eliminated and prices will be stable.
    (B) The national debt will increase.
    (C) Business cycles will become more stable.
    (D) The automatic stabilizing effect of fiscal policy will be eliminated.
    (E) The government will be forced to spend less when there are surpluses.

38. Which of the following changes would cause an economy's aggregate demand curve to shift to the right?

    (A) An increase in spending on imports
    (B) An increase in autonomous consumption spending
    (C) An increase in interest rates
    (D) A decrease in the money supply
   (E) A decrease in the overall price level in the economy

39. In the measurement of gross domestic product, investment includes spending by

(A) businesses on capital goods and changes in inventories
(B) businesses on stocks, bonds, and other financial assets
(C) individual households on stocks, bonds, and other financial assets
(D) the federal government to purchase bonds issued by the Federal Reserve
(E) the Federal Reserve to buy government bonds

40. Which of the following statements concerning economic growth is true?

(A) If the population is growing faster than potential output, real gross domestic product per capita will definitely increase.
(B) With long-run economic growth, there is an increase in aggregate supply.
(C) The gap between rich and poor must widen with long-run economic growth.
(D) Increasing potential output necessarily increases the economic welfare of the ·average citizen.
(E) Long-run economic growth is only possible with demand management policies.

41. If the economy was in a severe recession, the most expansionary fiscal policy would be to

(A) decrease both personal income taxes and government spending by equal amounts
(B) decrease both the reserve requirement and government spending by the same proportion
(C) decrease personal income taxes and increase government spending by equal amounts
(D) increase the money supply and increase government spending by the same proportion
(E) increase social security taxes and increase government spending by equal amounts

42. Which of the following would best explain an inward shift of the production possibilities curve?

(A) An increase in the labor-force participation rate
(B) An increase in the rate of savings
(C) A decrease in the quantity of inputs required to produce a unit of output
(D) A decrease in the quality of human capital
(E) A decrease in the government's budget deficit that leads to lower real interest rates

43. Assume that the economy is in equilibrium. If aggregate demand increases, nominal interest rates and bond prices will most likely change in which of the following ways?

Nominal Interest Rates	Bond Prices
(A) Increase	Increase
(B) Increase	Decrease
(C) Increase	Not change
(D) Decrease	Increase
(E) Decrease	Decrease

44. Which of the following would most likely stimulate economic growth?

(A) Decreased savings
(B) Decreased wages
(C) Increased transfer payments
(D) Increased personal income taxes
(E) Technological progress

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45. If a French firm buys computers from the United States, there would be an increase in which of the following in the foreign exchange market?

   (A) Demand for United States dollars and supply of euros
   (B) Demand for both United States dollars and euros
   (C) Supply of United States dollars and demand for euros
   (D) Supply of both United States dollars and euros
   (E) International value of the euro relative to the United States dollar

46. If the Federal Reserve pursues a contractionary monetary policy, output and the price level will change in which of the following ways in the short run?

	Output	Price Level
(A)	Increase	Increase
(B)	Increase	No change
(C)	Increase	Decrease
(D)	Decrease	Decrease
(E)	Decrease	Increase

47. If the nominal gross domestic product (GDP) of the nation of Hypothetica increased in 2007 relative to the previous year, it must be true that in Hypothetica in 2007

   (A) both the price level and the real GDP have increased
   (B) neither the price level nor the real GDP has increased
   (C) the price level increased by a larger percentage than did the real GDP
   (D) the price level increased by a smaller percentage than did the real GDP
   (E) the price level and/or the real GDP has increased

48. A decrease in the prices of inputs will cause which of the following to occur in the short run?

   (A) An increase in the aggregate demand and an increase in the price level
   (B) A decrease in the aggregate demand and an increase in the price level
   (C) An increase in the short-run aggregate supply and a decrease in the price level
   (D) An increase in the short-run aggregate supply and an increase in the price level
   (E) A decrease in the short-run aggregate supply and a decrease in the price level

49. Which of the following best describes human capital?

   (A) The number of workers in the labor force
   (B) The physical capital used by workers
   (C) The financial assets owned by workers
   (D) The training and education of workers
   (E) The spending by business for worker recruitment

50. Which of the following is an example of foreign direct investment?
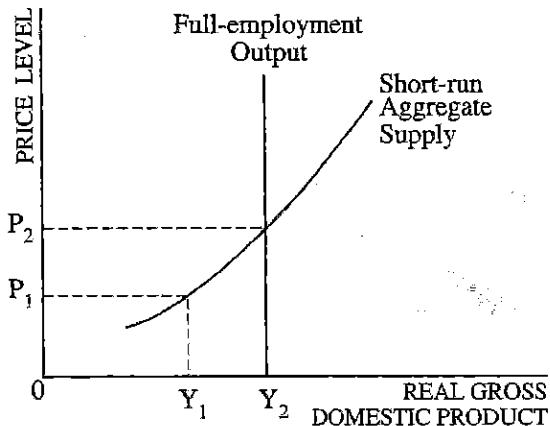
   (A) A United States automobile manufacturer building a steel plant in Russia
   (B) A United States citizen purchasing corporate bonds issued by a French manufacturing firm
   (C) A Mexican citizen purchasing United States Treasury bills
   (D) The Federal Reserve purchasing Japanese yen
   (E) Immigrant workers in the United States sending money to their native country

51. Which of the following is true of the long-run Phillips curve?

   (A) It shows there is a trade-off between unemployment and inflation.
   (B) It is positively sloped when the inflation rate exceeds the unemployment rate.
   (C) It is vertical at the natural rate of unemployment.
   (D) It shifts to the right if aggregate demand increases.
   (E) It is created by an adverse supply shock.

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52. Gross domestic product has been criticized as a measure of well-being because it fails to take into account which of the following?

    (A) The distribution of income
    (B) The value of services
    (C) The value of intermediate goods
    (D) The value of financial transactions and sales of used items
    (E) The value of government services

53. The graph above shows the macroeconomic conditions of Wattsonia. Many economists estimate that the natural rate of unemployment is 6 percent. If this is true and the current rate of unemployment is 5.1 percent, in what range of real gross domestic product is the economy currently producing?

    (A) Less than Y_1
    (B) At Y_1
    (C) At Y_2
    (D) Greater than Y_1 and less than Y_2
    (E) Greater than Y_2

54. Expansionary monetary policy can affect the economy through which of the following chains of events?

    (A) Increasing the discount rate lowers the real interest rate, which raises investment.
    (B) Reducing taxes lowers the discount rate, which raises consumption.
    (C) Increasing government expenditure lowers the interest rate, which raises investment.
    (D) Increasing the reserve requirement decreases the interest rate, which increases investment.
    (E) Buying bonds increases the money supply, which lowers the interest rate.

55. If the real interest rates in the United States rise relative to rates in other countries, what will happen to the international value of the United States dollar and United States net exports?

	Value of the Dollar	Net Exports
(A)	Depreciate	Increase
(B)	Depreciate	Decrease
(C)	Depreciate	No change
(D)	Appreciate	Decrease
(E)	Appreciate	Increase

56. Which of the following changes will have the smallest expansionary effect on aggregate demand in the short run?

    (A) An increase in exports of $100
    (B) An increase in government spending of $100
    (C) A decrease in taxes of $100
    (D) A decrease in imports of $100
    (E) A decrease in savings of $100

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57. A leftward shift of the long-run aggregate supply curve is most likely consistent with an improvement in a country's standard of living if
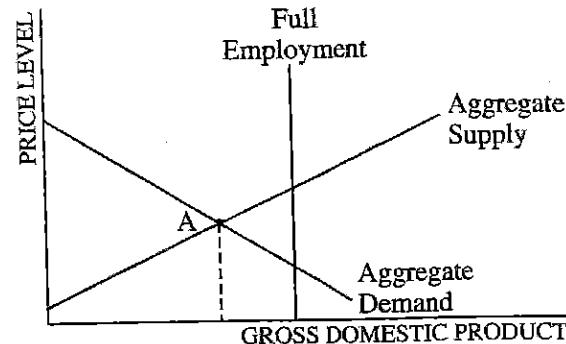
   (A) prices fall
   (B) depreciation increases
   (C) population decreases
   (D) taxes decrease
   (E) imports decline

58. Stagflation is caused by

   (A) an increase in imports
   (B) an increase in aggregate demand
   (C) a decrease in aggregate demand
   (D) a decrease in aggregate supply
   (E) an increase in aggregate supply

59. The required reserve ratio is 0.2 and the Federal Reserve sells $1 million in securities. If there are no leakages and banks do not hold excess reserves, then which of the following is the change in the money supply?

   (A) An increase of $1 million
   (B) An increase of $1.2 million
   (C) An increase of $5 million
   (D) A decrease of $1.2 million
   (E) A decrease of $5 million

GROSS DOMESTIC PRODUCT

60. The economy of a country is currently in equilibrium at point A in the diagram above. If the government does nothing and wages are flexible, which of the following will most likely occur in the long run?

   (A) Falling wages will shift the aggregate demand curve to the right, producing full employment.
   (B) Rising wages will shift the aggregate demand curve to the right, producing full employment.
   (C) The economy will remain at point A.
   (D) Rising wages will shift the aggregate supply curve to the right, producing full employment.
   (E) Falling wages will shift the aggregate supply curve to the right, producing full employment.

END OF SECTION I

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION.

DO NOT GO ON TO SECTION II UNTIL YOU ARE TOLD TO DO SO.

MACROECONOMICS
Section II
Planning Time—10 minutes
Writing Time—50 minutes

Directions: You have 50 minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes. Use a pen with black or dark blue ink.

1. Assume that the United States economy is currently in long-run equilibrium.

    (a) Draw a correctly labeled graph of aggregate demand and aggregate supply and show each of the following.

       (i) The long-run aggregate supply curve

       (ii) The current equilibrium output and price levels, labeled as Y_E and PL_E, respectively

    (b) Assume that the government increases spending on national defense without raising taxes.

       (i) On your graph in part (a), show how the government action affects aggregate demand.

       (ii) How will this government action affect the unemployment rate in the short run? Explain.

    (c) Assume that the economy adjusts to a new long-run equilibrium after the increase in government spending.

       (i) How will the short-run aggregate supply curve in the new long-run equilibrium compare with that in the initial long-run equilibrium in part (a) ? Explain.

       (ii) On your graph in part (a), label the new long-run equilibrium price level as PL_2.

    (d) In order to finance the increase in government spending on national defense from part (b), the government borrows funds from the public. Using a correctly labeled graph of the loanable funds market, show the effect of the government's borrowing on the real interest rate.

    (e) Given the change in the real interest rate in part (d), what is the impact on each of the following?

       (i) Investment

       (ii) Economic growth rate. Explain.

2. A drop in credit card fees causes people to use credit cards more often for transactions and demand less money.

    (a) Using a correctly labeled graph of the money market, show how the nominal interest rate will be affected.

    (b) Given the interest rate change in part (a), what will happen to bond prices in the short run?

    (c) Given the interest rate change in part (a), what will happen to the price level in the short run? Explain.

    (d) Identify an open-market operation the Federal Reserve could use to keep the nominal interest rate constant at the level that existed before the drop in credit card fees. Explain.

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3. A United States firm sells $10 million worth of goods to a firm in Argentina, where the currency is the peso.

   (a) How will the transaction above affect Argentina's aggregate demand? Explain.

   (b) Assume that the United States current account balance with Argentina is initially zero. How will the transaction above affect the United States current account balance? Explain.

   (c) Using a correctly labeled graph of the foreign exchange market for the United States dollar, show how a decrease in the United States financial investment in Argentina affects each of the following.

      (i) The supply of United States dollars

      (ii) The value of the United States dollar relative to the peso

   (d) Suppose that the inflation rate is 3 percent in the United States and 5 percent in Argentina. What will happen to the value of the peso relative to the United States dollar as a result of the difference in inflation rates? Explain.

STOP

END OF EXAM

Chapter III: Answers to the 2010 AP Macroeconomics Exam

- Section I: Multiple Choice
  - Section I Answer Key and Percent Answering Correctly
  - Analyzing Your Students' Performance on the Multiple-Choice Section
  - Diagnostic Guide for the 2010 AP Macroeconomics Exam
- Section II: Free Response
  - Comments from the Chief Reader
  - Scoring Guidelines, Sample Student Responses and Commentary

Section I: Multiple Choice

Listed below are the correct answers to the multiple-choice questions, the percent of AP students who answered each question correctly by AP score, and the total percent answering correctly.

Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct	Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1				5	4	3	2	1	
1	E	94	91	88	84	71	84	26	C	81	73	66	57	37	60
2	B	100	99	98	97	90	96	27	B	97	86	69	52	26	62
3	C	97	91	87	83	69	83	28	B	96	87	77	62	32	67
4	C	93	81	71	61	44	67	29	D	97	90	83	74	48	75
5	A	99	94	83	69	38	73	30	C	67	53	47	42	31	45
6	A	97	85	72	63	52	71	31	B	76	58	46	37	25	45
7	D	97	91	85	79	66	82	32	B	71	46	32	22	13	34
8	C	98	91	83	75	59	79	33	B	95	83	72	63	41	67
9	B	100	97	90	78	43	77	34	D	58	35	31	29	19	32
10	C	98	95	91	88	78	89	35	B	75	56	45	39	30	46
11	C	93	74	55	39	24	53	36	D	72	44	29	21	17	33
12	B	86	74	67	61	54	66	37	D	61	43	36	32	21	36
13	A	86	73	64	57	38	60	38	B	95	82	66	49	27	60
14	B	73	63	61	60	47	59	39	A	95	83	69	54	27	61
15	D	99	97	94	89	68	87	40	B	88	70	54	46	32	55
16	A	70	42	29	21	17	33	41	C	91	87	79	66	36	68
17	D	96	90	84	77	56	78	42	D	96	84	69	54	25	61
18*	–	–	–	–	–	–	–	43	B	35	18	15	14	15	18
19	C	96	81	62	48	30	60	44	E	97	91	85	80	56	79
20	D	96	91	84	78	57	78	45	A	96	87	78	70	44	71
21	A	87	80	75	69	51	70	46	D	92	72	51	36	18	49
22	C	93	78	66	54	32	61	47	E	81	54	37	28	19	40
23	D	99	96	88	75	40	75	48	C	98	92	81	67	37	71
24	A	97	87	73	57	29	64	49	D	73	56	46	37	22	43
25	A	91	75	59	46	25	55	50	A	55	37	30	27	22	32

*Although 60 multiple-choice items were administered in Section I, item 18 was not used in scoring.

Section I Answer Key and Percent Answering Correctly (continued)

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
51	C	95	83	66	51	25	60
52	A	79	59	48	36	22	45
53	E	84	61	42	28	11	41
54	E	98	87	68	47	18	59
55	D	91	70	51	37	20	50

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
56	C	69	51	34	23	15	36
57	C	83	59	43	32	19	43
58	D	95	77	51	33	18	51
59	E	74	45	25	15	6	29
60	E	79	46	24	14	8	31

Analyzing Your Students' Performance on the Multiple-Choice Section

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1. In each section, students should insert a check mark for each correct answer.

2. Add together the total number of correct answers for each section.

3. To compare the student's number of correct answers for each section with the average number correct for that section, copy the number of correct answers to the "Number Correct" table at the end of the Diagnostic Guide.

In addition, under each item, the percent of AP students who answered correctly is shown, so students can analyze their performance on individual items. This information will be helpful in deciding how students should plan their study time. Please note that one item may appear in several different categories, as questions can cross over different topics.

Diagnostic Guide for the 2010 AP Macroeconomics Exam

Economic Growth (Average number correct = 3.0)

Question #	1	40	44	49	57
Correct/Incorrect					
Percent of Students Answering Correctly	84	55	79	43	43

International Trade and Finance (Average number correct = 4.7)

Question #	2	14	24	33	36	45	50	55
Correct/Incorrect								
Percent of Students Answering Correctly	96	59	64	67	33	71	32	50

Basic Concepts (Average number correct = 4.4)

Question #	3	10	15	17	30	42
Correct/Incorrect						
Percent of Students Answering Correctly	83	89	87	78	45	61

Economic Measurements (Average number correct = 5.6)

Question #	4	7	20	22	25	29	39	47	52
Correct/Incorrect									
Percent of Students Answering Correctly	67	82	78	61	55	75	61	40	45

Policy, Inflation and Unemployment (Average number correct = 7.4)

Question #	5	9	12	21	26	31	34	37	41	46	51	54	58
Correct/Incorrect													
Percent of Students Answering Correctly	73	77	66	70	60	45	32	36	68	49	60	59	51

Money and Banking (Average number correct = 4.8)

Question #	6	11	13	16	19	23	32	35	43	59
Correct/Incorrect										
Percent of Students Answering Correctly	71	53	60	33	60	75	34	46	18	29

Diagnostic Guide for the 2010 AP Macroeconomics Exam *(continued)*

National Income Determination (Average number correct = 4.4)

Question #	8	27	28	38	48	53	56	60
Correct/Incorrect								
Percent of Students Answering Correctly	79	62	67	60	71	41	36	31

Number Correct

	Economic Growth	International Trade and Finance	Basic Concepts	Economic Measurements	Policy, Inflation and Unemployment	Money and Banking	National Income Determination
Number of Questions	5	8	6	9	13	10	8
Average Number Correct	3.0 (60.0%)	4.7 (58.8%)	4.4 (73.3%)	5.6 (62.2%)	7.4 (56.9%)	4.8 (48.0%)	4.4 (55.0%)
My Number Correct							

Chapter III: Answers to the 2010 AP Microeconomics Exam

- Section I: Multiple Choice
  - Section I Answer Key and Percent Answering Correctly
  - Analyzing Your Students' Performance on the Multiple-Choice Section
  - Diagnostic Guide for the 2010 AP Microeconomics Exam
- Section II: Free Response
  - Comments from the Chief Reader
  - Scoring Guidelines, Sample Student Responses and Commentary

Section I: Multiple Choice

Listed below are the correct answers to the multiple-choice questions, the percent of AP students who answered each question correctly by AP score, and the total percent answering correctly.

Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
1	D	79	63	52	47	37	55
2	A	83	68	54	44	31	55
3	D	99	95	87	77	53	82
4	D	91	74	57	43	24	57
5	A	87	79	70	56	30	64
6	B	81	64	54	49	37	56
7	A	95	85	73	63	42	71
8	B	90	63	40	26	22	47
9	B	94	84	70	55	35	67
10	D	87	61	42	35	27	49
11	D	98	95	89	80	58	83
12	B	98	88	69	50	28	66
13	A	95	87	76	67	45	73
14	B	70	40	21	11	10	29
15	C	89	66	43	27	17	47
16	D	81	68	65	63	52	65
17	C	93	84	73	62	41	70
18	D	94	88	79	65	39	72
19	D	84	64	46	33	20	48
20	B	90	72	52	40	25	55
21	E	91	70	47	29	10	48
22	C	97	91	85	78	55	80
23	C	76	43	25	18	18	35
24	B	75	51	33	23	20	40
25	D	94	81	61	46	22	60

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
26	E	92	83	73	61	34	68
27	E	88	76	63	55	32	62
28	C	90	78	69	61	44	68
29	D	100	98	95	90	71	90
30	C	82	61	47	35	26	49
31	A	95	88	78	68	44	74
32	B	98	91	79	61	30	71
33	A	100	100	98	94	65	90
34	C	73	46	30	21	16	36
35	E	94	75	49	29	11	51
36	D	93	89	83	77	50	78
37	C	94	74	47	29	15	51
38	A	82	59	43	35	22	47
39	A	94	82	67	51	28	64
40	D	84	67	55	42	21	53
41	B	95	86	72	58	31	68
42	C	89	66	45	35	20	50
43	D	98	91	82	75	52	79
44	E	84	63	45	32	19	48
45	B	95	79	57	41	22	58
46	C	91	77	67	59	48	68
47	E	86	63	42	26	13	45
48	C	92	72	51	34	21	53
49	A	88	65	47	37	22	50
50	D	79	64	50	39	21	50

Section I Answer Key and Percent Answering Correctly *(continued)*

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
51	D	96	88	72	49	19	64
52	B	75	57	43	34	20	45
53	C	94	75	52	35	21	55
54	C	90	79	67	52	31	63
55	C	78	60	49	42	32	51

Item No.	Correct Answer	Percent Correct by Score					Total Percent Correct
		5	4	3	2	1	
56	A	57	41	34	31	25	37
57	C	80	64	53	46	31	54
58	C	66	49	38	33	24	41
59	A	57	25	12	7	8	20
60	B	85	64	44	30	16	47

Analyzing Your Students' Performance on the Multiple-Choice Section

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In addition, under each item, the percent of AP students who answered correctly is shown, so students can analyze their performance on individual items. This information will be helpful in deciding how students should plan their study time. Please note that one item may appear in several different categories, as questions can cross over different topics.

Diagnostic Guide for the 2010 AP Microeconomics Exam

Basic Concepts (Average number correct = 3.6)

Question #	1	2	16	31	46	47
Correct/Incorrect						
Percent of Students Answering Correctly	55	55	65	74	68	45

Supply and Demand (Average number correct = 6.4)

Question #	3	4	5	6	17	18	22	32	34	48
Correct/Incorrect										
Percent of Students Answering Correctly	82	57	64	56	70	72	80	71	36	53

Production and Costs (Average number correct = 4.0)

Question #	7	8	19	23	35	37	49	52
Correct/Incorrect								
Percent of Students Answering Correctly	71	47	48	35	51	51	50	45

Firm Behavior and Market Structure (Average number correct = 10.2)

Question #	9	10	12	13	24	25	26	38	39	40	41	42	50	51	53	54	55	56
Correct/Incorrect																		
Percent of Students Answering Correctly	67	49	66	73	40	60	68	47	64	53	68	50	50	64	55	63	51	37

Market Failure and Public Policy (Average number correct = 3.6)

Question #	11	15	29	30	44	45	59	60
Correct/Incorrect								
Percent of Students Answering Correctly	83	47	90	49	48	58	20	47

Factor Markets (Average number correct = 3.0)

Question #	14	27	28	43	57	58
Correct/Incorrect						
Percent of Students Answering Correctly	29	62	68	79	54	41

Diagnostic Guide for the 2010 AP Microeconomics Exam *(continued)*

Theory of Consumer Choice (Average number correct = 2.7)

Question #	20	21	33	36
Correct/Incorrect				
Percent of Students Answering Correctly	55	48	90	78

Number Correct

	Basic Concepts	Supply and Demand	Production and Costs	Firm Behavior and Market Structure	Market Failure and Public Policy	Factor Markets	Theory of Consumer Choice
Number of Questions	6	10	8	18	8	6	4
Average Number Correct	3.6 (60.0%)	6.4 (64.0%)	4.0 (50.0%)	10.2 (56.7%)	3.6 (45.0%)	3.0 (50.0%)	2.7 (67.5%)
My Number Correct							