

## MACROECONOMICS

## Section I

Time—70 minutes

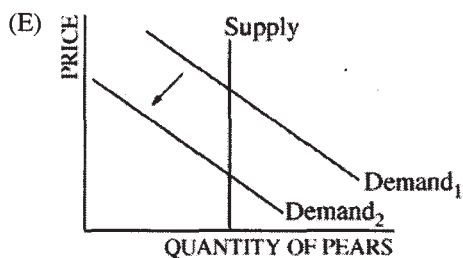
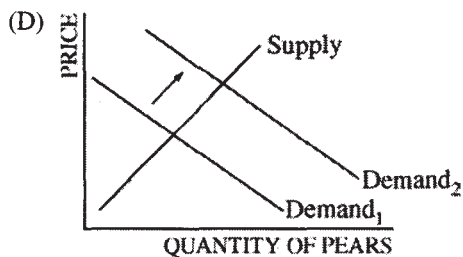
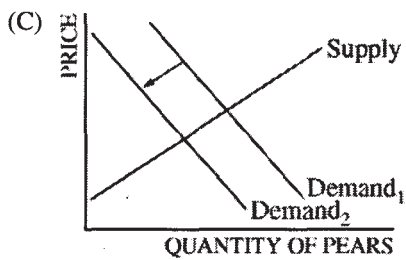
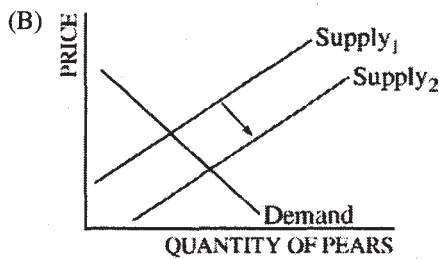
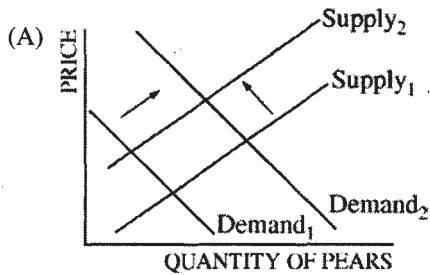
60 Questions

**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. In a mixed economy, what to produce and how much to produce are determined by
  - (A) a central planning agency
  - (B) a private planning agency
  - (C) an international planning agency
  - (D) markets and the government
  - (E) large corporations and small entrepreneurs
2. The major difference between real and nominal gross domestic product (GDP) is that real GDP
  - (A) excludes government transfer payments
  - (B) excludes imports
  - (C) is adjusted for price-level changes using a price index
  - (D) measures only the value of final goods and services that are consumed
  - (E) measures the prices of a market basket of goods purchased by a typical urban consumer
3. Which of the following statements exemplifies the concept of structural unemployment?
  - (A) New entrants into the labor force have trouble finding jobs.
  - (B) Workers leave their current jobs to find better jobs.
  - (C) Workers are laid off because aggregate demand has declined.
  - (D) Workers are fired because consumers have reduced their total expenditures.
  - (E) Workers are fired because their skills are no longer in demand.

**Section I**

4. Assume that for consumers, pears and apples are substitutes. It is announced that pesticides used on most apples may be dangerous to consumers' health. As a result of this announcement, which of the following market changes is most likely to occur in the short run in the pear market?

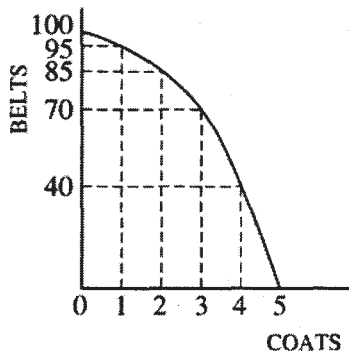


5. Federal budget deficits occur when
- (A) more money is being spent on entitlement programs than has been allocated
  - (B) the Internal Revenue Service spends more than it collects in taxes in a given year
  - (C) the federal government spends more than it collects in taxes in a given year
  - (D) high levels of unemployment use up tax collections
  - (E) interest payments on the national debt increase from one year to the next
6. Under which of the following conditions would consumer spending most likely increase?
- (A) Consumers have large unpaid balances on their credit cards.
  - (B) Consumers' wealth is increased by changes in the stock market.
  - (C) The government encourages consumers to increase their savings.
  - (D) Social security taxes are increased.
  - (E) Consumers believe they will not receive pay increases next year.
7. Crowding out is best described as which of the following?
- (A) The decrease in full-employment output caused by an increase in taxes
  - (B) The decrease in consumption or private investment spending caused by an increase in government spending
  - (C) The decrease in government spending caused by a decrease in taxes
  - (D) The increase in the amount of capital outflow caused by the increase in government spending
  - (E) The increase in the amount of capital inflow caused by the increase in government spending
8. Under a fractional reserve banking system, banks are required to
- (A) keep part of their demand deposits as reserves
  - (B) expand the money supply when requested by the central bank
  - (C) insure their deposits against losses and bank runs
  - (D) pay a fraction of their interest income in taxes
  - (E) charge the same interest rate on all their loans

9. An increase in which of the following will increase aggregate demand?
- (A) Taxes
  - (B) Government spending
  - (C) The federal funds rate
  - (D) Reserve requirements
  - (E) The discount rate
10. When the United States government engages in deficit spending, that spending is primarily financed by
- (A) increasing the required reserve ratio
  - (B) borrowing from the World Bank
  - (C) issuing new bonds
  - (D) appreciating the value of the dollar
  - (E) depreciating the value of the dollar
11. When the Federal Reserve buys government securities on the open market, which of the following will decrease in the short run?
- (A) Interest rates
  - (B) Taxes
  - (C) Investment
  - (D) The amount of money loaned by banks
  - (E) The money supply
12. Changes in which of the following factors would affect the growth of an economy?
- I. Quantity and quality of human and natural resources
  - II. Amount of capital goods available
  - III. Technology
- (A) I only
  - (B) I and II only
  - (C) I and III only
  - (D) II and III only
  - (E) I, II, and III
13. According to the short-run Phillips Curve, there is a trade-off between
- (A) interest rates and inflation
  - (B) the growth of the money supply and interest rates
  - (C) unemployment and economic growth
  - (D) inflation and unemployment
  - (E) economic growth and interest rates
14. A favorable supply shock, such as a decrease in energy prices, is most likely to have which of the following short-run effects on the price level and output?
- |     | <u>Price Level</u> | <u>Output</u> |
|-----|--------------------|---------------|
| (A) | Decrease           | No effect     |
| (B) | Decrease           | Increase      |
| (C) | Increase           | Increase      |
| (D) | Increase           | Decrease      |
| (E) | No effect          | No effect     |
15. Which of the following best explains why many United States economists support free international trade?
- (A) Workers who lose their jobs can collect unemployment compensation.
  - (B) It is more important to reduce world inflation than to reduce United States unemployment.
  - (C) Workers are not affected; only businesses suffer.
  - (D) The long-run gains to consumers and some producers exceed the losses to other producers.
  - (E) Government can protect United States industries while encouraging free trade.

Section I

Questions 16-17 refer to the following graph of a country's production possibilities curve.



16. If two coats are currently being produced, the opportunity cost of producing the third coat is
- (A) 85 belts
  - (B) 75 belts
  - (C) 40 belts
  - (D) 15 belts
  - (E) 10 belts
17. The best combination of belts and coats for this economy to produce is
- (A) 95 belts and 1 coat
  - (B) 85 belts and 2 coats
  - (C) 70 belts and 3 coats
  - (D) 40 belts and 4 coats
  - (E) indeterminate with the available information
18. The unemployment rate measures the percentage of
- (A) people in the labor force who do not have jobs
  - (B) people in the labor force who have a part-time job but are looking for a full-time job
  - (C) people who do not have jobs and have given up looking for work
  - (D) people in the adult population who do not have jobs
  - (E) people in the adult population who have temporary jobs
19. The classical economists argued that involuntary unemployment would be eliminated by
- (A) increasing government spending to increase aggregate demand
  - (B) increasing the money supply to stimulate investment spending
  - (C) self-correcting market forces stemming from flexible prices and wages
  - (D) maintaining the growth of the money supply at a constant rate
  - (E) decreasing corporate income taxes to encourage investment
20. Which of the following can be considered a leakage from the circular flow of economic activity?
- (A) Investment
  - (B) Government expenditures
  - (C) Consumption
  - (D) Exports
  - (E) Saving

21. An increase in the marginal propensity to consume causes an increase in which of the following?
- (A) Marginal propensity to save  
 (B) Spending multiplier  
 (C) Savings rate  
 (D) Exports  
 (E) Aggregate supply
22. If Mexicans increase their investment in the United States, the supply of Mexican pesos to the foreign exchange market and the dollar price of the peso will most likely change in which of the following ways?

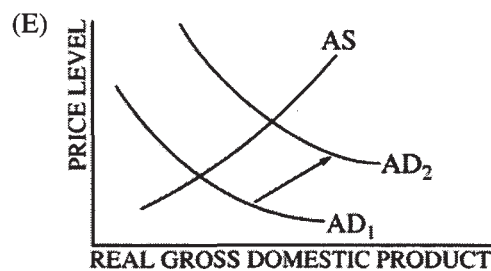
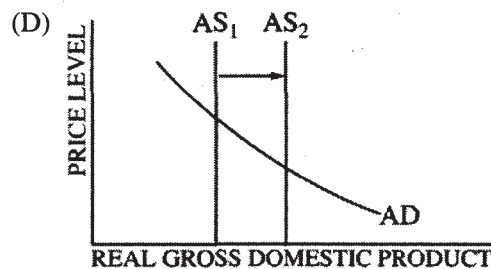
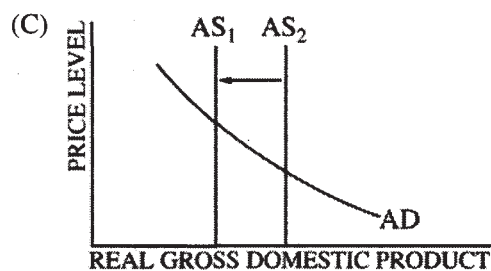
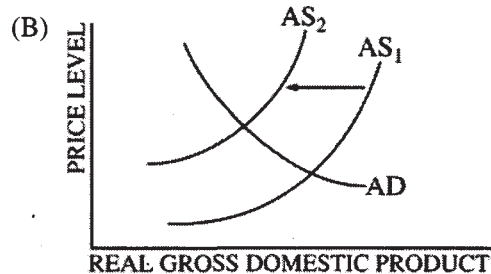
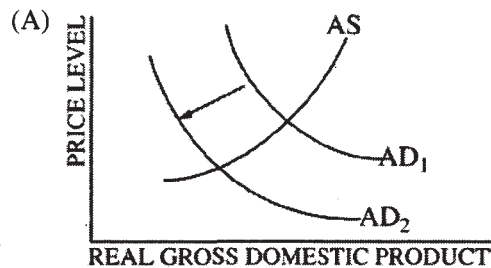
Supply of Pesos	Dollar Price of Peso
-----------------	----------------------

- |              |            |
|--------------|------------|
| (A) Increase | Increase   |
| (B) Increase | Decrease   |
| (C) Decrease | Increase   |
| (D) Decrease | Decrease   |
| (E) Decrease | Not change |

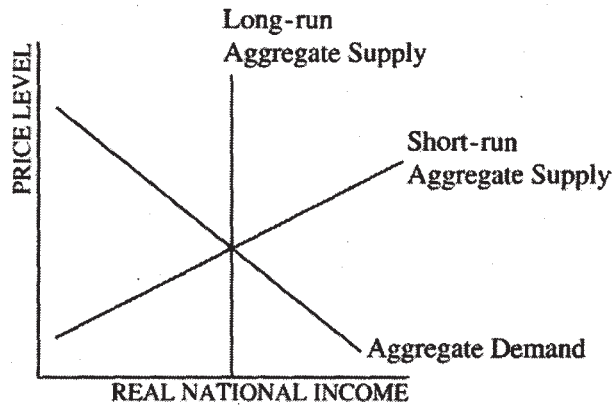
23. If a commercial bank has no excess reserves and the reserve requirement is 10 percent, what is the value of new loans this single bank can issue if a new customer deposits \$10,000 ?
- (A) \$100,000  
 (B) \$90,333  
 (C) \$10,000  
 (D) \$9,000  
 (E) \$1,000

24. An increase in government spending with no change in taxes leads to a
- (A) lower income level  
 (B) lower price level  
 (C) smaller money supply  
 (D) higher interest rate  
 (E) higher bond price

25. If AD and AS represent aggregate demand and aggregate supply curves, respectively, and the arrows indicate the movement of the curves, which of the following graphs best illustrates long-run economic growth?



**Section I**



26. Assume that the economy is at full-employment equilibrium in the diagram shown above. Which of the following would lead to stagflation?

- (A) A leftward shift of the short-run aggregate supply curve only
- (B) A rightward shift of the short-run aggregate supply curve only
- (C) A leftward shift of the aggregate demand curve only
- (D) A rightward shift of the aggregate demand curve only
- (E) A rightward shift in both the short-run aggregate supply curve and the aggregate demand curve

27. If the real interest rate in Country X increases relative to the real interest rate in Country Y and there are no trade barriers between the two countries, then for Country X which of the following will be true of its capital flow, the value of its currency, and its exports?

<u>Capital Flow</u>	<u>Currency</u>	<u>Exports</u>
(A) Inflow	Appreciation	Increase
(B) Inflow	Appreciation	Decrease
(C) Inflow	Depreciation	Increase
(D) Outflow	Depreciation	Increase
(E) Outflow	Appreciation	Decrease

28. When a central bank sells securities in the open market, which of the following set of events is most likely to follow?
- (A) An increase in the money supply, a decrease in interest rates, and an increase in aggregate demand
  - (B) An increase in the money supply, an increase in interest rates, and a decrease in aggregate demand
  - (C) An increase in interest rates, an increase in the government budget deficit, and a movement toward trade surplus
  - (D) A decrease in the money supply, an increase in interest rates, and a decrease in aggregate demand
  - (E) A decrease in the money supply, a decrease in interest rates, and a decrease in aggregate demand
29. The federal funds rate is the interest rate that
- (A) the Federal Reserve charges the federal government on its loans
  - (B) banks charge one another for short-term loans
  - (C) banks charge their best customers
  - (D) equalizes the yield on government bonds and corporate bonds
  - (E) is equal to the inflation rate
30. According to the long-run Phillips curve, which of the following is true?
- (A) Unemployment increases with an increase in inflation.
  - (B) Unemployment decreases with an increase in inflation.
  - (C) Increased automation will lead to lower levels of structural unemployment in the long run.
  - (D) Changes in the composition of the overall demand for labor tend to be deflationary in the long run.
  - (E) The natural rate of unemployment is independent of monetary and fiscal policy changes that affect aggregate demand.
31. A change in which of the following will cause the short-run aggregate supply curve to shift?
- I. The price level
  - II. Government spending
  - III. The cost of all inputs
- (A) I only
  - (B) II only
  - (C) III only
  - (D) I and II only
  - (E) I, II, and III
32. In an economy with lump-sum taxes and no international sector, assume that the aggregate supply curve is horizontal. If the marginal propensity to consume is equal to 0.8, which of the following will necessarily be true?
- (A) The average propensity to consume will be less than the marginal propensity to consume.
  - (B) The government expenditure multiplier will be equal to 5.
  - (C) A \$10 increase in consumption spending will bring about an \$80 increase in disposable income.
  - (D) Wealth will tend to accumulate in the hands of a few people.
  - (E) The economy will be running a deficit, since consumption expenditures exceed personal saving.

**Section I**

33. Country A can produce either 2 tons of cocoa or 4 cars with 10 units of labor. Country B can produce either 5 tons of cocoa or 25 cars with 10 units of labor. Based on this information, which of the following is true?
- (A) Country A has an absolute advantage in the production of cocoa, while Country B has a comparative advantage in the production of cocoa.
  - (B) Country A has a comparative advantage in the production of cocoa, while Country B has a comparative advantage in the production of cars.
  - (C) Country A has an absolute advantage in the production of cocoa, while Country B has a comparative advantage in the production of cars.
  - (D) Country A has a comparative disadvantage in the production of both goods.
  - (E) Neither country has a comparative advantage in the production of either good.
34. Which of the following is included in the computation of gross domestic product?
- (A) Government transfer payments, such as unemployment benefits
  - (B) Purchases of used goods, such as used cars
  - (C) Child care tasks performed by househusbands
  - (D) Total value of business inventories
  - (E) Additions to business inventories
35. In the country of Agronomia, banks charge 10 percent interest on all loans. If the general price level has been increasing at the rate of 4 percent per year, the real rate of interest in Agronomia is
- (A) 14%
  - (B) 10%
  - (C) 6%
  - (D) 4%
  - (E) 2.5%
36. According to the theory of rational expectations, a fully anticipated expansionary monetary policy will
- (A) increase potential output
  - (B) increase unemployment
  - (C) have no impact on real output
  - (D) promote the production of consumer goods over capital goods
  - (E) result in deflation
37. In an economy with a horizontal aggregate supply curve, an increase in government spending will cause output and the price level to change in which of the following ways?
- |     | <u>Output</u> | <u>Price Level</u> |
|-----|---------------|--------------------|
| (A) | Decrease      | Increase           |
| (B) | Increase      | Increase           |
| (C) | Increase      | No change          |
| (D) | No change     | Increase           |
| (E) | No change     | No change          |
38. The aggregate demand curve is downward sloping because as the price level increases the
- (A) purchasing power of wealth decreases
  - (B) demand for imports decreases
  - (C) demand for interest-sensitive expenditures increases
  - (D) demand for domestically produced substitute goods increases
  - (E) real value of fixed assets increases



Assets

Total Reserves: \$15,000  
 Securities: 70,000  
 Loan: 15,000

Liabilities

Demand Deposits: \$100,000

39. A commercial bank is facing the conditions given above. If the reserve requirement is 12 percent and the bank does not sell any of its securities, the maximum amount of additional lending this bank can undertake is

(A) \$15,000  
 (B) \$12,000  
 (C) \$3,000  
 (D) \$1,800  
 (E) 0

40. According to Keynesian analysis, if government expenditures and taxes are increased by the same amount, which of the following will occur?

(A) Aggregate supply will decrease.  
 (B) Aggregate supply will increase.  
 (C) Aggregate demand will be unaffected.  
 (D) Aggregate demand will decrease.  
 (E) Aggregate demand will increase.

41. If investors feel that business conditions will deteriorate in the future, the demand for loans and real interest rate in the loanable funds market will change in which of the following ways in the short run?

<u>Demand for Loans</u>	<u>Real Interest Rate</u>
(A) Increase	Increase
(B) Increase	Decrease
(C) Decrease	Increase
(D) Decrease	Decrease
(E) Decrease	Not change

42. If a country has a current account deficit, which of the following must be true?

(A) It must also show a deficit in its capital account.  
 (B) It must show a surplus in its capital account.  
 (C) It must increase the purchases of foreign goods and services.  
 (D) It must increase the domestic interest rates on its bonds.  
 (E) It must limit the flow of foreign capital investment.

43. The long-run growth rate of an economy will be increased by an increase in all of the following EXCEPT

(A) capital stock  
 (B) labor supply  
 (C) real interest rate  
 (D) rate of technological change  
 (E) spending on education and training

44. Assume that the government implements a deficit-reduction policy that results in changes in aggregate income and output. Then the Federal Reserve engages in monetary policy actions that reverse the changes in income and output caused by fiscal policy action. Which of the following sets of changes in taxes, government spending, the required reserve ratio, and the discount rate is most consistent with these policies?

	<u>Taxes</u>	<u>Government Spending</u>	<u>Required Reserve Ratio</u>	<u>Discount Rate</u>
(A)	Increase	Increase	Decrease	Increase
(B)	Increase	Decrease	Decrease	No change
(C)	Increase	Decrease	Increase	Decrease
(D)	Decrease	Increase	No change	Increase
(E)	Decrease	Decrease	Decrease	Increase

45. With an increase in investment demand in the United States, the real interest rate rises. In this situation, the most likely change in the capital stock in the United States and in the international value of the dollar would be which of the following?

<u>Capital Stock in United States</u>	<u>International Value of the Dollar</u>
(A) Increase	Decrease
(B) Increase	No change
(C) Increase	Increase
(D) Decrease	Increase
(E) No change	Decrease

46. Which of the following events will most likely cause an increase in both the price level and real gross domestic product?
- (A) The prime rate increases.  
 (B) Exports increase.  
 (C) Income taxes increase.  
 (D) Crude oil prices decrease.  
 (E) Inflationary expectations decrease.

47. Which of the following best explains why transfer payments are not included in the calculation of gross domestic product?

- (A) Transfer payments are used to pay for intermediate goods, and intermediate goods are excluded from gross domestic product.  
 (B) Transfer payments are a government expenditure, and government expenditures are excluded from gross domestic product.  
 (C) Recipients of transfer payments have not produced or supplied goods and services in exchange for these payments.  
 (D) Recipients of transfer payments are usually children, and income earned by children is excluded in gross domestic product.  
 (E) Recipients of transfer payments are sometimes not citizens of the United States.

48. Suppose that a typical consumer buys the following quantities of three commodities in 1993 and 1994.

<u>Commodity</u>	<u>Quantity</u>	<u>1993 per Unit Price</u>	<u>1994 per Unit Price</u>
Food	5 units	\$ 6.00	\$ 5.00
Clothing	2 units	\$ 7.00	\$ 9.00
Shelter	3 units	\$12.00	\$19.00

Which of the following can be concluded about the consumer price index (CPI) for this individual from 1993 to 1994 ?

- (A) It remained unchanged.  
 (B) It decreased by 25%.  
 (C) It decreased by 20%.  
 (D) It increased by 20%.  
 (E) It increased by 25%.
49. If an economy's aggregate supply curve is upward sloping, an increase in government spending will most likely result in a decrease in the
- (A) real level of output  
 (B) price level  
 (C) interest rate  
 (D) unemployment rate  
 (E) government's budget deficit
50. An increase in which of the following is consistent with an outward shift of the production possibilities curve?
- (A) Transfer payments  
 (B) Aggregate demand  
 (C) Long-run aggregate supply  
 (D) Income tax rates  
 (E) Exports
51. An increase in which of the following will lead to lower inflation and lower unemployment?
- (A) Exports  
 (B) Aggregate demand  
 (C) Labor productivity  
 (D) Government spending  
 (E) The international value of domestic currency
52. An unanticipated decrease in aggregate demand when the economy is in equilibrium will result in
- (A) a decrease in voluntary unemployment  
 (B) a decrease in the natural rate of unemployment  
 (C) a decrease in aggregate supply  
 (D) an increase in unplanned inventories  
 (E) an increase in the rate of inflation
53. Which of the following would be true if the actual rate of inflation were less than the expected rate of inflation?
- (A) Inflation had been underpredicted.  
 (B) The real interest rate had exceeded the nominal interest rate.  
 (C) The real interest rate had been negative.  
 (D) People who borrowed funds at the nominal interest rate during this time period would lose.  
 (E) The economy would expand because of the increased investment and spending.
54. If the Federal Reserve institutes a policy to reduce inflation, which of the following is most likely to increase?
- (A) Tax rates  
 (B) Investment  
 (C) Government spending  
 (D) Interest rates  
 (E) Gross domestic product
55. To stimulate investment in new plant and equipment without increasing the level of real output, the best policy mix is to
- (A) decrease the money supply and increase government spending  
 (B) increase the money supply and decrease government spending  
 (C) decrease the money supply and increase income taxes  
 (D) increase the money supply and decrease income taxes  
 (E) decrease income taxes and increase government spending

**Section I**

56. Assume that the reserve requirement is 20 percent, but banks voluntarily keep some excess reserves. A \$1 million increase in new reserves will result in
- (A) an increase in the money supply of \$5 million
  - (B) an increase in the money supply of less than \$5 million
  - (C) a decrease in the money supply of \$1 million
  - (D) a decrease in the money supply of \$5 million
  - (E) a decrease in the money supply of more than \$5 million
57. Assume that a perfectly competitive financial market for loanable funds is in equilibrium. Which of the following is most likely to occur to the quantity demanded and quantity supplied of loanable funds if the government imposes an effective interest rate ceiling?
- | <u>Quantity Demanded</u> | <u>Quantity Supplied</u> |
|--------------------------|--------------------------|
| (A) Increase             | Increase                 |
| (B) Increase             | Decrease                 |
| (C) No change            | No change                |
| (D) Decrease             | Increase                 |
| (E) Decrease             | Decrease                 |
58. If the economy is operating at full employment and there is a substantial increase in the money supply, the quantity theory of money predicts an increase in
- (A) the velocity of money
  - (B) real output
  - (C) interest rates
  - (D) unemployment
  - (E) the price level
59. Which of the following would cause the United States dollar to increase in value compared to the Japanese yen?
- (A) An increase in the money supply in the United States
  - (B) An increase in interest rates in the United States
  - (C) An increase in the United States trade deficit with Japan
  - (D) The United States purchase of gold on the open market
  - (E) The sale of \$2 billion dollars worth of Japanese television sets to the United States
60. Assume that the supply of loanable funds increases in Country X. The international value of Country X's currency and Country X's exports will most likely change in which of the following ways?
- | <u>International Value of Country X's Currency</u> | <u>Country X's Exports</u> |
|--|----------------------------|
| (A) Decrease                                       | Decrease                   |
| (B) Decrease                                       | Increase                   |
| (C) Increase                                       | Decrease                   |
| (D) Increase                                       | Increase                   |
| (E) Not change                                     | Not change                 |

**END OF SECTION I**

# Chapter III: Answers to the 2005 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 2005 AP Macroeconomics Exam
- Section II: Free Response
  - Comments from the Chief Reader
  - Scoring Guidelines, Sample Student Responses, and Commentary
    - Question 1
    - Question 2
    - Question 3

## 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 grade, and the total percent answering correctly.

### Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
1	D	95	90	86	83	73	85
2	C	98	91	79	64	37	72
3	E	93	82	71	59	37	67
4	D	96	92	87	79	54	80
5	C	99	97	94	91	78	91
6	B	99	98	98	96	89	96
7	B	96	85	66	52	28	64
8	A	99	95	92	88	67	87
9	B	100	98	90	74	41	79
10	C	81	67	60	56	41	60
11	A	92	76	57	44	28	58
12	E	94	87	84	83	75	84
13	D	99	92	79	67	38	74
14	B	95	82	69	61	54	71
15	D	95	82	71	64	49	71
16	D	99	97	95	92	70	89
17	E	79	58	47	42	30	50
18	A	97	91	85	79	64	82
19	C	93	81	69	55	33	65
20	E	88	81	74	66	45	70
21	B	98	90	81	71	47	76
22	B	81	59	46	39	31	50
23	D	89	81	78	72	47	72
24	D	87	62	46	38	32	51
25	D	95	83	71	58	31	66

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
26	A	94	72	49	32	17	51
27	B	78	52	35	27	20	41
28	D	93	78	60	42	20	57
29	B	71	52	40	31	20	41
30	E	59	26	14	10	11	22
31	C	97	86	66	44	19	61
32	B	84	62	42	28	14	44
33	B	93	78	62	46	24	59
34	E	82	62	48	34	16	46
35	C	89	66	48	39	26	52
36	C	57	28	15	9	9	22
37	C	95	85	68	53	31	65
38	A	92	80	68	56	33	64
39	C	73	46	33	25	18	37
40	E	80	50	29	17	10	35
41	D	74	49	34	28	18	39
42	B	41	18	11	7	9	16
43	C	97	90	79	70	46	75
44	B	88	65	41	26	16	46
45	C	73	59	51	45	35	51
46	B	84	63	49	42	29	52
47	C	93	81	70	60	38	67
48	E	73	50	39	33	23	42
49	D	95	77	57	42	21	57
50	C	98	85	64	46	27	63

*continued on the next page*

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

51	C	91	61	36	27	28	47
52	D	90	72	54	39	21	54
53	D	63	41	31	25	17	34
54	D	88	71	54	39	23	53
55	B	85	57	35	24	20	43

56	B	89	70	51	38	25	53
57	B	75	54	43	35	23	44
58	E	76	55	44	35	27	46
59	B	96	83	66	53	30	64
60	B	84	61	45	36	24	48

### Analyzing Your Students' Performance on the Multiple-Choice Section

If you give your students the 2005 AP Macroeconomics Exam for practice, you may want to analyze the results to find overall strengths and weaknesses in their understanding of AP Macroeconomics. The following diagnostic worksheet will help you do this. You are permitted to photocopy and distribute it to your students for completion.

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.