

1990

Macro

# **1990 AP<sup>®</sup> Macroeconomics**

## **Released Exam**

### **Multiple-Choice Section**



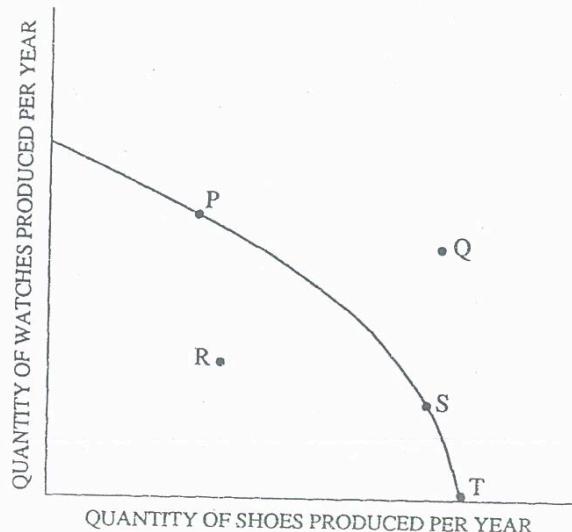
## MACROECONOMICS

### Section I

Time—60 minutes

50 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. Be sure to mark your answers in the third and fourth columns (numbers 61-110) of the answer sheet.



61. Which of the following is true of an economy with the production possibilities frontier shown above?
- Point Q is attainable but undesirable.
  - Point R is unattainable but desirable.
  - A technological improvement in the production of watches would move the economy from point T to point P.
  - The opportunity cost of moving from point S to point T is the number of watches given up.
  - There is unemployment at point T because workers in the watch industry are without jobs.
62. Increases in real income per capita are made possible by
- improved productivity
  - a high labor/capital ratio
  - large trade surpluses
  - stable interest rates
  - high protective tariffs

63. The sum of which of the following expenditures is equal to the value of the gross national product?
- Consumer purchases, investment for capital goods, exports, and imports
  - Consumer purchases, investment for capital goods, net exports, and inventories
  - Consumer purchases, investment for capital goods, government purchases, and net exports
  - Consumer purchases, government purchases, exports, and national income
  - Investment for capital goods, government purchases, net exports, and inventories
64. Which of the following would most likely lead to a decrease in aggregate demand, that is, shift the aggregate demand curve leftward?
- A decrease in taxes
  - A decrease in interest rates
  - An increase in household savings
  - An increase in household consumption
  - An increase in business firms' purchases of capital equipment from retained earnings
65. According to the Keynesian model, equilibrium output of an economy may be less than the full-employment level of output because at full employment
- sufficient income may not be generated to keep workers above the subsistence level
  - there might not be enough demand by firms and consumers to buy that output
  - workers may not be willing to work the hours necessary to produce the output
  - interest rates might not be high enough to provide the incentive to finance the production
  - banks may not be willing to lend enough money to support the output

**GO ON TO THE NEXT PAGE**

66. The principal reason for requiring commercial banks to maintain reserve balances with the Federal Reserve is that these balances
- provide the maximum amount of reserves a bank would ever need
  - give the Federal Reserve more control over the money-creating operations of banks
  - ensure that banks do not make excessive profits
  - assist the Treasury in refinancing government debt
  - enable the government to borrow cheaply from the Federal Reserve's discount window

67. If the Federal Reserve lowers the reserve requirement, which of the following is most likely to happen to interest rates and gross national product?

<u>Interest Rates</u>	<u>Gross National Product</u>
(A) Increase	Decrease
(B) Increase	Increase
(C) Decrease	Decrease
(D) Decrease	Increase
(E) No change	No change

68. Which of the following measures might be used to reduce a federal budget deficit?

- Raising taxes
  - Reducing federal spending
  - Lowering interest rates
- I only
  - II only
  - III only
  - I and III only
  - I, II, and III

69. If the nominal interest rate is 6 percent and the expected inflation rate is 4 percent, the real interest rate is

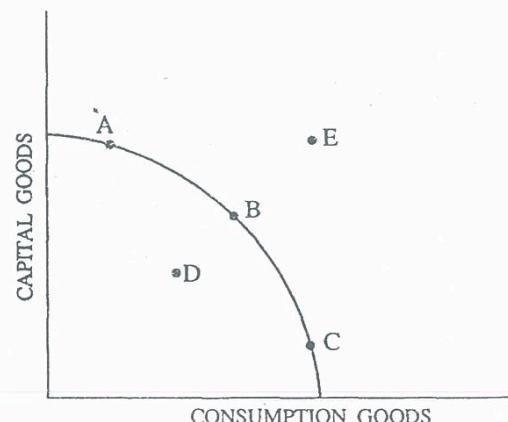
- 10 percent
- 6 percent
- 4 percent
- 2 percent
- 2 percent

70. Supply side economists argue that

- a cut in high tax rates results in an increased deficit and thus increases aggregate supply
- lower tax rates provide positive work incentives and thus shift the aggregate supply curve to the right
- the aggregate supply of goods can only be increased if the price level falls
- increased government spending should be used to stimulate the economy
- the government should regulate the supply of imports

71. If the dollar cost of the British pound decreases, United States imports from and exports to the United Kingdom will change in which of the following ways?

<u>Imports</u>	<u>Exports</u>
(A) Increase	Decrease
(B) Increase	Increase
(C) Increase	No change
(D) Decrease	Decrease
(E) Decrease	Increase



72. An economy that is fully employing all its productive resources but allocating less to investment than to consumption will be at which of the following positions on the production possibilities curve shown above?

- A
- B
- C
- D
- E

73. The United States government defines an individual as unemployed if the person

- does not hold a paying job
- has been recently fired
- works part-time but needs full-time work
- is without a job but is looking for work
- wants a job but is not searching because he or she thinks none is available

GO ON TO THE NEXT PAGE 

74. The gross national product is best described as a measure of
- economic welfare
  - the full-employment output of an economy
  - all monetary transactions in an economy
  - current consumption in an economy
  - current final output produced by an economy
75. An increase in which of the following would cause the long-run aggregate supply curve to shift to the right?
- Corporate income tax rates
  - Aggregate demand
  - Potential output
  - The average wage rate
  - The price level
76. Total spending in the economy is most likely to increase by the largest amount if which of the following occur to government spending and taxes?
- | <u>Government Spending</u> | <u>Taxes</u> |
|----------------------------|--------------|
| (A) Decrease               | Increase     |
| (B) Decrease               | No change    |
| (C) Increase               | Increase     |
| (D) Increase               | Decrease     |
| (E) No change              | Increase     |
77. If businesses are experiencing an unplanned increase in inventories, which of the following is most likely to be true?
- Aggregate demand is greater than output, and the level of spending will increase.
  - Aggregate demand is less than output, and the level of spending will decrease.
  - The economy is growing and will continue to grow until a new equilibrium level of spending is reached.
  - Planned investment is greater than planned saving, and the level of spending will decrease.
  - Planned investment is less than planned saving, and the level of spending will increase.
78. The purchase of securities on the open market by the Federal Reserve will
- increase the supply of money
  - increase the interest rate
  - increase the discount rate
  - decrease the number of Federal Reserve notes in circulation
  - decrease the reserve requirement
79. If a banking system's reserves are \$100 billion, demand deposits are \$500 billion, and the system is fully loaned-up, then the reserve requirement must be
- 10 percent
  - 12.5 percent
  - 16.6 percent
  - 20 percent
  - 25 percent
80. According to the Keynesian model, an expansionary fiscal policy would tend to cause which of the following changes in output and interest rates?
- | <u>Output</u> | <u>Interest Rates</u> |
|---------------|-----------------------|
| (A) Increase  | Increase              |
| (B) Increase  | Decrease              |
| (C) Decrease  | Increase              |
| (D) Decrease  | Decrease              |
| (E) No change | Decrease              |
81. Which of the following policies would most likely be recommended in an economy with an annual inflation rate of 3 percent and an unemployment rate of 11 percent?
- An increase in transfer payments and an increase in the reserve requirement
  - An increase in defense spending and an increase in the discount rate
  - An increase in income tax rates and a decrease in the reserve requirement
  - A decrease in government spending and the open-market sale of government securities
  - A decrease in the tax rate on corporate profits and a decrease in the discount rate
82. The cost of reducing unemployment is accepting a higher rate of inflation.  
The statement above would most likely be made by a person who believes in the
- quantity theory of money
  - Phillips curve
  - theory of rational expectations
  - paradox of value
  - liquidity trap
83. Which of the following would occur if the international value of the United States dollar decreased?
- United States exports would rise.
  - More gold would flow into the United States.
  - United States demand for foreign currencies would increase.
  - The United States trade deficit would increase.
  - Americans would pay less for foreign goods.

GO ON TO THE NEXT PAGE 

84. Which of the following will occur as a result of an improvement in technology?
- (A) The aggregate demand curve will shift to the right.
  - (B) The aggregate demand curve will shift to the left.
  - (C) The aggregate supply curve will shift to the right.
  - (D) The aggregate supply curve will shift to the left.
  - (E) The production possibilities curve will shift inward.
85. Assume that land in an agricultural economy can be used either for producing grain or for grazing cattle to produce beef. The opportunity cost of converting an acre from cattle grazing to grain production is the
- (A) market value of the extra grain that is produced
  - (B) total amount of beef produced
  - (C) number of extra bushels of grain that are produced
  - (D) amount by which beef production decreases
  - (E) profits generated by the extra production of grain
86. Which of the following workers is most likely to be classified as structurally unemployed?
- (A) A high school teacher who is unemployed during the summer months
  - (B) A recent college graduate who is looking for her first job
  - (C) A teen-ager who is seeking part-time employment at a fast-food restaurant
  - (D) A worker who is unemployed because his skills are obsolete
  - (E) A woman who reenters the job market after her child begins elementary school
87. According to the classical model, an increase in the money supply causes an increase in which of the following?
- I. The price level
  - II. Nominal gross national product
  - III. Nominal wages
- (A) I only
  - (B) II only
  - (C) III only
  - (D) II and III only
  - (E) I, II, and III
88. If, in response to an increase in investment of \$10 billion, equilibrium income rises by a total of \$50 billion, then the marginal propensity to save is
- (A) 0.1
  - (B) 0.2
  - (C) 0.5
  - (D) 0.8
  - (E) 0.9
89. In the circular flow diagram, which of the following is true?
- (A) Businesses pay wages, rent, interest, and profits to households in return for use of factors of production.
  - (B) Businesses purchase goods and services from households in return for money payments.
  - (C) Households pay wages, rent, interest, and profits to businesses in return for use of factors of production.
  - (D) The relationship between households and businesses exists only in a traditional society.
  - (E) The relationship between households and businesses exists only in a command economy.
90. Assume that the reserve requirement is 25 percent. If banks have excess reserves of \$10,000, which of the following is the maximum amount of additional money that can be created by the banking system through the lending process?
- (A) \$2,500
  - (B) \$10,000
  - (C) \$40,000
  - (D) \$50,000
  - (E) \$250,000
91. According to the Keynesian model, an increase in the money supply affects output more if
- (A) investment is sensitive to interest rates
  - (B) money demand is sensitive to interest rates
  - (C) the unemployment rate is low
  - (D) consumption is sensitive to the Phillips curve
  - (E) government spending is sensitive to public opinion

GO ON TO THE NEXT PAGE 

92. Which of the following combinations of monetary and fiscal policies is coordinated to increase output?

Monetary Policy

- (A) Decrease the reserve requirement
- (B) Increase the discount rate
- (C) Sell securities
- (D) Purchase securities
- (E) Purchase securities

Fiscal Policy

- Increase taxes
- Increase government expenditures
- Increase taxes
- Decrease government expenditures
- Decrease taxes

93. Which of the following is a possible cause of stagflation (simultaneous high unemployment and high inflation)?

- (A) Increase in labor productivity
- (B) Increase in price for raw materials
- (C) The rapid growth and development of the computer industry
- (D) A decline in labor union membership
- (E) A low growth rate of the money supply

94. If exchange rates are allowed to fluctuate freely and the United States demand for German marks increases, which of the following will most likely occur?

- (A) Americans will have to pay more for goods made in Germany.
- (B) Germans will find that American goods are getting more expensive.
- (C) The United States balance-of-payments deficit will increase.
- (D) The dollar price of marks will fall.
- (E) The dollar price of German goods will fall.

95. Which of the following would most likely be the immediate result if the United States increased tariffs on most foreign goods?

- (A) The United States standard of living would be higher.
- (B) More foreign goods would be purchased by Americans.
- (C) Prices of domestic goods would increase.
- (D) Large numbers of United States workers would be laid off.
- (E) The value of the United States dollar would decrease against foreign currencies.

96. Which of the following must be true of a country that is operating inside its production possibilities frontier?

- (A) It has a market economy.
- (B) It has a command economy.
- (C) It is in the early stages of industrial development.
- (D) It is using resources inefficiently.
- (E) It has plentiful resources.

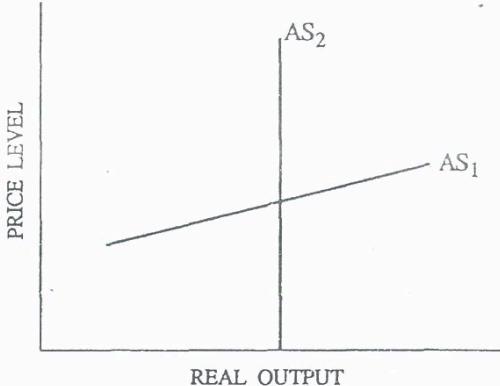
97. Which of the following is an example of "investment" as the term is used by economists?

- (A) A schoolteacher purchases 10,000 shares of stock in an automobile company.
- (B) Newlyweds purchase a previously owned home.
- (C) One large automobile firm purchases another large automobile firm.
- (D) A farmer purchases \$10,000 worth of government securities.
- (E) An apparel company purchases 15 new sewing machines.

98. If the gross national product increased from \$930 billion in 1969 to \$975 billion in 1970 solely because of a rise in the price level, which of the following was necessarily true?

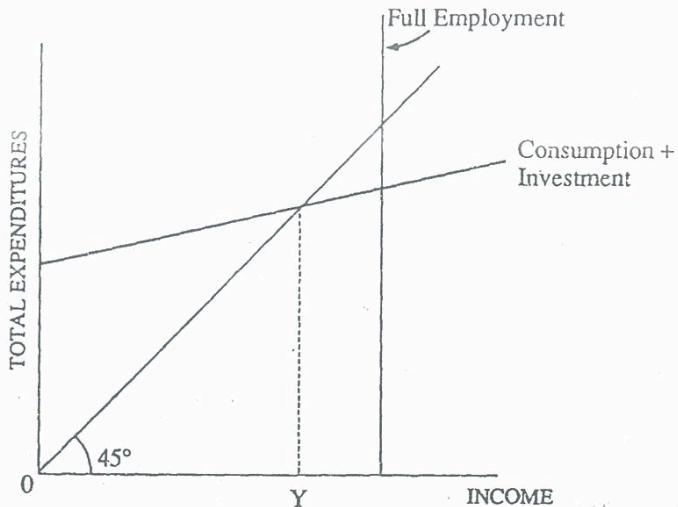
- (A) Real gross national product increased between 1969 and 1970.
- (B) Real gross national product decreased between 1969 and 1970.
- (C) Nominal income increased between 1969 and 1970.
- (D) Real income increased between 1969 and 1970.
- (E) The rise in the price level between 1969 and 1970 was greater than 10 percent.

GO ON TO THE NEXT PAGE 



99. The diagram above shows two aggregate supply curves, AS<sub>1</sub> and AS<sub>2</sub>. Which of the following statements most accurately characterizes the AS<sub>1</sub> curve relative to the AS<sub>2</sub> curve?
- (A) AS<sub>1</sub> is Keynesian because it reflects greater wage and price flexibility.  
 (B) AS<sub>1</sub> is classical because it reflects greater wage and price flexibility.  
 (C) AS<sub>1</sub> is Keynesian because it reflects less wage and price flexibility.  
 (D) AS<sub>1</sub> is classical because it reflects less wage and price flexibility.  
 (E) AS<sub>1</sub> could be either classical or Keynesian because it reflects greater wage flexibility but less price flexibility.
100. If the marginal propensity to consume is 0.9, what is the maximum amount that the equilibrium gross national product could change if government expenditures increase by \$1 billion?
- (A) It could decrease by up to \$9 billion.  
 (B) It could increase by up to \$0.9 billion.  
 (C) It could increase by up to \$1 billion.  
 (D) It could increase by up to \$9 billion.  
 (E) It could increase by up to \$10 billion.

GO ON TO THE NEXT PAGE



101. The figure above represents an economy with no government and no foreign sector. Which of the following statements about this economy is true?
- At Y, planned investment is less than saving.
  - At Y, planned investment is equal to saving.
  - At Y, planned investment is greater than saving.
  - At full employment, total spending is equal to total income.
  - At full employment, planned investment is equal to saving.
- 
102. According to the classical economists, which of the following is most sensitive to interest rates?
- Consumption
  - Investment
  - Government spending
  - Transfer payments
  - Intermediate goods
103. Expansionary fiscal policy will be most effective when
- the aggregate supply curve is horizontal
  - the economy is at or above full-employment output
  - transfer payments are decreased, while taxes remain unchanged
  - wages and prices are very flexible
  - the Federal Reserve simultaneously increases the reserve requirement
104. Which of the following would increase the value of the multiplier?
- An increase in government expenditure
  - An increase in exports
  - A decrease in government unemployment benefits
  - A decrease in the marginal propensity to consume
  - A decrease in the marginal propensity to save
105. According to the monetarists, inflation is most often the result of
- high federal tax rates
  - increased production of capital goods
  - decreased production of capital goods
  - an excessive growth of the money supply
  - upward shifts in the consumption function

GO ON TO THE NEXT PAGE 

106. To counteract a recession, the Federal Reserve should
- (A) buy securities on the open market and raise the reserve requirement
  - (B) buy securities on the open market and lower the reserve requirement
  - (C) buy securities on the open market and raise the discount rate
  - (D) sell securities on the open market and raise the discount rate
  - (E) raise the reserve requirement and lower the discount rate
107. Which of the following would result in the largest increase in aggregate demand?
- (A) A \$30 billion increase in military expenditure and a \$30 billion open-market purchase of government securities
  - (B) A \$30 billion increase in military expenditure and a \$30 billion open-market sale of government securities
  - (C) A \$30 billion tax cut and a \$30 billion open-market sale of government securities
  - (D) A \$30 billion tax increase and a \$30 billion open-market purchase of government securities
  - (E) A \$30 billion increase in social security payments and a \$30 billion open-market sale of government securities
108. Which of the following will be true if inflation can be accurately forecast and both prices and wages are fully flexible?
- (A) Long periods of high unemployment will be possible.
  - (B) The supply of labor will be insensitive to the real wage rate.
  - (C) The Phillips curve will be vertical.
  - (D) The equilibrium unemployment rate will be zero.
  - (E) Real interest rates will be greater than nominal interest rates.
109. Which of the following policies is most likely to encourage long-run economic growth in a country?
- (A) An embargo on high-technology imports
  - (B) A decline in the number of immigrants to the country
  - (C) An increase in government transfer payments
  - (D) An increase in the per capita savings rate
  - (E) An increase in defense spending
110. In one year, real gross national product fell by 3 percent, inflation rose to 10 percent, and unemployment rose to 11 percent. Which of the following may have caused these changes?
- (A) A decrease in the money supply and a decrease in government spending
  - (B) A decrease in inflationary expectations
  - (C) An increase in investment in inventories
  - (D) An increase in the money supply and an increase in government spending
  - (E) An increase in inflationary expectations

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.

**ANSWER KEY AND PERCENT ANSWERING CORRECTLY  
SECTION I**  
**1990 AP Macroeconomics Examination**

Listed below are the correct answers to the multiple-choice questions and the percentage of AP candidates who attempted each question and answered it correctly. As a general rule, candidates who correctly answered an individual question also achieved a higher mean score on the exam as a whole than candidates who did not answer that question correctly.

Item No.	Correct Answer	Percent Correct	Item No.	Correct Answer	Percent Correct	Item No.	Correct Answer	Percent Correct
67	D	76%	100	E	41%			
68	E	82%	101	B	55%			
69	D	66%	102	B	75%			
70	B	62%	103	A	35%			
71	A	69%	104	E	58%			
72	C	82%	105	D	76%			
73	D	75%	106	B	80%			
74	E	77%	107	A	52%			
75	C	45%	108	C	26%			
76	D	91%	109	D	55%			
77	B	76%	110	E	27%			
78	A	79%						
79	D	77%						
80	A	23%						
81	E	57%						
82	B	60%						
83	A	67%						
84	C	83%						
85	D	77%						
86	D	71%						
87	E	48%						
88	B	68%						
89	A	65%						
90	C	55%						
91	A	44%						
92	E	76%						
93	B	51%						
61	D	78%	94	A	69%			
62	A	70%	95	C	55%			
63	C	82%	96	D	86%			
64	C	75%	97	E	70%			
65	B	61%	98	C	59%			
66	B	77%	99	C	28%			

An answer sheet with the correct responses filled in appears on the next page.



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## **Released Exam**

### **Multiple-Choice Section**





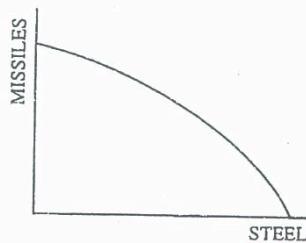
MACROECONOMICS

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. Which of the following would cause the production possibilities curve shown above to shift outward?
  - (A) Reopening steel plants that had been closed
  - (B) Rehiring laid-off steelworkers
  - (C) Using machinery for missile production instead of steel production
  - (D) Using machinery for steel production instead of missile production
  - (E) Developing a more efficient steelmaking process
2. If in a specified year nominal gross domestic product grew by 11 percent and real gross domestic product grew by 4 percent, inflation for this year would be
  - (A) -7%
  - (B) 7%
  - (C) 8%
  - (D) 11%
  - (E) 15%
3. Which of the following is an example of structural unemployment?
  - (A) A computer programmer who leaves her job to move to Florida
  - (B) A worker who loses his job during a recession
  - (C) An autoworker who is replaced by a robot
  - (D) A construction worker who is always unemployed during the winter months
  - (E) A worker who is engaged in unproductive work

4. What would be the effect of a large increase in labor productivity on the real gross domestic product and the price level?

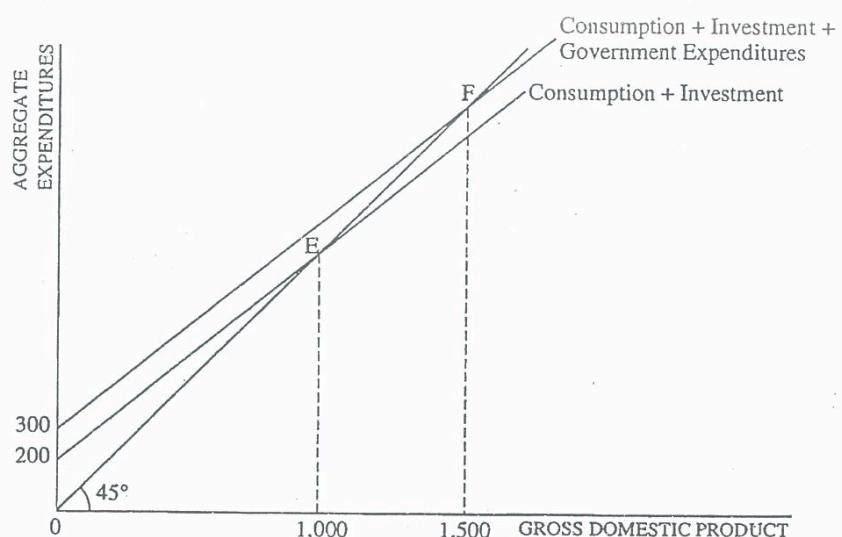
Real Gross Domestic Product	Price Level
(A) Increase	Increase
(B) Increase	Decrease
(C) No effect	Increase
(D) Decrease	Increase
(E) Decrease	Decrease

5. An increase in which of the following will increase the value of the spending multiplier?

- (A) The supply of money
- (B) Equilibrium output
- (C) Personal income tax rates
- (D) The marginal propensity to consume
- (E) The required reserve ratio

6. According to the Keynesian model, which of the following would increase aggregate demand?

- (A) An increase in autonomous investment
- (B) An increase in the discount rate
- (C) A decrease in unemployment compensation payments
- (D) A decrease in government expenditures accompanied by an equal reduction in taxes
- (E) A decrease in government expenditures on public works



7. The graph above indicates equilibrium at E for a closed economy without government spending. If the addition of government spending results in equilibrium at F, which of the following is true?

- (A) Government spending is \$300 and the multiplier is 5.
- (B) Government spending is \$100 and the multiplier is 5.
- (C) Government spending is \$100 and consumption increases by \$500.
- (D) Government spending and gross domestic product increase by \$500 each.
- (E) Consumption and gross domestic product increase by \$500 each.

8. Commercial banks can create money by
- (A) transferring depositors' accounts at the Federal Reserve for conversion to cash
  - (B) buying Treasury bills from the Federal Reserve
  - (C) sending vault cash to the Federal Reserve
  - (D) maintaining a 100 percent reserve requirement
  - (E) lending excess reserves to customers
9. If the reserve requirement is 20 percent, the existence of \$100 worth of excess reserves in the banking system can lead to a maximum expansion of the money supply equal to
- (A) \$20
  - (B) \$100
  - (C) \$300
  - (D) \$500
  - (E) \$750
10. If the Federal Reserve lowers the reserve requirement, which of the following would most likely occur?
- (A) Imports will rise, decreasing the trade deficit.
  - (B) The rate of saving will increase.
  - (C) Unemployment and inflation will both increase.
  - (D) Businesses will purchase more factories and equipment.
  - (E) The budget deficit will increase.
11. If the public's desire to hold money as currency increases, what will the impact be on the banking system?
- (A) Banks would be more able to reduce unemployment.
  - (B) Banks would be more able to decrease aggregate supply.
  - (C) Banks would be less able to decrease aggregate supply.
  - (D) Banks would be more able to expand credit.
  - (E) Banks would be less able to expand credit.

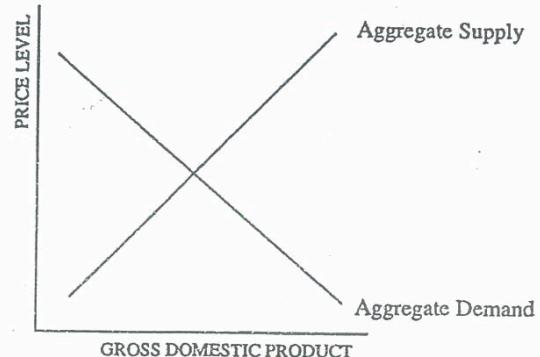
12. According to Keynesian theory, decreasing taxes and increasing government spending will most likely change consumption expenditures and unemployment in which of the following ways?

<u>Consumption Expenditures</u>	<u>Unemployment</u>
(A) Decrease	Increase
(B) Decrease	No change
(C) Increase	Decrease
(D) Increase	Increase
(E) No change	Decrease

13. Which of the following policy combinations is most likely to cure a severe recession?

<u>Open-Market Operations</u>	<u>Taxes</u>	<u>Government Spending</u>
(A) Buy securities	Increase	Decrease
(B) Buy securities	Decrease	Increase
(C) Buy securities	Decrease	Decrease
(D) Sell securities	Decrease	Decrease
(E) Sell securities	Increase	Increase

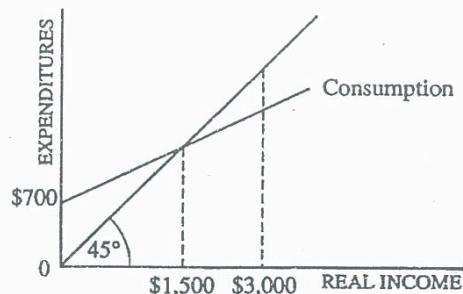
14. In an economy at full employment, a presidential candidate proposes cutting the government debt in half in four years by increasing income tax rates and reducing government expenditures. According to Keynesian theory, implementation of these policies is most likely to increase
- unemployment
  - consumer prices
  - aggregate demand
  - aggregate supply
  - the rate of economic growth
15. To protect high-cost domestic producers, a country imposes a tariff on an imported commodity, Y. Which of the following is most likely to occur in the short run?
- A decrease in domestic production of Y
  - An increase in domestic production of Y
  - An increase in foreign output of Y
- I only
  - II only
  - III only
  - I and III only
  - II and III only
16. Suppose two countries are each capable of individually producing two given commodities. Instead, each specializes by producing the commodity for which it has a comparative advantage and then trades with the other country. Which of the following is most likely to result?
- The two countries will become more independent of each other.
  - Unemployment will increase in one country and decrease in the other.
  - There will be more efficient production in one country but less efficient production in the other.
  - Both countries will become better off.
  - Both countries will be producing their commodity inefficiently.
17. Which of the following means of reducing military spending would have the greatest positive impact on gross domestic product for the United States?
- Combining two domestic military bases into one overseas base
  - Cutting retirement benefits to military personnel
  - Closing overseas military bases and relocating those operations to the United States
  - Closing overseas military bases and laying off military personnel
  - Canceling contracts with domestic producers for new airplanes



18. According to the graph above, which of the following will necessarily result in a decrease in output?
- A rightward shift of the aggregate demand curve
  - A leftward shift of the aggregate demand curve
  - A rightward shift of the aggregate supply curve
  - A leftward shift of the aggregate supply curve
- I only
  - III only
  - I and III only
  - II and III only
  - II and IV only

19. Which of the following will result in the greatest increase in aggregate demand?
- A \$100 increase in taxes
  - A \$100 decrease in taxes
  - A \$100 increase in government expenditures
  - A \$100 increase in government expenditures, coupled with a \$100 increase in taxes
  - A \$100 increase in government expenditures, coupled with a \$100 decrease in taxes
20. If the economy is in a severe recession, which of the following is the fiscal policy most effective in stimulating production?
- Government spending increases.
  - Government spending decreases.
  - Personal income taxes are increased.
  - The Federal Reserve sells bonds on the open market.
  - The Federal Reserve buys bonds on the open market.

Questions 21-22 refer to the diagram below, which depicts an economy's consumption function.



21. If the marginal propensity to consume increases, the equilibrium levels of income and consumption will change in which of the following ways?
- | Equilibrium Level<br>of Income | Equilibrium Level<br>of Consumption |
|--------------------------------|-------------------------------------|
| (A) No change                  | No change                           |
| (B) No change                  | Increase                            |
| (C) Increase                   | No change                           |
| (D) Increase                   | Increase                            |
| (E) Decrease                   | Decrease                            |
22. If private investment of \$100 is added to the economy, the equilibrium levels of income and consumption will change in which of the following ways?
- | Equilibrium Level<br>of Income | Equilibrium Level<br>of Consumption |
|--------------------------------|-------------------------------------|
| (A) Increase                   | Decrease                            |
| (B) Increase                   | Increase                            |
| (C) Increase                   | No change                           |
| (D) No change                  | Increase                            |
| (E) No change                  | No change                           |

23. The real value of the United States dollar is determined by
- (A) federal regulations regarding purchasing power
  - (B) the value of the gold backing the dollar
  - (C) the goods and services it will buy
  - (D) the money multiplier
  - (E) the marginal propensity to consume
24. The demand for money increases when national income increases because
- (A) spending on goods and services increases
  - (B) interest rates increase
  - (C) the budget deficit increases
  - (D) the money supply increases
  - (E) the public becomes more optimistic about the future
25. An aggregate supply curve may be horizontal over some range because within that range
- (A) a higher price level leads to higher interest rates, which reduce the money supply and consumer spending
  - (B) changes in the aggregate price level do not induce substitution
  - (C) output cannot be increased unless prices and interest rates increase
  - (D) rigid prices prevent employment from fluctuating
  - (E) resources are underemployed and an increase in demand will be satisfied without any pressure on the price level
26. If the Federal Reserve wishes to use monetary policy to reinforce Congress' fiscal policy changes, it should
- (A) increase the money supply when government spending is increased
  - (B) increase the money supply when government spending is decreased
  - (C) decrease the money supply when government spending is increased
  - (D) increase interest rates when government spending is increased
  - (E) decrease interest rates when government spending is decreased
27. Which of the following relationships is illustrated by a short-run Phillips curve?
- (A) A decrease in the rate of inflation is accompanied by an increase in the rate of economic growth.
  - (B) A decrease in the rate of inflation is accompanied by an increase in the rate of unemployment.
  - (C) An increase in the rate of inflation is accompanied by a decrease in the rate of economic growth.
  - (D) An increase in the rate of inflation is accompanied by an increase in the rate of unemployment.
  - (E) A decrease in the rate of economic growth is accompanied by a decrease in the rate of unemployment.
28. Which of the following could cause simultaneous increases in inflation and unemployment?
- (A) A decrease in government spending
  - (B) A decrease in the money supply
  - (C) A decrease in the velocity of money
  - (D) An increase in inflationary expectations
  - (E) An increase in the overall level of productivity
29. If other things are held constant, an increase in United States imports will
- (A) tend to cause the dollar to appreciate because the world supply of dollars will rise
  - (B) tend to cause the dollar to appreciate because the world demand for dollars will rise
  - (C) have no effect on the exchange rate for the dollar because exports will also increase
  - (D) tend to cause the dollar to depreciate because the world supply of dollars will rise
  - (E) tend to cause the dollar to depreciate because the world demand for dollars will rise

30. An increase in which of the following is most likely to cause an improvement in the standard of living over time?
- (A) Size of the population
  - (B) Size of the labor force
  - (C) Number of banks
  - (D) Level of taxation
  - (E) Productivity of labor
31. The long-run aggregate supply curve is likely to shift to the right when there is
- (A) an increase in the cost of productive resources
  - (B) an increase in productivity
  - (C) an increase in the federal budget deficit
  - (D) a decrease in the money supply
  - (E) a decrease in the labor force
32. The consumer price index measures which of the following?
- (A) The change over time of the weighted prices of a particular group of goods and services
  - (B) The change over time of the weighted wholesale price index
  - (C) The change over time of the difference between the gross domestic product deflator and the wholesale price index
  - (D) Inflation corrected for changes in the real gross domestic product
  - (E) Inflation corrected for changes in the wholesale price index
33. Which of the following is true if the economy is producing at the full-employment level of output?
- (A) The unemployment rate is zero.
  - (B) No person is receiving unemployment compensation from the government.
  - (C) There is frictional unemployment.
  - (D) The government's budget is balanced.
  - (E) The balance of trade is in equilibrium.
34. Which of the following is a basic tenet of classical economic analysis?
- (A) Saving is usually greater than investment.
  - (B) The economy is self-correcting to full employment.
  - (C) The economy may be in equilibrium at less than full employment.
  - (D) Inflation is not a serious economic problem.
  - (E) The prices of products tend to be inflexible.
35. Which of the following will most likely result from a decrease in government spending?
- (A) An increase in output
  - (B) An increase in the price level
  - (C) An increase in employment
  - (D) A decrease in aggregate supply
  - (E) A decrease in aggregate demand
36. Current equilibrium output equals \$2,500,000, potential output equals \$2,600,000, and the marginal propensity to consume equals 0.75. Under these conditions, a Keynesian economist is most likely to recommend
- (A) decreasing taxes by \$25,000
  - (B) decreasing taxes by \$100,000
  - (C) increasing government spending by \$25,000
  - (D) increasing government spending by \$33,333
  - (E) increasing government spending by \$100,000
37. An inflationary gap could be reduced by
- (A) an increase in government spending
  - (B) an increase in the supply of money
  - (C) an increase in the income tax rate
  - (D) a decrease in the discount rate
  - (E) a decrease in the reserve requirement

38. The circular flow of economic activity between consumers and producers includes which of the following?
- I. Households buy factor services from firms.
  - II. Households sell factor services to firms.
  - III. Households buy outputs from firms.
  - IV. Households sell outputs to firms.
- (A) III only  
(B) IV only  
(C) I and II only  
(D) II and III only  
(E) III and IV only
39. Suppose the required reserve ratio is 20 percent and a single bank with no excess reserves receives a \$100 deposit from a new customer. The bank now has excess reserves equal to
- (A) \$20  
(B) \$80  
(C) \$100  
(D) \$400  
(E) \$500
40. Which of the following is most likely to increase if the public decides to increase its holdings of currency?
- (A) The interest rate
  - (B) The price level
  - (C) Disposable personal income
  - (D) Employment
  - (E) The reserve requirement
41. During a mild recession, if policymakers want to reduce unemployment by increasing investment, which of the following policies would be most appropriate?
- (A) Equal increases in government expenditure and taxes
  - (B) An increase in government expenditure only
  - (C) An increase in transfer payments
  - (D) An increase in the reserve requirement
  - (E) Purchase of government securities by the Federal Reserve

42. Which of the following monetary and fiscal policy combinations would most likely result in a decrease in aggregate demand?

<u>Discount Rate</u>	<u>Open-Market Operations</u>	<u>Government Spending</u>
(A) Lower	Buy bonds	Increase
(B) Lower	Buy bonds	Decrease
(C) Raise	Sell bonds	Increase
(D) Raise	Buy bonds	Increase
(E) Raise	Sell bonds	Decrease

43. Which of the following is true of supply shocks?

- (A) They tend to change both relative prices and the general price level in the economy.
- (B) They affect only the general price level.
- (C) They can be anticipated and offset with appropriate fiscal policy.
- (D) They can be anticipated and offset with appropriate monetary policy.
- (E) They make the aggregate supply curve vertical.

44. Suppose that, from 1985 to 1986, unemployment fell from 7.2 to 7.0 percent and inflation fell from 3.8 to 1.1 percent. An explanation of these changes might be that the

- (A) aggregate demand curve shifted to the left
- (B) aggregate demand curve shifted to the right
- (C) aggregate supply curve shifted to the left
- (D) aggregate supply curve shifted to the right
- (E) short-run Phillips curve shifted to the right

45. If higher United States interest rates cause foreign demand for the dollar to increase, which of the following will occur to the international value of the dollar and to United States exports?

<u>International Value of the Dollar</u>	<u>Exports</u>
(A) Increase	Increase
(B) Increase	Decrease
(C) Increase	No change
(D) Decrease	Increase
(E) Decrease	Decrease

46. The table below indicates the number of labor hours required in Countries X and Y to produce one unit of food or one unit of clothing.

<u>Country</u>	<u>Food</u>	<u>Clothing</u>
X	20 hours	50 hours
Y	10 hours	20 hours

Given this information, which of the following statements is correct?

- (A) X has a comparative advantage in the production of both food and clothing.
  - (B) Y has a comparative advantage in the production of both food and clothing.
  - (C) X has a comparative advantage in food production, whereas Y has a comparative advantage in clothing production.
  - (D) Y has a comparative advantage in food production, whereas X has a comparative advantage in clothing production.
  - (E) Neither country has a comparative advantage in the production of either good.
47. Which of the following groups of people would benefit from unanticipated inflation?

- I. Savers
- II. Borrowers
- III. Lenders

- (A) I only
- (B) II only
- (C) III only
- (D) I and II only
- (E) I and III only

48. An increase in the labor force participation rate will

- (A) increase investment and decrease savings
- (B) increase savings and decrease investment
- (C) have no effect on unemployment
- (D) make it easier to reduce unemployment
- (E) make it more difficult to reduce unemployment

49. Which of the following is a key feature of Keynesian economics?

- (A) The level of saving depends mostly on interest rates.
- (B) The level of government expenditure depends mostly on interest rates.
- (C) Supply creates its own demand.
- (D) Macroeconomic equilibrium can occur at less than full employment.
- (E) Wages are more flexible than prices.

50. If a large increase in total spending has no effect on real gross domestic product, it must be true that

- (A) the price level is rising
- (B) the economy is experiencing high unemployment
- (C) the spending multiplier is equal to 1
- (D) the economy is in short-run equilibrium
- (E) aggregate supply has increased

51. According to Keynesian theory, the most important determinant of saving and consumption is the

- (A) interest rate
- (B) price level
- (C) level of income
- (D) level of employment
- (E) flexibility of wages and prices

52. Under which of the following circumstances would increasing the money supply be most effective in increasing real gross domestic product?

<u>Interest Rates</u>	<u>Employment</u>	<u>Business Optimism</u>
(A) High	Full	High
(B) High	Less than full	High
(C) Low	Full	High
(D) Low	Full	Low
(E) Low	Less than full	Low

53. Faced with a large federal budget deficit, the government decides to decrease expenditures and tax revenues by the same amount. This action will affect output and interest rates in which of the following ways?

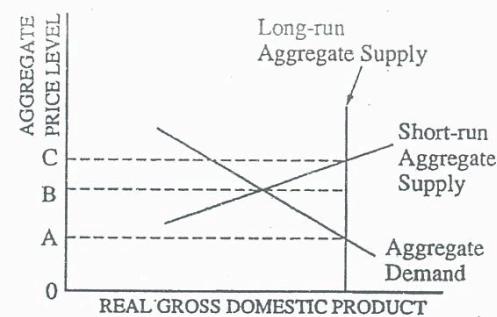
<u>Output</u>	<u>Interest Rates</u>
(A) Increase	Increase
(B) Increase	Decrease
(C) No change	Decrease
(D) Decrease	Increase
(E) Decrease	Decrease

54. If crowding out only partially offsets the effects of a tax cut, which of the following changes in interest rates and gross domestic product are most likely to occur?

<u>Interest Rates</u>	<u>Gross Domestic Product</u>
(A) Increase	Increase
(B) Increase	Remain unchanged
(C) Increase	Decrease
(D) Remain unchanged	Increase
(E) Decrease	Decrease

55. All of the following are components of the money supply in the United States EXCEPT

- (A) paper money
- (B) gold bullion
- (C) checkable deposits
- (D) coins
- (E) demand deposits



56. The graph above depicts an economy's aggregate demand and aggregate supply curves. If aggregate demand remains constant, the equilibrium price levels in the short run and in the long run will be which of the following?

<u>Short Run</u>	<u>Long Run</u>
(A) 0A	0A
(B) 0B	0A
(C) 0B	0C
(D) 0C	0A
(E) 0C	0C

57. According to both monetarists and Keynesians, which of the following happens when the Federal Reserve reduces the discount rate?

- (A) The demand for money decreases and market interest rates decrease.
- (B) The demand for money increases and market interest rates increase.
- (C) The supply of money increases and market interest rates decrease.
- (D) The supply of money increases and market interest rates increase.
- (E) Both the demand for money and the supply of money increase and market interest rates increase.

58. An increase in which of the following is most likely to increase the long-run growth rate of an economy's real per capita income?
- (A) Population growth
  - (B) The proportion of gross domestic product consumed
  - (C) The educational attainment of the population
  - (D) The supply of money in circulation
  - (E) Personal income taxes
59. An increase in the money supply will have the greatest effect on real gross domestic product if
- (A) the marginal propensity to consume is low
  - (B) unemployment is very low
  - (C) investment spending is not sensitive to changes in interest rates
  - (D) the quantity of money demanded is not very sensitive to interest rates
  - (E) the required reserve ratio is high
60. If the Federal Reserve undertakes a policy to reduce interest rates, international capital flows will be affected in which of the following ways?
- (A) Long-run capital outflows from the United States will decrease.
  - (B) Long-run capital inflows to the United States will increase.
  - (C) Short-run capital outflows from the United States will decrease.
  - (D) Short-run capital inflows to the United States will decrease.
  - (E) Short-run capital inflows to the United States will not change.

## Chapter III

### Answers to the 1995 AP Macroeconomics Examination

#### ■ SECTION I: MULTIPLE-CHOICE

Listed below are the correct answers to the multiple-choice questions and the percentage of AP candidates

who attempted each question and answered it correctly. An answer sheet gridded with the correct responses appears on the next page.

Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct	Item No.	Correct Answer	Percent Correct
1	E	67	31	B	67
2	B	67	32	A	67
3	C	67	33	C	67
4	B	67	34	B	67
5	D	67	35	E	67
6	A	67	36	C	67
7	B	67	37	C	67
8	E	67	38	D	67
9	D	67	39	B	67
10	D	67	40	A	67
11	E	67	41	E	67
12	C	67	42	A	67
13	B	67	43	D	67
14	A	67	44	B	67
15	B	67	45	C	67
16	D	67	46	B	67
17	C	67	47	C	67
18	E	67	48	B	67
19	E	67	49	D	67
20	A	67	50	A	67
21	D	67	51	C	67
22	B	67	52	B	67
23	C	67	53	E	67
24	A	67	54	A	67
25	E	67	55	B	67
26	A	67	56	B	67
27	B	67	57	C	67
28	D	67	58	C	67
29	D	67	59	D	67
30	E	67	60	D	67

# **2000 AP<sup>®</sup> Macroeconomics**

## **Released Exam**

### **Multiple-Choice Section**





## 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. Which of the following will most likely occur in an economy if more money is demanded than is supplied?

- (A) The amount of investment spending will increase.
- (B) Interest rates will decrease.
- (C) Interest rates will increase.
- (D) The demand curve for money will shift to the left.
- (E) The demand curve for money will shift to the right.

2. Which of the following transactions would represent an addition to a nation's current gross domestic product?

- (A) Ms. Smith purchases a share of stock in an automobile company.
- (B) A retailer increases her stock of imported shoes.
- (C) The government increases its domestic purchases of food for use by the military.
- (D) A corporation sells shoes from last year's inventory.
- (E) A mother sells her car to her daughter.

3. An increase in energy costs will most likely cause the price level and real gross domestic product to change in which of the following ways?

Price Level	Real Gross Domestic Product
(A) Increase	Increase
(B) Increase	Decrease
(C) Increase	Not change
(D) Decrease	Increase
(E) Decrease	Decrease

4. Which of the following arguments is typically associated with classical economists?

- (A) A market economy is self-correcting and thus will not remain in a recession indefinitely.
- (B) A market economy has stable prices and thus is usually free from inflation.
- (C) A market economy requires a strong government to ensure that the market meets the needs of the people.
- (D) A market economy needs only moderate assistance from the government to avoid an extended recession.
- (E) A market economy eventually results in monopolies in both the input and output markets.

5. Which of the following is true according to the circular flow model?

- (A) Firms are suppliers in both the product and factor markets.
- (B) Firms are demanders in the product markets and suppliers in the factor markets.
- (C) Households are demanders in both the product and factor markets.
- (D) Households are demanders in the product markets and suppliers in the factor markets.
- (E) The government is a demander in the product market only.

6. Which of the following will occur if the federal government runs a budget deficit?
- The expenditure multiplier will increase.
  - The size of the national debt will increase.
  - The economy's output will decrease.
  - State governments will run a budget surplus to offset the federal deficit.
  - Interest rates will tend to decline.
7. According to the Keynesian savings schedule, when aggregate income increases by a given amount, savings will
- remain the same
  - decrease by the amount of the change in income
  - increase by the amount of the change in income
  - increase by less than the amount of the change in income
  - increase by more than the amount of the change in income
8. If on receiving a checking deposit of \$300 a bank's excess reserves increased by \$255, the required reserve ratio must be
- 5%
  - 15%
  - 25%
  - 35%
  - 45%
9. The Federal Reserve can increase the money supply by
- selling gold reserves to the banks
  - selling foreign currency holdings
  - buying government bonds on the open market
  - buying gold from foreign central banks
  - borrowing reserves from foreign governments
10. When consumers hold money rather than bonds because they expect the interest rate to increase in the future, they are holding money for which of the following purposes?
- Transactions
  - Unforeseen expenditures
  - Speculation
  - Liquidity
  - Exchange
11. An increase in the money supply is most likely to have which of the following short-run effects on real interest rates and real output?
- | Real Interest Rates | Real Output |
|---------------------|-------------|
| (A) Decrease        | Decrease    |
| (B) Decrease        | Increase    |
| (C) Increase        | Decrease    |
| (D) Increase        | No change   |
| (E) No change       | Increase    |
12. In the Keynesian model, an expansionary monetary policy will lead to
- lower real interest rates and more investment
  - lower real interest rates and lower prices
  - higher real interest rates and lower prices
  - higher real interest rates and higher real income
  - higher nominal interest rates and more investment
13. An inflationary gap can be eliminated by all of the following EXCEPT
- an increase in personal income taxes
  - an increase in the money supply
  - an increase in interest rates
  - a decrease in government spending
  - a decrease in net exports

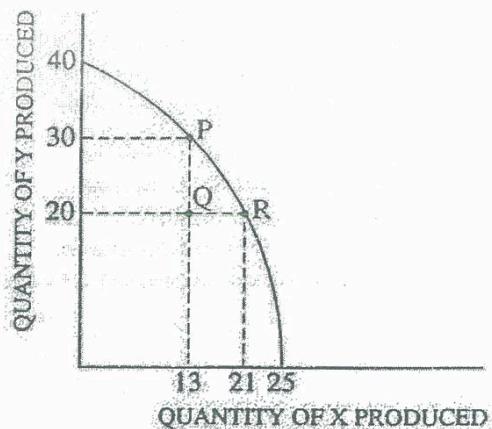
**Section I**

14. A contractionary supply shock would most likely result in

- (A) an increase in aggregate demand
- (B) an increase in national income
- (C) an increase in gross domestic product
- (D) a decrease in the general price level
- (E) a decrease in employment

15. An increase in Japan's demand for United States goods would cause the value of the dollar to

- (A) depreciate because of inflation
- (B) depreciate because the United States would be selling more dollars to Japan
- (C) depreciate because the United States money supply would increase as exports rise
- (D) appreciate because Japan would be buying more United States dollars
- (E) appreciate because Japan would be selling more United States dollars



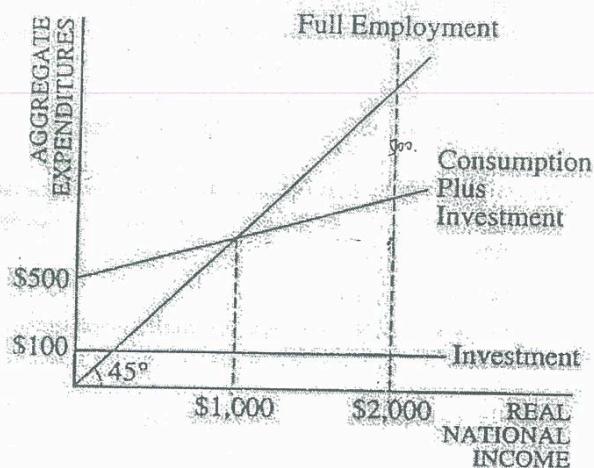
16. On the basis of the diagram above showing an economy's production possibilities curve for two goods, which of the following statements must be true?

- I. The opportunity cost of moving from point P to point R is 10 units of Y.
  - II. The opportunity cost of moving from point R to point P is 8 units of X.
  - III. The opportunity cost of moving from point Q to point R is 0 units of Y.
- (A) I only
  - (B) III only
  - (C) I and II only
  - (D) II and III only
  - (E) I, II, and III

17. If real gross domestic product is increasing at 3 percent per year and nominal gross domestic product is increasing at 7 percent per year, which of the following is necessarily true?
- (A) Unemployment is increasing.
  - (B) The price level is increasing.
  - (C) Exports exceed imports.
  - (D) The economy is in a recession.
  - (E) The government is running a budget deficit.
18. The official unemployment rate is not an accurate indicator of actual unemployment in the economy because
- (A) structural unemployment is greater than cyclical unemployment at the going wage rate
  - (B) full employment is greater than natural unemployment
  - (C) the unemployment rate is less than natural unemployment
  - (D) the official rate does not include persons who have given up looking for work
  - (E) the official rate does not reflect the number of people receiving unemployment compensation

**Section I**

Questions 19-21 refer to the graph below that shows an economy's aggregate expenditures, assuming no foreign sector and that government expenditures are initially zero.



19. The economy is currently experiencing

- (A) inflation
- (B) recession
- (C) expansion
- (D) stagflation
- (E) rapid growth

20. The appropriate monetary policy measure necessary to reach full employment is to increase

- (A) the money supply
- (B) the reserve requirements
- (C) the discount rate
- (D) taxes
- (E) exports

21. The minimum increase in government spending necessary to reach full employment is

- (A) \$2,000
- (B) \$1,000
- (C) \$500
- (D) \$200
- (E) \$100

22. If the economy is operating in the intermediate range of the aggregate supply curve and if aggregate demand increases due to an increase in net exports, then the price level, output, and the unemployment rate are most likely to change in which of the following ways?

Price Level	Output	Unemployment Rate
(A) Increase	Increase	Increase
(B) Increase	Increase	Decrease
(C) Increase	Decrease	Increase
(D) Increase	Decrease	Decrease
(E) Decrease	Decrease	Increase

23. The value of the spending multiplier decreases when
- (A) tax rates are reduced
  - (B) exports decline
  - (C) imports decline
  - (D) government spending increases
  - (E) the marginal propensity to save increases

24. Which of the following best explains why equilibrium income will rise by more than \$100 in response to a \$100 increase in government spending?
- (A) Incomes will rise, resulting in a tax decrease.
  - (B) Incomes will rise, resulting in higher consumption.
  - (C) The increased spending raises the aggregate price level.
  - (D) The increased spending increases the money supply, lowering interest rates.
  - (E) The higher budget deficit reduces investment.

25. The money-creating ability of the banking system will be less than the maximum amount indicated by the money multiplier when
- (A) interest rates are high
  - (B) the velocity of money is rising
  - (C) people hold a portion of their money in the form of currency
  - (D) the unemployment rate is low
  - (E) the government's budget is in deficit

26. Which of the following constitutes the largest component of the United States money supply (M1)?
- (A) Silver certificates
  - (B) Checkable deposits (demand deposits)
  - (C) Currency (paper money)
  - (D) Coins
  - (E) Large certificates of deposit

27. Under which of the following conditions would restrictive monetary policy be most appropriate?
- (A) High inflation
  - (B) High unemployment
  - (C) Full employment with stable prices
  - (D) Low interest rates
  - (E) A budget deficit

**Section I**

(28) A major advantage of automatic stabilizers in fiscal policy is that they

- (A) reduce the public debt
- (B) increase the possibility of a balanced budget
- (C) stabilize the unemployment rate
- (D) go into effect without passage of new legislation
- (E) automatically reduce the inflation rate

(29) Which of the following would best explain a decline in potential gross domestic product?

- (A) Negative net investment
- (B) The discovery of vast new oil deposits
- (C) A lower price level
- (D) A decrease in the infant mortality rate
- (E) A decrease in wages and profits

(30) Which of the following changes will occur to the demand for United States dollars and the international value of the dollar in the short run if investors in the United States and abroad increase their purchases of United States government bonds?

Demand for Dollars	International Value of the Dollar
(A) Decrease	Decrease
(B) Decrease	Increase
(C) Decrease	No change
(D) Increase	Decrease
(E) Increase	Increase

(31) As nations specialize in production and trade in international markets, they can expect which of the following domestic improvements?

- I. Allocation of domestic resources
- II. Standard of living
- III. Self-sufficiency

(A) I only

(B) II only

(C) III only

(D) I and II only

(E) I, II, and III

(32) As a measure of economic welfare, gross domestic product underestimates a country's production of goods and services when there is an increase in

- (A) the production of military goods
- (B) the production of antipollution devices
- (C) crime prevention services
- (D) household production
- (E) legal services

(33) Unexpected increases in inventories usually precede

- (A) increases in inflation
- (B) increases in imports
- (C) stagflation
- (D) decreases in production
- (E) decreases in unemployment

(34) The short-run aggregate supply curve is likely to shift to the left when there is an increase in

- (A) the cost of productive resources
- (B) productivity
- (C) the money supply
- (D) the federal budget deficit
- (E) imports

35. In the simple Keynesian aggregate expenditure model of an economy, changes in investment or government spending will lead to a change in which of the following?
- (A) The price level
  - (B) The level of output and employment
  - (C) Interest rates
  - (D) The aggregate supply curve
  - (E) The demand for money, unless the economy slips into the liquidity trap
- 

36. In a closed economy with no taxes in which the average propensity to consume is 0.75, which of the following is true?
- (A) If income is \$100, then saving is \$75.
  - (B) If income is \$100, then consumption is \$50.
  - (C) If income is \$200, then saving is \$50.
  - (D) If income is \$200, then consumption is \$75.
  - (E) If income is \$500, then saving is \$100.

37. In the short run, a restrictive fiscal policy will cause aggregate demand, output, and the price level to change in which of the following ways?

<u>Aggregate Demand</u>	<u>Output</u>	<u>Price Level</u>
(A) Decrease	Decrease	Decrease
(B) Decrease	Increase	Increase
(C) Increase	Decrease	Decrease
(D) Increase	Increase	Increase
(E) Not change	Not change	Not change

## Section I

38. One way in which the Federal Reserve works to change the United States money supply is by changing the

- (A) number of banks in operation
- (B) velocity of money
- (C) price level
- (D) prime rate
- (E) discount rate

39. Assume that the reserve requirement is 20 percent. If a bank initially has no excess reserves and \$10,000 cash is deposited in the bank, the maximum amount by which this bank may increase its loans is

- (A) \$2,000
- (B) \$8,000
- (C) \$10,000
- (D) \$20,000
- (E) \$50,000

40. If the money stock decreases but nominal gross domestic product remains constant, which of the following has occurred?

- (A) Income velocity of money has increased.
- (B) Income velocity of money has decreased.
- (C) Price level has increased.
- (D) Price level has decreased.
- (E) Real output has decreased.

41. This item was not scored.

42. Which of the following best explains how an economy could simultaneously experience high inflation and high unemployment?

- (A) The government increases spending without increasing taxes.
- (B) The government increases taxes without increasing spending.
- (C) Inflationary expectations decline.
- (D) Women and teen-agers stay out of the labor force.
- (E) Negative supply shocks cause factor prices to increase.

43. Crowding out due to government borrowing occurs when

- (A) lower interest rates increase private sector investment
- (B) lower interest rates decrease private sector investment
- (C) higher interest rates decrease private sector investment
- (D) a smaller money supply increases private sector investment
- (E) a smaller money supply decreases private sector investment

55. Compared to expansionary monetary policies adopted to counteract a recession, expansionary fiscal policies tend to result in
- (A) less public spending
  - (B) higher interest rates
  - (C) lower prices
  - (D) a high rate of economic growth
  - (E) decreased investment by foreign countries
56. According to the monetarists, which of the following is true of expansionary fiscal policy?
- (A) It will cause interest rates to rise and crowd out private investment spending.
  - (B) It should not be used so long as there is a national debt.
  - (C) It should be used only when some resources are unemployed and the inflation rate is low.
  - (D) It will decrease aggregate income.
  - (E) It will increase aggregate income as long as the money supply is decreased at a slow, steady rate.
57. Which of the following policies would a Keynesian recommend during a period of high unemployment and low inflation?
- (A) Decreasing the money supply to reduce aggregate demand
  - (B) Decreasing taxes to stimulate aggregate demand
  - (C) Decreasing government spending to stimulate aggregate supply
  - (D) Balancing the budget to stimulate aggregate supply
  - (E) Imposing wage and price controls to stimulate aggregate supply

44. Policymakers concerned about fostering long-run growth in an economy that is currently in a recession would most likely recommend which of the following combinations of monetary and fiscal policy actions?

<u>Monetary Policy</u>	<u>Fiscal Policy</u>
(A) Sell bonds	Reduce taxes
(B) Sell bonds	Raise taxes
(C) No change	Raise taxes
(D) Buy bonds	Reduce spending
(E) Buy bonds	No change

45. Which of the following would be most likely to occur if the United States placed high tariffs on imported goods?

- (A) Workers in the United States would have more jobs in the long run.
- (B) Income in the United States would be redistributed from the rich to the poor.
- (C) The United States standard of living would increase.
- (D) The United States economy would become less efficient.
- (E) United States exports would increase.

46. Mary Jane is a lawyer who can earn \$150 per hour in her law practice. She is also an excellent carpenter who can build cabinets three times as fast as the best carpenter, whose hourly wage is \$20 per hour. Which of the following is a correct economic statement?

- (A) Mary Jane has a comparative advantage in law so she should specialize in law and hire a carpenter to make her cabinets.
- (B) Mary Jane has an absolute and comparative advantage in both law and carpentry, so she should make her own cabinets while continuing to practice law.
- (C) Mary Jane is three times faster than any carpenter so she should give up her law practice to become a carpenter.
- (D) When carpenters work for lawyers, they should charge \$150 per hour instead of \$20 per hour.
- (E) Because Mary Jane is an excellent carpenter, when the best carpenter works for Mary Jane, he can only charge one third as much, or \$6.67 per hour.

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**Section I**

47. The intersection of the aggregate supply curve and the aggregate demand curve occurs at the economy's equilibrium level of
- (A) real investment and the interest rate
  - (B) real disposable income and unemployment
  - (C) real national output and the price level
  - (D) government expenditures and taxes
  - (E) imports and exports
48. If purchases of education and medical care were counted as investment rather than consumption, gross domestic product would
- (A) not change, because there is no change in total expenditures
  - (B) increase, because investment is included in gross domestic product but consumption is not
  - (C) increase, because consumption is included in gross domestic product but investment is not
  - (D) decrease, because investment is weighted more heavily than consumption in calculating gross domestic product
  - (E) decrease, because consumption is weighted more heavily than investment in calculating gross domestic product
49. Which of the following would most likely cause the United States economy to fall into a recession?
- (A) An increase in welfare payments
  - (B) An increase in exports
  - (C) A decrease in savings by consumers
  - (D) A decrease in the required reserve ratio
  - (E) An open market sale by the Federal Reserve
50. Which of the following would most likely cause a rightward shift in an economy's aggregate supply curve?
- (A) An increase in interest rates
  - (B) A tax increase of 50 cents per gallon for gasoline
  - (C) An across-the-board reduction of wages in the manufacturing sector
  - (D) The passage of legislation mandating a reduction in automobile pollution
  - (E) The shutdown of plants and movement of production of goods abroad

51. Suppose that disposable income is \$1,000, consumption is \$700, and the marginal propensity to consume (MPC) is 0.6. If disposable income then increases by \$100, consumption and savings will equal which of the following?

<u>Consumption</u>	<u>Savings</u>
(A) \$420	\$280
(B) \$600	\$400
(C) \$660	\$320
(D) \$660	\$440
(E) \$760	\$340

52. If, at full employment, the government wants to increase its spending by \$100 billion without increasing inflation in the short run, it must do which of the following?
- (A) Raise taxes by more than \$100 billion.
  - (B) Raise taxes by \$100 billion.
  - (C) Raise taxes by less than \$100 billion.
  - (D) Lower taxes by \$100 billion.
  - (E) Lower taxes by less than \$100 billion.

53. Assume that the reserve requirement is 15 percent and that a bank receives a new checking deposit of \$200. Which of the following will most likely occur in the bank's balance sheet?

<u>Liabilities</u>	<u>Required Reserves</u>
(A) Increase by \$200	Increase by \$170
(B) Increase by \$200	Increase by \$30
(C) Increase by \$200	Not change
(D) Decrease by \$200	Decrease by \$30
(E) Decrease by \$200	Decrease by \$170

54. Open market operations refer to which of the following activities?
- (A) The buying and selling of stocks in the New York stock market
  - (B) The loans made by the Federal Reserve to member commercial banks
  - (C) The buying and selling of government securities by the Federal Reserve
  - (D) The government's purchases and sales of municipal bonds
  - (E) The government's contribution to net exports



55. Compared to expansionary monetary policies adopted to counteract a recession, expansionary fiscal policies tend to result in
- (A) less public spending
  - (B) higher interest rates
  - (C) lower prices
  - (D) a high rate of economic growth
  - (E) decreased investment by foreign countries
56. According to the monetarists, which of the following is true of expansionary fiscal policy?
- (A) It will cause interest rates to rise and crowd out private investment spending.
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  - (E) It will increase aggregate income as long as the money supply is decreased at a slow, steady rate.
57. Which of the following policies would a Keynesian recommend during a period of high unemployment and low inflation?
- (A) Decreasing the money supply to reduce aggregate demand
  - (B) Decreasing taxes to stimulate aggregate demand
  - (C) Decreasing government spending to stimulate aggregate supply
  - (D) Balancing the budget to stimulate aggregate supply
  - (E) Imposing wage and price controls to stimulate aggregate supply



## Chapter III

# Answers to the 2000 Macroeconomics Examination

- Section I: Multiple Choice
  - Section I Answer Key and Percent Answering Correctly
- Section II: Free Response
  - Comments from the Chief Faculty Consultant
  - 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 percentage of AP candidates who answered each question correctly by AP grade, and the total percentage 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	C	88	74	57	43	29	63
2	C	95	89	83	72	52	79
3	B	91	75	61	52	41	64
4	A	96	90	84	76	48	80
5	D	27	90	81	71	49	75
6	B	94	83	72	63	41	71
7	D	88	73	63	51	32	62
8	B	97	91	83	72	53	80
9	C	99	97	94	86	64	89
10	C	79	71	66	61	43	64
11	B	98	89	75	60	43	73
12	A	86	75	63	49	28	61
13	B	97	83	79	63	34	73
14	E	94	79	57	40	20	58
15	D	92	80	72	68	58	74
16	E	92	86	79	75	53	78
17	B	96	87	72	53	35	70
18	D	89	79	72	66	52	72
19	B	96	83	66	45	20	63
20	A	98	93	81	65	44	77
21	C	66	45	31	22	15	36
22	B	97	93	88	78	49	82
23	E	97	93	86	77	49	81
24	B	78	54	42	35	29	47
25	C	82	73	62	51	32	62
26	B	85	72	64	53	37	62
27	A	97	92	87	76	50	81
28	D	83	69	58	45	25	56
29	A	75	54	41	32	21	44
30	E	84	71	59	52	35	60

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
1	D	87	77	67	56	37	66
2	D	76	67	60	53	41	66
3	D	82	66	54	48	32	55
4	A	96	92	85	72	41	77
5	B	90	71	60	44	28	55
6	C	98	95	90	80	47	83
7	A	99	91	79	53	23	77
8	F	98	95	90	78	43	88
9	B	83	78	76	69	43	72
10	A	60	38	26	18	12	32
11	E	94	75	52	33	16	55
12	G	88	65	47	36	27	55
13	E	86	73	61	38	12	55
14	D	80	60	49	39	33	55
15	A	85	71	58	47	27	55
16	G	99	98	95	88	63	88
17	A	97	91	82	66	33	77
18	E	84	65	46	27	13	44
19	C	94	79	57	37	20	55
20	E	90	75	63	55	34	66
21	A	76	51	36	25	19	44
22	B	98	95	90	82	59	88
23	G	98	91	81	66	39	77
24	B	80	51	34	27	25	44
25	A	85	67	52	38	25	55
26	B	98	91	83	65	38	77
27	A	82	64	49	35	20	44
28	D	84	54	28	16	13	31
29	D	90	76	62	47	23	55

\* Item 41 was not scored.

## Section I

58. An important assumption in Keynesian theory is that
- (A) prices are rigid downward and decreases in aggregate demand will lead to an increase in unemployment
  - (B) price rigidity will cause downturns in the economy to self-correct
  - (C) when aggregate demand is inadequate, prices will fall
  - (D) when interest rates are high, many businesses borrow money
  - (E) changes in the money supply are the major cause of changes in real output and price level.
59. Which of the following changes in the aggregate demand and aggregate supply curves is likely to result in stagflation?
- (A) The aggregate demand curve shifts to the left when the economy is in the classical range of the aggregate supply curve.
  - (B) The aggregate demand curve shifts to the right when the economy is in the classical range of the aggregate supply curve.
  - (C) The aggregate demand curve shifts to the right when the economy is in the Keynesian range of the aggregate supply curve.
  - (D) The aggregate supply curve shifts to the left.
  - (E) The aggregate supply curve shifts to the right.

60. In a flexible system of exchange rates, an open market sale of bonds by the Federal Reserve will most likely change the money supply, the interest rate, and the value of the United States dollar in which of the following ways?

Money Supply	Interest Rate	Value of the Dollar
(A) Increase	Decrease	Decrease
(B) Increase	Decrease	Increase
(C) Decrease	Decrease	Decrease
(D) Decrease	Increase	Increase
(E) Decrease	Increase	Decrease

**END OF SECTION I**

# **2005 AP<sup>®</sup> Macroeconomics**

## **Released Exam**

### **Multiple-Choice Section**





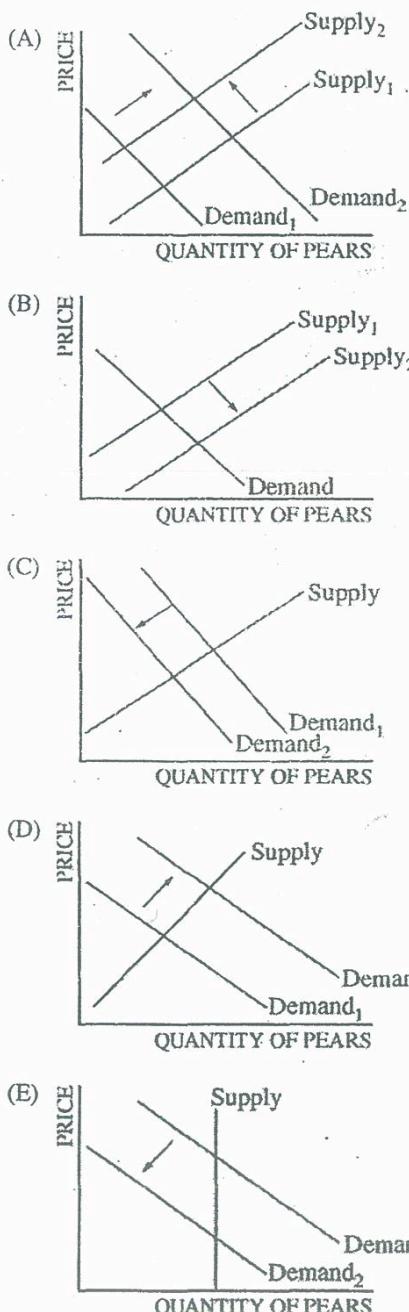
**MACROECONOMICS****Section I****Time—70 minutes****60 Questions**

**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?

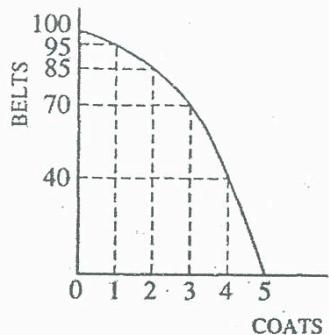


5. Federal budget deficits occur when
- more money is being spent on entitlement programs than has been allocated
  - the Internal Revenue Service spends more than it collects in taxes in a given year
  - the federal government spends more than it collects in taxes in a given year
  - high levels of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

9. An increase in which of the following will increase aggregate demand?
- Taxes
  - Government spending
  - The federal funds rate
  - Reserve requirements
  - The discount rate
10. When the United States government engages in deficit spending, that spending is primarily financed by
- increasing the required reserve ratio
  - borrowing from the World Bank
  - issuing new bonds
  - appreciating the value of the dollar
  - 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?
- Interest rates
  - Taxes
  - Investment
  - The amount of money loaned by banks
  - 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
- I only
  - I and II only
  - I and III only
  - II and III only
  - I, II, and III
13. According to the short-run Phillips Curve, there is a trade-off between
- interest rates and inflation
  - the growth of the money supply and interest rates
  - unemployment and economic growth
  - inflation and unemployment
  - 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?
- Workers who lose their jobs can collect unemployment compensation.
  - It is more important to reduce world inflation than to reduce United States unemployment.
  - Workers are not affected; only businesses suffer.
  - The long-run gains to consumers and some producers exceed the losses to other producers.
  - 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.



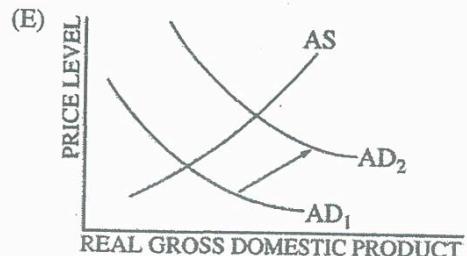
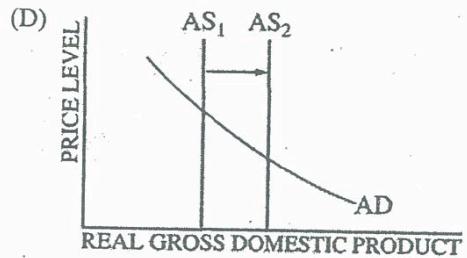
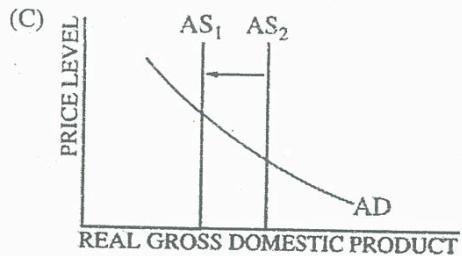
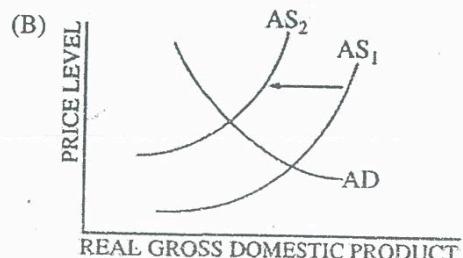
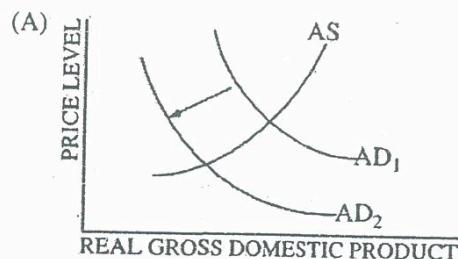
16. If two coats are currently being produced, the opportunity cost of producing the third coat is  
(A) 85 belts  
(B) 75 belts  
(C) 40 belts  
(D) 15 belts  
(E) 10 belts
17. The best combination of belts and coats for this economy to produce is  
(A) 95 belts and 1 coat  
(B) 85 belts and 2 coats  
(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

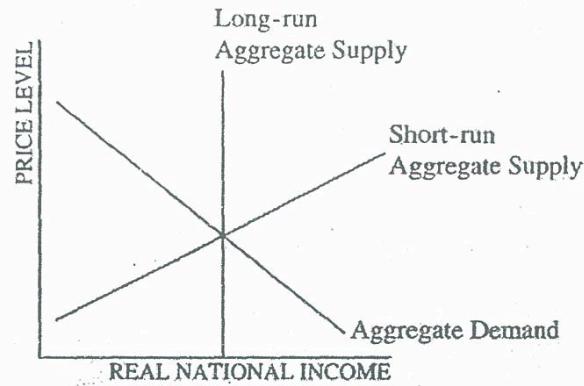
**Section I**

21. An increase in the marginal propensity to consume causes an increase in which of the following?
- Marginal propensity to save
  - Spending multiplier
  - Savings rate
  - Exports
  - 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?
- | <u>Supply of Pesos</u> | <u>Dollar Price of Peso</u> |
|------------------------|-----------------------------|
| (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?
- \$100,000
  - \$90,333
  - \$10,000
  - \$9,000
  - \$1,000
24. An increase in government spending with no change in taxes leads to a
- lower income level
  - lower price level
  - smaller money supply
  - higher interest rate
  - 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 expectation 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 substitutable 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

## Section I

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>	1993 per <u>Unit Price</u>	1994 per <u>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.