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AP[®] Macroeconomics Exam

SECTION I: Multiple Choice

2013

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

At a Glance

Total Time
1 hour, 10 minutes
Number of Questions
60
Percent of Total Score
66.67%
Writing Instrument
Pencil required

Instructions

Section I of this exam contains 60 multiple-choice questions. Fill in only the circles for numbers 1 through 60 on your answer sheet.

Indicate all of your answers to the multiple-choice questions on the answer sheet. No credit will be given for anything written in this exam booklet, but you may use the booklet for notes or scratch work. After you have decided which of the suggested answers is best, completely fill in the corresponding circle on the answer sheet. Give only one answer to each question. If you change an answer, be sure that the previous mark is erased completely. Here is a sample question and answer.

Sample Question Sample Answer

Chicago is a (A) ● (C) (D) (E)
(A) state
(B) city
(C) country
(D) continent
(E) village

Use your time effectively, working as quickly as you can without losing accuracy. Do not spend too much time on any one question. Go on to other questions and come back to the ones you have not answered if you have time. It is not expected that everyone will know the answers to all of the multiple-choice questions.

Your total score on the multiple-choice section is based only on the number of questions answered correctly. Points are not deducted for incorrect answers or unanswered questions.

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Form I
Form Code 4JBP4-S

35

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DO NOT seal answer sheet inside

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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 circle on the answer sheet.

1. Which of the following combinations of economic policies would be most effective to correct a severe recession?

<u>Taxes</u>	<u>Money Supply</u>
(A) Increase	Increase
(B) Increase	Decrease
(C) Increase	No change
(D) Decrease	Increase
(E) Decrease	Decrease
2. Any point inside a production possibilities curve is
 - (A) better than points on the production possibilities curve
 - (B) allocatively efficient but technologically inefficient
 - (C) associated with inefficient use or unemployment of some resources
 - (D) associated with movements along the production possibilities curve
 - (E) associated with constant opportunity costs
3. If nominal gross domestic product in a country is \$1,600 and the money supply is \$400, what is the velocity of money?
 - (A) 400
 - (B) 10
 - (C) 4
 - (D) 2
 - (E) 0.5
4. An increase in which of the following would most likely cause the gross domestic product of a country to decrease in the short run?
 - (A) Government spending
 - (B) Imports
 - (C) Money supply
 - (D) Consumption spending by households
 - (E) Investment spending by domestic firms
5. A country's infrastructure refers to its
 - (A) natural resources
 - (B) private financial institutions
 - (C) proportion of population with postsecondary education
 - (D) public capital goods such as highways
 - (E) internal, as opposed to external, debt
6. In the short run, which of the following will most likely result if wages in an economy rise faster than workers' productivity?
 - (A) An increase in the price level
 - (B) An increase in firms' profits
 - (C) An increase in efficiency in labor-intensive industries
 - (D) A larger increase in property income than in labor income
 - (E) A decrease in import prices
7. When the central bank sells government bonds on the open market, which of the following will most likely increase?
 - (A) Bank reserves
 - (B) Price of bonds
 - (C) Money supply
 - (D) Nominal interest rates
 - (E) The required reserve ratio

8. If one-fourth of a nation's wheat crop is destroyed by a flood in a given season, then the price of wheat and the quantity sold will change in the short run in which of the following ways?

<u>Price</u>	<u>Quantity Sold</u>
--------------	----------------------

- | | |
|---------------|-----------|
| (A) Decrease | No change |
| (B) Decrease | Increase |
| (C) Increase | Decrease |
| (D) Increase | Increase |
| (E) No change | Increase |
9. Which of the following is a determinant of the amount of money the commercial banking system can create?
- (A) The marginal propensity to consume
 (B) The marginal propensity to save
 (C) The total number of banks
 (D) The size of the federal debt
 (E) The reserve requirement
10. A discretionary fiscal policy action to reduce inflation in the short run would be to
- (A) increase transfer payments to those on fixed incomes
 (B) increase taxes or decrease government spending
 (C) decrease taxes or increase government spending
 (D) increase taxes and the money supply
 (E) decrease taxes and interest rates
11. The money demanded for the purpose of purchasing goods and services is known as
- (A) an asset demand
 (B) a derived demand
 (C) excess reserves
 (D) a transactions demand
 (E) balance of payments

12. Which of the following will increase the United States trade deficit?
- (A) United States firms buying technologically advanced computers from Germany
 (B) European citizens traveling in large numbers to the United States
 (C) A United States company being hired to build a production plant in another country
 (D) The United States dollar depreciating in the foreign exchange market
 (E) The United States selling one million tons of wheat to China
13. If producing each additional unit of good X required giving up ever-increasing amounts of good Y, the production possibilities curve between X and Y would be
- (A) bowed outward
 (B) bowed inward
 (C) a straight line
 (D) horizontal
 (E) upward sloping
14. The unemployment rate is calculated as
- (A) the number of people not working divided by the population
 (B) the number of people not working divided by the number of people working both full-time and part-time
 (C) the number of people working part-time but actively seeking full-time employment divided by the number of people in the labor force
 (D) the number of people not working but actively seeking employment divided by the number of people in the labor force
 (E) the number of people in the labor force divided by the population

15. Crowding out is most likely to occur with which of the following changes?
- (A) Decrease in government spending
 - (B) Increase in budget surplus
 - (C) Increase in budget deficit
 - (D) Decrease in the real interest rate
 - (E) Decrease in trade deficit
16. A change in which of the following can affect the long-run economic growth of a country?
- I. The quantity and quality of a country's labor force
 - II. Technology
 - III. Spending on capital goods
- (A) I only
 - (B) III only
 - (C) I and II only
 - (D) II and III only
 - (E) I, II, and III
17. With an upward-sloping aggregate supply curve, an increase in the money supply will affect the price level and real gross domestic product (GDP) in the short run in which of the following ways?
- | | <u>Price Level</u> | <u>Real GDP</u> |
|-----|--------------------|-----------------|
| (A) | Decrease | Decrease |
| (B) | Decrease | Increase |
| (C) | Increase | Decrease |
| (D) | Increase | Increase |
| (E) | No change | No change |
18. Assume that with a proportional tax system, the government always sets the tax rate at a level that yields a balanced budget at full employment. Which of the following is necessarily true?
- (A) The government budget will balance every year.
 - (B) The government budget will be in deficit over the business cycle.
 - (C) The national debt will increase in any year the economy operates below full employment.
 - (D) Crowding out of private investment will occur whenever the economy operates at full employment.
 - (E) The tax system will be destabilizing.
19. A bank has \$800 million in demand deposits and \$100 million in reserves. If the reserve requirement is 10 percent, the bank's excess reserves equal
- (A) \$10 million
 - (B) \$20 million
 - (C) \$80 million
 - (D) \$100 million
 - (E) \$200 million
20. Which of the following describes a typical business cycle in the correct sequence?
- (A) Peak, trough, recession, and expansion
 - (B) Peak, trough, expansion, and recession
 - (C) Peak, recession, trough, and expansion
 - (D) Peak, recession, expansion, and trough
 - (E) Peak, expansion, trough, and recession
21. If the international value of the United States dollar depreciates in comparison with the Japanese yen, which of the following is most likely to occur?
- (A) United States exports to Japan will increase.
 - (B) The United States government will increase the tariff on Japanese imports.
 - (C) The United States balance-of-trade deficit with Japan will become even larger.
 - (D) United States tourists can be expected to visit Japan in greater numbers.
 - (E) Trade between the United States and Japan will not be affected.
22. Expansionary monetary policy will most likely cause interest rates and investment to change in which of the following ways in the short run?
- | | <u>Interest Rates</u> | <u>Investment</u> |
|-----|-----------------------|-------------------|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | Decrease | Increase |
| (D) | Decrease | Decrease |
| (E) | No change | Increase |

23. The value of which of the following would be included in the United States gross domestic product?
- (A) Time spent volunteering at a local hospital
 - (B) A United States savings bond received as a birthday gift
 - (C) A movie ticket purchased at a local theater
 - (D) A new handbag made in Italy by a United States firm
 - (E) A used car sold at the same price paid for it
24. Which of the following will lead to an increase in the money supply?
- (A) A decrease in income tax rates
 - (B) A decrease in government spending
 - (C) Open-market purchase of securities by the central bank
 - (D) Increased borrowing by the federal government by issuing new bonds
 - (E) An increase in the discount rate
25. When an economy is in equilibrium at potential gross domestic product, the actual unemployment rate is
- (A) equal to the cyclical rate
 - (B) greater than the natural rate
 - (C) less than the natural rate
 - (D) equal to the natural rate
 - (E) equal to zero
26. Structural unemployment is best described as unemployment arising from
- (A) the elimination of jobs as a result of technological change
 - (B) an increase in the number of workers searching for better-paying jobs
 - (C) an increase in the number of jobs demanding unskilled labor
 - (D) the temporary reduction of jobs during a downturn in the business cycle
 - (E) the reduction in jobs due to seasonal changes in demand
27. Which of the following would cause both the aggregate demand and aggregate supply curves to shift to the right?
- (A) A decrease in corporate income taxes
 - (B) A decrease in government spending
 - (C) A decrease in natural resource prices
 - (D) A decrease in the stock market prices
 - (E) An increase in the international value of the domestic currency
28. Which of the following would directly increase the capital stock of an economy?
- (A) An individual purchases shares of corporate stock.
 - (B) An individual purchases high-risk corporate bonds.
 - (C) A business firm expands its production facilities.
 - (D) A bank uses cash reserves to purchase short- and long-term government securities.
 - (E) The government implements a spending program to cover prescription drugs for Medicare recipients.
29. The recent popularity of job search Web sites that enable job seekers and potential employers to more efficiently contact each other is most likely to cause
- (A) a reduction in the labor force participation rate
 - (B) a reduction in structural, but not in frictional, unemployment rates
 - (C) a reduction in the frictional unemployment rate
 - (D) an increase in the overall unemployment rate
 - (E) a reduction in cyclical, but not in frictional, unemployment rates

30. Which of the following is most likely to be caused by an adverse supply shock?

- (A) Structural unemployment
- (B) Frictional unemployment
- (C) Demand-pull inflation
- (D) Cost-push inflation
- (E) Deflation

31. Which of the following policy combinations could reduce a government deficit without changing aggregate demand?

- (A) An increase in taxes and a decrease in the money supply
- (B) An increase in taxes and an increase in the money supply
- (C) A decrease in taxes and a decrease in the money supply
- (D) A decrease in government spending and a decrease in the money supply
- (E) An increase in government spending and a decrease in the money supply



32. Which of the following is illustrated by the relationship depicted in the graph above?

- (A) Aggregate demand curve
- (B) Long-run Phillips curve
- (C) Short-run Phillips curve
- (D) Long-run aggregate supply curve
- (E) Short-run aggregate supply curve

33. Which of the following is most likely to benefit from an appreciation in the United States dollar in the short run?

- (A) United States investors holding European bonds
- (B) Importers in foreign countries seeking raw inputs at a lower price
- (C) United States exporters selling capital equipment
- (D) United States tourists traveling to foreign countries
- (E) European consumers buying United States goods

34. Following a decrease in exports, what fiscal policy would restore the economy to the original equilibrium?

- (A) An increase in the income tax rate
- (B) An increase in government transfer payments
- (C) A reduction in the government budget deficit
- (D) An open-market purchase of bonds by the central bank
- (E) An open-market sale of bonds by the central bank

35. If the annual interest rate is 5 percent, then the present value of \$1.00 received one year from now is closest to

- (A) \$1.50
- (B) \$1.05
- (C) \$1.00
- (D) \$0.95
- (E) \$0.05

<u>Period</u>	<u>Real Gross Domestic Product</u>	<u>Nominal Gross Domestic Product</u>
Year 1	\$100 billion	\$70 billion
Year 2	\$120 billion	\$120 billion
Year 3	\$130 billion	\$150 billion

36. Which of the following can be concluded from the data above?

- (A) The base year for the price index was year 1.
- (B) The base year for the price index was year 3.
- (C) The economy was producing higher-quality goods and services in years 2 and 3 than in year 1.
- (D) The economy was experiencing inflation during years 2 and 3.
- (E) The economy was experiencing deflation during years 1, 2, and 3.

37. An increase in inflationary expectations will most likely affect nominal interest rates and bond prices in which of the following ways in the short run?

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

38. Which of the following concepts can be illustrated using the production possibilities curve?

- I. Choice
- II. Scarcity
- III. Price level
- IV. Opportunity cost

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

39. The consumer price index (CPI) measures the

- (A) value of current gross domestic product in base-year dollars
- (B) prices of all consumer goods and services produced in the economy
- (C) prices of selected raw materials purchased by firms
- (D) prices of a specific group of goods and services purchased by consumers
- (E) prices of imports, but not exports

40. An increase in which of the following is most likely to cause the short-run aggregate supply curve to shift to the left?

- (A) Consumers' incomes
- (B) The money supply
- (C) Government spending
- (D) The optimism of business firms
- (E) The per unit cost of production

41. The aggregate demand curve is downward sloping because an increase in the general price level will cause the demand for money, interest rates, and investment to change in which of the following ways?

	<u>Demand for Money</u>	<u>Interest Rates</u>	<u>Investment</u>
(A)	Increase	Increase	Increase
(B)	Increase	Increase	Decrease
(C)	Increase	Decrease	Increase
(D)	Decrease	Increase	Decrease
(E)	Decrease	Decrease	Increase

42. Last year both a borrower and a lender expected an inflation rate of 3 percent when they signed a long-term loan agreement with fixed nominal interest rates of 5 percent. If the actual inflation rate were lower than expected, then which of the following would be true?

- (A) The borrower would benefit.
- (B) The lender would benefit.
- (C) The real interest rate would be lower than expected.
- (D) The nominal interest rate would be higher than expected.
- (E) The nominal interest rate would increase.

43. 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

44. If the marginal propensity to consume is 0.9, the government increases purchases by \$100, and net exports decline by \$60, the equilibrium level of real gross domestic product will

- (A) decrease by up to \$400
- (B) increase by up to \$400
- (C) increase by up to \$600
- (D) decrease by up to \$1,600
- (E) increase by up to \$1,600

45. Which of the following represents a leakage from the circular flow in an economy?

- (A) Consumption spending
- (B) Government spending
- (C) Investment spending
- (D) Unemployment benefits
- (E) Imports

	<u>Number of Computers</u>		<u>Units of Steel</u>
Country A	100	or	100
Country B	20	or	80

46. The table above indicates the production alternatives of two countries, A and B, which produce computers and steel using equal amounts of resources. If both countries always produce at full employment, which of the following statements must be correct?

- (A) Mutually advantageous trade can occur between the two countries when 1 unit of steel from Country A is exchanged for 2 computers from Country B.
- (B) Mutually advantageous trade can occur between the two countries when 2 units of steel from Country B are exchanged for 1 computer from Country A.
- (C) Country A has an absolute and comparative advantage in the production of computers, and Country B has an absolute and comparative advantage in the production of steel.
- (D) Country B has an absolute advantage in the production of both commodities, but a comparative advantage in the production of steel.
- (E) Country A has an absolute advantage in the production of both commodities, but a comparative advantage in the production of steel.

47. An increase in United States imports will result in which of the following in foreign exchange markets?
- (A) Increased foreign demand for United States dollars
 - (B) Decreased supply of United States dollars
 - (C) Increased United States demand for foreign currencies
 - (D) A decrease in the value of foreign currencies
 - (E) An increase in the value of the United States dollar
48. If the reserve requirement is 10 percent and the central bank sells \$10,000 in government bonds on the open market, the money supply will
- (A) increase by a maximum of \$9,000
 - (B) increase by a maximum of \$90,000
 - (C) decrease by a maximum of \$9,000
 - (D) decrease by a maximum of \$10,000
 - (E) decrease by a maximum of \$100,000
49. If the federal government decreases its expenditures on goods and services by \$10 billion and decreases taxes on personal incomes by \$10 billion, which of the following will occur in the short run?
- (A) The federal budget deficit will increase by \$10 billion.
 - (B) The federal budget deficit will decrease by \$10 billion.
 - (C) Aggregate income will remain the same.
 - (D) Aggregate income will increase by up to \$10 billion.
 - (E) Aggregate income will decrease by up to \$10 billion.
50. If a central bank significantly increases its sales of government bonds, it is most likely responding to which of the following?
- (A) Slow economic growth
 - (B) An appreciating domestic currency
 - (C) Rising unemployment
 - (D) Rising price levels
 - (E) Rising imports and declining exports
51. Which of the following is a cause of hyperinflation?
- (A) Rapid growth of real gross domestic product
 - (B) Rapid growth of the money supply
 - (C) Unanticipated decrease in aggregate demand
 - (D) Unanticipated increase in aggregate supply
 - (E) Unanticipated rise in real interest rates
52. Assume that the economy is in long-run equilibrium. A shift in the aggregate demand curve will change
- (A) only the price level in the long run
 - (B) only the output level in the long run
 - (C) both the price level and the output level in the long run
 - (D) neither the price level nor the output level in the short run
 - (E) only the price level in the short run and only the output level in the long run
53. Which of the following will lower the prices of a country's outstanding government bonds?
- (A) An open-market purchase of government bonds by the country's central bank
 - (B) A decrease in the required reserve ratio for the country's commercial banks
 - (C) An outflow of financial capital to other countries
 - (D) A decrease in the country's government spending
 - (E) A decrease in inflationary expectations in the country
54. Which of the following could cause a movement along a country's short-run Phillips curve toward higher unemployment and lower inflation?
- (A) A significant reduction in energy prices
 - (B) A recession in the economies of the nation's major trading partners
 - (C) A decrease in savings by the country's consumers
 - (D) A movement of the economy from the recovery phase to the expansionary phase of the business cycle
 - (E) An improvement in technology

55. Which of the following is true in the short run if consumers buy more imported goods and fewer domestic goods?

- (A) The trade balance moves toward deficit, and equilibrium income decreases.
- (B) The trade balance moves toward deficit, and equilibrium income increases.
- (C) The trade balance moves toward surplus, and equilibrium income is unaffected.
- (D) The trade balance moves toward surplus, and equilibrium income decreases.
- (E) The trade balance is unaffected, and equilibrium income decreases.

56. If the aggregate supply curve is horizontal, an increase in government spending will result in which of the following?

- | | <u>Real Output</u> | <u>Price Level</u> |
|-----|--------------------|--------------------|
| (A) | Increase | Increase |
| (B) | Increase | No change |
| (C) | Increase | Decrease |
| (D) | No change | Increase |
| (E) | No change | No change |

57. Assume that the Federal Reserve pursues a contractionary monetary policy. Based on the resulting change in the interest rate, what will happen to the international value of the dollar, United States imports, and United States exports?

- | <u>International Value
of the Dollar</u> | <u>United States
Imports</u> | <u>United States
Exports</u> |
|--|----------------------------------|----------------------------------|
| (A) Increase | Increase | Increase |
| (B) Increase | Increase | Decrease |
| (C) Increase | Decrease | Increase |
| (D) Decrease | Increase | Decrease |
| (E) Decrease | Decrease | Increase |

58. Expansionary fiscal policy will most likely result in

- (A) a decrease in the money supply
- (B) an increase in the marginal propensity to consume
- (C) an increase in nominal interest rates
- (D) a decrease in the level of output
- (E) a decrease in the price level

59. If a country has a deficit in its current account, there will be a

- (A) surplus in the financial account (formerly called capital account)
- (B) surplus in the trade balance
- (C) surplus in the balance of payments
- (D) deficit in the financial account (formerly called capital account)
- (E) deficit in the balance of payments

60. Which of the following will shift the aggregate demand curve to the right?

- (A) A report that corporate earnings were lower than expected
- (B) An increase in interest rates caused by a tightening of monetary policy
- (C) Increased imports caused by appreciation of the dollar
- (D) Increased spending by businesses on computers
- (E) An increase in the government's budget surplus

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.

MAKE SURE YOU HAVE DONE THE FOLLOWING.

- **PLACED YOUR AP NUMBER LABEL ON YOUR ANSWER SHEET**
- **WRITTEN AND GRIDDED YOUR AP NUMBER CORRECTLY ON YOUR ANSWER SHEET**
- **TAKEN THE AP EXAM LABEL FROM THE FRONT OF THIS BOOKLET AND PLACED IT ON YOUR ANSWER SHEET**

AP[®] Macroeconomics Exam

SECTION II: Free Response

2013

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

At a Glance

Total Time

1 hour

Number of Questions

3

Percent of Total Score

33.33%

Writing Instrument

Pen with black or dark blue ink

Reading Period

Time

10 minutes. Use this time to read the questions and plan your answers.

Writing Period

Time

50 minutes

Question 1

Suggested Time

25 minutes

Percent of Section II Score

50%

Question 2

Suggested Time

12.5 minutes

Percent of Section II Score

25%

Question 3

Suggested Time

12.5 minutes

Percent of Section II Score

25%

IMPORTANT Identification Information

PLEASE PRINT WITH PEN:

1. First two letters of your last name

First letter of your first name

2. Date of birth

Month Day Year

3. Six-digit school code

4. Unless I check the box below, I grant the College Board the unlimited right to use, reproduce, and publish my free-response materials, both written and oral, for educational research and instructional purposes. My name and the name of my school will not be used in any way in connection with my free-response materials. I understand that I am free to mark "No" with no effect on my score or its reporting.

No, I do not grant the College Board these rights. ☐

Instructions

The questions for Section II are printed in this booklet. You may use page 3 and the pages the questions are printed on to organize your answers and for scratch work, but you must write your answers on the lined pages provided for each question.

The proctor will announce the beginning and end of the reading period. You are advised to spend the 10-minute period reading all the questions and planning your answers. Do NOT begin writing on the lined pages until the proctor tells you to do so.

Write clearly and legibly. Do not skip lines. Cross out any errors you make; crossed-out work will not be scored.

Manage your time carefully. You may proceed freely from one question to the next. You may review your responses if you finish before the end of the exam is announced.

Form I
Form Code 4JBP4-S

35

MACROECONOMICS

Section II

Planning Time—10 minutes

Writing Time—50 minutes

Directions: You have 10 minutes to read all of the questions in this booklet, to sketch graphs, to make notes, and to plan your answers. You will then have 50 minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes. Use a pen with black or dark blue ink.

Question 1 begins on page 4.

Question 2 begins on page 10.

Question 3 begins on page 14.

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.

NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.

WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

GO ON TO THE NEXT PAGE.

1. Assume the economy of Country X is operating above its full-employment output level.
- (a) Using a correctly labeled graph of aggregate demand, short-run aggregate supply, and long-run aggregate supply, show the short-run equilibrium, labeling the equilibrium price level as PL_e and the equilibrium output as Y_e .
 - (b) Draw a single correctly labeled graph and show both a short-run and a long-run Phillips curve. Identify a point that could represent the short-run equilibrium in part (a) and label it as Z.
 - (c) Assume that the central bank of Country X wants the economy to be in full-employment equilibrium. What open-market operation should the central bank initiate?
 - (d) Given your answer in part (c), what will be the effect of the central bank's open-market operation on each of the following in the short run?
 - (i) The nominal interest rate
 - (ii) Employment. Explain.
 - (e) Assume that the real interest rate increases in Country X. Will the international value of Country X's currency increase, decrease, or remain unchanged on the foreign exchange market? Explain.
 - (f) Assume that Country X's financial account (formerly called capital account) balance is initially zero. Given your answer to part (e), will its financial account balance now be in surplus, be in deficit, or remain at zero?

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.

NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.

WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing. There are no margins, text, or other markings on the page.

-5-

Question 1 is reprinted for your convenience.

1. Assume the economy of Country X is operating above its full-employment output level.
 - (a) Using a correctly labeled graph of aggregate demand, short-run aggregate supply, and long-run aggregate supply, show the short-run equilibrium, labeling the equilibrium price level as P_{Le} and the equilibrium output as Y_e .
 - (b) Draw a single correctly labeled graph and show both a short-run and a long-run Phillips curve. Identify a point that could represent the short-run equilibrium in part (a) and label it as Z.
 - (c) Assume that the central bank of Country X wants the economy to be in full-employment equilibrium. What open-market operation should the central bank initiate?
 - (d) Given your answer in part (c), what will be the effect of the central bank's open-market operation on each of the following in the short run?
 - (i) The nominal interest rate
 - (ii) Employment. Explain.
 - (e) Assume that the real interest rate increases in Country X. Will the international value of Country X's currency increase, decrease, or remain unchanged on the foreign exchange market? Explain.
 - (f) Assume that Country X's financial account (formerly called capital account) balance is initially zero. Given your answer to part (e), will its financial account balance now be in surplus, be in deficit, or remain at zero?

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.

NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.

WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

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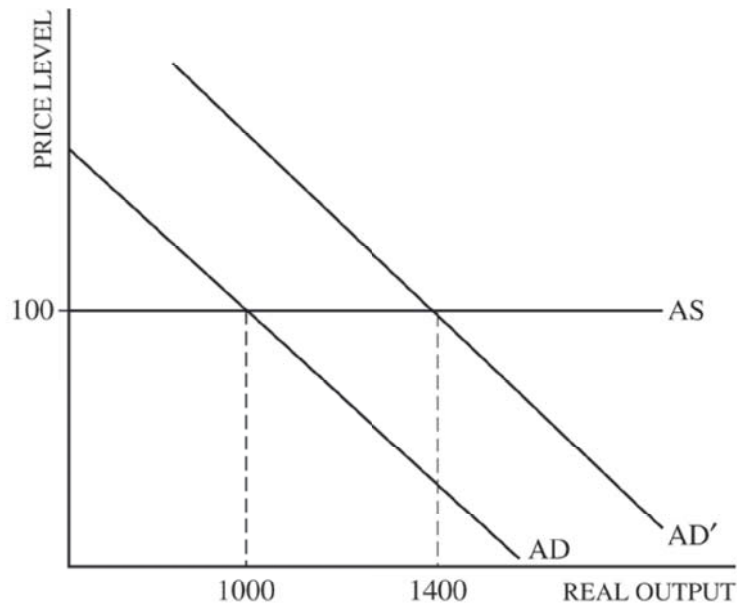
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2. The graph above shows the aggregate supply (AS) and aggregate demand (AD) curves for an economy.
- Calculate the spending multiplier if AD shifts to AD' as a result of an increase in government spending of \$100.
 - Will a decrease in income taxes have to be larger, smaller, or equal to \$100 in order to shift the AD by the same amount as the \$100 increase in government spending? Explain.
 - If the marginal propensity to save decreases, will the spending multiplier increase, decrease, or remain unchanged?
 - Now assume instead that the AS curve is upward sloping. Would the change in real gross domestic product resulting from the \$100 increase in government spending be greater than, less than, or equal to the change shown in the graph above?
 - Now assume that wages and prices are perfectly flexible. As a result of a \$100 increase in government spending, will real GDP increase, decrease, or remain unchanged? Explain.

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3. Country A and Country B produce the same two products, hammocks and looms. Country A can produce a maximum of 60 hammocks or 40 looms, while Country B can produce a maximum of 40 hammocks or 20 looms.
- (a) What is the opportunity cost to produce a loom in terms of hammocks in Country A?
 - (b) Which country, if either, has a comparative advantage in producing looms? Explain.
 - (c) Internationally, if 1 loom is traded for 1.75 hammocks, who will benefit from trading: Country A only, Country B only, both countries, or neither country?
 - (d) Assume there is international trade.
 - (i) Can a country produce beyond its production possibilities curve (PPC) ?
 - (ii) Can a country consume beyond its PPC?
-

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WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a template for writing or drawing. The margins are consistent on all sides.

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-17-

STOP

END OF EXAM

THE FOLLOWING INSTRUCTIONS APPLY TO THE COVERS OF THE SECTION II BOOKLET.

- **MAKE SURE YOU HAVE COMPLETED THE IDENTIFICATION INFORMATION AS REQUESTED ON THE FRONT AND BACK COVERS OF THE SECTION II BOOKLET.**
- **CHECK TO SEE THAT YOUR AP NUMBER LABEL APPEARS IN THE BOX(ES) ON THE COVER(S).**
- **MAKE SURE YOU HAVE USED THE SAME SET OF AP NUMBER LABELS ON ALL AP EXAMS YOU HAVE TAKEN THIS YEAR.**

AP Macroeconomics

2013

APPENDIX - ANSWERS

Matching multiple-choice answers and free-response scoring follow.

**Answer Key for AP Macroeconomics
Practice Exam, Section I**

Question 1: D	Question 31: B
Question 2: C	Question 32: C
Question 3: C	Question 33: D
Question 4: B	Question 34: B
Question 5: D	Question 35: D
Question 6: A	Question 36: D
Question 7: D	Question 37: B
Question 8: C	Question 38: D
Question 9: E	Question 39: D
Question 10: B	Question 40: E
Question 11: D	Question 41: B
Question 12: A	Question 42: B
Question 13: A	Question 43: C
Question 14: D	Question 44: B
Question 15: C	Question 45: E
Question 16: E	Question 46: B
Question 17: D	Question 47: C
Question 18: C	Question 48: E
Question 19: B	Question 49: E
Question 20: C	Question 50: D
Question 21: A	Question 51: B
Question 22: C	Question 52: A
Question 23: C	Question 53: C
Question 24: C	Question 54: B
Question 25: D	Question 55: A
Question 26: A	Question 56: B
Question 27: A	Question 57: B
Question 28: C	Question 58: C
Question 29: C	Question 59: A
Question 30: D	Question 60: D

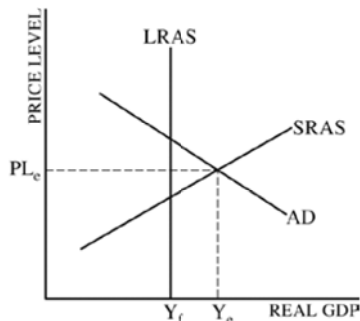
Free-Response Scoring Guidelines

The following contains the scoring guidelines
for the free-response questions in this exam.

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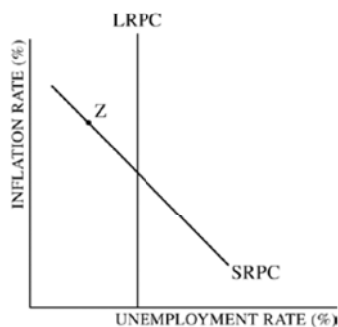
Question 1

10 Points (2+2+1+2+2+1)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph with PL_e and Y_e at the intersection of AD and SRAS to the right of the LRAS.
- One point is earned for drawing a vertical LRAS curve.



(b) 2 points:

- One point is earned for drawing a correctly labeled graph with a downward-sloping short-run Phillips curve
- One point is earned for drawing a vertical LRPC curve and showing point Z on the SRPC to the left of the LRPC.

(c) 1 point:

- One point is earned for stating that the central bank should sell bonds.

(d) 2 points:

- One point is earned for stating that the nominal interest rate will increase.
- One point is earned for stating that employment will fall because AD and real output will decrease

(e) 2 points:

- One point is earned for stating that the international value of country X's currency will increase (appreciate)
- One point is earned for explaining that the higher real interest rate attracts financial capital to flow into country X, causing an increase in the demand for its currency

(f) 1 point:

- One point is earned for stating that the financial account will be in surplus

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Question 2

6 points (1+1+1+1+2)

(a) 1 point:

- One point is earned for calculating the spending multiplier:
 $M = (\Delta GDP / \Delta G) = (400 / 100) = 4$

(b) 1 point:

- One point is earned for stating that a larger decrease in income taxes will be needed because part of the increase in disposable income will be saved

(c) 1 point:

- One point is earned for stating that the spending multiplier will increase.

(g) 1 point:

- One point is earned for stating that the change in real gross domestic product would be smaller

(h) 2 points:

- One point is earned for stating that real GDP remains unchanged.
- One point is earned for explaining that input prices adjust to the long-run equilibrium immediately.

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Question 3

5 points (1+1+1+2)

(a) 1 point:

- One point is earned for calculating the opportunity cost:
 $1L = (60/40) = 1.5 H$

(b) 1 point:

- One point is earned for stating that Country A has a comparative advantage in producing looms because it has a lower opportunity cost than Country B.

(c) 1 point:

- One point is earned for stating that both countries will benefit from trade

(d) 2 points:

- One point is earned for stating no.
- One point is earned for stating yes.