

Name: _____

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

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No.	Answer
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AP[®] Macroeconomics Exam

SECTION I: Multiple Choice

2019

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

At a Glance

Total Time

1 hour and 10 minutes

Number of Questions

60

Percent of Total Score

66.67%

Writing Instrument

Pencil required

Electronic Device

None allowed

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.

<u>Sample Question</u>	<u>Sample Answer</u>
------------------------	----------------------

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.

Form I

Form Code 4PBP4-S

35

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MACROECONOMICS

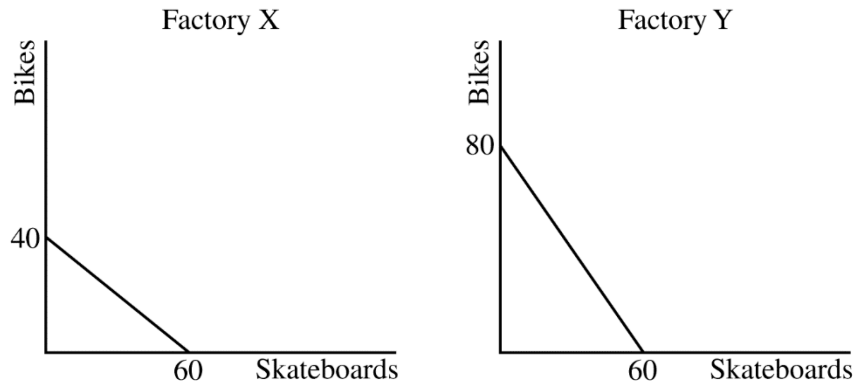
Section I

Time—1 hour and 10 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. An economy is operating at a point inside its production possibilities curve (PPC). Which of the following will most likely cause the economy to move toward the current PPC in the short run?
 - (A) A decrease in government spending
 - (B) A decrease in inflation
 - (C) An increase in human capital
 - (D) An increase in employment
 - (E) An increase in imports
2. An increase in which of the following will most likely promote economic growth?
 - (A) Taxes on investment
 - (B) The price level
 - (C) Human capital
 - (D) Consumption of nondurable goods
 - (E) Interest rates
3. Which of the following will cause aggregate supply to increase in Country X?
 - (A) An increase in personal income taxes
 - (B) The discovery of low-cost alternative sources of energy
 - (C) A decrease in labor productivity with no change in nominal wages
 - (D) Depreciation of country X's currency on the foreign exchange market
 - (E) An increase in the price level



4. The graph above shows the production possibilities curve for Factory X and Factory Y. If Factory X uses the same amount of resources to produce skateboards and bikes as Factory Y uses, which of the following is true?
- (A) Factory X has an absolute advantage in producing bikes.
 - (B) Factory X has an absolute advantage in producing skateboards.
 - (C) Factory X has a comparative advantage in producing skateboards.
 - (D) Factory Y has a comparative advantage in producing skateboards.
 - (E) Factory Y has an absolute advantage in producing skateboards.

5. An increase in the price of oil, an important input to production, will result in which of the following in the short run?

(A) A decrease in the price level
 (B) A decrease in short-run aggregate supply
 (C) A decrease in unemployment
 (D) An increase in real wages
 (E) An increase in aggregate demand

6. An economy is currently operating at the full-employment level of output. Which of the following would result in a recessionary gap in the short run?

(A) An increase in the costs of production
 (B) An improvement in the productivity of labor
 (C) An increase in money supply
 (D) A positive supply shock
 (E) A decrease in income tax rates

7. Thailand and Malaysia are trading partners. If the price level in Thailand decreases relative to the price level in Malaysia, what will happen to Thailand's exports to Malaysia and Thailand's aggregate demand?

<u>Thailand's Exports</u>	<u>Thailand's Aggregate Demand</u>
(A) Increase	Decrease
(B) Increase	Increase
(C) Increase	Indeterminate
(D) Decrease	Decrease
(E) Decrease	Increase

8. Country X produces only apples and bananas. The following table shows prices and quantities of both products in two years.

	Year 1		Year 2	
	Price	Quantity	Price	Quantity
Apples	\$1	100	\$2	80
Bananas	\$2	50	\$2	60

Assuming year 1 is the base year, what is the nominal and real gross domestic product (GDP) for year 2 ?

<u>Nominal GDP</u>	<u>Real GDP</u>
(A) \$200	\$280
(B) \$200	\$200
(C) \$280	\$200
(D) \$280	\$560
(E) \$560	\$280

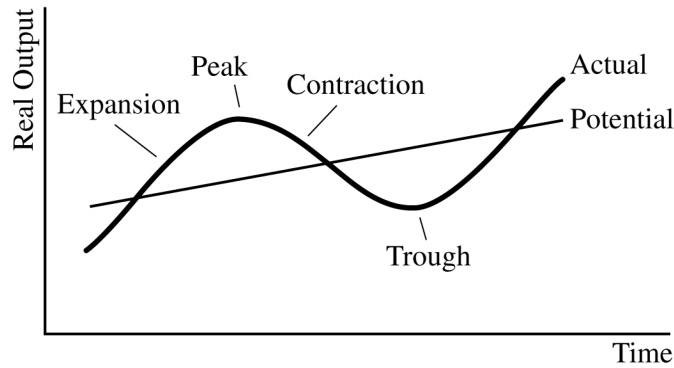
9. Which of the following is a fiscal policy action aimed at reducing unemployment?

(A) Decreasing government expenditures
 (B) Decreasing income taxes
 (C) Decreasing tax credits
 (D) Increasing nominal interest rates
 (E) Increasing required reserves

10. Increases in human capital can be achieved by which of the following?

(A) Building more factories
 (B) Reducing immigration of skilled workers
 (C) Improving the quality of job-training programs
 (D) Increasing the physical capital per worker
 (E) Increasing government spending on infrastructure

11. If the marginal propensity to save is 0.25, a \$15 billion increase in government spending will lead to an increase in national income by a maximum of
- (A) \$60 billion
 - (B) \$45 billion
 - (C) \$15 billion
 - (D) \$11.25 billion
 - (E) \$3.75 billion
12. Assume the economy is currently in long-run equilibrium. An increase in the money supply will affect unemployment in the short run and in the long run in which of the following ways?
- | <u>Short Run</u> | <u>Long Run</u> |
|----------------------------------|--------------------------------|
| (A) Falls | Falls |
| (B) Rises | Rises |
| (C) No change | Remains at the natural rate |
| (D) Rises above the natural rate | Falls back to the natural rate |
| (E) Falls below the natural rate | Rises back to the natural rate |
13. The term "value added" for a firm is best defined as which of the following?
- (A) The firm's sales
 - (B) The firm's sales minus depreciation
 - (C) The firm's sales minus its losses
 - (D) The firm's sales minus the cost of inputs purchased from other firms
 - (E) The firm's profits from its sales
14. An increase in a country's current account surplus will result in which of the following in the short run?
- (A) A decrease in the country's government budget surplus
 - (B) A decrease in the country's national savings
 - (C) A decrease in the country's financial account deficit
 - (D) An increase in the country's net financial capital outflows
 - (E) An increase in the country's national debt
15. Using 2010 as the base year, the gross domestic product (GDP) deflator in 2011 was 97. Which of the following must be true?
- (A) The inflation rate in 2011 was positive.
 - (B) The inflation rate in 2011 was negative.
 - (C) The inflation rate in 2011 was zero.
 - (D) The purchasing power of a dollar decreased by 3 percent.
 - (E) The real output increased by 3 percent.



16. According to the business cycle represented in the diagram above, the actual rate of unemployment equals the natural rate of unemployment when the economy is
- (A) in expansion
 - (B) in contraction
 - (C) at the peak
 - (D) at the trough
 - (E) on the potential line
-
17. A fiscal policy action to reduce inflationary pressure would be to increase which of the following?
- (A) The required reserve ratio
 - (B) The discount rate
 - (C) Transfer payments
 - (D) Government spending
 - (E) Income tax rates
18. The nominal gross domestic product of China in 2010 is a measure of the total value of which of the following in 2010 ?
- (A) Financial assets, including stocks, in China
 - (B) Firms located within the borders of China
 - (C) Final goods and services consumed in China
 - (D) Final goods and services produced within the borders of China
 - (E) Final goods and services exported by China to the rest of the world
19. Assume the government reduces its spending and raises income taxes in an effort to reduce the budget deficit. The most likely short-run result will be an increase in
- (A) interest rates
 - (B) unemployment
 - (C) the money supply
 - (D) the price level
 - (E) personal savings
20. Which of the following is true about inflation and interest rates?
- (A) The higher the inflation rate, the higher the real interest rate.
 - (B) If there is no actual or expected inflation, the nominal and real interest rates are equal.
 - (C) If the economy is experiencing deflation, the nominal interest rate exceeds the real interest rate.
 - (D) The higher the inflation rate, the lower the nominal interest rate.
 - (E) The nominal interest rate is the difference between the real interest rate and the expected inflation rate.

21. Economic growth is shown by a rightward shift in
- (A) the aggregate demand curve
 - (B) the long-run Phillips curve
 - (C) the production possibilities curve
 - (D) the short-run aggregate supply curve
 - (E) the money supply curve
22. During a period of stagflation, a nation is most likely experiencing
- (A) high unemployment and low inflation
 - (B) low unemployment and high inflation
 - (C) low inflationary expectations
 - (D) a decrease in short-run aggregate supply
 - (E) an increase in taxes and government spending
23. If businesses become optimistic about the profitability of investments in an economy, which of the following will happen in the loanable funds market in the short run?
- (A) The supply and demand for loanable funds will increase.
 - (B) The supply and demand for loanable funds will decrease.
 - (C) The demand for loanable funds by the private sector will decrease.
 - (D) The real interest rate will increase.
 - (E) The real interest rate will decrease.
24. If investment demand becomes less responsive to changes in interest rates, which of the following is true?
- (A) An expansionary fiscal policy results in less crowding out.
 - (B) An expansionary fiscal policy results in more crowding out.
 - (C) An expansionary monetary policy is more effective.
 - (D) A contractionary monetary policy is more effective.
 - (E) An expansionary monetary policy results in more crowding out.
25. Which of the following measures the opportunity cost of holding currency?
- (A) The nominal wage rate
 - (B) The increase in the demand for money
 - (C) The forgone interest on alternative assets
 - (D) The ability to access currency to meet unexpected expenses
 - (E) The average income tax rates
26. A contractionary monetary policy combined with an expansionary fiscal policy will
- (A) decrease both income and consumption
 - (B) increase both income and consumption
 - (C) have uncertain effects on the interest rate and investment
 - (D) increase the interest rate and decrease investment
 - (E) increase both the interest rate and investment
27. Ms. Smith withdraws \$1,000 from her safe and deposits the money in a bank. If the bank holds no excess reserves and the reserve requirement is 10 percent, how will this deposit increase the bank's required reserves and the bank's loans?
- | | <u>Required Reserves</u> | <u>Loans</u> |
|-----|--------------------------|--------------|
| (A) | \$1,000 | \$9,000 |
| (B) | \$1,000 | \$10,000 |
| (C) | \$900 | \$100 |
| (D) | \$100 | \$900 |
| (E) | \$100 | \$1,000 |
28. A country can have an increased surplus in its balance of trade as a result of
- (A) an increase in domestic inflation
 - (B) declining imports and rising exports
 - (C) higher tariffs imposed by its trading partners
 - (D) an increase in financial capital inflow
 - (E) an appreciating currency
29. Country X has a budget deficit. Which of the following changes in government budget outlays and tax revenues will result in a decrease in Country X's government budget deficit?
- | | <u>Government Outlays</u> | <u>Tax Revenues</u> |
|-----|---------------------------|-----------------------|
| (A) | Fall by \$100 million | Fall by \$600 million |
| (B) | Fall by \$200 million | Fall by \$200 million |
| (C) | Rise by \$300 million | Fall by \$300 million |
| (D) | Rise by \$400 million | Rise by \$600 million |
| (E) | Rise by \$500 million | Rise by \$500 million |

	Motorcycles	OR	Automobiles
Country X	50	OR	80
Country Y	75	OR	40

30. The table above shows the quantity of motorcycles and automobiles produced by two countries that use the same amount of resources. Which of the following is true?
- (A) Country X has an absolute and comparative advantage in the production of motorcycles.
 (B) Country X has an absolute and comparative advantage in the production of both goods.
 (C) Neither country has a comparative advantage in the production of motorcycles.
 (D) Country Y has an absolute and comparative advantage in the production of automobiles.
 (E) Country Y has an absolute and comparative advantage in the production of motorcycles.
31. Which of the following is an example of how the consumer price index (CPI) exhibits bias in its estimates of changes in the cost of living?
- (A) Energy prices have a higher impact on inflation than other input costs do.
 (B) New products are always overrepresented in the CPI.
 (C) The CPI assigns greater weight to measures of welfare than it does to economic activity.
 (D) Product improvements are not always fully reflected in the calculation of the CPI.
 (E) The CPI adjusts for the substitution of less expensive goods by consumers.
32. Fred Jones withdraws \$1,000 in cash from his savings account. What immediate effect does this transaction have on the monetary aggregate measures of M1 and M2 ?
- | <u>M1</u> | <u>M2</u> |
|---------------|-----------|
| (A) Increases | Decreases |
| (B) Increases | No change |
| (C) Decreases | No change |
| (D) No change | Decreases |
| (E) No change | No change |
33. Which of the following is true about inflationary expectations?
- (A) The actual unemployment rate equals the natural rate of unemployment if the actual inflation rate exceeds the expected inflation rate.
 (B) The actual unemployment rate equals the natural rate of unemployment when wages fully adjust to expected inflation.
 (C) Expectations are always correct in the short run.
 (D) The actual inflation rate is always equal to the expected inflation rate because of labor contracts.
 (E) The natural rate of unemployment equals the inflation rate when the actual inflation rate equals the expected inflation rate.
34. Which of the following transactions is included in the financial account of Country X's balance of payments accounts?
- (A) A firm in Country X sells robots to a firm in Country A.
 (B) Country X sends financial aid to Country B.
 (C) An individual in Country X receives dividend payments from a firm in Country C.
 (D) An individual in Country X sends money monthly to family members in Country D.
 (E) An individual in Country X buys new government bonds issued by Country E.
35. Assume a country's government increases taxes and its central bank decreases the money supply. The actions will result in an increase in which of the following in the short run?
- (A) Aggregate demand
 (B) Aggregate supply
 (C) Investment spending
 (D) Unemployment
 (E) Inflation
36. When there is excess demand in the loanable funds market, which of the following will occur?
- (A) National savings will exceed investment spending.
 (B) The economy will remain at full employment.
 (C) Real interest rates will increase.
 (D) An inflationary gap will exist.
 (E) The money supply will increase.

37. Which of the following is an assumption underlying an upward-sloping short-run aggregate supply curve?
- (A) The economy is experiencing high inflation.
 - (B) The economy is at full employment.
 - (C) National income is fixed.
 - (D) Wages are sticky.
 - (E) The velocity of money is constant.
38. The short-run Phillips curve implies there is a trade-off between
- (A) rule making and discretionary policies
 - (B) monetary and fiscal policies
 - (C) inflation and unemployment
 - (D) budget deficits and interest rates
 - (E) interest rates and investment
39. When Stephanie took out a one-year fixed-rate loan, she expected to pay a real interest rate of 3 percent. At the end of the year, the real interest rate had fallen to 2 percent. Which of the following could have caused the decrease in the real interest rate?
- (A) There was an increase in the nominal interest rate.
 - (B) There was a decrease in the nominal interest rate.
 - (C) There was a decrease in the money supply.
 - (D) The actual inflation rate was greater than the expected inflation rate.
 - (E) The actual inflation rate was less than the expected inflation rate.
40. A continuous increase in the consumer price index (CPI) is
- (A) deflation
 - (B) stagflation
 - (C) inflation
 - (D) recession
 - (E) disinflation
41. Which of the following would most likely lead to cost-push inflation in the short run?
- (A) A decrease in labor productivity
 - (B) A decrease in income tax rates
 - (C) A decrease in consumers' and businesses' optimism about future economic activity
 - (D) An increase in government deficit spending to stimulate a weak economic recovery
 - (E) Discovery of new sources of energy
42. The measured unemployment rate is often criticized for understating the level of joblessness because
- (A) individuals working in the underground economy are counted as employed
 - (B) individuals working more than one job are counted more than once
 - (C) discouraged workers are counted as unemployed
 - (D) discouraged workers are not counted in the labor force
 - (E) part-time workers are counted as unemployed
43. An economy is in short-run equilibrium at a level of output that is greater than potential output. If there were no active fiscal or monetary policy intervention, which of the following changes in output and the price level would occur in the long run?
- | <u>Output</u> | <u>Price Level</u> |
|---------------|--------------------|
| (A) Increase | Decrease |
| (B) Increase | Increase |
| (C) Decrease | Decrease |
| (D) Decrease | Increase |
| (E) No change | No change |

Production Point	Shirts	Chairs
A	20	0
B	16	1
C	12	2
D	8	3
E	4	4
F	0	5

44. The table shows the production possibilities for Country X in producing shirts and chairs when it uses all its available resources. The opportunity cost of producing one additional chair is
- (A) zero
(B) constant
(C) increasing
(D) decreasing
(E) indeterminate
45. An increase in which of the following will most likely cause an increase in aggregate demand and inflation in the short run?
- (A) Income tax rates
(B) Input prices
(C) Government spending
(D) Real interest rates
(E) Savings
46. If the central bank of a country wishes to maintain a stable nominal interest rate after a decrease in consumers' spending, taking which of the following actions will achieve the goal?
- (A) Increasing government spending
(B) Increasing income tax rates
(C) Decreasing the required reserve ratio
(D) Decreasing the discount rate
(E) Selling government bonds
47. Investment in physical capital is most likely to occur as a result of an increase in
- (A) interest rates
(B) inflation rates
(C) business confidence
(D) money demand
(E) personal consumption
48. Country X's government increases its spending without raising taxes. Which of the following is true about the effect on Country X's real interest rates and its subsequent effect on Country X's net exports?
- (A) Real interest rates increase and net exports increase.
(B) Real interest rates increase and net exports decrease.
(C) Real interest rates increase with no change in net exports.
(D) Real interest rates decrease and net exports increase.
(E) Real interest rates decrease and net exports decrease.
49. Which of the following shifts the money demand curve to the right?
- (A) An increase in the price level
(B) A decrease in the price level
(C) An increase in interest rates
(D) A decrease in interest rates
(E) A decrease in the nominal gross domestic product
50. An increase in the money supply will result in an increase in
- (A) output in the short run and in the long run
(B) inflation in the short run and an increase in output in the long run
(C) inflation in the short run and no change in output in the long run
(D) output in the long run but not in the short run
(E) output in the long run and no change in inflation in the short run
51. Which of the following is an example of frictional unemployment?
- (A) A former mayor doing volunteer work
(B) A factory worker who loses her job because of recession
(C) A college student working part-time at the campus bookstore
(D) A college graduate interviewing for two available positions
(E) An architect whose job is replaced by computer software that designs buildings

52. Assuming no government policies, which of the following will occur in the long run if the actual unemployment rate exceeds the natural rate of unemployment?

- (A) Prices will increase.
- (B) Unemployment will increase.
- (C) Wages will fall.
- (D) Aggregate demand will increase.
- (E) Long-run aggregate supply will decrease.

53. Assume that the market for bottled water is in equilibrium. If both the supply of and the demand for bottled water decrease, what will be the effect on equilibrium price and quantity?

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

- | | |
|-------------------|---------------|
| (A) Decrease | Decrease |
| (B) Decrease | Increase |
| (C) Increase | Decrease |
| (D) Increase | Indeterminate |
| (E) Indeterminate | Decrease |

54. An increase in government spending that is financed by an equal increase in taxes results in which of the following changes in aggregate demand (AD) and short-run aggregate supply (SRAS) curves?

<u>AD Curve</u>	<u>SRAS Curve</u>
-----------------	-------------------

- | | |
|-------------------------|---------------------|
| (A) Shifts to the right | Shifts to the right |
| (B) Shifts to the left | Shifts to the left |
| (C) Shifts to the right | No change |
| (D) Shifts to the left | No change |
| (E) No change | No change |

55. Assume that the United States current account balance is zero. If the United States dollar appreciates against the Japanese yen, then demand for United States exports will

- (A) increase and result in a deficit in the United States financial account
- (B) increase and result in a surplus in the United States financial account
- (C) decrease and result in a surplus in the United States financial account
- (D) decrease and result in a deficit in the United States financial account
- (E) remain unchanged because the surplus in the current account will be offset by the deficit in the financial account

56. If the government decreases spending while the country's central bank buys bonds on the open market, which of the following will definitely occur?

- (A) The aggregate demand curve will shift to the right.
- (B) The aggregate demand curve will shift to the left.
- (C) The short-run aggregate supply curve will shift to the right.
- (D) Interest rates will fall.
- (E) Interest rates will rise.

57. Which of the following best illustrates rising productivity?

- (A) An expansion of the labor force
- (B) An increase in the value of financial capital
- (C) A decrease in the amount of physical capital per worker
- (D) A decrease in the amount of labor needed to produce a unit of output
- (E) An increase in the amount of resources required to produce a certain level of output

58. Which of the following will most likely cause a depreciation in a country's currency?
- (A) An increase in the country's price level
 - (B) An increase in the country's real interest rate
 - (C) A decrease in the country's expected inflation
 - (D) A decrease in the country's real gross domestic product
 - (E) A decrease in the country's money supply
59. Banks create money when
- (A) they make loans
 - (B) the loans they make are repaid
 - (C) they keep all excess reserves
 - (D) customers increase their cash withdrawals from their savings accounts
 - (E) the money multiplier is less than one
60. Which of the following is true about a country's national debt?
- (A) It is the sum of the country's trade deficit and government budget deficit.
 - (B) It increases when gross domestic product increases.
 - (C) It increases when the country's government has a budget deficit.
 - (D) It decreases when the country's exports exceed its imports.
 - (E) It decreases when national savings decrease.

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

2019

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

Electronic Device

None allowed

Reading Period

Time

10 minutes. Use this time to read the questions and plan your answers. You may begin writing your responses before the reading period is over.

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

<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Month	Day	Year

3. Six-digit school code

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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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. You may begin writing your responses before the reading period is over.

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 4BP4-S

35

MACROECONOMICS

Section II

Total Time—1 hour

Reading Period—10 minutes

Writing Period—50 minutes

Directions: You are advised to spend the first 10 minutes reading all of the questions and planning your answers. You will then have 50 minutes to answer all three of the following questions. You may begin writing your responses before the reading period is over. 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. 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 that a country's economy is currently in recession.
- (a) Draw a correctly labeled graph of the long-run and short-run Phillips curves. Label the current equilibrium as point Z.
 - (b) Assume banks in the country hold no excess reserves and the public's holding of currency is constant. The required reserve ratio is 25%. The central bank of the country buys \$100 billion in bonds from the nonbank public.
 - (i) By how much will the monetary base of the country change?
 - (ii) Calculate the change in the amount of loans in the banking system in the country.
 - (iii) Calculate the change in the money supply in the country.
 - (c) Draw a correctly labeled graph of the money market and show the effect of the change in the money supply identified in part (b)(iii) on the nominal interest rate.
 - (d) Assume there is no change in inflationary expectations. On your graph in part (a), label a point W that is consistent with the effect of the change in the nominal interest rate identified in part (c).
 - (e) Based on the change in the interest rate identified in part (c), how will the international value of the country's currency change?
 - (f) Based on your answer in part (e), will the country's net exports increase, decrease, or stay the same? Explain.
-

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Question 1 is reprinted for your convenience.

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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 single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, text, or other markings on the page.

2. Suppose that the United States government implements a fiscal policy that increases the budget surplus.
- (a) Draw a correctly labeled graph of the loanable funds market and show the effect of the increase in the budget surplus on the equilibrium real interest rate.
 - (b) The European Union is a major trading partner of the United States. Given your answer in part (a) about the real interest rate, will the United States dollar appreciate or depreciate against the euro? Explain.
 - (c) Suppose that the Federal Reserve, the central bank of the United States, decides to offset the change in the value of the dollar identified in part (b).
 - (i) Would the Federal Reserve buy or sell the euro?
 - (ii) Would the Federal Reserve buy or sell the dollar?
 - (d) Suppose that the Federal Reserve wants to counteract the real interest rate change identified in part (a). What open-market operation would the Federal Reserve use?
-

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[illegible]

[illegible]

Time	Price of Apples	Quantity of Apples	Price of Oranges	Quantity of Oranges
Year 1	4	15	10	4
Year 2	6	10	5	20

3. The table above shows data for the economy of Fruitland, which produces two goods, apples and oranges.
- Calculate the nominal gross domestic product (GDP) for year 2.
 - Using year 1 as the base year, calculate real GDP for year 2.
 - Calculate the GDP deflator for year 2.
 - Assuming the market basket is composed of the quantities in year 1, calculate the consumer price index (CPI) for year 2.
 - Suppose apple and orange pickers received a 2 percent increase in their wages. Based on your answer to part (d), would real wages of apple and orange pickers increase, decrease, or stay the same from year 1 to year 2 ? Explain.

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[illegible]

[illegible]

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 ON THE FRONT COVER.**
- **MAKE SURE YOU HAVE USED THE SAME SET OF AP NUMBER LABELS ON ALL AP EXAMS YOU HAVE TAKEN THIS YEAR.**

AP Macroeconomics

2019

APPENDIX - ANSWERS

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

Answer Key for AP Macroeconomics
Practice Exam, Section I

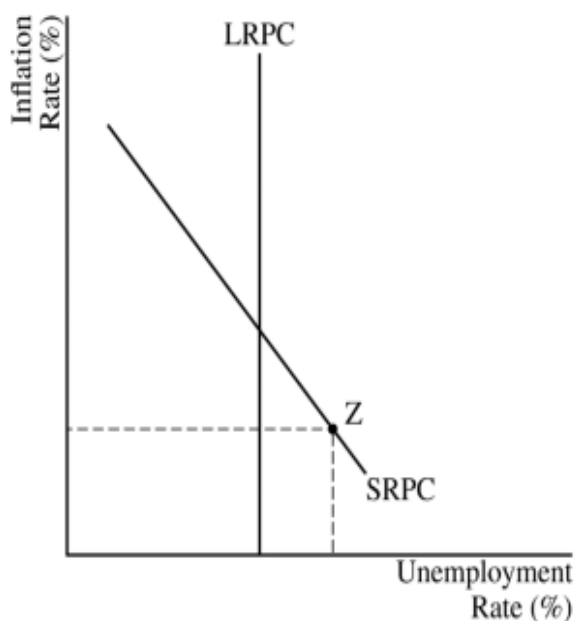
Question 1: D	Question 31: D
Question 2: C	Question 32: B
Question 3: B	Question 33: B
Question 4: C	Question 34: E
Question 5: B	Question 35: D
Question 6: A	Question 36: C
Question 7: B	Question 37: D
Question 8: C	Question 38: C
Question 9: B	Question 39: D
Question 10: C	Question 40: C
Question 11: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

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Question 1

10 points (2, 3, 2, 1, 1, 1)

(a) 2 points



- One point is earned for drawing a correctly labeled graph of the SRPC.
- One point is earned for drawing the LRPC and for showing point Z on the SRPC to the right of the LRPC.

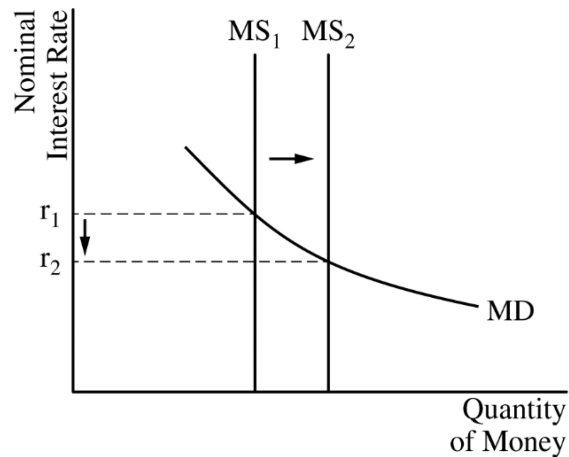
b) 3 points:

- One point is earned for stating that the monetary base will change by \$100 billion.
- One point is earned for correctly calculating the change in the amount of loans in the banking system as \$300 ($=4 \times \75).
- One point is earned for correctly calculating the change in the money supply as \$400 ($=4 \times \100).

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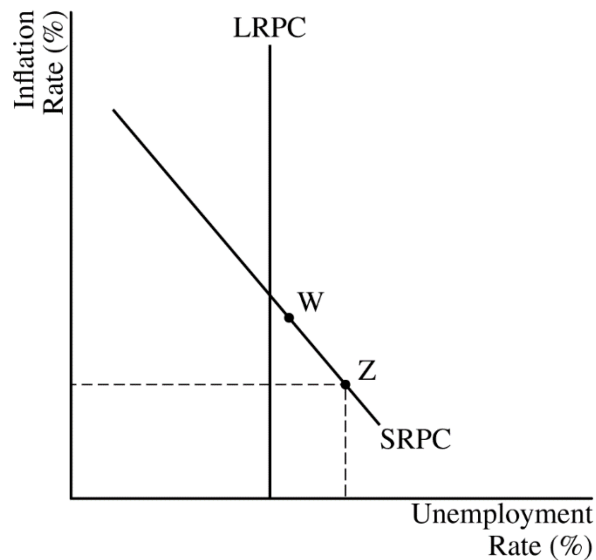
Question 1 (continued)

(c) 2 points



- One point is earned for drawing a correctly labeled graph of the money market.
- One point is earned for showing a rightward shift in the money supply curve and a lower nominal interest rate.

(d) 1 point



- One point is earned for showing point W to the left of point Z on the SRPC.

(e) 1 point

- One point is earned for stating that the country's currency will depreciate.

(f) 1 point

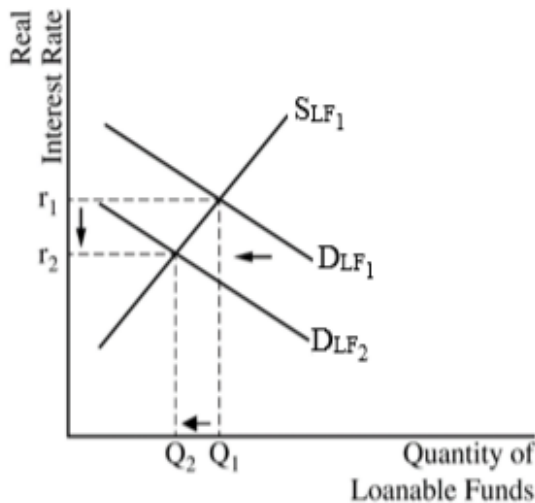
- One point is earned for stating that net exports will increase and for explaining that this is because the country's goods will be relatively cheaper than foreign goods.

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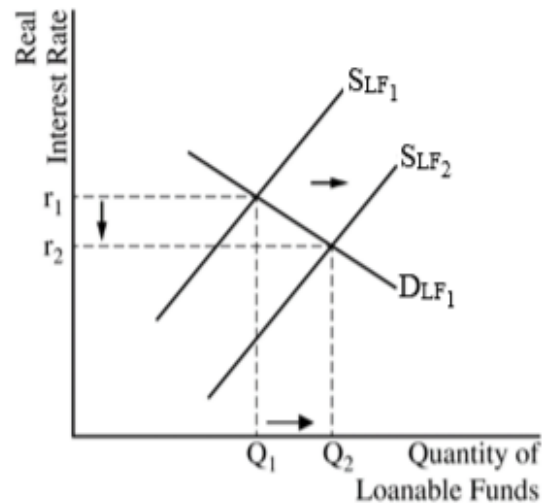
Question 2

5 Points (2, 1, 1, 1)

(a) 2 Points



OR



- One point is earned for drawing a correctly labeled graph of the loanable funds market.
- One point is earned for showing a leftward shift of the demand curve for loanable funds (or a rightward shift of the supply curve of loanable funds) and a decrease in the equilibrium real interest rate.

(b) 1 point

- One point is earned for stating that the dollar will depreciate against the euro and for explaining that the demand for United States financial assets decreases which decreases the demand for the dollar or increases the supply of the dollar. (It is also acceptable to explain that as investors seek higher returns in foreign financial assets, there will be financial capital outflows, which decreases the demand for the dollar or increases the supply of the dollar.)

(c) 1 point

- One point is earned for stating that the Federal Reserve should sell the euro and buy the dollar.

(d) 1 point

- One point is earned for stating that the Federal Reserve would sell bonds.

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Question 3

5 points (1, 1, 1, 1, 1)

(a) 1 point

- One point is earned for correctly calculating the nominal GDP for year 2 as 160 ($=6 \times 10 + 5 \times 20$).

(b) 1 point

- One point is earned for correctly calculating the real GDP for year 2 as 240 ($=4 \times 10 + 10 \times 20$).

(c) 1 point

- One point is earned for correctly calculating the GDP deflator for year 2 as 67 ($=160/240 \times 100$).

(d) 1 point

- One point is earned for correctly calculating the CPI for year 2 as 110 ($=110/100 \times 100$).

(e) 1 point

- One point is earned for correctly stating that real wages will decrease and for explaining that the increase in the nominal wage rate is lower than the inflation rate ($2\% < 10\%$).