AP® Macroeconomics Exam

SECTION I: Multiple Choice

2018

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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.

Sample Question	Sample Answer
Chicago is a (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 4OBP4-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. Which of the following typically occurs during an expansionary phase of a business cycle?

   (A) Nominal interest rates decrease.
   (B) Income taxes decrease.
   (C) The price level decreases.
   (D) Government transfer payments increase.
   (E) Employment increases.

2. Economic growth refers to an increase in which of the following?

   (A) Government spending
   (B) Consumption spending
   (C) Nominal gross domestic product
   (D) Potential real gross domestic product
   (E) Household wealth

3. If both the nominal interest rate and the expected inflation rate increase, what will happen to the real interest rate?

   (A) It will increase because the expected inflation rate has increased.
   (B) It will increase because the nominal interest rate has increased.
   (C) It will increase if the expected inflation rate increases by more than the nominal interest rate.
   (D) It will decrease because the nominal interest rate has increased.
   (E) It will decrease if the expected inflation rate increases by more than the nominal interest rate.

4. Which of the following statements is true about an expansionary fiscal policy?

   (A) It decreases demand for loanable funds.
   (B) It decreases the equilibrium price level.
   (C) It decreases the equilibrium real interest rate.
   (D) It increases aggregate demand.
   (E) It increases the money supply.

5. Which of the following will most likely result from deflation?

   (A) Increased nominal interest rates
   (B) Increased business profits
   (C) Increased real value of fixed incomes
   (D) Decreased purchasing power of cash
   (E) Decreased real wealth

6. Which of the following is a defining characteristic of a fractional reserve banking system?

   (A) The existence of a central bank with a monopoly on money creation
   (B) The use of paper money backed by a commodity such as gold or silver
   (C) The fact that banks retain an amount of bank reserves that is less than the amount of customer demand deposits
   (D) The requirement that banks maintain a certain percentage of their reserves as a deposit in an account at the central bank
   (E) The regulations that separate investment banking from commercial banking

7. A negative aggregate supply shock will result in which of the following in the short run?

   (A) An increase in the price level and a decrease in the unemployment rate
   (B) A decrease in the price level and an increase in the unemployment rate
   (C) A decrease in both the price level and real output
   (D) An increase in both the price level and real output
   (E) An increase in both the price level and the unemployment rate

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8. Which of the following combinations of fiscal and monetary policies will correct a severe recession?

(A) Increasing income tax rates and decreasing the money supply
(B) Increasing both the income tax rates and the money supply
(C) Decreasing both the income tax rates and the money supply
(D) Decreasing income tax rates and increasing the money supply
(E) Decreasing income tax rates and increasing the federal funds rate

9. Which of the following would decrease the United States net exports to South Korea?

(A) South Korean computer companies sell more computers to the United States.
(B) South Korean insurance companies provide fewer services to the United States.
(C) South Koreans spend more vacations in the United States.
(D) United States banks provide more banking services to South Korea.
(E) United States smartphone companies sell more smartphones to South Korea.

10. An increase in the purchases of newly constructed houses will result in which of the following?

(A) Aggregate demand will decrease as a result of a decrease in the price level.
(B) Aggregate demand will increase as a result of an increase in investment spending.
(C) Aggregate demand will increase as a result of an increase in exports.
(D) Aggregate demand will not change, since consumer spending has not changed.
(E) Aggregate demand will not change, since investment spending has not changed.

11. Suppose that a country's nominal gross domestic product (GDP) was $1,000 in year 1 and $2,000 in year 2. If year 1 is the base year and real GDP in year 2 was $1,000, which of the following is true?

(A) Prices fell by 50% between year 1 and year 2.
(B) Prices doubled between year 1 and year 2.
(C) Prices remained the same between year 1 and year 2.
(D) More goods and services were produced in year 2 than in year 1.
(E) Fewer goods and services were produced in year 2 than in year 1.

12. To decrease the money supply, a country's central bank can do which of the following?

(A) Sell government bonds.
(B) Decrease the discount rate.
(C) Decrease the required reserve ratio.
(D) Increase taxes.
(E) Increase government spending.

13. Which of the following types of unemployment is caused by a recession?

(A) Hidden
(B) Frictional
(C) Seasonal
(D) Structural
(E) Cyclical

14. If the United States government increases deficit spending, which of the following will occur as a result of the change in the interest rate?

(A) The United States dollar will appreciate in foreign exchange markets.
(B) Household savings in the United States will decrease.
(C) The United States exports will increase.
(D) The demand for United States dollars will decrease.
(E) Private investment in plant and equipment in the United States will increase.

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15. In the short run, a reduction in the money supply will cause

(A) a rightward shift in the aggregate demand curve
(B) a leftward shift in the aggregate demand curve
(C) a rightward shift in the aggregate supply curve
(D) a leftward shift in the aggregate supply curve
(E) a movement along the aggregate demand curve

16. How will an increase in demand and a simultaneous decrease in supply affect the equilibrium price and quantity of a good in a market?

	Price	Quantity
(A)	Increase	Increase
(B)	Increase	Indeterminate
(C)	Decrease	Increase
(D)	Decrease	Indeterminate
(E)	Indeterminate	Indeterminate

17. An increase in government spending financed by increased borrowing will most likely change the real interest rate and the gross private domestic investment in which of the following ways?

	Real Interest Rate	Gross Private Domestic Investment
(A)	No change	No change
(B)	Decrease	Increase
(C)	Decrease	Decrease
(D)	Increase	Decrease
(E)	Increase	Increase

18. If real interest rates in the United States fall relative to real interest rates in Great Britain, which of the following will occur?

(A) British investors will buy more United States securities.
(B) British exports to the United States will increase.
(C) The supply of dollars will decrease.
(D) United States investors' demand for British pounds will decrease.
(E) The British pound will appreciate relative to the dollar.

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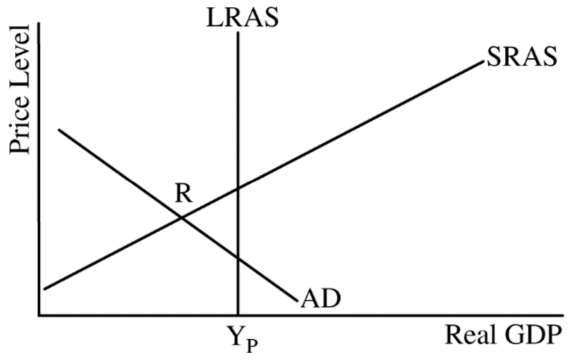

19. A country's economy is currently in equilibrium at point R. Which of the following policy actions could the country's government take to achieve potential output (Y_P) ?

(A) Decreasing the money supply
(B) Decreasing investment tax credits
(C) Increasing interest rates
(D) Increasing government expenditures
(E) Increasing the minimum wage

	Good X		Good Y	
	Price	Quantity	Price	Quantity
Year 1	$2	2	$1	4
Year 2	$3	2	$2	4

20. Assume that an economy produces just two goods, X and Y, as shown in the table above. If year 1 is the base year, the consumer price index for year 2 in this economy is

(A) 57.1
(B) 66.7
(C) 100
(D) 175
(E) 250

21. Which of the following is LEAST likely to affect the long-run growth of an economy?

(A) Investment in physical capital
(B) Research and development
(C) Education and training
(D) A specific tax on luxury goods
(E) Stable and efficient institutions

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22. Pat deposits a portion of her wages into a personal savings account every week. The saved money can be considered to be primarily a

(A) means of payment
(B) unit of account
(C) store of value
(D) measure of value
(E) medium of exchange

23. An increase in the number of which of the following will lead to an increase in the unemployment rate?

(A) Discouraged workers
(B) Business start-ups
(C) Self-employed persons
(D) Persons working 30 instead of 40 hours per week
(E) Persons quitting part-time jobs to look for full-time ones

24. An economy experiences a sharp increase in energy prices, and policy makers adopt a stabilization policy to increase aggregate demand. Compared with the initial short-run equilibrium, which of the following will definitely occur?

(A) Lower level of output
(B) Higher level of output
(C) Lower price level
(D) Higher price level
(E) Higher aggregate supply

25. Assume that the marginal propensity to consume is 0.8. If the government increases its purchases of goods and services by $200 and exports decline by $50, at most the equilibrium level of income will

(A) decrease by $250
(B) decrease by $1,000
(C) increase by $150
(D) increase by $750
(E) increase by $1,250

26. An ongoing increase in the price of oil will result in

(A) demand-pull inflation
(B) cost-push inflation
(C) expansionary fiscal policy
(D) a decrease in the prices of substitute forms of energy
(E) deflation

27. Assume that Country X and Country Y are trading partners. If the average income in Country X increases, which of the following will occur in the foreign exchange market?

(A) The demand for Country X's currency will increase, and Country X's currency will appreciate.
(B) The demand for Country Y's currency will increase, and Country X's currency will depreciate.
(C) The demand for Country Y's currency will increase, and Country X's currency will appreciate.
(D) The supply of Country X's currency will decrease, and Country X's currency will appreciate.
(E) The supply of Country Y's currency will increase, and Country Y's currency will depreciate.

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28. Which of the following is a monetary policy aimed at increasing the equilibrium interest rate in the money market?

(A) Raising taxes
(B) Lowering the discount rate
(C) Lowering the federal funds rate
(D) Selling bonds on the open market
(E) Lowering the required reserve ratio

29. Which of the following monetary and fiscal policy mixes will reduce unemployment?

(A) Buying government bonds in the open market and increasing taxes
(B) Buying government bonds in the open market and decreasing taxes
(C) Selling government bonds in the open market and increasing government spending
(D) Selling government bonds in the open market and decreasing government spending
(E) Selling government bonds in the open market and increasing taxes

30. Which of the following is correct according to the circular flow model of an economy?

(A) Taxes received from the public equal government spending.
(B) Imports equal exports.
(C) Total spending equals total income.
(D) Consumption plus saving equals investment.
(E) Saving plus investment equals imports plus exports.

31. If the short-run aggregate supply curve is upward sloping, which of the following will cause inflation?

(A) An increase in long-run aggregate supply
(B) An increase in short-run aggregate supply
(C) An increase in aggregate demand
(D) A decrease in aggregate demand
(E) A decrease in aggregate demand and an increase in aggregate supply

32. Sam and Bill run a leaf raking and lawn mowing business. In one day, Sam can rake 3 lawns or mow 5 lawns whereas Bill can rake 2 lawns or mow 6 lawns. Which of the following correctly describes Sam's and Bill's absolute and comparative advantages?

(A) Sam has a comparative advantage in raking and an absolute advantage in mowing.
(B) Sam has a comparative advantage in mowing and an absolute advantage in raking.
(C) Sam has a comparative advantage in mowing and an absolute advantage in mowing.
(D) Bill has a comparative advantage in mowing and an absolute advantage in mowing.
(E) Bill has a comparative advantage in raking and an absolute advantage in mowing.

33. People who have given up looking for jobs are classified as

(A) cyclically unemployed
(B) frictionally unemployed
(C) structurally unemployed
(D) discouraged workers
(E) underemployed workers

34. Banks expand the money supply when

(A) issuing credit cards
(B) printing money
(C) cashing checks
(D) making loans
(E) accepting deposits

35. The economy is currently in long-run equilibrium. If the central bank increases the money supply, in the long run the price level will

(A) increase, and output will remain at the full-employment level
(B) increase, and output will be above the full-employment level
(C) increase, and output will be below the full-employment level
(D) remain unchanged, and output will remain at the full-employment level
(E) remain unchanged, and output will be above the full-employment level

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36. The crowding out effect of government spending will be large if

(A) investment is highly sensitive to changes in the interest rate
(B) consumption is highly sensitive to changes in wealth
(C) money demand is highly insensitive to changes in income
(D) it takes a long time for changes in government spending to cause a change in equilibrium income
(E) the long-run aggregate supply curve is horizontal

37. When the United States dollar appreciates against the euro, which of the following will most likely happen?

(A) European firms will pay fewer euros for equipment purchased from the United States.
(B) European products will become more expensive for United States consumers.
(C) United States tourists will pay fewer dollars for trips to Europe.
(D) The European trade deficit will increase.
(E) The United States trade deficit will decrease.

38. Which of the following will occur in the money market when the aggregate price level increases?

(A) The money supply will increase and nominal interest rates will decrease.
(B) The demand for money will increase and nominal interest rates will decrease.
(C) The demand for money will increase and nominal interest rates will increase.
(D) The demand for money will decrease and nominal interest rates will decrease.
(E) The opportunity cost of holding money will decrease.

39. Increases in government subsidies to encourage investment in research and development will affect aggregate demand (AD) and long-run aggregate supply (LRAS) in which of the following ways?

	AD	LRAS
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Increase	No change
(D)	Decrease	Increase
(E)	Decrease	No change

40. If an automobile was manufactured in 2006 and sold to a consumer in 2007, what was the effect on gross domestic product in 2006 and 2007?

	2006	2007
(A)	No change	Increase
(B)	Decrease	Increase
(C)	Increase	No change
(D)	Increase	Decrease
(E)	No change	No change

41. If the government implements an expansionary fiscal policy, how will real gross domestic product (GDP) and the price level be affected in the short run?

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

42. Which of the following will most likely contribute to long-run economic growth?

(A) High levels of household spending
(B) High levels of government spending
(C) High levels of investment in plant and equipment
(D) Low levels of immigration to the country
(E) Low levels of foreign investment in the country

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43. Which of the following is true when interest rates rise?

(A) The opportunity cost of holding cash decreases.
(B) The opportunity cost of holding cash increases.
(C) The opportunity cost of holding cash stays the same.
(D) The money demand curve shifts to the right.
(E) The money supply curve shifts to the right.

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

(A) Decreasing income tax rates
(B) Increasing the money supply
(C) Decreasing the discount rate
(D) Selling government bonds
(E) Decreasing the required reserve ratio

45. All of the following explain why prices and wages are sticky EXCEPT

(A) menu costs experienced by firms
(B) efficiency wages paid to labor
(C) misperceptions about relative prices by suppliers
(D) competition in the business sector
(E) labor contracts covering multiple years

Total Population	300
Working-age Population	200
Unemployed	10
Employed	90

46. The table above gives population and labor-market data for an economy. The unemployment rate in this economy is

(A) 3.3%
(B) 5%
(C) 10%
(D) 33.3%
(E) 50%

47. In the short run, how would a government's budget deficit, national debt, and real output change if government spending increases with no change in taxes?

	Deficit	Debt	Real Output
(A)	Increase	Increase	Decrease
(B)	Increase	Decrease	Increase
(C)	Increase	Increase	Increase
(D)	Decrease	Decrease	Increase
(E)	Decrease	Increase	Decrease

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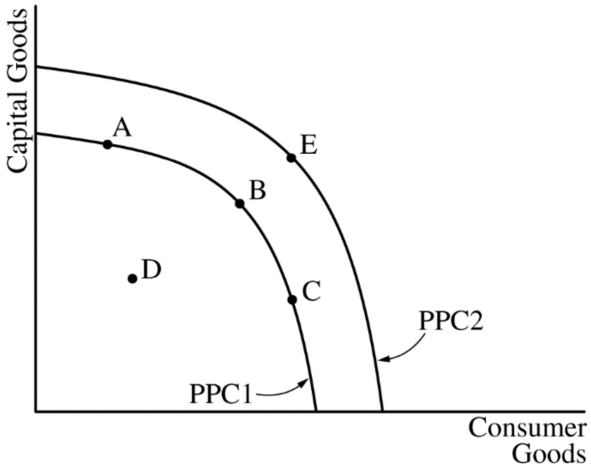

48. The graph above shows the production possibilities curves (PPC) for an economy. The concept of opportunity cost is best represented by which of the following?

(A) A shift from PPC1 to PPC2
(B) A movement from point A to point D
(C) A movement from point B to point C
(D) A movement from point C to point E
(E) A movement from point D to point B

49. If the central bank of Country Z wishes to increase the value of its currency on foreign exchange markets, it can do which of the following?

(A) Buy the currencies of other countries
(B) Increase the domestic money supply in Country Z
(C) Increase the income tax in Country Z
(D) Raise interest rates in Country Z
(E) Increase tariffs in Country Z

50. An increase in the expected inflation rate will cause the

(A) short-run Phillips curve to shift to the left
(B) short-run Phillips curve to shift to the right
(C) long-run Phillips curve to shift to the left
(D) long-run Phillips curve to shift to the right
(E) actual inflation rate to fall below the expected inflation rate

51. Which of the following is most likely included in gross domestic product?

(A) Matt gives his secondhand bicycle to his brother.
(B) Sal paints his own bicycle.
(C) Ali buys a new bicycle.
(D) Mike buys a share of stock in a bicycle firm.
(E) Daniel bikes to school every day.

52. Which of the following is likely to result in an inflow of financial capital to Country Z?

(A) A decrease in Country Z's government budget deficit
(B) An increase in personal income tax rates in Country Z
(C) Increased sales of government bonds by the central bank of Country Z
(D) An increase in country Z's trade surplus
(E) Increased political instability in Country Z

53. A bank has $200 million in demand deposits and $150 million in reserves. The reserve ratio is 20 percent. What is the maximum amount of loans the bank can make from its reserves?

(A) $750 million
(B) $150 million
(C) $110 million
(D) $50 million
(E) $40 million

54. Which of the following is true about the Phillips curve?

(A) A change in aggregate demand does not shift the long-run Phillips curve (LRPC).
(B) A change in aggregate demand does not cause a movement along the short-run Phillips curve (SRPC).
(C) The LRPC shows the trade-off between unemployment and inflation but the SRPC does not.
(D) Changes in expected inflation affect the LRPC only.
(E) Negative supply shocks affect the LRPC only.

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55. When the total amount the government spends equals tax revenues in any given year, which of the following must remain constant?

(A) The real interest rate
(B) The national debt
(C) Real gross domestic product
(D) The price level
(E) The money supply

56. How does the automatic adjustment mechanism move the economy to potential real gross domestic product (GDP) in the long run when current real GDP is above potential GDP?

(A) Nominal wages fall, shifting the short-run aggregate supply curve to the right.
(B) Nominal wages fall, shifting the short-run aggregate supply curve to the left.
(C) Nominal wages do not change, shifting the short-run aggregate supply curve to the right.
(D) Nominal wages rise, shifting the short-run aggregate supply curve to the right.
(E) Nominal wages rise, shifting the short-run aggregate supply curve to the left.

57. Which of the following statements about inflation is true?

(A) The expected inflation rate is the difference between nominal and real interest rates.
(B) Low expected inflation rates lead to high inflation rates.
(C) Lenders lose from expected inflation.
(D) Lenders gain from unexpected inflation.
(E) Workers lose from expected inflation.

58. The opportunity cost of an activity is

(A) the amount of time spent on the activity
(B) the value of the benefit received from performing the activity
(C) the value of the forgone benefit of the next best alternative
(D) zero if the activity offered no benefits
(E) the sum of benefits from all the sacrificed alternatives

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59. Increased spending on which of the following contributes most to long-term economic growth?

(A) Social security and other transfer payments
(B) New automobiles and homes
(C) Education and infrastructure
(D) Imported consumer goods
(E) Interest payments on national debt

60. If consumers in Canada increase their demand for products that are manufactured in India, which of the following will occur?

(A) The Indian rupee will depreciate.
(B) The Canadian dollar will appreciate.
(C) India's financial capital inflow will increase.
(D) Canada's financial capital inflow will increase.
(E) The supply of Canadian dollars will 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**

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AP® Macroeconomics Exam

SECTION II: Free Response

2018

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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
   ☐☐ ☐☐ ☐☐☐☐
   Month Day Year
3. Six-digit school code
   ☐☐☐☐☐☐
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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 4OBP4-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.

1. Assume a country's economy is currently in recession.

   (a) Draw a correctly labeled graph of the long-run aggregate supply, short-run aggregate supply, and aggregate demand curves, and show each of the following.

      (i) Current real output, labeled Y_1, and current price level, labeled PL_1

      (ii) Full employment output, labeled Y_f

   (b) Identify one action the central bank can take to help the economy recover from the recession.

   (c) Draw a correctly labeled graph of the money market, and show the impact of the central bank's action identified in part (b) on the nominal interest rate.

   (d) On your graph for part (a), show the effect of the central bank's action identified in part (b) on real output and the price level.

   (e) Assume there is an increase in business confidence as a result of the central bank's action.

      (i) What will happen to the demand for capital goods?

      (ii) Draw a correctly labeled graph of the loanable funds market, and show the effect of the change identified in part (e)(i) on the real interest rate.

   (f) Given your answer to part (e), what is the effect on potential real output in the long run? Explain.

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

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ANSWER PAGE FOR QUESTION 1

GO ON TO THE NEXT PAGE.

Question 1 is reprinted for your convenience.

1. Assume a country's economy is currently in recession.

   (a) Draw a correctly labeled graph of the long-run aggregate supply, short-run aggregate supply, and aggregate demand curves, and show each of the following.

      (i) Current real output, labeled Y_1, and current price level, labeled PL_1

      (ii) Full employment output, labeled Y_f

   (b) Identify one action the central bank can take to help the economy recover from the recession.

   (c) Draw a correctly labeled graph of the money market, and show the impact of the central bank's action identified in part (b) on the nominal interest rate.

   (d) On your graph for part (a), show the effect of the central bank's action identified in part (b) on real output and the price level.

   (e) Assume there is an increase in business confidence as a result of the central bank's action.

      (i) What will happen to the demand for capital goods?

      (ii) Draw a correctly labeled graph of the loanable funds market, and show the effect of the change identified in part (e)(i) on the real interest rate.

   (f) Given your answer to part (e), what is the effect on potential real output in the long run? Explain.

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2. The exchange rate between the Australian dollar and the Indian rupee is determined in a flexible foreign exchange market.

(a) Assume India is currently in recession. What fiscal policy action could the Indian government take to eliminate the recession?

(b) What would be the effect of the fiscal policy action identified in part (a) on interest rates in India?

(c) Draw a correctly labeled graph of the foreign exchange market for the Australian dollar. Show on your graph the impact of the change in interest rates identified in part (b) on each of the following.

(i) The supply of Australian dollars

(ii) The equilibrium exchange rate of the Australian dollar

(d) What would be the effect of the change in the exchange rate identified in part (c)(ii) on Australian exports?

(e) What would be the effect of the change in Australian exports identified in part (d) on Australian unemployment?

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ANSWER PAGE FOR QUESTION 2

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3. Gross domestic product (GDP), unemployment, inflation, and economic growth are key measures of a country's economic performance.

The following statistics are from the country of Pattiland in 2016; dollar values are measured in 2016 dollars.

Consumption	$90
Investment	$65
Exports	$25
Imports	$50
Government spending	$50
Taxes	$20

Population	50
Labor force	25
Employed	20

GDP deflator (2016)	90

(a) Calculate each of the following and show your work.

(i) Nominal GDP

(ii) Real GDP

(iii) Real GDP per capita

(b) Debbie is a citizen of the country of Wayland and owns a computer software firm in Pattiland. Is the output produced by Debbie's computer software firm included in Pattiland's nominal GDP calculated in part (a) ? Explain.

(c) The GDP deflator for Pattiland in 2015 was 110. In 2016 was Pattiland experiencing inflation or deflation, or is there insufficient information to determine Pattiland's economic condition? Explain.

(d) Calculate the unemployment rate in Pattiland.

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ANSWER PAGE FOR QUESTION 3

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END OF EXAM

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