

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 is a result of limited resources?

(A) Governments must run deficits.
(B) Opportunity costs are always increasing.
(C) There are no trade-offs in production.
(D) Efficiency can never be achieved.
(E) Societies must make choices.

2. Supply and demand curves are similar in that both

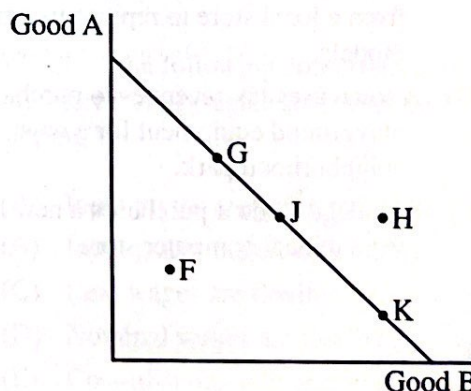
(A) illustrate the relationship between the price and the quantity of a good
(B) have a negative relationship to price
(C) show an increase by shifting left
(D) shift to the right when there is a decrease in input prices
(E) have a positive relationship to price

3. Which of the following illustrates the movement of income and expenditure through an entire economy?

(A) Reserve market model
(B) Circular flow model
(C) Loanable funds market model
(D) Balance sheet (T-account)
(E) Supply and demand market model

4. Assume Good X and Good Y are complements in consumption and are bought and sold in competitive markets. If the price of Good X increases, what will happen in the market for Good Y in the short run?

(A) There will be a movement along the demand curve to the right for Good Y.
(B) The demand curve for Good Y will shift to the right.
(C) There will be a shortage of Good Y.
(D) The equilibrium quantity of Good Y will decrease.
(E) The price of Good Y will increase.



5. Based on the production possibilities curve model provided, which of the following movements shows the effect of cyclically unemployed workers finding new jobs?

(A) A movement from point H to point K
(B) A movement from point H to point F
(C) A movement from point J to point H
(D) A movement from point F to point G
(E) A movement from point F to point H

6. Shirts are bought and sold in a competitive market. If there are 1,200 shirts available for sale but consumers would like to purchase 1,500 shirts at the current market price, which of the following is true?

- (A) The current market price is higher than the equilibrium market price.
- (B) The market is experiencing a shortage.
- (C) The market is experiencing a surplus.
- (D) The market is in equilibrium.
- (E) The quantity supplied is greater than the quantity demanded.

7. Which of the following is an example of a transaction that is excluded from the calculation of GDP?

- (A) A homeowner pays a landscaping company to provide lawn maintenance services.
- (B) A lawyer provides free legal counsel in her community.
- (C) A restaurant in town buys new appliances from a local store to replace its aging models.
- (D) A town uses tax revenues to purchase playground equipment for a new neighborhood park.
- (E) A college student purchases a new laptop from a local computer store.

8. Which of the following describes a difference between stocks and bonds?

- (A) Stocks earn a fixed return, while bonds do not.
- (B) Stocks are only issued by governments, while bonds are only issued by corporations.
- (C) Bonds result in dividend payments, while stocks result in interest payments.
- (D) Bonds represent a share of company ownership, while stocks do not.
- (E) Bonds earn interest, while stocks do not.

	Scarves Knitted	Floors Waxed
Hector	2	6
Marie	3	6

9. The table provided shows the number of scarves that can be knitted or floors that can be waxed by Hector and Marie in a 6-hour work period with equivalent resources. Which of the following is true based on the available data?

- (A) Hector has the absolute advantage in the waxing of floors.
- (B) Hector gives up 3 waxed floors for every scarf that he knits.
- (C) Neither Hector nor Marie has an incentive to specialize and trade.
- (D) Marie's opportunity cost per waxed floor is 2 knitted scarves.
- (E) If Marie specializes in the production of the item in which she has the comparative advantage, she will wax 36 floors per work period.

10. The price of one currency in terms of another currency is known as the
- (A) deflator
 - (B) exchange rate
 - (C) inflation rate
 - (D) nominal interest rate
 - (E) real interest rate
11. A short-run increase in real output due to an increase in aggregate demand represents
- (A) a recessionary gap
 - (B) the exchange rate effect
 - (C) flexible wages and prices
 - (D) the real wealth effect
 - (E) a phase of the business cycle
12. How is expansionary monetary policy similar in an economy with limited reserves and in an economy with ample reserves?
- (A) The amount of reserves available will be unchanged.
 - (B) The primary policy tool is open market bond purchases.
 - (C) Increases in the money supply increase the nominal interest rate.
 - (D) The central bank's actions cause the policy rate to decrease.
 - (E) The supply of reserves curve shifts along the horizontal portion of the demand for reserves curve.
13. GEV Bank made a loan to a business at a fixed nominal interest rate of 6%, expecting inflation to be 2%. If actual inflation was 5%, what was the actual real interest rate on the loan?
- (A) 1%
 - (B) 3%
 - (C) 4%
 - (D) 8%
 - (E) 11%
14. Which of the following indicates economic growth?
- (A) An increase in real output per capita
 - (B) An increase in the population
 - (C) An increase in average consumer debt-to-income ratios
 - (D) A decrease in the unemployment rate
 - (E) A decrease in the inflation rate
15. Which of the following conditions explains why the short-run aggregate supply curve is upward sloping?
- (A) Input prices are quick to adjust.
 - (B) Input prices are slow to adjust.
 - (C) Real wages are flexible.
 - (D) Nominal wages are flexible.
 - (E) Cost-of-living adjustment contracts do not reflect changes in inflation.

16. Which of the following is an example of money being used as a medium of exchange?

- (A) Pippin deposits \$10 into her bank account to save it for the future.
- (B) Sallie compares the prices of two different T-shirts.
- (C) Greta uses a \$5 bill to purchase an ice-cream cone.
- (D) Seyi lends his friend Bo \$3.
- (E) Emry receives a \$20 bill in the mail from her grandmother.

17. Suppose that both the price level and real GDP have decreased in the short run. Which of the following best explains what could have contributed to this outcome?

- (A) Consumer expectations concerning job security became more positive.
- (B) The central bank's policy rate decreased.
- (C) Investment spending by businesses decreased.
- (D) The government decreased taxes on household income.
- (E) Export sales increased faster than import purchases.

18. An economy has a banking system with limited reserves, and the required reserve ratio is 10%. If the central bank purchases \$50 million of bonds on the open market, what will be the maximum possible change in the monetary base and the money supply after all adjustments are made in the banking system?

	Monetary Base	Money Supply
A	Decrease by \$50 million	Increase by \$500 million
B	Decrease by \$500 million	Decrease by \$50 million
C	Increase by \$50 million	Increase by \$50 million
D	Increase by \$50 million	Increase by \$500 million
E	Increase by \$500 million	Decrease by \$50 million

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

19. Which of the following is a reason why the measured unemployment rate is criticized for understating the level of joblessness?

- (A) Individuals who were laid off and are searching for jobs are not counted as unemployed.
- (B) Business owners are not counted as part of the labor force.
- (C) Individuals who are not working and have stopped looking for jobs are not counted as unemployed.
- (D) Part-time workers are not counted as part of the labor force.
- (E) Discouraged workers are counted as unemployed.

20. If there is an economy-wide increase in the cost of energy, what will be the short-run impact?

- (A) The rate of growth of the economy will increase.
- (B) The full-employment output level of the economy will decrease.
- (C) The price level will decrease.
- (D) Real GDP will decrease.
- (E) Both short-run aggregate supply and aggregate demand will increase.

21. If the current real interest rate in the loanable funds market is greater than the equilibrium real interest rate, which of the following is most likely to occur?

- (A) The real interest rate will decrease, causing borrowers to decrease the quantity demanded of loanable funds.
- (B) The real interest rate will decrease, causing savers to increase the quantity supplied of loanable funds.
- (C) The real interest rate will decrease, causing savers to decrease the quantity supplied of loanable funds.
- (D) The real interest rate will increase, causing savers to increase the quantity supplied of loanable funds.
- (E) The real interest rate will increase, causing borrowers to increase the quantity demanded of loanable funds.

Consumption spending	\$500 billion
Investment spending	\$200 billion
Exports	\$80 billion
Imports	\$100 billion
Government spending	\$130 billion
Personal income taxes	\$40 billion
Potential output	\$800 billion

22. The table provided shows economic data for a country in 2021, which was the base year. Based on this information, which of the following is true?

- (A) The economy is experiencing a recessionary gap.
- (B) In the long run, nominal wages will eventually fall.
- (C) The central bank could decrease the policy rate to restore the economy to full employment.
- (D) The government could increase taxes to restore the economy to full employment.
- (E) The economy is operating at the natural rate of unemployment.

23. Which of the following accurately describes the relationship between inflation and unemployment in the long run?

- (A) As inflation decreases, unemployment increases.
- (B) As inflation increases, unemployment decreases.
- (C) As inflation increases, unemployment remains constant.
- (D) As unemployment increases, inflation remains constant.
- (E) As unemployment decreases, inflation decreases.

Currency in circulation	\$400 million
Demand deposits	\$600 million
Savings accounts	\$388 million
Small-denomination time deposits	\$55 million
Stocks	\$187 million

24. The table provided shows the value of financial assets in a nation. What are the values of M1 and M2 ?

- (A) M1: \$1,000 million; M2: \$630 million
- (B) M1: \$1,000 million; M2: \$1,443 million
- (C) M1: \$1,388 million; M2: \$55 million
- (D) M1: \$1,388 million; M2: \$1,443 million
- (E) M1: \$1,000 million; M2: \$1,388 million

25. An economy has a marginal propensity to consume of 0.60. If the government decreases income taxes by \$100 billion, what will be the maximum possible change in real gross domestic product?

- (A) \$60 billion
- (B) \$100 billion
- (C) \$150 billion
- (D) \$167 billion
- (E) \$250 billion

26. An economy experiences an increase in equilibrium real output and a decrease in the price level. Which event could have led to this change in the short run?
- (A) Nominal wages increased for workers in the manufacturing sector.
 - (B) New technology resulted in higher labor productivity.
 - (C) Consumption spending increased because of a decrease in market interest rates.
 - (D) Unemployment benefits were cut because of a deficit reduction plan.
 - (E) The economy's currency depreciated on the foreign exchange market.

27. Which of the following would appear on the liability side of a commercial bank's balance sheet?

- (A) Government bonds
- (B) Demand deposits
- (C) Customer loans
- (D) Bank buildings
- (E) Reserves

28. If an economy experiences an increase in aggregate demand, which of the following statements describes how an automatic stabilizer will moderate the short-run effects of the increase in aggregate demand?

- (A) Households will pay more in taxes as their incomes increase.
- (B) Retirement accounts will grow as stock prices increase.
- (C) More unemployed workers will begin to receive benefits from the government.
- (D) Nominal wages will increase as workers demand higher pay from their employers.
- (E) A law will be passed to decrease government spending in an attempt to decrease inflation.

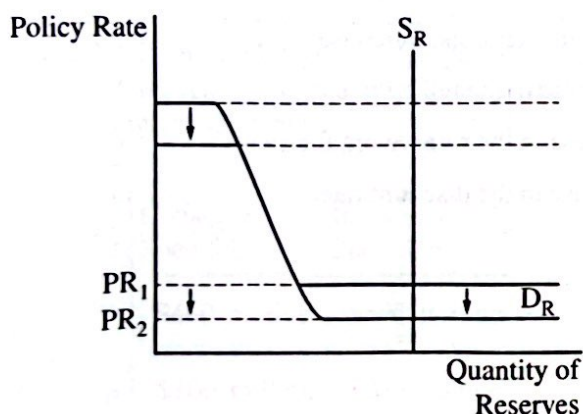
Year	Nominal GDP	GDP Deflator
2020	\$10 billion	125
2021	\$12 billion	150

29. Based on the information in the table provided, what was the value of real GDP in 2021 ?

- (A) \$2 billion
- (B) \$8 billion
- (C) \$9.6 billion
- (D) \$10 billion
- (E) \$12 billion

30. Macroland has an open economy with a flexible exchange rate, and the government of Macroland decides to implement expansionary fiscal policy. How will the resulting change in Macroland's price level affect Macroland's currency in the foreign exchange market?

- (A) The demand for Macroland's currency will increase, resulting in an appreciation.
- (B) The demand for Macroland's currency will increase, resulting in a depreciation.
- (C) The demand for Macroland's currency will decrease, resulting in a depreciation.
- (D) The supply of Macroland's currency will decrease, resulting in an appreciation.
- (E) The supply of Macroland's currency will increase, resulting in an appreciation.



31. The change shown in the reserve market graph best illustrates which of the following monetary policy actions?

- (A) Decreasing administered interest rates
- (B) Decreasing the supply of reserves
- (C) Decreasing personal income taxes
- (D) Decreasing the reserve requirement
- (E) Buying bonds on the open market

32. Nation G is currently experiencing a higher rate of inflation than it did in the previous year. Which combination of events is the most likely cause of the higher inflation rate in the short run?

- (A) An increase in consumer spending and an increase in worker productivity
- (B) An increase in new home construction and a decrease in the cost of raw materials
- (C) A decrease in income taxes and an increase in the price of oil
- (D) A decrease in exports and an increase in production subsidies
- (E) A decrease in consumer confidence and a decrease in producer confidence

33. Which of the following policies could a country's government adopt to promote economic growth?

- (A) Decreasing funding for education
- (B) Decreasing spending on infrastructure
- (C) Increasing government borrowing
- (D) Increasing taxes on businesses
- (E) Increasing investment tax credits

34. The United States has an open economy with a flexible exchange rate. The currency of the United States is the dollar. Which of the following scenarios would result in an increase in the demand for the dollar in the foreign exchange market?

- (A) A resident of the United States deposits \$20 into his checking account.
- (B) While on vacation in France, a family from the United States purchases souvenirs.
- (C) The United States government places a tariff on international goods.
- (D) A United States investor buys shares of stock on the Japanese stock market.
- (E) A German citizen purchases United States government bonds.

35. An economy that has a banking system with limited reserves experienced a decrease in the unemployment rate, but interest rates remained constant. Which combination of fiscal and monetary policies would most likely have resulted in this change in the short run?

	Fiscal Policy	Monetary Policy
A	Increase in government spending	Open market bond sale
B	Increase in government spending	Open market bond purchase
C	Decrease in government spending	Decrease in the policy rate
D	Decrease in taxes	Increase in the reserve requirement
E	Increase in taxes	Increase in the discount rate

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

36. Iya took out a one-year loan from First Bank at a 3% fixed nominal interest rate with the expectation that annual inflation would be 2%. If inflation was actually 6% that year, which of the following occurred?

- (A) Both Iya and First Bank were worse off.
- (B) Both Iya and First Bank were better off.
- (C) Iya was worse off, and First Bank was better off.
- (D) Iya was better off, and First Bank was worse off.
- (E) Iya was better off, and First Bank was not affected.

37. An economy with a marginal propensity to consume of 0.75 experienced an increase in real output of \$2,400 million. Which of the following combinations of changes in aggregate spending could have led to this overall increase in real output in the short run?

	Consumer Spending	Investment Spending
A	-\$400 million	\$800 million
B	\$100 million	\$250 million
C	\$200 million	\$300 million
D	\$400 million	\$200 million
E	\$600 million	-\$100 million

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

38. A decrease in national savings will result in a decrease in which of the following?

- (A) The real interest rate
- (B) The supply of money
- (C) Capital inflows
- (D) The national debt
- (E) The supply of loanable funds

39. Which of the following changes could explain why the country of Gamma recently experienced an increase in its nominal interest rates?

- (A) Gamma's government decreased government spending.
- (B) Gamma's government increased income taxes.
- (C) Long-run aggregate supply in Gamma decreased.
- (D) Aggregate demand in Gamma increased.
- (E) Residents of Gamma started using credit cards instead of cash to make payments.

40. An economy that was operating at full employment experienced an increase in inflation with no change in real output in the long run. Which of the following changes could explain this long-run outcome?

- (A) The government increased tax rates to decrease the national debt.
- (B) The national savings rate increased.
- (C) The nation's currency appreciated on the foreign exchange market.
- (D) The nation's money supply increased for a sustained period of time.
- (E) Labor productivity in the nation decreased.

41. When payments for exports flow into a country, how are those payments reported in the country's balance of payments?
- (A) As a credit to the capital and financial account
 - (B) As a credit to the current account
 - (C) As a debit from net exports
 - (D) As a debit from the current account
 - (E) As a debit from the trade balance
42. In 2022, total government outlays for the country of Bobland exceeded its tax revenues. Which of the following will most likely result?
- (A) The demand for loanable funds will decrease.
 - (B) The supply of loanable funds will increase.
 - (C) Bobland's government will run a budget surplus.
 - (D) Bobland's national debt will increase.
 - (E) Financial capital will flow out of Bobland.
43. A nation's civilian, noninstitutional, working-age population is 150 million. In May, the government reported that 15 million of the 120 million people in the labor force were officially unemployed. In June, an additional 5 million people lost their jobs and started looking for work. Assuming that there was no change to the size of the population between May and June, how did the labor force participation rate change between May and June?
- (A) It increased by approximately 3.3%.
 - (B) It decreased by approximately 3.3%.
 - (C) It increased by approximately 6.7%.
 - (D) It decreased by approximately 6.7%.
 - (E) It stayed the same.

44. Country M has an open economy with a flexible exchange rate. The banking system of Country M has ample reserves. If the central bank of Country M decreases the interest rate on reserves, what will be the short-run effect on real output, the price level, and the value of the country's currency?

	Real Output	Price Level	Value of the Currency
A	Increase	Increase	Depreciate
B	Increase	Increase	Appreciate
C	Increase	Decrease	Appreciate
D	Decrease	Increase	Depreciate
E	Decrease	Decrease	Appreciate

- (A) A
(B) B
(C) C
(D) D
(E) E

45. According to the aggregate production function, which of the following will occur if firms increase the number of workers they employ?

- (A) Profits will increase.
- (B) Nominal wages will decrease.
- (C) Output will increase.
- (D) Firms will pay less in corporate taxes.
- (E) Consumers will demand more of their products.

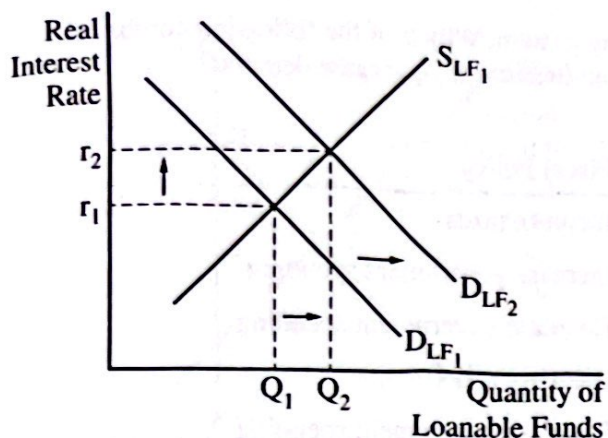
46. Which of the following is a similarity between the short-run aggregate supply curve and the short-run Phillips curve?

- (A) A change in inflationary expectations will shift both curves.
- (B) A change in the natural rate of unemployment is depicted as a movement along both curves.
- (C) They both depict a positive relationship between inflation and unemployment.
- (D) Technological innovation is depicted as a movement along both curves.
- (E) They both assume that nominal wages are flexible in the short run.

47. The federal government and the central bank of Nation J have decided to conduct fiscal and monetary policies with the goal of restoring full employment during a recession. If these policies are implemented, which of the following correctly indicates what will happen to aggregate demand and interest rates in the short run?

	Aggregate Demand	Interest Rates
A	Increase	Increase
B	Increase	Indeterminate
C	Indeterminate	Indeterminate
D	Decrease	Increase
E	Decrease	Decrease

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E



48. The graph provided of the loanable funds market shows the result of a change in government spending. Based on the change in the real interest rate, which of the following is most likely to occur?

- (A) The central bank will conduct contractionary monetary policy.
- (B) Private investment spending will decrease.
- (C) The capital and financial account balance will not change.
- (D) Financial capital will flow out of the country.
- (E) Consumers will increase their spending on durable goods.

Labor force	40 million
Employed	38 million
Natural rate of unemployment	4%

49. Based on the data provided for a nation, what is the current condition of the nation's economy?

- (A) It is in long-run equilibrium.
- (B) It is experiencing a recessionary gap.
- (C) It is experiencing an inflationary gap.
- (D) It is operating on its production possibilities curve.
- (E) It is on the short-run Phillips curve to the left of the long-run Phillips curve.

50. A decrease in a nation's capital and financial account balance will lead to which of the following for that nation?

- (A) An increase in the economic growth rate
- (B) An increase in the supply of loanable funds
- (C) An increase in real interest rates
- (D) A decrease in the current account balance
- (E) A decrease in net exports

51. Which of the following could cause a rightward shift of the long-run Phillips curve?

- (A) An increase in manufacturing automation
- (B) New job training programs
- (C) A decline in the labor force participation rate
- (D) A prolonged economic expansion
- (E) A decrease in immigration

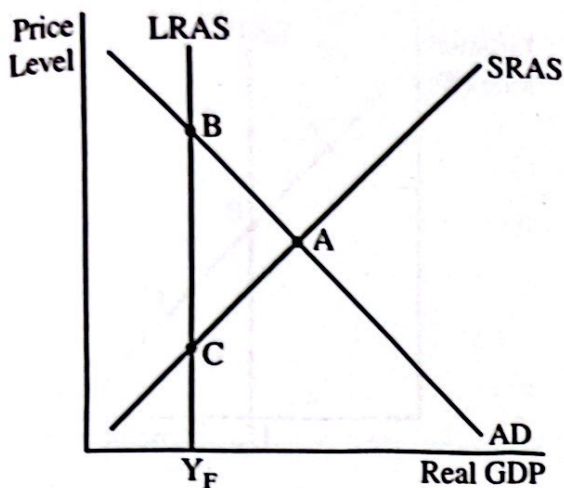
52. An economy is operating with ample reserves in its banking system. Which of the following combinations of monetary and fiscal policy actions will definitely result in an increase in aggregate demand?

	Monetary Policy	Fiscal Policy
A	Decrease the discount rate	Increase taxes
B	Increase administered interest rates	Increase government spending
C	Buy bonds on the open market	Decrease government spending
D	Decrease administered interest rates	Decrease taxes
E	Decrease interest on reserves	Decrease government spending

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

53. How is the real interest rate different from the nominal interest rate?

- (A) The real interest rate will decrease in the short run when the price level rises, whereas the nominal interest rate is unadjusted for inflation.
- (B) The real interest rate is calculated on a looking-forward basis, whereas the nominal interest rate is calculated in hindsight.
- (C) The real interest rate increases when the money supply expands, whereas the nominal interest rate decreases when the money supply expands.
- (D) The real interest rate does not influence international financial capital flows, whereas the nominal interest rate influences international financial capital flows.
- (E) The real interest rate does not influence the rate of economic growth, whereas the nominal interest rate influences the rate of economic growth.



54. The aggregate demand–aggregate supply graph provided shows an economy that is currently in short-run equilibrium at point A. Which of the following is most likely to happen in the long run?

- (A) Inflationary expectations will increase, and the economy will move to a new equilibrium at point C.
- (B) Inflationary expectations will increase, and the economy will move to a new equilibrium at point B.
- (C) Inflationary expectations will not change, and the economy will remain in equilibrium at point A.
- (D) Inflationary expectations will decrease, and the economy will move to a new equilibrium at point B.
- (E) Inflationary expectations will decrease, and the economy will move to a new equilibrium at point C.

55. The country of Truca is an open economy with a flexible exchange rate. If there is a decrease in the supply of Truca's currency, what will happen to the value of Truca's currency on the foreign exchange market, and how will the change in the value of Truca's currency affect its net exports?

	Value of Truca's Currency	Truca's Net Exports
A	Depreciate	Decrease
B	Depreciate	Increase
C	Appreciate	Decrease
D	Appreciate	Increase
E	Appreciate	No change

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

56. A nation has a banking system with limited reserves. What monetary policy action taken by the central bank could cause the nation's price level to decrease and the unemployment rate to increase in the short run?

- (A) An open market bond purchase
- (B) An increase in government spending
- (C) An increase in business taxes
- (D) An increase in the discount rate
- (E) A decrease in the required reserve ratio

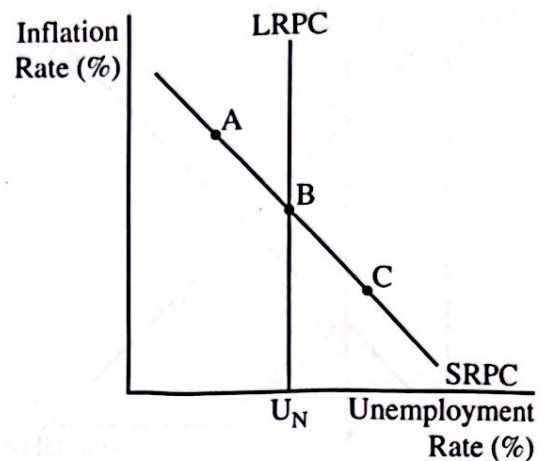
57. Which of the following statements explains why the consumer price index (CPI) may overestimate the true inflation rate?

- (A) The CPI includes the prices of the newest products available to consumers.
- (B) Improvements often result in higher prices on products.
- (C) Consumers substitute away from more expensive products.
- (D) The CPI includes prices of only domestically produced products.
- (E) The CPI includes the prices of imported products.

58. What will be the effect of an increase in government borrowing on the real interest rate in the short run and the effect of the change in the real interest rate on the rate of economic growth in the long run?

	Real Interest Rate	Economic Growth Rate
A	Increase	Increase
B	Increase	Decrease
C	Decrease	Increase
D	Decrease	Decrease
E	Decrease	No change

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E



59. An economy is initially only experiencing frictional and structural unemployment. If consumer spending on durable goods increases, the result of this change could be shown on the graph as a movement from

- (A) point A to point B
- (B) point A to point C
- (C) point C to point A
- (D) point B to point C
- (E) point B to point A

60. Country G has an open economy with a flexible exchange rate. Which of the following would increase as a result of an increase in the real interest rate in Country G?

- (A) Country G's current account surplus
- (B) The price of previously issued bonds in Country G
- (C) Net financial capital flows into Country G
- (D) The supply of Country G's currency
- (E) Potential output in Country G

MACROECONOMICS

SECTION II

Total Time—1 hour

Reading Period—10 minutes

Writing Period—50 minutes

3 Questions

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. If the question prompts you to "Calculate," you must show how you arrived at your final answer. Use a pen with black or dark blue ink.

You may plan your answers in this orange booklet, but no credit will be given for anything written in this booklet. You will only earn credit for what you write in the separate Free Response booklet.

1. The data provided represent Eastland's economy in 2018, when it was in short-run macroeconomic equilibrium.

Tax revenues	\$200 million
Government spending	\$200 million
Nominal interest rate	5%
Discount rate	7%
Expected inflation rate	3%
Natural rate of unemployment	4%
Cyclical rate of unemployment	1%

- (a) Calculate the actual rate of unemployment. Show your work.
- (b) Calculate the expected real interest rate. Show your work.
- (c) Using the relevant numerical values, draw a correctly labeled graph of the short-run and long-run Phillips curves, and label as E the short-run equilibrium point in Eastland in 2018. Plot the relevant numerical values on the graph.
- (d) Assume that in 2019, Eastland's tax revenues were \$200 million and government spending was \$220 million.
- (i) If the marginal propensity to consume is 0.75, calculate the maximum possible change in aggregate demand that would result solely from the change in Eastland's government budget from 2018 to 2019. Show your work.
 - (ii) On your graph in part (c), show a new possible short-run equilibrium point, labeled W, that would result in the short run due to the change in Eastland's government budget from 2018 to 2019 and assuming no change in inflationary expectations.
 - (iii) Draw a correctly labeled graph of the loanable funds market, and show the effect of the change in Eastland's government budget from 2018 to 2019 on the equilibrium real interest rate.
- (e) Based solely on the change in the real interest rate shown in part (d)(iii), what will happen to each of the following?
- (i) Eastland's long-run economic growth rate. Explain.
 - (ii) Eastland's financial capital inflows. Explain.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

2. The economy of Antilly is in short-run equilibrium with an inflationary output gap.
- (a) Explain how the economy of Antilly would self-adjust in the long run in the absence of any policy actions.
 - (b) Assume that instead of waiting for the long-run adjustment process, the central bank of Antilly is considering taking action. The banking system in Antilly has ample reserves. What specific monetary policy action would the central bank of Antilly take to decrease the inflation rate in the short run?
 - (c) Draw a correctly labeled graph of the reserve market for Antilly, and show the effect of the central bank's action identified in part (b) on the policy rate.
 - (d) As a result of the change in the policy rate shown on your graph in part (c), will real output in Antilly increase, decrease, or remain the same in the short run? Explain.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

3. Assume that the country of Singapore experiences a decrease in consumer confidence.

(a) How would a decrease in consumer confidence affect each of the following in the short run in Singapore?

(i) The price level

(ii) Unemployment. Explain.

(b) Singapore is an open economy with a flexible exchange rate. The currency of Singapore is the Singapore dollar (SGD). Based solely on the change in the price level in Singapore identified in part (a)(i), what will happen to each of the following in the short run?

(i) Singapore's net exports. Explain.

(ii) The supply of the Singapore dollar in the foreign exchange market

(c) Based on the change in the supply of the Singapore dollar identified in part (b)(ii), what will happen to the international value of the Singapore dollar?

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

AP Macroeconomics

2024

APPENDIX - ANSWERS

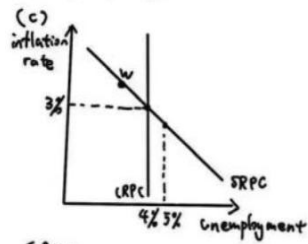
Matching multiple-choice answers and free-response scoring follow.

Matching supplied third-party answer material; not official scoring.

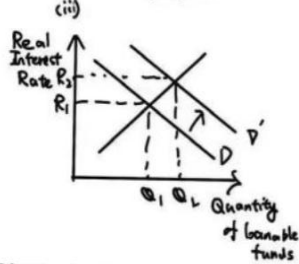
Answer

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

1. (a) $1 + 4 = 5$
 (b) $5 - 3 = 2$

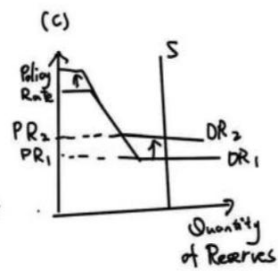


(d) (i) $20 \times \frac{0.75}{1-0.75} = 80$



- (e) (i) $\downarrow$ because investment $\downarrow$
 (ii) $\uparrow$ because Real interest rate $\uparrow$

2. (a) $SRAS \downarrow$
 (b) Administered interest rate $\uparrow$



(d) $\downarrow$ because investment $\downarrow$

3. (i) $\downarrow$

(ii) $\uparrow$ because $AD \downarrow$, Real output $\downarrow$

(b) (i) $\uparrow$ because price level $\downarrow$
 There's depreciation.

(ii) $\downarrow$

(c) $\uparrow$