

MACROECONOMICS

Section I

Time—70 Minutes

60 Questions

Directions: Each of the question or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case and then fill in the corresponding oval on the answer sheet.

- Which of the following is included in U.S. GDP?
 - The market value of movies made in Africa by U.S. citizens
 - The market value of olive oil made in Italy and sold in the United States.
 - The market value of blue jeans made in the United States and sold in Japan
 - The market value of wine made in the United States by Canadian citizens
 - II, III, and IV only
 - I and III only
 - II and IV only
 - IV only
 - III and IV only
- Assume commercial banks save no excess reserves and the reserve requirement is 20 percent. How much money is created in new loans from all banks after this bank receives a deposit of \$1000 ?
 - \$800
 - \$1,000
 - \$4,000
 - \$5,000
 - \$20,000
- In a given period, the average price level in the country of Sherwood tripled, and Robin's income increased from \$30,000 to \$60,000. What happened to Robin's nominal and real income?

<u>Nominal Income</u>	<u>Real Income</u>
(A) Increased	Decreased
(B) Increased	Increased
(C) Decreased	Decreased
(D) Increased	Stayed the same
(E) Decreased	Increased
- The upward sloping section of the aggregate supply curve can be explained by
 - excess capacity that allows output to increase without upward pressure on prices
 - the physical limit on output that prevents additional output from being produced
 - wages and other input prices that adjust more slowly than output prices
 - accurate information within firms about how their prices compare to the overall price level
 - a rational desire to produce more at higher price levels because the prices received for items sold will in turn allow the sellers to purchase more output from others
- Which of the following is a direct, accurate link within the circular flow?
 - Goods and services are exchanged for inputs via the factor markets.
 - Wages and rents are exchanged for income via the product markets.
 - Household expenditures result in revenues for firms via the product markets.
 - Household income results in revenues via the factor markets.
 - Firms exchange revenues for land, labor, and capital via the product markets.
- Which of the following would be an example of fiat money?
 - Cigarettes used as money in prisons
 - Dollar bills
 - Gold coins
 - Arrowheads used as a medium of exchange
 - Chickens used for bartering

GO ON TO THE NEXT PAGE.

7. Assume Astobia and Bonavia are countries that exercise free trade. If the real interest rate in Astobia decreases in comparison to Bonavia's real interest rate, then for Bonavia which of the following would be true of capital flow, the value of its currency, and its exports?

<u>Capital Flow</u>	<u>Currency</u>	<u>Exports</u>
(A) outflow	appreciation	decrease
(B) outflow	appreciation	increase
(C) inflow	depreciation	decrease
(D) inflow	depreciation	decrease
(E) inflow	appreciation	decrease

8. Expansionary fiscal policy would best be prescribed to
- (A) eliminate a recessionary gap
 - (B) reduce inflation
 - (C) reduce the interest rate
 - (D) eliminate an inflationary gap
 - (E) avoid crowding out



9. The figure above illustrates a/an
- (A) demand curve
 - (B) Phillips curve
 - (C) production possibilities frontier
 - (D) aggregate supply curve
 - (E) Lorenz curve

10. The aggregate demand curve is

- (A) a horizontal summation of market demand curves
- (B) a horizontal summation of firm demand curves
- (C) a simple aggregation of demand curves for individual goods
- (D) a vertical summation of firm demand curves
- (E) not found by adding product demand curves horizontally or vertically

11. Assuming there is no statistical discrepancy, a trade surplus must be offset elsewhere in the

- (A) current-account balance only
- (B) financial-account balance only
- (C) merchandise balance of trade only
- (D) current-account or financial-account only
- (E) merchandise balance of trade or current-account only

12. Kevin wants shoes and grows turnips. Lisa wants turnips and makes sheet metal. Bob wants sheet metal and makes shoes. Which function of money will cater most directly to the situation at hand?

- (A) Store of value
- (B) Unit of account
- (C) Medium of exchange
- (D) Means of deferred payment
- (E) Standard measure

13. Classical economists believe

- (A) in the quantity theory of money—that both the velocity and the quantity of goods and services sold per period are fairly stable
- (B) there is a serious risk of a liquidity trap because the demand curve for money is relatively flat
- (C) that the government should make every effort to fine-tune the economy
- (D) that the aggregate supply curve is L-shaped
- (E) that an increase in the money supply has a small and indirect effect on total spending

GO ON TO THE NEXT PAGE.

Section I

14. The aggregate supply curve will shift to the right in response to
- (A) a decrease in the labor supply
 - (B) an increase in investment in capital
 - (C) an increase in corporate taxes
 - (D) a decrease in the availability of education and training
 - (E) natural disasters
15. A fixed output level in the long run at full-employment output corresponds with which of the following shapes of the long-run Phillips curve?
- (A) Horizontal
 - (B) Convex to the origin
 - (C) Concave to the origin
 - (D) Vertical
 - (E) Linear with a slope of 1
16. Every choice results in a foregone best alternative, which economists call the
- (A) accounting cost
 - (B) switching cost
 - (C) inferior cost
 - (D) average cost
 - (E) opportunity cost
17. The aggregate demand curve has a negative slope in part because when the price level increases
- (A) the value of cash increases
 - (B) imports become relatively more expensive
 - (C) the real quantity of money increases
 - (D) the interest rate increases
 - (E) exports increase
18. When the value of the U.S. dollar appreciates relative to other currencies, which of the following is the most likely to occur?
- (A) Imports into the United States will decrease.
 - (B) Exports from the United States will increase.
 - (C) U.S. residents will take more vacations in foreign countries.
 - (D) More foreign visitors will travel to the United States.
 - (E) Investments in U.S. securities will increase.
19. Among those hurt by inflation are
- I. borrowers at fixed interest rates
 - II. individuals on fixed incomes
 - III. those with savings earning fixed interest rates
 - IV. restaurant owners
- (A) I and II only
 - (B) II and III only
 - (C) II and IV only
 - (D) II only
 - (E) II, III, and IV only
20. A difference between M1 and M2 is that
- (A) M1 is a first mortgage and M2 is a second mortgage
 - (B) M2 is M1 plus assets that are more liquid
 - (C) M2 includes savings deposits
 - (D) M1 is larger than M2
 - (E) M2 is always double M1
21. Which of the following will cause the aggregate demand curve to shift to the left?
- (A) Expectations of surpluses of goods in the future
 - (B) A decrease in income taxes
 - (C) An increase in government spending
 - (D) An increase in foreign income
 - (E) Expectations of inflation in the future
22. According to Keynesian economists,
- (A) the investment demand curve is relatively elastic
 - (B) fiscal policy is more effective than monetary policy
 - (C) the economy is inherently stable
 - (D) inadequate supply is largely to blame for periods of stagnation
 - (E) real GDP will naturally adjust to the full-employment level

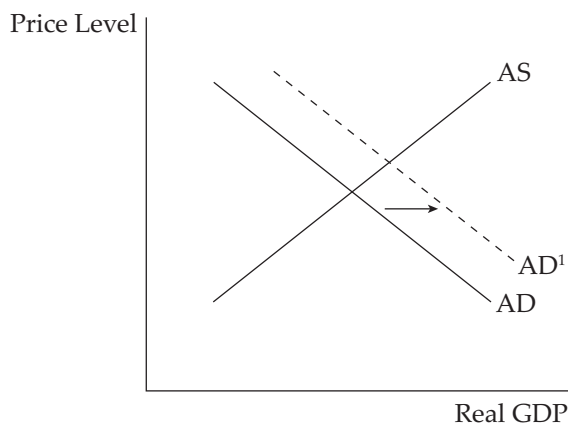
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23. Which of the following results from stagflation?

- (A) Unemployment decreases
- (B) The price level decreases
- (C) The aggregate supply curve shifts to the right
- (D) The Phillips curve shifts to the right
- (E) Real GDP increases

24. Which of the following will shift the demand curve for the Mexican peso to the left?

- (A) Speculation that the peso will increase in value
- (B) An increase in interest rates in Mexico relative to other countries
- (C) A lower rate of inflation in Mexico relative to other countries
- (D) An increase in incomes elsewhere relative to in Mexico
- (E) A decrease in the international demand for Mexican-made textiles



25. Which of the following is illustrated in the figure above?

- I. Stagflation
 - II. Cost-push inflation
 - III. Supply-side inflation
 - IV. Demand-pull inflation
- (A) I and II only
 - (B) II and III only
 - (C) II and IV only
 - (D) IV only
 - (E) I and IV only

26. The government of a country decides to increase government spending and taxes by the same amount in order to keep a balanced budget. The MPC is 0.75. Which of the following is true of this situation?

	<u>Policy</u> <u>Direction</u>	<u>Expenditure</u> <u>Multiplier</u>	<u>Tax</u> <u>Multiplier</u>
(A)	expansionary	4	3
(B)	expansionary	4	-3
(C)	contractionary	4	3
(D)	contractionary	4	-3
(E)	contractionary	5	4

27. Having a fractional reserve banking system means that

- (A) no single loan can be larger than 20 percent of the bank's holdings
- (B) the central bank reserves the right to audit any bank at any time
- (C) the central bank holds a certain fraction of GDP on reserve at all times
- (D) the central bank must approve loans over \$1 million
- (E) a bank cannot lend out all of its deposits

28. If technology makes production less expensive and at the same time exports decrease, which of the following will result with certainty?

- (A) Real GDP will increase
- (B) Real GDP will decrease
- (C) The price level will increase
- (D) The price level will decrease
- (E) Real output will remain the same

29. Which of the following must exist to allow for mutual benefit from specialization and trade between two countries?

- (A) Comparative advantage in the production of a good or service
- (B) Absolute advantage in the production of a good or service
- (C) Increasing marginal returns in production
- (D) Absolute and comparative advantage in the production of a good or service
- (E) Absolute advantage and increasing marginal returns in production

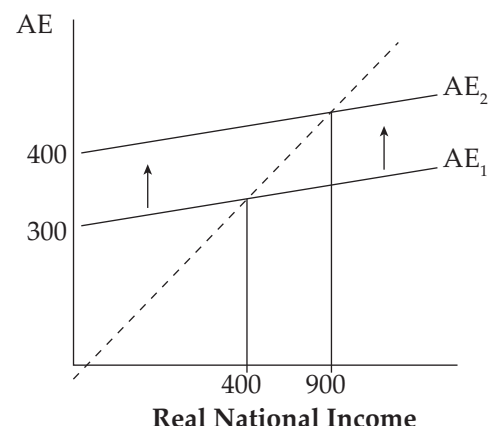
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Section I

30. The GDP Deflator differs from the CPI in that the GDP Deflator
- (A) is thought to slightly overestimate the inflation rate
 - (B) uses base year quantities in its calculations
 - (C) incorporates both current year prices and base year prices
 - (D) incorporates current year quantities in its calculations
 - (E) is the favored price index of the U.S. government
31. It is a monetarist point of view that
- (A) monetary policy should be used to fine-tune the economy
 - (B) crowding out is not a problem
 - (C) the money supply should be increased steadily
 - (D) the velocity of money is unstable
 - (E) the economy is inherently unstable
32. Which group of people will suffer the most from a rising price level?
- (A) debtors with fixed interest rates
 - (B) people with fixed money incomes
 - (C) investors in gems, coins, and stamps
 - (D) property owners
 - (E) lenders of adjustable-rate mortgage loans
33. Droughts, technical glitches, and restrictions on the use of resources can all result in
- (A) a vertical Phillips curve
 - (B) supply shocks
 - (C) structural shocks
 - (D) demand-pull inflation
 - (E) deflation
34. On a bank's balance sheet, which of the following is considered a liability?
- (A) Required reserves
 - (B) Excess reserves
 - (C) Loans
 - (D) Deposits
 - (E) Reserve ratio
35. Suppose yesterday the euro was trading on the foreign exchange market at \$1.36 U. S. and today it is trading at \$1.40 U.S. Which of the following is true?
- (A) The U.S. dollar has appreciated.
 - (B) The euro has depreciated.
 - (C) Interest rates in the United States have decreased.
 - (D) The demand for U.S. products has decreased.
 - (E) The euro has appreciated.
36. In order to reduce or eliminate crowding out, expansionary fiscal policy can be accompanied by
- (A) an increase in government spending
 - (B) a decrease in investment
 - (C) expansionary monetary policy
 - (D) contractionary monetary policy
 - (E) an increase in the interest rate
37. In order to go from national income to GDP, one must
- (A) add depreciation expenses
 - (B) add indirect taxes
 - (C) subtract subsidies
 - (D) add the net income of foreigners
 - (E) all of the above
38. Which of the following creates the tradeoff depicted by the Phillips curve?
- (A) A rightward shift in the aggregate supply curve
 - (B) An increase in input costs that corresponds with an increase in unemployment
 - (C) An increase in output that corresponds with a decrease in the price level
 - (D) A leftward shift in the aggregate supply curve
 - (E) A rightward shift in the aggregate demand curve

GO ON TO THE NEXT PAGE.

39. The natural rate of unemployment
- (A) includes structural and frictional unemployment
 - (B) includes cyclical and frictional unemployment
 - (C) includes structural and cyclical unemployment
 - (D) includes structural, frictional, and cyclical unemployment
 - (E) is around 1 percent
40. According to Say's law,
- (A) when price goes up, supply goes up
 - (B) it is better to give than receive
 - (C) demand creates its own supply
 - (D) supply creates its own demand
 - (E) demand and supply are mutually independent
41. A budget deficit exists when
- (A) the total amount that the government owes at a given time is positive
 - (B) government spending exceeds tax collections for a given period
 - (C) exports exceed imports in a given year
 - (D) imports exceed exports in a given year
 - (E) the total amount that the government owes at a given time is negative
42. The money supply will increase as a result of which of the following?
- (A) A decrease in the required reserve ratio
 - (B) An increase in the discount rate
 - (C) The selling of bonds by the Federal Reserve
 - (D) An increase in the fraction of deposits that must be held by banks
 - (E) An increase in income taxes



43. According to the aggregate expenditure graph above, what is the value of the expenditure multiplier?
- (A) 2
 - (B) 2.25
 - (C) 3
 - (D) 4
 - (E) 5
44. A professional singer who loses his voice may have a hard time finding employment because he or she has no marketable skills. This is an example of which of the following?
- (A) Frictional unemployment
 - (B) Structural unemployment
 - (C) Cyclical unemployment
 - (D) Seasonal unemployment
 - (E) Discouraged workers
45. Country A has a current account surplus; this means that
- (A) Country A also has a financial account surplus.
 - (B) Country A has a financial account deficit.
 - (C) Country A must borrow from its foreign reserves.
 - (D) Country A is operating in a recessionary gap.
 - (E) Country A is operating in an inflationary gap.

GO ON TO THE NEXT PAGE.

Section I

46. Which of the following is the most likely to be a deterrent to growth in the economy?
- (A) Spending on education and training
 - (B) Increases in capital
 - (C) Increases in the interest rate
 - (D) Expenditures on research and development
 - (E) Increased capacity utilization
47. The domestic purchasing power of a currency
- (A) varies directly with the cost of living
 - (B) is inversely related to the savings rate
 - (C) is inversely related to the price level
 - (D) varies directly with economic growth
 - (E) is inversely related to the level of aggregate supply
48. Julia would spend \$30 per week even if she made no income. Her weekly income is \$1,000 and her marginal propensity to consume is 0.5. How much does Julia save per week?
- (A) \$500
 - (B) \$ 35
 - (C) \$530
 - (D) \$ 80
 - (E) \$470
49. Classical economists generally believe that
- I. wages fluctuate quickly
 - II. Say's law does not hold
 - III. input and output prices will stay in line with each other
 - IV. the government should not worry about maintaining aggregate demand at an adequate level
- (A) II and IV only
 - (B) I, III, and IV only
 - (C) I and IV only
 - (D) II and III only
 - (E) I, II, and III only
50. When a bank's balance sheet shows that the bank has excess reserves
- (A) the bank's reserves exceed the bank's assets
 - (B) the bank can make additional loans
 - (C) the bank's actual reserves are less than its required reserves
 - (D) the bank is required to change its interest rate
 - (E) the bank has fallen below the required reserve ratio
51. The real interest rate is
- (A) what one sees when looking at bank literature
 - (B) the nominal interest rate divided by the inflation rate
 - (C) the nominal interest rate plus the anticipated inflation rate
 - (D) the nominal interest rate plus the compound interest rate
 - (E) the nominal interest rate minus anticipated inflation
52. The formula for the money multiplier is
- (A) $\frac{1}{(1 - MPC)}$
 - (B) $\frac{1}{(1 - \text{Required reserve ratio})}$
 - (C) $\frac{MPC}{\text{Required reserve ratio}}$
 - (D) $\frac{1}{\text{Required reserve ratio}}$
 - (E) $\frac{(1 - MPC)}{MPC}$
53. Which of the following would shift the aggregate demand curve to the right?
- (A) An increase in the price level
 - (B) Depreciation in the international value of the dollar
 - (C) An increase in personal income tax rates
 - (D) An increase in interest rates
 - (E) A decrease in the price level

GO ON TO THE NEXT PAGE.

54. Which of the following is true when expansionary fiscal and expansionary monetary (easy money) policy are used at the same time?

- (A) Unemployment will increase.
- (B) Real GDP will decrease.
- (C) Interest rates will remain relatively constant.
- (D) Inflation will decrease dramatically.
- (E) Investment will be crowded out.

55. Suppose an economy is in long-run equilibrium at the full-employment level of output. If government spending then increases,

- (A) an inflationary gap is created because the aggregate demand curve shifts to the right
- (B) an inflationary gap is created because the aggregate supply curve shifts to the right
- (C) an inflationary gap is created because potential GDP shifts to the left
- (D) a recessionary gap is created because the aggregate supply curve shifts to the left
- (E) a recessionary gap is created because the aggregate demand curve shifts to the left

56. Suppose that Tiger Woods buys a golf ball in England for \$1 and the marginal propensity to consume in England is 0.75. What is the total increase in England's real GDP resulting from Mr. Woods' purchase?

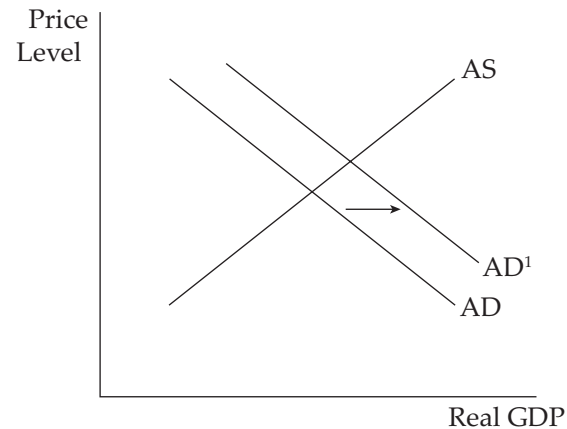
- (A) \$1
- (B) \$1.25
- (C) \$1.75
- (D) \$4
- (E) \$7.50

57. If prices are expected to rise more slowly in the future,

- (A) the Phillips curve will shift to the right
- (B) the actual rate of inflation will increase
- (C) the actual inflation rate will remain steady unless supply shocks set in
- (D) the government will carry out contractionary fiscal policy to prevent this occurrence
- (E) these expectations will become reality

58. A decrease in real investment stemming from higher interest rates due to government purchases is most commonly called

- (A) crowding out
- (B) zero policy effectiveness
- (C) the Laffer effect
- (D) fiscal defeat
- (E) fiscal imbalance



59. According to the theory of rational expectations, an increase in government spending to increase AD as illustrated in the figure above will be met with which of the following?

- (A) a sustainable increase in real GDP
- (B) an increase in AS
- (C) a countervailing decrease in AD
- (D) a decrease in AS
- (E) apathy and inaction

60. A use of easy money (expansionary) policy by the Fed could result in which of the following?

- (A) an increase in net exports
- (B) a decrease in net exports
- (C) an increase in the real interest rate
- (D) an increase in the nominal interest rate
- (E) crowded out investment

END OF SECTION I

MACROECONOMICS

Section II

Planning time—10 minutes

Writing time—50 minutes

You will have 10 minutes to read the exam questions. Spend this time reading through all of the questions, practicing graphs, noting possible problem-solving approaches, and otherwise planning your answers. It's fine to make notes on the green question insert, but be sure to write your answers and anything else that might be worth partial credit in the pink answer booklet—the graders will not see the green insert. After 10 minutes you will be told to break the seal on the pink Free-Response booklet and begin writing your answers in that booklet.

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

1. Assume the economy is operating in long-run equilibrium at the full-employment level of output.
 - (a) Draw a correctly labeled aggregate demand and aggregate supply graph that represents this scenario.
 - (b) Suppose the economy experiences a change in consumer spending due to a sharp increase in stock market indices and that this has increased the wealth of the nation.
 - (i) Amend the graph you drew for part (a) to show the results of this change.
 - (ii) Show the new equilibrium output and price level on your graph.
 - (iii) What type of gap exists in this economy?
 - (iv) Explain the effect of this change on the unemployment rate.
 - (c) Recommend a fiscal policy action that could move the economy back to full-employment output.
 - (d) Explain the effect of the recommended fiscal policy action on
 - (i) Aggregate demand
 - (ii) The price level
 - (iii) Real GDP
 - (e) Explain how the following will influence the effect of the fiscal policy you recommended.
 - (i) Crowding out
 - (ii) Changes in net exports

GO ON TO THE NEXT PAGE.

2. Suppose the reserve requirement is 10 percent and the National Bank of Austin holds no excess reserves. Then Alexandra deposits \$1,000 in her checking account at the National Bank of Austin.
- (a) Incorporate the following three terms into a general explanation of how a bank can create money: deposits, required reserves, excess reserves.
 - (b) After Alexandra's \$1,000 deposit and prior to any other deposits or withdrawals, what is the largest amount that the National Bank of Austin can lend out?
 - (c) Determine the money multiplier in this economy. Show your work.
 - (d) What is the maximum value of additional deposits that can be created as the result of Alexandra's \$1,000 deposit.
 - (e) What policy change by the Federal Reserve would double the size of the money multiplier?
3. Suppose that Cyber Sara, the Bill Gates of the new millennium, takes technology to new heights with robots that provide widespread cost savings in the production of goods and services.
- (a) Use a correctly labeled aggregate demand and aggregate supply diagram to explain the direct effect of this increase in productivity on output and the price level in the United States.
 - (b) If Cyber Sara's technology is available only in the United States, use a new, correctly labeled aggregate demand and aggregate supply diagram to illustrate the effect of the robots on exports.
 - (c) Explain how the change in exports identified in part (b) will affect the value of the dollar relative to foreign currencies.

STOP
END OF EXAM
