

MACROECONOMICS

SECTION I

Time—70 minutes

60 Questions

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

1. Which of the following will most likely occur in an economy if more money is demanded than is supplied?
 - (A) The amount of investment spending will increase.
 - (B) Interest rates will decrease.
 - (C) Interest rates will increase.
 - (D) The demand curve for money will shift to the left.
 - (E) The demand curve for money will shift to the right.

 2. Which of the following transactions would represent an addition to a nation's current gross domestic product?
 - (A) Ms. Smith purchases a share of stock in an automobile company.
 - (B) A retailer increases her stock of imported shoes.
 - (C) The government increases its domestic purchases of food for use by the military.
 - (D) A corporation sells shoes from last year's inventory.
 - (E) A mother sells her car to her daughter.

 3. An increase in energy costs will most likely cause the price level and real gross domestic product to change in which of the following ways?
- | Price Level | Real Gross Domestic Product |
|--------------|-----------------------------|
| (A) Increase | Increase |
| (B) Increase | Decrease |
| (C) Increase | Not change |
| (D) Decrease | Increase |
| (E) Decrease | Decrease |
4. Which of the following arguments is typically associated with classical economists?
 - (A) A market economy is self-correcting and thus will not remain in a recession indefinitely.
 - (B) A market economy has stable prices and thus is usually free from inflation.
 - (C) A market economy requires a strong government to ensure that the market meets the needs of the people.
 - (D) A market economy needs only moderate assistance from the government to avoid an extended recession.
 - (E) A market economy eventually results in monopolies in both the input and output markets.

 5. Which of the following is true according to the circular flow model?
 - (A) Firms are suppliers in both the product and factor markets.
 - (B) Firms are demanders in the product markets and suppliers in the factor markets.
 - (C) Households are demanders in both the product and factor markets.
 - (D) Households are demanders in the product markets and suppliers in the factor markets.
 - (E) The government is a demander in the product market only.

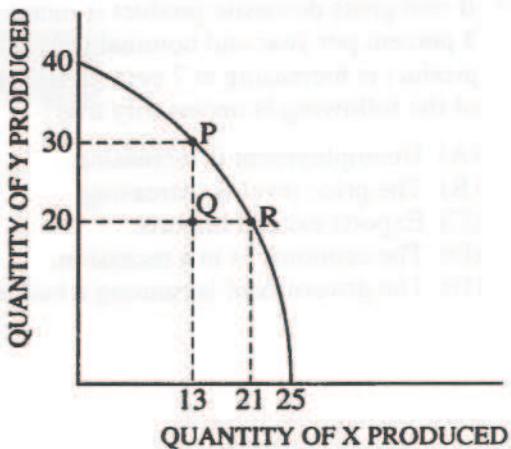
6. Which of the following will occur if the federal government runs a budget deficit?
- The expenditure multiplier will increase.
 - The size of the national debt will increase.
 - The economy's output will decrease.
 - State governments will run a budget surplus to offset the federal deficit.
 - Interest rates will tend to decline.
7. According to the Keynesian savings schedule, when aggregate income increases by a given amount, savings will
- remain the same
 - decrease by the amount of the change in income
 - increase by the amount of the change in income
 - increase by less than the amount of the change in income
 - increase by more than the amount of the change in income
8. If on receiving a checking deposit of \$300 a bank's excess reserves increased by \$255, the required reserve ratio must be
- 5%
 - 15%
 - 25%
 - 35%
 - 45%
9. The Federal Reserve can increase the money supply by
- selling gold reserves to the banks
 - selling foreign currency holdings
 - buying government bonds on the open market
 - buying gold from foreign central banks
 - borrowing reserves from foreign governments
10. When consumers hold money rather than bonds because they expect the interest rate to increase in the future, they are holding money for which of the following purposes?
- Transactions
 - Unforeseen expenditures
 - Speculation
 - Illiquidity
 - Exchange
11. An increase in the money supply is most likely to have which of the following short-run effects on real interest rates and real output?
- | <u>Real Interest Rates</u> | <u>Real Output</u> |
|----------------------------|--------------------|
| (A) Decrease | Decrease |
| (B) Decrease | Increase |
| (C) Increase | Decrease |
| (D) Increase | No change |
| (E) No change | Increase |
12. In the Keynesian model, an expansionary monetary policy will lead to
- lower real interest rates and more investment
 - lower real interest rates and lower prices
 - higher real interest rates and lower prices
 - higher real interest rates and higher real income
 - higher nominal interest rates and more investment
13. An inflationary gap can be eliminated by all of the following EXCEPT
- an increase in personal income taxes
 - an increase in the money supply
 - an increase in interest rates
 - a decrease in government spending
 - a decrease in net exports

14. A contractionary supply shock would most likely result in

(A) an increase in aggregate demand
 (B) an increase in national income
 (C) an increase in gross domestic product
 (D) a decrease in the general price level
 (E) a decrease in employment

15. An increase in Japan's demand for United States goods would cause the value of the dollar to

(A) depreciate because of inflation
 (B) depreciate because the United States would be selling more dollars to Japan
 (C) depreciate because the United States money supply would increase as exports rise
 (D) appreciate because Japan would be buying more United States dollars
 (E) appreciate because Japan would be selling more United States dollars

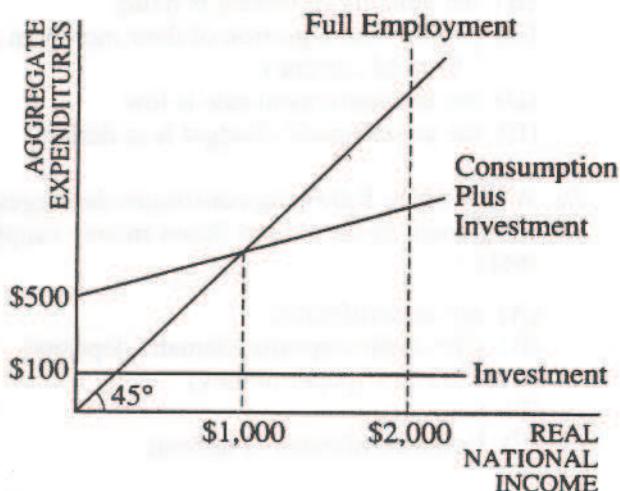


16. On the basis of the diagram above showing an economy's production possibilities curve for two goods, which of the following statements must be true?

- I. The opportunity cost of moving from point P to point R is 10 units of Y.
 - II. The opportunity cost of moving from point R to point P is 8 units of X.
 - III. The opportunity cost of moving from point Q to point R is 0 units of Y.
- (A) I only
 (B) III only
 (C) I and II only
 (D) II and III only
 (E) I, II, and III

17. If real gross domestic product is increasing at 3 percent per year and nominal gross domestic product is increasing at 7 percent per year, which of the following is necessarily true?
- (A) Unemployment is increasing.
 - (B) The price level is increasing.
 - (C) Exports exceed imports.
 - (D) The economy is in a recession.
 - (E) The government is running a budget deficit.
18. The official unemployment rate is not an accurate indicator of actual unemployment in the economy because
- (A) structural unemployment is greater than cyclical unemployment at the going wage rate
 - (B) full employment is greater than natural unemployment
 - (C) the unemployment rate is less than natural unemployment
 - (D) the official rate does not include persons who have given up looking for work
 - (E) the official rate does not reflect the number of people receiving unemployment compensation

Questions 19–21 refer to the graph below that shows an economy's aggregate expenditures, assuming no foreign sector and that government expenditures are initially zero.



19. The economy is currently experiencing

- (A) inflation
- (B) recession
- (C) expansion
- (D) stagflation
- (E) rapid growth

20. The appropriate monetary policy measure necessary to reach full employment is to increase
- (A) the money supply
 - (B) the reserve requirements
 - (C) the discount rate
 - (D) taxes
 - (E) exports
21. The minimum increase in government spending necessary to reach full employment is
- (A) \$2,000
 - (B) \$1,000
 - (C) \$500
 - (D) \$200
 - (E) \$100

22. If the economy is operating in the intermediate range of the aggregate supply curve and if aggregate demand increases due to an increase in net exports, then the price level, output, and the unemployment rate are most likely to change in which of the following ways?

<u>Price Level</u>	<u>Output</u>	<u>Unemployment Rate</u>
(A) Increase	Increase	Increase
(B) Increase	Increase	Decrease
(C) Increase	Decrease	Increase
(D) Increase	Decrease	Decrease
(E) Decrease	Decrease	Increase

23. The value of the spending multiplier decreases when

- (A) tax rates are reduced
- (B) exports decline
- (C) imports decline
- (D) government spending increases
- (E) the marginal propensity to save increases

24. Which of the following best explains why equilibrium income will rise by more than \$100 in response to a \$100 increase in government spending?

- (A) Incomes will rise, resulting in a tax decrease.
- (B) Incomes will rise, resulting in higher consumption.
- (C) The increased spending raises the aggregate price level.
- (D) The increased spending increases the money supply, lowering interest rates.
- (E) The higher budget deficit reduces investment.

25. The money-creating ability of the banking system will be less than the maximum amount indicated by the money multiplier when

- (A) interest rates are high
- (B) the velocity of money is rising
- (C) people hold a portion of their money in the form of currency
- (D) the unemployment rate is low
- (E) the government's budget is in deficit

26. Which of the following constitutes the largest component of the United States money supply (M1)?

- (A) Silver certificates
- (B) Checkable deposits (demand deposits)
- (C) Currency (paper money)
- (D) Coins
- (E) Large certificates of deposit

27. Under which of the following conditions would a restrictive monetary policy be most appropriate?

- (A) High inflation
- (B) High unemployment
- (C) Full employment with stable prices
- (D) Low interest rates
- (E) A budget deficit

28. A major advantage of automatic stabilizers in fiscal policy is that they

- (A) reduce the public debt
- (B) increase the possibility of a balanced budget
- (C) stabilize the unemployment rate
- (D) go into effect without passage of new legislation
- (E) automatically reduce the inflation rate

29. Which of the following would best explain a decline in potential gross domestic product?

- (A) Negative net investment
- (B) The discovery of vast new oil deposits
- (C) A lower price level
- (D) A decrease in the infant mortality rate
- (E) A decrease in wages and profits

30. Which of the following changes will occur to the demand for United States dollars and the international value of the dollar in the short run if investors in the United States and abroad increase their purchases of United States government bonds?

<u>Demand for Dollars</u>	<u>International Value of the Dollar</u>
(A) Decrease	Decrease
(B) Decrease	Increase
(C) Decrease	No change
(D) Increase	Decrease
(E) Increase	Increase

31. As nations specialize in production and trade in international markets, they can expect which of the following domestic improvements?

- I. Allocation of domestic resources
 - II. Standard of living
 - III. Self-sufficiency
- (A) I only
 - (B) II only
 - (C) III only
 - (D) I and II only
 - (E) I, II, and III

32. As a measure of economic welfare, gross domestic product underestimates a country's production of goods and services when there is an increase in

- (A) the production of military goods
- (B) the production of antipollution devices
- (C) crime prevention services
- (D) household production
- (E) legal services

33. Unexpected increases in inventories usually precede

- (A) increases in inflation
- (B) increases in imports
- (C) stagflation
- (D) decreases in production
- (E) decreases in unemployment

34. The short-run aggregate supply curve is likely to shift to the left when there is an increase in

- (A) the cost of productive resources
- (B) productivity
- (C) the money supply
- (D) the federal budget deficit
- (E) imports

35. In the simple Keynesian aggregate expenditure model of an economy, changes in investment or government spending will lead to a change in which of the following?
- (A) The price level
(B) The level of output and employment
(C) Interest rates
(D) The aggregate supply curve
(E) The demand for money, unless the economy slips into the liquidity trap
36. In a closed economy with no taxes in which the average propensity to consume is 0.75, which of the following is true?
- (A) If income is \$100, then saving is \$75.
(B) If income is \$100, then consumption is \$50.
(C) If income is \$200, then saving is \$50.
(D) If income is \$200, then consumption is \$75.
(E) If income is \$500, then saving is \$100.

37. In the short run, a restrictive fiscal policy will cause aggregate demand, output, and the price level to change in which of the following ways?

<u>Aggregate Demand</u>	<u>Output</u>	<u>Price Level</u>
(A) Decrease	Decrease	Decrease
(B) Decrease	Increase	Increase
(C) Increase	Decrease	Decrease
(D) Increase	Increase	Increase
(E) Not change	Not change	Not change

Section I

38. One way in which the Federal Reserve works to change the United States money supply is by changing the

- (A) number of banks in operation
- (B) velocity of money
- (C) price level
- (D) prime rate
- (E) discount rate

39. Assume that the reserve requirement is 20 percent. If a bank initially has no excess reserves and \$10,000 cash is deposited in the bank, the maximum amount by which this bank may increase its loans is

- (A) \$2,000
- (B) \$8,000
- (C) \$10,000
- (D) \$20,000
- (E) \$50,000

40. If the money stock decreases but nominal gross domestic product remains constant, which of the following has occurred?

- (A) Income velocity of money has increased.
- (B) Income velocity of money has decreased.
- (C) Price level has increased.
- (D) Price level has decreased.
- (E) Real output has decreased.

41. This item was not scored.

42. Which of the following best explains how an economy could simultaneously experience high inflation and high unemployment?

- (A) The government increases spending without increasing taxes.
- (B) The government increases taxes without increasing spending.
- (C) Inflationary expectations decline.
- (D) Women and teen-agers stay out of the labor force.
- (E) Negative supply shocks cause factor prices to increase.

43. Crowding out due to government borrowing occurs when

- (A) lower interest rates increase private sector investment
- (B) lower interest rates decrease private sector investment
- (C) higher interest rates decrease private sector investment
- (D) a smaller money supply increases private sector investment
- (E) a smaller money supply decreases private sector investment

44. Policymakers concerned about fostering long-run growth in an economy that is currently in a recession would most likely recommend which of the following combinations of monetary and fiscal policy actions?

<u>Monetary Policy</u>	<u>Fiscal Policy</u>
(A) Sell bonds	Reduce taxes
(B) Sell bonds	Raise taxes
(C) No change	Raise taxes
(D) Buy bonds	Reduce spending
(E) Buy bonds	No change

45. Which of the following would be most likely to occur if the United States placed high tariffs on imported goods?

- (A) Workers in the United States would have more jobs in the long run.
- (B) Income in the United States would be redistributed from the rich to the poor.
- (C) The United States standard of living would increase.
- (D) The United States economy would become less efficient.
- (E) United States exports would increase.

46. Mary Jane is a lawyer who can earn \$150 per hour in her law practice. She is also an excellent carpenter who can build cabinets three times as fast as the best carpenter, whose hourly wage is \$20 per hour. Which of the following is a correct economic statement?

- (A) Mary Jane has a comparative advantage in law so she should specialize in law and hire a carpenter to make her cabinets.
- (B) Mary Jane has an absolute and comparative advantage in both law and carpentry, so she should make her own cabinets while continuing to practice law.
- (C) Mary Jane is three times faster than any carpenter so she should give up her law practice to become a carpenter.
- (D) When carpenters work for lawyers, they should charge \$150 per hour instead of \$20 per hour.
- (E) Because Mary Jane is an excellent carpenter, when the best carpenter works for Mary Jane, he can only charge one third as much, or \$6.67 per hour.

Section I

47. The intersection of the aggregate supply curve and the aggregate demand curve occurs at the economy's equilibrium level of
- (A) real investment and the interest rate
 - (B) real disposable income and unemployment
 - (C) real national output and the price level
 - (D) government expenditures and taxes
 - (E) imports and exports
48. If purchases of education and medical care were counted as investment rather than consumption, gross domestic product would
- (A) not change, because there is no change in total expenditures
 - (B) increase, because investment is included in gross domestic product but consumption is not
 - (C) increase, because consumption is included in gross domestic product but investment is not
 - (D) decrease, because investment is weighted more heavily than consumption in calculating gross domestic product
 - (E) decrease, because consumption is weighted more heavily than investment in calculating gross domestic product
49. Which of the following would most likely cause the United States economy to fall into a recession?
- (A) An increase in welfare payments
 - (B) An increase in exports
 - (C) A decrease in savings by consumers
 - (D) A decrease in the required reserve ratio
 - (E) An open market sale by the Federal Reserve
50. Which of the following would most likely cause a rightward shift in an economy's aggregate supply curve?
- (A) An increase in interest rates
 - (B) A tax increase of 50 cents per gallon for gasoline
 - (C) An across-the-board reduction of wages in the manufacturing sector
 - (D) The passage of legislation mandating a reduction in automobile pollution
 - (E) The shutdown of plants and movement of production of goods abroad

51. Suppose that disposable income is \$1,000, consumption is \$700, and the marginal propensity to consume (MPC) is 0.6. If disposable income then increases by \$100, consumption and savings will equal which of the following?

<u>Consumption</u>	<u>Savings</u>
(A) \$420	\$280
(B) \$600	\$400
(C) \$660	\$320
(D) \$660	\$440
(E) \$760	\$340

52. If, at full employment, the government wants to increase its spending by \$100 billion without increasing inflation in the short run, it must do which of the following?

- (A) Raise taxes by more than \$100 billion.
- (B) Raise taxes by \$100 billion.
- (C) Raise taxes by less than \$100 billion.
- (D) Lower taxes by \$100 billion.
- (E) Lower taxes by less than \$100 billion.

53. Assume that the reserve requirement is 15 percent and that a bank receives a new checking deposit of \$200. Which of the following will most likely occur in the bank's balance sheet?

<u>Liabilities</u>	<u>Required Reserves</u>
(A) Increase by \$200	Increase by \$170
(B) Increase by \$200	Increase by \$30
(C) Increase by \$200	Not change
(D) Decrease by \$200	Decrease by \$30
(E) Decrease by \$200	Decrease by \$170

54. Open market operations refer to which of the following activities?

- (A) The buying and selling of stocks in the New York stock market
- (B) The loans made by the Federal Reserve to member commercial banks
- (C) The buying and selling of government securities by the Federal Reserve
- (D) The government's purchases and sales of municipal bonds
- (E) The government's contribution to net exports

55. Compared to expansionary monetary policies adopted to counteract a recession, expansionary fiscal policies tend to result in

- (A) less public spending
- (B) higher interest rates
- (C) lower prices
- (D) a high rate of economic growth
- (E) decreased investment by foreign countries

56. According to the monetarists, which of the following is true of expansionary fiscal policy?

- (A) It will cause interest rates to rise and crowd out private investment spending.
- (B) It should not be used so long as there is a national debt.
- (C) It should be used only when some resources are unemployed and the inflation rate is low.
- (D) It will decrease aggregate income.
- (E) It will increase aggregate income as long as the money supply is decreased at a slow, steady rate.

57. Which of the following policies would a Keynesian recommend during a period of high unemployment and low inflation?

- (A) Decreasing the money supply to reduce aggregate demand
- (B) Decreasing taxes to stimulate aggregate demand
- (C) Decreasing government spending to stimulate aggregate supply
- (D) Balancing the budget to stimulate aggregate supply
- (E) Imposing wage and price controls to stimulate aggregate supply

Section I

58. An important assumption in Keynesian theory is that
- (A) prices are rigid downward and decreases in aggregate demand will lead to an increase in unemployment
 - (B) price rigidity will cause downturns in the economy to self-correct
 - (C) when aggregate demand is inadequate, prices will fall
 - (D) when interest rates are high, many businesses borrow money
 - (E) changes in the money supply are the major cause of changes in real output and price level
59. Which of the following changes in the aggregate demand and aggregate supply curves is likely to result in stagflation?
- (A) The aggregate demand curve shifts to the left when the economy is in the classical range of the aggregate supply curve.
 - (B) The aggregate demand curve shifts to the right when the economy is in the classical range of the aggregate supply curve.
 - (C) The aggregate demand curve shifts to the right when the economy is in the Keynesian range of the aggregate supply curve.
 - (D) The aggregate supply curve shifts to the left.
 - (E) The aggregate supply curve shifts to the right.

60. In a flexible system of exchange rates, an open market sale of bonds by the Federal Reserve will most likely change the money supply, the interest rate, and the value of the United States dollar in which of the following ways?

<u>Money Supply</u>	<u>Interest Rate</u>	<u>Value of the Dollar</u>
(A) Increase	Decrease	Decrease
(B) Increase	Decrease	Increase
(C) Decrease	Decrease	Decrease
(D) Decrease	Increase	Increase
(E) Decrease	Increase	Decrease

END OF SECTION I

Chapter III

Answers to the 2000 Macroeconomics Examination

- Section I: Multiple Choice
 - Section I Answer Key and Percent Answering Correctly

- Section II: Free Response
 - Comments from the Chief Faculty Consultant
 - Scoring Guidelines, Sample Student Responses, and Commentary
 - Question 1
 - Question 2
 - Question 3

Section I: Multiple Choice

Listed below are the correct answers to the multiple-choice questions, the percentage of AP candidates who answered each question correctly by AP grade, and the total percentage answering correctly.

Section I Answer Key and Percent Answering Correctly

Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
1	C	88	74	57	43	29	58
2	C	95	89	83	72	52	79
3	B	91	75	61	52	41	64
4	A	96	90	84	76	48	80
5	D	97	90	81	71	49	78
6	B	94	83	72	63	41	71
7	D	88	73	63	51	32	62
8	B	97	91	83	72	53	80
9	C	99	97	94	86	64	89
10	C	79	71	66	61	43	64
11	B	98	89	75	60	43	73
12	A	86	75	63	49	28	61
13	B	97	88	79	63	34	73
14	E	94	79	57	40	20	58
15	D	92	80	72	68	58	74
16	E	92	86	79	75	53	78
17	B	98	87	72	53	35	70
18	D	89	79	72	66	52	72
19	B	96	83	66	45	20	63
20	A	98	93	81	65	44	77
21	C	66	45	31	22	15	36
22	B	97	93	88	78	49	82
23	E	97	93	86	77	49	81
24	B	78	54	42	35	29	47
25	C	88	73	62	51	35	62
26	B	85	72	64	53	37	62
27	A	97	92	87	76	50	81
28	D	83	69	58	45	25	56
29	A	75	54	41	32	21	44
30	E	84	71	59	52	35	60
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Item No.	Correct Answer	Percent Correct by Grade					Total Percent Correct
		5	4	3	2	1	
51	D	87	77	67	56	37	65
52	D	76	67	60	53	41	60
53	D	82	66	54	48	32	56
54	A	96	92	85	72	41	78
55	B	90	71	60	44	28	58
56	C	98	95	90	80	47	83
57	A	99	92	79	53	23	70
58	E	98	95	90	78	43	82
59	B	83	78	76	69	43	71
60	A	60	38	26	18	12	30
61	E	94	75	52	33	16	54
62	C	88	65	47	36	27	52
63	E	86	73	61	38	12	54
64	D	80	60	49	39	33	51
65	A	85	71	58	47	27	58
66	C	99	98	95	88	63	89
67	A	97	91	82	66	33	75
68	E	84	65	46	27	13	47
69	C	94	79	57	37	20	58
70	E	90	75	63	55	34	63
71	A	76	51	36	25	19	41
72	B	98	95	90	82	59	86
73	C	98	91	81	66	39	76
74	B	80	51	34	27	25	42
75	A	85	67	52	38	25	53
76	B	98	91	83	65	38	75
77	A	82	64	49	35	20	49
78	D	84	54	28	16	13	38
79	D	90	76	62	47	23	58

* Item 41 was not scored.