Answers and Explanations

1. **The correct answer is (E).** A change in the composition of output causes a movement along the production possibilities curve. A shift in the curve is caused by changes in technology, changes in natural resources (weather), education (human capital), labor force (emigration), and physical capital.

2. **The correct answer is (C).** The inflation rate is the current period's price level minus the previous period's price level divided by the previous period's price level times 100 percent, or the percentage change in the price level from the previous period.

3. **The correct answer is (A).** Economic choices must be made due to the finite quality of available resources. All resources are scarce; therefore choices about their allocation must be made.

4. **The correct answer is (E).** At $20, the quantity demanded is 40 and the quantity supplied is 14. Therefore, at $20 there will be a shortage of 26 units.

5. **The correct answer is (E).** A person with an absolute advantage can produce more of a good than the person to whom he/she is being compared. Xenia is able to produce more coffee and bread than Zava. Therefore, Xenia has the absolute advantage in both goods.

6. **The correct answer is (E).** Disposable personal income is by definition the income that households and noncorporate businesses have left after paying taxes and non-tax payments to the government. The income of noncorporate businesses is considered personal by economics.

7. **The correct answer is (C).** The quantity demanded is equal to the quantity supplied at $2 per pound of hamburger. The quantity sold would be 7 pounds.

8. **The correct answer is (C).** The cold spell in Florida reduced the size of the crop, decreasing the supply of Florida oranges and causing the price of Florida oranges to increase. The increase in the price of Florida oranges caused an increase in the demand for California oranges, a substitute.

9. **The correct answer is (C).** If the minimum wage remained at $5, the quantity demanded would still equal quantity supplied. There would not be a surplus of workers, and an equilibrium of 80 workers would have been reached.

10. **The correct answer is (D).** The Necco candy factory's overproduction would be included as part of the 1980 GDP in the category of inventory investment. Inventories are a normal part of GDP, expected from period to period, and included when produced.

11. **The correct answer is (D).** Resources are limited for every individual, household, state and/or economy. Even the richest person in the world lacks the resources to cure cancer, malaria, and famine.

12. **The correct answer is (B).** When the government says that GDP "increased by 2 percent in the last quarter", it is reporting a non-annualized figure. Multiplying the quarterly percentage change by 4 gives the annualized rate. GDP could then be said to have increased at an annual rate of 8 percent during the last quarter.

13. **The correct answer is (B).** Cyclical unemployment refers to year-to-year fluctuations of unemployment around its natural rate. Long-term, experience, or training situations are considered as falling under the category of structural unemployment. Location or information problems have to do with frictional unemployment.

14. **The correct answer is (E).** A college student is neither employed, unemployed, nor part of the labor force. The college student is also not a "discouraged worker", because discouraged workers voluntarily take themselves out of the labor force.

15. **The correct answer is (A).** Real GDP evaluates current production at the prices that prevailed in some specific year in the past (called the base year). Real GDP is nominal GDP adjusted for inflation.

16. **The correct answer is (E).** The GDP deflator is Nominal GDP divided by Real GDP. It is often multiplied by 100, which, in this case, makes it equal to 125.

17. **The correct answer is (C).** The opportunity cost is the explicit and implicit cost of any good or service. The implicit cost includes the value of the next best use one has for those resources.

18. **The correct answer is (A).** The inflation rate is calculated by subtracting the previous period's index number from the current number and dividing that number by the previous period's index number. The result is usually expressed in percentage terms. Thus, (126-120)/120 times 100 percent = 5 percent.

19. **The correct answer is (A).** The substitution bias in the CPI overstates the increase in the cost of living from one year to the next. The CPI uses a fixed basket of goods, which does not allow the index to switch to cheaper goods. Consumers will switch to cheaper goods and services when prices rise. Thus, the CPI overstates the cost of living.

20. **The correct answer is (B).** Interest rates are quoted in nominal terms to consumers. When calculating the real interest rate, use the quoted nominal interest rate and subtract the rate of inflation.

21. **The correct answer is (D).** Productivity is one of the most important determinants of long run aggregate supply, and is figured from the amount of output each employee produces (on average) per hour.

22. **The correct answer is (B).** Due to lags in policy effectiveness and impact, an unexpectedly expansionary monetary policy will increase aggregate demand and real output 6 to 15 months in the future.

23. **The correct answer is (B).** A decrease in the price level causes real wealth to rise, people to lend more, interest rates to fall, and the dollar to depreciate because movement along the aggregate demand curve and increase in real output results from a decrease in the price level.

24. **The correct answer is (E).** The aggregate supply curve is vertical in the long term, but not the short term. Long term aggregate supply is unaffected by the price level and is therefore vertical in the aggregate supply/aggregate demand model.

25. **The correct answer is (B).** If Congress raises the minimum wage substantially, less potential (or long run) real output will be produced. A change in the minimum wage is considered a long term effect and unlikely to be reversed (in the short term). Unemployment benefits falling would increase the curve, as would an increase in immigration and a decrease in the price of oil.

26. **The correct answer is (D).** Saving equals negative autonomous consumption plus the marginal propensity to save out of income [–$60 + 0.2 ($900), all in billions] or $120 billion.

27. **The correct answer is (D).** An increase in the expected price level shifts short-run aggregate supply to the left but an increase in the actual price level does not shift short-run aggregate supply. The long run curve is unaffected by a change in the expected price level or the actual price level.

28. **The correct answer is (D).** Bad weather or other input cost increases mean that the producers have been producing temporarily below potential or long run equilibrium. As the economy moves from short-run to long-run equilibrium, from below potential to potential real output, prices will fall and output will rise. The short run will shift right as wages fall and resources prices rise.

29. The correct answer is (B). Restrictive fiscal policy decreases government spending and/or increases taxes. These policies will shift AD to the left (a decrease) and move the economy toward point b.

30. The correct answer is (C). Income and spending are unaffected because saving leaks out of the circular flow. Saving leaks out to borrowers, who use the funds to buy goods and services, thus injecting the funds back into the circular flow.

31. The correct answer is (E). A cut of $9 billion in taxes will provide consumers with a $9 billion increase in income. Consumers will spend 90% of that income, increasing consumption spending by $8.1 billion.

32. The correct answer is (D). Fiscal policy consists of the government's tax revenue generation and spending policies. These include transfer payments such as Social Security, as well as income tax policies and spending on defense.

33. The correct answer is (E). The multiplier will double the impact of the initial increase in business spending. National income will increase by $300 billion.

34. The correct answer is (D). In Keynesian analysis, a tax cut unaccompanied with a government spending decrease will increase the government's budget deficit. The increase in the budget deficit will stimulate aggregate demand (consumption) and promote employment.

35. The correct answer is (D). The crowding-out effect occurs when a budget deficit leads to higher interest rates that reduce private consumer and investment spending. The government budget deficit is said to be crowding out private investment.

36. The correct answer is (B). Kelly will reduce her business tax liability by $20,000. She will have to give up $30,000 in after tax income in order to buy the Mercedes.

37. The correct answer is (B). The Keynesian economist would want to respond to the fact that current output is below potential (LRAS). A Keynesian would either increase government spending or decrease taxes to stimulate aggregate demand.

38. The correct answer is (D). Money demand varies directly with prices and output. Higher prices and higher output will increase the demand for money (shift the money demand curve to the right).

39. The correct answer is (B). Human capital is the knowledge and skills that workers acquire through education, training, and experience. Human capital can be acquired in any manner, not just through formal training.

40. The correct answer is (E). Consumption will be $36,000 [= $4,000 + .8($40,000)] so investment will be $4,000. Noting that autonomous expenditures need to be $8,000 (Income or $40,000 divided by the multiplier 5) and autonomous consumption is $4,000, intended investment must be $4,000.

41. The correct answer is (D). Consumption is equal to the autonomous consumption plus the marginal propensity to consume out of income [$60 + 0.8 ($900), all in billions], or $780 billion.

42. The correct answer is (D). The aggregate demand curve slopes downward because higher prices cause real wealth to decrease and interest rates to increase. Less real wealth and higher interest rates will decrease real output.

43. The correct answer is (E). A decrease in the money supply means that less money is available for transactions, which causes interest rates to increase (the opportunity cost of money becomes greater). The increase in the interest rate causes a decrease in investment and a decrease in GDP.

44. The correct answer is (E). New classical economists would allow the economy to self-correct and restore full employment through decreases in wages and input prices at point *c*.

45. The correct answer is (C). A second round of spending will mean that once the net exports have decreased, less income will be earned by Japanese workers. Therefore, Japanese workers will spend less by the amount of MPC times their income loss or $7.5 billion.

46. The correct answer is (B). The money supply will be unaffected by a change in nominal GDP. A decrease in nominal GDP will decrease the demand for money and decrease interest rates.

47. The correct answer is (C). Higher nominal interest rates raise the opportunity cost of money. Households will save more and hold less money balances. Higher prices, a rise in inflation, and an expansion of nominal income will change the demand for money (or shift the money demand curve).

48. The correct answer is (C). An increase in the money supply will decrease the interest rate and thereby raise the amount of investment, assuming that investment is sensitive to changes in the interest rate.

49. The correct answer is (C). Fiat money has no intrinsic value. Fiat money can be used in payment for goods and services and in the repayment of debt only because the government decrees it has value.

50. The correct answer is (C). The Federal Reserve is the agency responsible for regulating the money supply in the United States. The Federal Reserve issues new currency and takes old and damaged currency out of circulation.

51. The correct answer is (D). If the Federal Reserve System lowers the discount rate or lowers the reserve requirement ratio, the money supply will increase. The decrease in these tools will encourage banks to lend more of their excess reserves.

52. The correct answer is (B). To increase the money supply the Federal Reserve could decrease the discount rate. Selling bonds and increasing the reserve requirement would decrease the money supply. Moral suasion and increasing margin requirements decrease the money supply.

53. The correct answer is (D). The discount rate is what the Federal Reserve charges on loans it makes to banks. The prime rate is what banks charge to their best customers. The reserve ratio is used to calculate a bank's required reserves and the federal funds rate is the market interest rate on the reserves that banks lend to each other.

54. The correct answer is (B). If the reserve ratio is at 20 percent, the money multiplier equals 5. With a multiplier of 5, excess reserves of $1,000 can create $5,000 of new money.

55. The correct answer is (B). The Last Bank of Hope is in a position to make a new loan of $1,500. With a reserve requirement of 10%, the bank is required to keep $1,000 at the Fed and has excess reserves of $1,500 to loan.

56. The correct answer is (D). The Federal Reserve System pursues an independent monetary policy that can conflict with the government's economic policy. Often the Congress or the president disagrees with the actions of the Federal Reserve.

57. The correct answer is (C). The cyclical deficit equals government spending minus tax revenue at the current level of GDP. Tax revenue is 0.18 times $6,200 or $1,116. Therefore, government spending minus tax revenue is $144.

58. The correct answer is (C). The equation of exchange identity in growth rates states that real GDP plus the GDP deflator is equal to M1 plus the growth in the velocity of money. 2.8% + 2.2% –7.8% = –2.8%, the velocity of money declined.

59. The correct answer is (B). A budget surplus exists when spending is less than total revenue. Government spending includes transfers. Therefore, when government expenditures plus transfers are less than tax receipts, a budget surplus exists.

60. The correct answer is (A). The short run shock of an unexpected oil price increase would cause a drop in real GDP and a rise in price level and unemployment.

61. The correct answer is (E). Flexible wages and prices along with basically competitive markets are the two major market propositions of the classical school. Classical economists would allow the market to work and keep the government involvement to a minimum.

62. The correct answer is (E). Keynesian economics believes that insufficient aggregate demand will often result in less than the full employment level of real GDP. Government stimulus is necessary to help the economy back to the full employment level.

63. The correct answer is (B). The switch to savings will decrease consumption and therefore decrease aggregate demand. The real interest rate will decrease, cushioning the decrease in consumption, but aggregate demand will still fall.

64. The correct answer is (B). An oil price shock will decrease real output and increase the general level of prices. Unemployment will rise and a recession may result unless wages and resource prices fall and the long run equilibrium is attained again.

65. The correct answer is (C). An unanticipated aggregate demand shock from unexpected export sales growth will increase the price level and real output above the long-run equilibrium. A potentially inflationary gap, actual unemployment will temporarily fall below the natural rate and put pressure on wages and resource prices to rise.

66. The correct answer is (C). The Tax Reform Act of 1986 decreased the top marginal tax rate from 70 percent to 31 percent.

67. The correct answer is (B). The growth rate of nominal GDP should equal the growth rate of the nominal money supply plus the growth rate of velocity. If real GDP and velocity are growing at 2%, the money supply should remain stable to achieve a stable price level.

68. The correct answer is (A). Fiscal policy primarily affects saving, investment, and real growth. In the short run it affects primarily aggregate demand but if the economy is left to self-correct wages and resource prices will also be affected.

69. The correct answer is (B). If fiscal policy is expansionary, contractionary monetary policy will keep the price level from increasing. Inflation would otherwise become a problem and workers would ask for higher wages.

70. The correct answer is (A). Recessions entail an increase in transfer payments and unemployment compensation and a decrease in tax receipts. These automatic stabilizers will cause the government's budget to move towards deficit.

71. The correct answer is (C). Monetarists and classical economists believe that the velocity of money in the equation of exchange is constant. If growth in nominal GDP is set equal to the long run growth of the money supply, the economy will self-correct and policy mistakes will not exacerbate recessions or inflationary periods.

72. The correct answer is (C). "Lean against the wind!" Countercyclical policy was relatively uncomplicated for Keynesian economists. It simply required that during recession, the government runs budget deficits and the Federal Reserve expands the money supply, while during prosperity, the government runs budget surpluses and the Federal Reserve contracts the money supply.

73. The correct answer is (D). Keynes said that in the long run, we are all dead. Rational expectations advocates believe that past experience is a good guide for decision making, but so is information related to possible future outcomes. People will use all of the information that they know in making decisions.

74. The correct answer is (B). A tariff or a quota will increase the price to the importing country such that it is greater than the price in the exporting country. The tariff or quota will actually drive a wedge between the prices in the two countries.

75. The correct answer (D). An increase in the number of skiers in Switzerland will increase the demand for Swiss francs. Therefore we would expect the Swiss franc to appreciate.

76. The correct answer is (C). Nanda's opportunity cost is determined by the production relationship between its corn and wheat. Nanda gives up 4 units of wheat for every unit of corn it produces. Therefore, Nanda's opportunity cost of 1 unit of wheat is 1/4 units of corn.

77. The correct answer is (B). The national security argument for restricting trade can be made for very important and valid reasons, yet many countries apply the argument to goods that can be readily bought or traded. Food stuffs, resources, manufactured goods, etc. can be described as being vital to national security, if a country desires.

78. The correct answer is (A). To have the comparative advantage in producing a good means that a country has the least opportunity cost in that good. Therefore, by specializing in the production of that good and trading for others, the country will be better off.

79. The correct answer is (A). Capital deepening occurs when a laborer is receiving a larger per capita amount of capital. In this case, the capital-labor ratio increases from $200 to $220, indicating there is more capital per worker.

80. The correct answer is (B). If the dollar purchases less of a currency, then the dollar has depreciated. Choices A, C, D, and E show the dollar buying less of each of the national currencies of Japan, Italy, Germany, and France. In the case of buying a yen for 8 cents now instead of 10 cents, the dollar buys more yen.