1) Macroeconomics is mainly concerned with the study of
   A) large economic units such as General Motors or Molson Breweries
   B) individual households and how they deal with problems like inflation and unemployment.
   C) governments and their intervention in individual markets.
   D) fluctuations and trends in aggregated data.
   E) fluctuations and trends in disaggregated data.

2) A nation’s real national income in a given year measures the
   A) opportunity cost of the economy’s national output.
   B) market value of national output produced by the economy.
   C) value of output produced by the economy, measured in constant dollars.
   D) level of national income that is subject to taxation by the federal government.
   E) dollar income earned by the nation’s producing sector.

3) Suppose actual output is less than potential output. If the output gap measures the output loss due to the
   failure to achieve full employment, it can generally be concluded that the larger this output gap, the
   A) greater is the employment rate.
   B) lower is frictional unemployment.
   C) greater is the unemployment rate.
   D) more upward pressure there is on prices.
   E) lower the deadweight loss of unemployment.

4) If a country’s labour force is 15 million people, and 500 000 of those are unemployed, the country’s
   unemployment rate is
   A) 2.5 percent.  B) 3.3 percent.  C) 4.5 percent.  D) 6.7 percent.  E) 9.0 percent.

5) Cyclical unemployment is associated with
   A) people entering the labour force typically take some time to find a job.
   B) an output level different from the economy’s potential output.
   C) differences between the characteristics of the supply of labour and the demand for labour.
   D) changes to the economy’s industrial structure resulting from growth in some industries and decline in others.
   E) people quitting their present jobs to look for other jobs.

6) Consider a small economy with real GDP of $1 billion and the total number of hours worked equal to 5 million.
   Which of the following is the best measure of labour productivity in this economy?
   A) real GDP per hour worked = $200
   B) real GDP per employed worker = $20
   C) real GDP per hour worked = $20
   D) real GDP per employed worker = $200
   E) indeterminable from the information provided.
7) Economic theory argues that there will be fewer real effects from inflation as long as the
A) actual rate of inflation is less than 5 percent.
B) inflation is fully anticipated and no one changes their behaviour.
C) whole private sector is unaware that it is happening.
D) anticipated rate of inflation is less than the actual rate of inflation.
E) anticipated rate of inflation is more than the actual rate of inflation.

8) Suppose the Bank of Montreal wants a five percent real rate of return on all its loans, and anticipates an annual inflation rate of four percent. It should therefore lend its money at a nominal interest rate of
A) ten percent.  B) nine percent.  C) five percent.  D) four percent.  E) one percent.

9) If 0.75 U.S. dollars can be exchanged for one Canadian dollar, we say that the Canadian – U.S. exchange rate is
A) 1.25.  B) 0.75.  C) 75.  D) 1.0.  E) 1.33.

10) In national–income accounting, the value of intermediate products
A) is counted as factor income in the calculation of GDP from the income side.
B) must equal the value added by the firm.
C) should be added to the value of other inputs in determining a firm’s contribution to GDP.
D) should always be counted as part of GDP in the expenditure approach.
E) should be subtracted from the value of final goods in determining a firm’s total value added.

11) A farmer raises free–range chickens, which he sells to a company for $1000. That company sells the “processed” chickens to a grocery store for $1600, which in turn produces roasted chickens which are sold to the public for $2400. Based on this information, the value of total output is equal to
A) $1400  B) $2400  C) $5000  D) $4000  E) $1600

12) Transfer payments are excluded from the government component in the calculation of GDP because
A) it is difficult to assess the market value of a transfer payment.
B) they are small enough to ignore when computing the national accounts.
C) they are not counted as income by any economic agent.
D) they do not represent the purchase of a good or a service.
E) they do not generate additional income in the economy.

13) One major reason that GDP is an inaccurate measure of the true level of economic activity is that
A) it does not include non–market activities.
B) people frequently buy things they do not want.
C) it cannot be adjusted for changes in prices.
D) it is statistically very inaccurate.
E) all of the above

14) One reason that real GDP tends to overstate the economic well–being of the country’s residents is that it ignores
A) the tips that waiters receive.
B) the market–based activity done from the home.
C) the costs of increased leisure time.
D) the economic “bads” associated with production, such as pollution.
E) transactions such as teenaged–babysitting services.
15) In the simple macroeconomic model, "autonomous expenditures" are
   A) those which are constant.
   B) non-domestic expenditures.
   C) dependent on national income.
   D) induced expenditures.
   E) not dependent on national income.

![Figure 21-1](image)

16) Refer to Figure 21-1. The APC will be equal to one (1.0) when disposable income is equal to
   A) $Y_1$.
   B) 0.
   C) $Y_3$.
   D) $Y_2$.
   E) none of the above.

17) If a family's annual disposable income rose from $60,000 to $65,000 and their desired consumption expenditures rose from $50,000 to $54,000, it can be concluded that the family's
   A) average propensity to save is 0.8.
   B) marginal propensity to consume is 0.8.
   C) marginal propensity to consume is $800.
   D) marginal propensity to save is 0.8.
   E) average propensity to consume is 0.8.
18) Refer to Figure 21-3. If national income is $Y_3$ and the aggregate expenditure function is $AE_1$,  
   A) the economy is in equilibrium. 
   B) there is unintended inventory accumulation and income will rise. 
   C) there is unintended inventory accumulation and income will fall. 
   D) there is unintended inventory decumulation and income will rise. 
   E) there is unintended inventory decumulation and income will fall.

19) Refer to Figure 21-3. If national income is $Y_1$ and the aggregate expenditure function is $AE_1$,  
   A) the economy is in equilibrium. 
   B) there is unintended inventory accumulation and income will rise. 
   C) there is unintended inventory accumulation and income will fall. 
   D) there is unintended inventory decumulation and income will rise. 
   E) there is unintended inventory decumulation and income will fall.

20) The $G$ and $T$ components in the national-income accounts measure purchases and net taxes collected by  
   A) only local governments. 
   B) all levels of government. 
   C) only the federal government. 
   D) only provincial governments. 
   E) only provincial governments and the federal government.

21) Suppose $G = 300$ and the government’s net tax revenue is equal to $0.14Y$. When $Y = 2000$, public saving is  
   ________, denoting a budget __________.  
   A) $-20$; surplus  
   B) $0$; balance  
   C) $-20$; deficit  
   D) $20$; deficit  
   E) $20$; surplus

FIGURE 21-3
22) If the government’s net tax rate increases, then for a given level of national income private saving will _______ but public saving will _______.
   A) increase; increase
   B) increase; decrease
   C) not change; increase
   D) decrease; increase
   E) decrease; decrease

23) Consider a macro model with demand-determined output. The equations are: 
   \[ C = 150 + 0.8Yd \]
   \[ Yd = Y - T \]
   \[ I = 400 \]
   \[ G = 700 \]
   \[ T = 0.2Y \]
   \[ X = 130 \]
   \[ IM = 0.14Y \]
   The marginal propensity to spend on national income in this model is _______.
   A) 0.50  B) 0.54  C) 0.64  D) 0.84  E) 0.86

24) Refer to Figure 22-2. The rotation from \( AE_0 \) to \( AE_1 \) could be caused by
   A) higher government purchases.
   B) a lower net tax rate.
   C) a balanced budget.
   D) a higher net tax rate.
   E) lower government purchases.
The diagram below shows desired aggregate expenditure for a hypothetical economy. Assume the following features of this economy:

- marginal propensity to consume (mpc) = 0.75
- net tax rate (t) = 0.20
- no foreign trade
- fixed price level
- all expenditure and income figures are in billions of dollars.

![Diagram showing desired aggregate expenditure](image)

**FIGURE 22-1**

25) Refer to Figure 22-1. What is the equilibrium national income in this economy?
   A) $625  B) $294  C) $187.50  D) $1666.67  E) $333.34

26) Consider a model with demand-determined output and a constant price level. A decrease in the net tax rate causes ______ in autonomous spending and a ______ in the simple multiplier.
   A) a rise; rise  B) a rise; fall  C) a fall; fall  D) no change; fall  E) no change; rise

27) Other things being equal, an exogenous rise in the domestic price level will
   A) cause net exports to rise.
   B) decrease desired real expenditure because it will affect the real value of wealth.
   C) increase the level of desired real expenditure.
   D) have no effect on the level of desired real expenditure.
   E) decrease desired real expenditure only if it is accompanied by a change in the current income of households.
28) Other things being equal, a rise in the price level will imply _______ in wealth for the bondholder but _______ in the wealth of the issuer of the bond.
   A) an increase; an increase  
   B) a decline; no change  
   C) a decline; a decline  
   D) an increase; a decline  
   E) a decline; an increase

29) In a macro model with a constant price level, an increase in autonomous desired consumption will cause the AE curve to shift
   A) upward and the AD curve to shift to the right.  
   B) downward and the AD curve to shift to the right.  
   C) upward and the AD curve to shift to the left.  
   D) upward and a movement to the right along the AD curve.  
   E) downward and the AD curve to shift to the left.

30) Aggregate supply shocks cause the price level and real GDP to change in
   A) the same direction and by the same amount.  
   B) opposite directions with price changing by less than output.  
   C) opposite directions but not necessarily by the same amount.  
   D) the same direction with price changing by more than output.  
   E) opposite directions but by the same amount.

31) In macroeconomic analysis, the assumption that potential output (Y*) is changing is a characteristic of
   A) the business cycle model.  
   B) the adjustment process.  
   C) the short run.  
   D) the national accounts model.  
   E) the long run.

32) Which of the following is a defining characteristic of the AD/AS macro model in the long run?
   A) factor supplies are assumed to be fixed  
   B) the level of potential output is constant  
   C) technology used in production is constant  
   D) factor prices are assumed to be fixed  
   E) changes in real GDP are determined by the changes in potential output

33) The economy’s output gap is defined as the
   A) constant factor in the long run.  
   B) level of total output that would be produced if capacity utilization is at the normal rate.  
   C) difference between nominal GDP and real GDP.  
   D) difference between actual GDP and potential GDP.  
   E) result of economic growth.
34) Refer to Figure 24-1. If the economy is currently in a short-run equilibrium at $Y_0$, the economy is experiencing
   A) an inflationary output gap.
   B) a recessionary output gap.
   C) potential output growth.
   D) a labour shortage.
   E) a long-run equilibrium.
FIGURE 24-2

35) Refer to Figure 24-2. Suppose the economy is in equilibrium at $Y_1$. The economy’s automatic adjustment process will restore potential output, $Y^*$, through

A) a leftward shift of the $AD$ to intersect both the $AS$ and potential GDP at $A$.
B) wage decreases and a rightward shift of the $AD$ curve.
C) wage increases and a leftward shift of the $AS$ curve.
D) wage increases and a rightward shift in the $AS$ curve.
E) an increase in potential GDP to intersect both the $AD$ and $AS$ curves at $B$.

36) The “adjustment asymmetry” in the $AS$ curve implies that

A) wages and prices are equally sticky in both directions.
B) unemployment can persist for a while without causing large decreases in wages and prices.
C) prices are sticky but wages are not.
D) booms can persist for a long time without causing increases in wages and prices.
E) wages are very flexible in the downward direction.

37) The wage-adjustment process is asymmetrical because

A) employers delay wage increases in a boom but lay off workers quickly during a slump.
B) wages rise quickly in a boom but fall slowly during a slump.
C) factor prices fluctuate more frequently than goods prices.
D) taxes rise quickly in a boom but do not fall during a slump.
E) goods prices rise more quickly than factor prices.

38) Consider an AD/AS model in long-run equilibrium. An output gap, caused by a leftward shift of the $AD$ curve, would be eliminated if

A) wages rose quickly.
B) real national income decreased.
C) the $AS$ curve shifted upward.
D) prices rose quickly.
E) wages and other factor prices fell quickly.
39) Suppose there is a relatively steep AS curve. If the AD curve shifts to the left, then the price level will _______ and national output will _______.
   A) increase sharply; increase slightly
   B) increase slightly; significantly decrease
   C) fall sharply; will not change.
   D) fall sharply; decrease slightly.
   E) increase slightly; significantly increase

40) Consider the basic AD/AS macro model. An expansionary AD shock will _______ the price level and _______ output in the short run. In the long run, the price level will _______ and output _______.
   A) increase; decrease; increase further; will increase further
   B) increase; decrease; increase further; will be restored to potential output
   C) increase; increase; increase further; will be restored to potential output
   D) decrease; decrease; decrease further; will be restored to potential output
   E) decrease; decrease; decrease further; will decrease further

The diagram below shows an AD/AS model for a hypothetical economy. The economy begins in long-run equilibrium at point A.

![AD/AS Model Diagram]

41) Refer to Figure 24-4. The initial effect of a positive AS shock results in _______.
   A) an inflationary output gap of 550
   B) a recessionary output gap of 450
   C) a recessionary output gap of 250
   D) an inflationary output gap of 200
   E) an inflationary output gap of 300

42) Refer to Figure 24-4. After the positive aggregate supply shock shown in the diagram, which of the following would shift the AS curve leftward during the economy’s adjustment process?
   A) an increase in wages and other factor prices
   B) a decrease in wages and other factor prices
   C) an increase in the unemployment rate
   D) an increase in labour productivity
   E) an increase in factor supplies
43) Refer to Figure 24-4. Following the positive AS shock shown in the diagram, the adjustment process will take the economy to a long-run equilibrium where the price level is ______ and real GDP is ______.
   A) 60; 1000  B) 60; 1300  C) 110; 1000  D) 90; 750  E) 90; 1200

44) Other things being equal, a country with a high national saving rate may have a ______ long-run growth rate because more saving increases the ______.
   A) high; interest rate and encourages more investment
   B) low; consumption in the long run
   C) low; unemployment and decreases wages in the long run
   D) high; wealth of people and increases future consumption
   E) high; availability of funds, thus lowering the interest rate

45) Long-run increases in real national income can generally be traced to
   A) growing demand that lead to increases in output and prices.
   B) growing demand which causes continuous growth in consumer spending.
   C) growing availability of factors and/or growing factor productivity.
   D) growing supply because higher wages will increase the participation rate.
   E) excess of demand in the labour market that increases employment.

46) In the short run, changes in real GDP are primarily determined by changes in factor-utilization rates which, in turn, are due to changes in
   A) aggregate supply because when firms increase prices they are then willing to produce more.
   B) aggregate demand only.
   C) aggregate demand because increases in demand will lead to increases in output.
   D) aggregate supply only.
   E) both aggregate demand and aggregate supply.

47) Potential GDP is defined as the level of aggregate output at which
   A) all factors of production are employed at their "normal" utilization rates.
   B) all factors of production are employed at 100 percent capacity.
   C) the unemployment rate is zero.
   D) there is only cyclical and structural unemployment.
   E) there is only cyclical and frictional unemployment, and capital equipment is being used at 100 percent capacity.

48) At any given time, the level of potential GDP depends on
   A) a given amount of available factors of production.
   B) normal rates of utilization for labour and capital.
   C) the productivity of factors of production.
   D) all of the above
   E) none of the above

49) GDP can be represented by the equation: GDP = L x [E/L] x [GDP/E] where L is the total supply of labour and E is the level of employment. In this equation, the term [GDP/E] represents
   A) output per unit of capital.
   B) one minus the unemployment rate.
   C) the productivity of labour.
   D) the ratio of the population unemployed.
   E) none of the above
50) GDP can be represented by the equation: \( \text{GDP} = F \times (\text{Fe}/\text{F}) \times (\text{GDP}/\text{Fe}) \). This equation tells us that real aggregate output can be expressed as factor
   A) price times the utilization rate times GDP per capita.
   B) utilization times equilibrium factor price times factor productivity.
   C) supply times the equilibrium factor price times GDP per capita.
   D) supply times equilibrium factor price times factor productivity.
   E) supply times the factor–utilization rate times factor productivity.

51) In the short run, aggregate demand and aggregate supply shocks cause output gaps, which in turn, cause fluctuations in
   A) the factor utilization rate.
   B) the natural rate of unemployment.
   C) the normal factor utilization rate.
   D) productivity.
   E) factor supply.

52) Consider the equation \( \text{GDP} = F \times (\text{Fe}/\text{F}) \times (\text{GDP}/\text{Fe}) \). If the economy enters a recessionary gap because of a negative aggregate demand shock, the equation changes in which of the following ways?
   A) the value of \( \text{Fe}/\text{F} \) rises as the rate of unemployment rises.
   B) the value of \( \text{GDP}/\text{Fe} \) falls as workers are laid off and equipment is used less intensively.
   C) there are no short–run changes in this case.
   D) the value of \( F \) falls as the rate of unemployment rises.
   E) the value of \( \text{Fe}/\text{F} \) falls as workers are laid off and equipment is used less intensively.

53) For the economy as a whole, changes in the factor–utilization rate are associated with short–run fluctuations in output because
   A) potential output is affected by the factor–utilization rate in the short run.
   B) the short–run fluctuations in factor supplies and productivity cancel each other out.
   C) factor prices can only fully adjust in the long run.
   D) firms cannot change their prices in the short run.
   E) it is cheaper for firms to let their inventories accumulate than to employ more workers.

54) Inflationary gaps are typically associated with
   A) excess demand for factors and lower–than–normal factor–utilization rates.
   B) excess supply of factors and lower–than–normal factor–utilization rates.
   C) excess supply of factors and normal factor–utilization rates.
   D) excess demand for factors and higher–than–normal factor–utilization rates.
   E) excess supply of factors and higher–than–normal factor–utilization rates.

55) Fiscal and monetary policies typically affect the short–run level of GDP because they cause shifts in the ______ but they will not generally have any long–run effects on real GDP unless they affect ______.
   A) AD curve; factor–utilization rates
   B) AD; the level of potential output
   C) AD; the unemployment rate
   D) AS curve; factor–utilization rates
   E) AS curve; factor supplies or factor productivity
56) Over a long period of time, perhaps many years, changes in real GDP come primarily from
A) rightward shifts of the AD curve.
B) upward shifts of the AE curve.
C) leftward shifts of the AD curve.
D) continuous increases in potential GDP.
E) upward shifts of the AS curve.

57) If a country transfers resources from the production of consumption goods to the production of capital goods, the result will be to
A) lower future living standards.
B) decrease the long-run growth rate.
C) raise future consumption.
D) raise current consumption.
E) raise current living standards.

58) For a given level of technology, a more rapid rate of economic growth can probably be achieved only if a country's citizens are prepared to
A) decrease interest rates.
B) redistribute income.
C) sacrifice some present consumption.
D) pay more taxes.
E) increase their demand for goods and services.

59) Consider the market for loanable funds for a closed economy in the long run. Other things being equal, a country with a high national saving rate will tend to have
A) an AS curve moving continually to the left.
B) either a high or low growth rate depending on the investment demand schedule.
C) a high growth rate because sustained high investment is possible with high saving.
D) a high growth rate because aggregate expenditure will be high out of any given income.
E) trouble achieving potential real national income in the short run.

60) One important assumption of the Neoclassical growth model is that, with a given state of technology,
A) the return from successive units of a single factor increases over time.
B) increases in the use of a single factor result in constant returns.
C) increases in GDP are possible only if all factors are increased at an equal rate.
D) increases in the use of a single factor bring increasing returns.
E) increases in the use of single factor bring diminishing returns.

61) In the Neoclassical growth model, if capital and labour grow at the same rate, we will observe
A) increasing living standards but only for workers using labour-intensive production.
B) increasing living standards but only for workers using capital-intensive production.
C) rising GDP but no change in living standards.
D) rising GDP but falling living standards.
E) rising GDP and increasing living standards.

62) A person who returns to school to improve her computer skills is an example of an increase in
A) human capital.
B) financial capital.
C) technological capital.
D) the labour force.
E) physical capital.
63) According to the Neoclassical growth theory, sustained rising material living standards can only be explained by
   A) technological change.
   B) growth in the labour force.
   C) growth in physical capital.
   D) balanced growth of labour and capital.
   E) growth in human capital.

64) Neoclassical growth theory is based on the assumption of _______ marginal returns to a single factor and _______ returns to scale exhibited by the aggregate production function.
   A) increasing; increasing
   B) increasing; constant
   C) decreasing; decreasing
   D) decreasing; constant
   E) constant; decreasing

65) New theories of growth based on the idea that growth is endogenous
   A) assume that the growth rate of technology is exogenous.
   B) assume that the rate of growth of the economy is equal to the rate of population growth.
   C) ignore the role of technology.
   D) incorporate factors such as central bank behaviour.
   E) stress the role of knowledge and learning in the economy’s rate of growth.

66) The function of money in an economy is to serve as
   A) a unit of account.
   B) a medium of exchange.
   C) a store of value.
   D) all of the above.
   E) none of the above.

67) Other things being equal, a rise in the price level will
   A) stabilize the value of money.
   B) increase the value of money.
   C) have no effect on the value of money
   D) decrease the purchasing power of money.
   E) increase the purchasing power of money.

68) Other things being equal, the purchasing power of money is
   A) inversely related to the price level.
   B) inversely related to the level of aggregate demand.
   C) directly related to the price level.
   D) directly related to the level of aggregate demand.
   E) directly related with the cost of living.

69) A major disadvantage of a barter system compared to one that uses money is that
   A) a standardized unit of account cannot exist in a barter system.
   B) each trade requires a double coincidence of wants.
   C) commodities are difficult to transport and therefore inefficient for exchange.
   D) commodities are difficult to use as a store of value.
   E) it is difficult to find goods to trade in a barter system that satisfies the needs of society.
70) The use of money in an economy does all of the following EXCEPT
   A) eliminate the necessity for a double coincidence of wants.
   B) solve the problem of trading a portion of indivisible commodities such as live animals.
   C) solve the problem of inflation.
   D) provide a convenient unit of account.
   E) promote specialization and the division of labour.

71) Which of the following was the most important initial step in the evolution of paper currency?
   A) the use of the Gold Standard
   B) the acceptance of metallic coins
   C) the acceptance of goldsmiths’ receipts
   D) the acceptance of bank notes
   E) the issuance of currency by governments

72) For a country to be on a “gold standard”, it must
   A) use gold coins as money.
   B) use gold as money, but not necessarily in the form of gold coins.
   C) use gold coins as money and promise never to debase its coins.
   D) use gold as fiat money.
   E) make its currency convertible into gold at a fixed rate of exchange.

73) The currency that is in circulation in Canada today is
   A) backed by the euro.
   B) not officially backed by anything.
   C) fractionally backed by gold.
   D) backed by the U.S. dollar.
   E) fully backed by gold held at the central bank.

74) The basic functions of the Bank of Canada include
   A) regulating the money supply.
   B) acting as lender of last resort to the commercial banks.
   C) acting as banker for the chartered banks.
   D) supporting the financial markets.
   E) all of the above

75) A bank run is unlikely to occur in Canada today because,
   A) if necessary, the central bank can provide all the reserves that are necessary to avoid this situation.
   B) banking is done mostly electronically.
   C) the commercial banks are required by law to maintain 100 percent of their deposits in cash.
   D) there is relatively little demand for cash at present.
   E) the commercial banks hold enough government securities that are convertible into cash.

76) Canadian commercial banks maintain their reserves in the form of
   A) gold in their bank vaults.
   B) cash and foreign currency at the Bank of Canada.
   C) cash in their bank vaults.
   D) cash in their bank vaults and deposits at the Bank of Canada.
   E) deposits at other commercial banks that are immediately accessible.
77) Suppose you found a $100 bill that was lost for several years under your grandmother's mattress and you decided to deposit this money in a commercial bank. If the target reserve ratio were 20 percent and all excess reserves were lent out, your new deposit of $100 would lead to an eventual expansion of the money supply of

A) $120.  
B) $200.  
C) $500.  
D) $1200.  
E) $2000.

78) The term "demand for money" usually refers to the

A) aggregate demand for cash and chequable deposits in the economy.  
B) sum of all desired holdings of cash.  
C) sum of all desired assets, including cash, bonds, and real property.  
D) cash and deposits actually held by firms.  
E) average person's desire to hold cash.

79) The "transactions demand" for money arises from the fact that

A) households decide to hold money in order to make purchases of goods and services.  
B) households wish to have all their wealth in the form of money.  
C) there is uncertainty in the receipts of income.  
D) households want to keep cash on had to buy bonds if bond prices drop.  
E) there is uncertainty about the movement of interest rates.

80) Other things being equal, the transactions demand for money tends to increase when

A) interest rates stop rising.  
B) national income falls.  
C) national income rises.  
D) the price level falls.  
E) interest rates rise.

81) In general, people hold cash balances for all of the following reasons EXCEPT:

A) as a store of wealth.  
B) to maximize their returns on interest-earning assets.  
C) to meet unforeseen emergencies.  
D) to guard against the uncertainty of the timing of receipts and payments.  
E) to make purchases.
82) Refer to Figure 28-1. A rightward shift of the money demand curve can be caused by
   A) a decrease in real GDP.
   B) a decrease in the price level.
   C) an increase in the price level.
   D) an increase in the rate of interest.
   E) a decrease in the rate of interest.
83) Refer to Figure 28–2. Starting at equilibrium $E_0$, an increase in real GDP will lead to a
A) shift of the $M_s$ curve to the right and a fall in the interest rate.
B) shift of the $M_D$ curve to the right and an increase in the interest rate.
C) shift of the $M_s$ curve to the left and an increase in the interest rate.
D) shift of the $M_D$ curve to the left and a fall in the interest rate.
E) downward movement along the $M_D$ curve and a lower interest rate.
84) Refer to Figure 28-4. The economy begins in equilibrium at E0. Now consider an expansion of the money supply. The initial effect is:
   A) a shift of the AS curve to AS1 and a decrease in real GDP to Y2.
   B) a simultaneous shift of AD to AD1 and AS to AS1, resulting in a new equilibrium at E2.
   C) no change in the short-run equilibrium or level of real GDP.
   D) a shift of the AD curve to AD1 and an increase in real GDP to Y1.
   E) a shift of the AD curve to AD1, and then a shift back to AD0 to restore equilibrium at E0.

85) Refer to Figure 28-4. The economy begins in equilibrium at E0. Now consider an expansion of the money supply. What is the adjustment toward the new long-run equilibrium?
   A) The AD curve shifts to AD1. The inflationary gap causes prices to rise, AS shifts to AS1 and equilibrium is restored at E3.
   B) The AD curve shifts to AD1. The inflationary gap causes wages to rise, AS shifts to AS1 and equilibrium is restored at E2.
   C) The AD and AS curves shift to AD1 and AS1 simultaneously. The increased price level pushes them back to AD0 and AS0 and equilibrium is restored at E0.
   D) The AS curve shifts to AS1 which causes the AD curve to shift to AD1, resulting in a new equilibrium at E2.
   E) The AD curve shifts to AD1. The increased money supply causes an increase in potential output and a new long-run equilibrium at E1.

86) The economy’s investment demand function describes the
   A) positive relationship between desired investment and the rate of interest.
   B) negative relationship between desired investment and aggregate expenditure.
   C) negative relationship between the interest rate and desired investment.
   D) negative relationship between the demand for money and the interest rate.
   E) positive relationship between desired investment, the rate of interest, and aggregate expenditure.
Refer to Figure 28-3. The increase in the money supply from $M_{S0}$ to $M_{S1}$ shifts the monetary equilibrium from $E_0$ to $E_1$. The result is

A) a shift of the investment demand curve to the left.
B) sustained monetary disequilibrium.
C) an increase in the interest rate and a decrease in desired investment.
D) a shift of the investment demand curve to the right.
E) a decrease in the interest rate and an increase in desired investment.

Refer to Figure 28-3. This figure illustrates

A) the entire monetary transmission mechanism.
B) the first two steps of the monetary transmission mechanism.
C) the effect of a change in the money supply on money demand.
D) only the first step of the monetary transmission mechanism.
E) the ultimate effect of a change in the money supply on real GDP.

The monetary transmission mechanism describes the process by which changes in

A) personal consumption affect real GDP.
B) monetary equilibrium influence the interest rate.
C) interest rate affect the demand for money.
D) business investment influence real GDP.
E) monetary equilibrium influence real GDP through changes in desired investment.
90) Which one of the following statements best describes the monetary transmission mechanism?
   A) An increase in the money supply leads to a lower interest rate, higher investment, an upward shift in the AE curve and a higher GDP.
   B) A decrease in the money supply leads to a lower interest rate, higher investment, an upward shift in the AE curve and a higher GDP.
   C) An increase in government spending causes the AE curve to shift upwards, leading to a higher GDP.
   D) An increase in personal consumption leads to an upward shift in the AE curve and thereby increases real GDP.
   E) A decrease in imports causes the AE curve to shift upwards, leading to a higher interest rate.

91) A decrease in the money supply is most likely to
   A) lower interest rates, investment, and aggregate expenditures.
   B) raise interest rates, lower investment, and lower aggregate expenditures.
   C) lower interest rates, raise investment, and raise aggregate expenditures.
   D) raise interest rates, investment, and aggregate expenditures.
   E) raise interest rates and investment, and lower aggregate expenditures.

92) If the economy is experiencing an undesired inflationary gap, the Bank of Canada could
   A) shift the investment demand curve to the right by lowering interest rates, which would shift the AD curve outward.
   B) increase the supply of money, lowering interest rates, which would shift the AD curve outward.
   C) increase the supply of money, lowering interest rates, which would shift the AD curve inward.
   D) decrease the supply of money, raising interest rates, which would shift the AD curve inward.
   E) decrease the demand for money, lowering interest rates, which would shift the AD curve outward.

93) Any central bank, including the Bank of Canada, can implement its monetary policy by directly influencing either _______ or ________, but not both.
   A) money supply; money demand
   B) aggregate supply; aggregate demand
   C) aggregate demand; the interest rate
   D) the money supply; the interest rate
   E) the price level; the interest rate

94) Most central banks, including the Bank of Canada, implement monetary policy by
   A) influencing a short-term interest rate directly.
   B) controlling the process of deposit creation in the commercial banking system.
   C) influencing investment demand directly.
   D) controlling the money supply directly.
   E) influencing the demand for money directly.

95) In practice, the Bank of Canada implements its monetary policy by
   A) setting the money supply.
   B) directly influencing the excess reserves in the commercial banking system.
   C) directly influencing the price level.
   D) directly influencing the overnight interest rate.
   E) influencing the slope of the money demand curve.
96) In Canada, open–market operations are
   A) the buying and selling of government securities by the Bank of Canada.
   B) government actions aimed at creating competition within the banking industry.
   C) loans made by the Bank of Canada to the commercial banks.
   D) no longer carried out.
   E) conducted to enforce the reserve requirements of commercial banks.

97) Suppose the Canadian economy had an inflationary gap. To decrease the level of aggregate desired investment, the Bank of Canada could
   A) buy securities in the open market.
   B) reduce its spending.
   C) lower short–term interest rates.
   D) raise its target for the overnight interest rate.
   E) either A or D would be effective.

98) The monetary transmission mechanism describes how changes in the demand for or supply of money cause changes in the interest rate, which then cause changes in
   A) aggregate demand, real GDP and the price level.
   B) desired investment and net exports.
   C) the inflation rate.
   D) potential output.
   E) both A and B are correct.

99) Most central banks accept that, in the long run, monetary policy has an effect on
   A) the level of aggregate demand.
   B) real GDP and the price level.
   C) the price level and the inflation rate only.
   D) the level of investment demand.
   E) all real economic variables.

100) Time lags in monetary policy can cause
    A) monetary policy to work more slowly and more smoothly than was initially predicted by economists.
    B) short–term monetary policy to work more effectively than long–term targeting.
    C) an expansionary policy to have too little an effect because it takes much longer to work than was expected by policymakers.
    D) difficulty in the timing of appropriate policy and can even lead to destabilization.
    E) monetary expansions to work very quickly but cause monetary contractions to work very slowly.
Answer Key
Testname: FINALF09_V4

1) D  
Diff: 1  
Topic: 19.1a. the study of macroeconomics

2) C  
Diff: 1  
Topic: 19.1b. national output/national income

3) C  
Diff: 2  
Topic: 19.1c. potential output and output gaps

4) B  
Diff: 2  
Topic: 19.1d. employment, unemployment and the labour force

5) B  
Diff: 2  
Topic: 19.1e. frictional, structural and cyclical unemployment

6) A  
Diff: 3  
Topic: 19.1f. productivity

7) B  
Diff: 1  
Topic: 19.1g. inflation and the price level

8) B  
Diff: 2  
Topic: 19.1h. real and nominal interest rates

9) E  
Diff: 2  
Topic: 19.1i. the exchange rate and depreciation/appreciation

10) E  
Diff: 1  
Topic: 20.1. national output and value added

11) B  
Diff: 2  
Topic: 20.1. national output and value added

12) D  
Diff: 1  
Topic: 20.2a. GDP from the expenditure side

13) A  
Diff: 1  
Topic: 20.3c. omissions from GDP

14) D  
Diff: 1  
Topic: 20.3c. omissions from GDP

15) E  
Diff: 1  
Topic: 21.1b. the consumption function
16) D
   Diff: 2
   Topic: 21.1b. the consumption function

17) B
   Diff: 1
   Topic: 21.1c. average and marginal propensities to consume

18) C
   Diff: 2
   Topic: 21.1f. the aggregate expenditure function (AE)

19) D
   Diff: 2
   Topic: 21.1f. the aggregate expenditure function (AE)

20) B
   Diff: 1
   Topic: 22.1. government expenditure (G) and tax revenue (T)

21) C
   Diff: 2
   Topic: 22.1. government expenditure (G) and tax revenue (T)

22) D
   Diff: 2
   Topic: 22.1. government expenditure (G) and tax revenue (T)

23) A
   Diff: 3
   Topic: 22.3a. the AE function

24) B
   Diff: 2
   Topic: 22.3a. the AE function

25) A
   Diff: 3
   Topic: 22.3b. equilibrium national income

26) E
   Diff: 2
   Topic: 22.4b. the simple multiplier with taxes (t) and imports (m)

27) B
   Diff: 1
   Topic: 23.1a. effects of an exogenous change in the price level

28) E
   Diff: 2
   Topic: 23.1a. effects of an exogenous change in the price level

29) A
   Diff: 2
   Topic: 23.1b. relationship between AE and AD curves

30) C
   Diff: 2
   Topic: 23.3b. AD shocks and AS shocks
Answer Key
Testname: FINALF09_V4

31) E
   Diff: 2
   Topic: 24.1a. time spans in macroeconomics

32) E
   Diff: 1
   Topic: 24.1a. time spans in macroeconomics

33) D
   Diff: 1
   Topic: 24.1b. output gaps and the adjustment of factor prices

34) B
   Diff: 1
   Topic: 24.1b. output gaps and the adjustment of factor prices

35) C
   Diff: 2
   Topic: 24.1b. output gaps and the adjustment of factor prices

36) B
   Diff: 1
   Topic: 24.1c. adjustment asymmetry

37) B
   Diff: 1
   Topic: 24.1c. adjustment asymmetry

38) E
   Diff: 2
   Topic: 24.2a. AD shocks

39) D
   Diff: 2
   Topic: 24.2a. AD shocks

40) C
   Diff: 3
   Topic: 24.2a. AD shocks

41) D
   Diff: 2
   Topic: 24.2b. AS shocks

42) A
   Diff: 2
   Topic: 24.2b. AS shocks

43) C
   Diff: 2
   Topic: 24.2b. AS shocks

44) E
   Diff: 3
   Topic: 25.1. two examples of SR versus LR macroeconomics

45) C
   Diff: 1
   Topic: 25.2a. LR versus SR changes in output
Answer Key
Testname: FINALF09_V4

46) E
   Diff: 2
   Topic: 25.2a. LR versus SR changes in output

47) A
   Diff: 1
   Topic: 25.2a. LR versus SR changes in output

48) D
   Diff: 1
   Topic: 25.2a. LR versus SR changes in output

49) C
   Diff: 1
   Topic: 25.2b. accounting for changes in GDP

50) E
   Diff: 2
   Topic: 25.2b. accounting for changes in GDP

51) A
   Diff: 2
   Topic: 25.2b. accounting for changes in GDP

52) E
   Diff: 2
   Topic: 25.2b. accounting for changes in GDP

53) C
   Diff: 2
   Topic: 25.2b. accounting for changes in GDP

54) D
   Diff: 2
   Topic: 25.2b. accounting for changes in GDP

55) B
   Diff: 2
   Topic: 25.3. policy implications

56) D
   Diff: 1
   Topic: 26.1a. the nature of economic growth

57) C
   Diff: 2
   Topic: 26.1b. benefits and costs of economic growth

58) C
   Diff: 1
   Topic: 26.1b. benefits and costs of economic growth

59) C
   Diff: 3
   Topic: 26.2a. investment, saving and growth

60) E
   Diff: 2
   Topic: 26.2b. Neoclassical growth theory
Answer Key
Testname: FINALF09_V4

61) C  
   Diff: 2  
   Topic: 26.2b. Neoclassical growth theory

62) A  
   Diff: 1  
   Topic: 26.2b. Neoclassical growth theory

63) A  
   Diff: 2  
   Topic: 26.2b. Neoclassical growth theory

64) D  
   Diff: 2  
   Topic: 26.2d. the aggregate production function

65) E  
   Diff: 2  
   Topic: 26.3. new growth theories

66) D  
   Diff: 1  
   Topic: 27.1a. the functions of money

67) D  
   Diff: 1  
   Topic: 27.1a. the functions of money

68) A  
   Diff: 1  
   Topic: 27.1a. the functions of money

69) B  
   Diff: 2  
   Topic: 27.1a. the functions of money

70) C  
   Diff: 2  
   Topic: 27.1a. the functions of money

71) C  
   Diff: 2  
   Topic: 27.1b. the origins of money

72) E  
   Diff: 2  
   Topic: 27.1b. the origins of money

73) B  
   Diff: 1  
   Topic: 27.1b. the origins of money

74) E  
   Diff: 2  
   Topic: 27.2a. the Canadian banking system

75) A  
   Diff: 2  
   Topic: 27.2a. the Canadian banking system
Answer Key
Testname: FINALF09_V4

76) D
   Diff: 2
   Topic: 27.2a. the Canadian banking system

77) C
   Diff: 3
   Topic: 27.3. the creation of deposit money

78) A
   Diff: 1
   Topic: 28.2a. reasons for holding money

79) A
   Diff: 1
   Topic: 28.2a. reasons for holding money

80) C
   Diff: 1
   Topic: 28.2a. reasons for holding money

81) B
   Diff: 2
   Topic: 28.2a. reasons for holding money

82) C
   Diff: 2
   Topic: 28.2b. the money demand function

83) B
   Diff: 2
   Topic: 28.3a. monetary equilibrium

84) D
   Diff: 2
   Topic: 28.3a. monetary equilibrium

85) B
   Diff: 3
   Topic: 28.3a. monetary equilibrium

86) C
   Diff: 2
   Topic: 28.3b. the monetary transmission mechanism

87) E
   Diff: 2
   Topic: 28.3b. the monetary transmission mechanism

88) B
   Diff: 2
   Topic: 28.3b. the monetary transmission mechanism

89) E
   Diff: 2
   Topic: 28.3b. the monetary transmission mechanism

90) A
   Diff: 3
   Topic: 28.3b. the monetary transmission mechanism
Answer Key
Testname: FINALF09_V4

91) B
   Diff: 3
   Topic: 28.3b. the monetary transmission mechanism

92) D
   Diff: 2
   Topic: 28.3b. the monetary transmission mechanism

93) D
   Diff: 2
   Topic: 29.1a. money supply vs. the interest rate

94) A
   Diff: 2
   Topic: 29.1a. money supply vs. the interest rate

95) D
   Diff: 1
   Topic: 29.1b. the overnight interest rate

96) A
   Diff: 1
   Topic: 29.1c. open-market operations

97) D
   Diff: 2
   Topic: 29.1d. expansionary and contractionary monetary policy

98) E
   Diff: 3
   Topic: 29.1d. expansionary and contractionary monetary policy

99) C
   Diff: 2
   Topic: 29.1d. expansionary and contractionary monetary policy

100) D
    Diff: 2
    Topic: 29.3. time lags in monetary policy