Chapter 1

1. A central topic of study in macroeconomics is __________, while a central topic of study in microeconomics is __________.

   a. the cosmos; particle physics
   b. the overall performance of an economy; an individual market
   c. an individual market; the overall performance of an economy
   d. the performance of international trade; the individual firm
   e. consumer behavior; firm behavior

2. The three main variables we discuss in the short run are

   a. economic fluctuations, the real exchange rate, and unemployment.
   b. economic fluctuations, inflation, and international trade.
   c. economic fluctuations, inflation, and unemployment.
   d. interest rates, money supply, and taxes.
   e. economic fluctuations, interest rates, and productivity.

3. Which of the following does macroeconomics endeavor to answer?
   i. Why is the typical person in the United States today more than 10 times richer than the typical person in the United States a century ago?
   ii. Why has the unemployment rate been nearly twice as high in Europe as in the United States in recent years?
   iii. What determines the rate of inflation? What determines how rapidly the overall price level in an economy increases?

   a. *i* only
   b. *i*, *ii*, and *iii*
   c. *ii* only
   d. *i* and *ii*
   e. *ii* and *iii*

4. Which of the following does macroeconomics NOT endeavor to answer?
   i. Why is the typical person in the United States today more than 10 times richer than the typical person in the United States a century ago?
   ii. Why has the unemployment rate been nearly twice as high in Europe as in the United States in recent years?
   iii. Why has the price of orange juice risen sharply?

   a. *ii* and *iii*
   b. *i* only
   c. *ii* only
   d. *i*, *ii*, and *iii*
   e. *iii* only

5. Which of the following does macroeconomics endeavor to answer?
   i. What role does the government play in recessions, booms, and determining the rate of inflation?
   ii. What causes an increase in the price of Exxon stock?
   iii. How does a dairy farmer react to rising milk prices?

   a. *i* only
   b. *ii* only
   c. *iii* only
   d. *i*, *ii*, and *iii*
   e. *ii* and *iii*

6. Which of the following does macroeconomics endeavor to answer?
   i. How does a dairy farmer react to rising wheat prices?
   ii. What will the impact of steel tariffs be on the price of washing machines?
   iii. What are potential causes of financial crises?

   a. *i* only
   b. *ii* only
   c. *iii* only
   d. *i*, *ii*, and *iii*
   e. *ii* and *iii*

7. Which of the following does macroeconomics endeavor to answer?
   i. What role does the government play in recessions, booms, and determining the rate of inflation?
   ii. What caused the currency crises in Mexico in the mid-1990s and in many Asian economies in the late 1990s?
   iii. How does a dairy farmer react to rising milk prices?

a. *iii* only
b. *ii* only
c. *i* and *ii*
d. *i*, *ii*, and *iii*
e. *i* and *iii*

8. Which of the following lists the four steps we use to study macroeconomic behavior in the correct order?

   a. (1) document the facts; (2) develop a model; (3) compare the predictions of the model to the original facts; (4) use the model to make other predictions that may eventually be tested
   b. (1) document the facts; (2) use the model to make other predictions that may eventually be tested; (3) compare the predictions of the model to the original facts; (4) develop a model
   c. (1) compare the predictions of the model to the original facts; (2) develop a model; (3) document the facts; (4) use the model to make other predictions that may eventually be tested
   d. (1) develop a model; (2) document the facts; (3) compare the predictions of the model to the original facts; (4) use the model to make other predictions that may eventually be tested
   e. None of these answers is correct.

9. __________ are inputs to the model and generally are fixed over time, while __________ are the outcomes of the model.

   a. Shocks; parameters
   b. Endogenous variables; exogenous variables
   c. Endogenous variables; shocks
   d. Exogenous variables; endogenous variables
   e. Parameters; system variables

10. Which of the following questions should a successful model predict?
    i. How do changes in government policies change the labor market?
    ii. How does money supply influence inflation?
    iii. How does investment affect economic growth?

    a. *ii* only
    b. *i*, *ii*, and *iii*
    c. *iii* only
    d. *i* and *ii*
    e. *i* and *iii*

11. Which of the following questions should a successful model predict?
    i. How do changes in government policies change the labor market?
    ii. How does money supply influence inflation?
    iii. How does a change in the inflation rate affect unemployment?

    a. *iii* only
    b. *ii* only
    c. *i*, *ii*, and *iii*
    d. *i* and *ii*
    e. *i* and *iii*

12. Which of the following questions shoulda successful model predict?
    i. Why, in general, do Americans have higher incomes than Africans?
    ii. How much less unemployment is there during an economic expansion?
    iii. Why does the United States have a lower unemployment rate than Europe?

    a. *i* and *ii*
    b. *ii* only
    c. *iii* only
    d. *i*, *ii*, and *iii*
    e. *i* and *iii*

13.
    Consider the following model of the labor market from the text:
    Labor supply: $L^s = \bar{a} \times w + \bar{l}$ Labor demand: $L^d = \bar{f} - w$ The endogenous variables are

    a. $\bar{f}$ and $\bar{a}$.
    b. $\bar{a}$ and the equilibrium wage, *w*.
    c. $\bar{f}$ and the equilibrium wage, *w*.
    d. the equilibrium quantity of labor, *L**, and wage, *w**.
    e. $\bar{a}$ and the equilibrium quantity of labor, *L*.

14.

Consider the following model of the labor market:
Labor supply: $L^s = \bar{a} \times w + \bar{l}$ Labor demand: $L^d = \bar{f} - w$ The values of the equilibrium quantity of labor, *L*, and wage, *w*, are

a. $L^* = (\bar{a}\bar{f} + \bar{l})/(1 + \bar{a}); w^* = (\bar{f} - \bar{l})/(1 + \bar{a})$
b. $L^* = (\bar{a}\bar{f} + \bar{l})/(\bar{l} + \bar{a}); w^* = (\bar{f} - \bar{l})/(\bar{l} - \bar{a})$
c. $L^* = (\bar{a}\bar{f} + \bar{l})/(\bar{l} + \bar{a}); w^* = (\bar{f} + \bar{l})/(\bar{l} + \bar{a})$
d. $L^* = (\bar{a}\bar{f} + \bar{l})/(\bar{l} + \bar{a}); w^* = (\bar{f} + \bar{l})/(\bar{l} - \bar{a})$
e. $L^* = (\bar{a}\bar{f} + \bar{l})/(\bar{l} + 1); w^* = (\bar{f} - \bar{l})/(\bar{l} - \bar{a})$

15. Consider the following model of the labor market:
Labor supply: $L^S = 1 + w$
Labor demand: $L^d = 11 - w$
The value of the equilibrium quantity of labor, *L*, and wage, *w*, are

a. $L^* = 4^{4/5}; w^* = 1/5$
b. $L^* = 5; w^* = 6$
c. $L^* = 6; w^* = 5$
d. $L^* = 6; w^* = 6$
e. Not enough information is given.

16. In the United States, income per person began at __________ in 1870 and __________ by more than a factor of 15 to __________ in 2022.

a. $2,500; rose; $35,000
b. $2,800; rose; $58,000
c. $3,600; rose; $76,600
d. $44,000; fell; $3,500
e. $40,000; fell; $2,500

17. Actual GDP is __________ equal to potential GDP.

a. almost always
b. always
c. never
d. rarely
e. Not enough information is given.

18. When we look at the __________ run, we are concerned with the __________.

a. short; causes of economic fluctuations
b. long; causes of economic fluctuations
c. short; determinants of economic growth
d. long; causes of inflation
e. long; money supply

19. Macroeconomics is to microeconomics what __________ is to __________.

a. cosmology; particle physics
b. particle physics; cosmology
c. physics; biology
d. chemistry; organic chemistry
e. biology; zoology

20. When we look at the long run, we are concerned with the

a. money supply.
b. causes of economic fluctuations.
c. causes of economic growth.
d. causes of inflation.
e. monthly unemployment rate.

21. The short run is concerned with __________, while the long run is concerned with __________.

a. inflation; unemployment
b. the causes of economic fluctuations; inflation
c. the causes of economic fluctuations; the determinants of economic growth
d. the determinants of economic growth; the causes of economic fluctuations
e. the causes of economic fluctuations; the money supply

22. The largest decline in employment since World War II was during the

    a. Great Depression.
    b. Volker-Reagan recession of 1980–1982.
    c. Covid-19 pandemic.
    d. oil crisis of the mid-1970s.
    e. 2007–2009 recession.

23. The country with the consistently lowest inflation rate since 1980 is

    a. Japan.
    b. the United Kingdom.
    c. the United States.
    d. Germany.
    e. Mexico.

24. The country with the consistently lowest unemployment rate since 1980 is

    a. Italy.
    b. the United Kingdom.
    c. the United States.
    d. Japan.
    e. Mexico.

25. According to the text, per capita GDP in 2022 in the United States was about

    a. $30,000.
    b. $76,000.
    c. $120,000.
    d. $1.2 million.
    e. $50,000.

26. The average annual growth rate of per capita GDP in the United States from 1870 to 2022 was __________ percent.

    a. 0
    b. 2
    c. 5
    d. 10

27. What is one endogenous variable in a model of the supply and demand for houses?

    a. the level of housing prices
    b. the number of real estate agents
    c. the level of income
    d. the level of unemployment

28. The difference between a parameter and an exogenous variable is that a parameter is __________, while an exogenous variable is __________.

    a. allowed to change over time; fixed over time
    b. an outcome of the model; an input to the model
    c. an input to the model; an output of the model
    d. fixed over time; allowed to change over time

29. Since the 1980s, the trade deficit in the United States has

    a. remained unchanged.
    b. reached 8 percent of GDP.
    c. been declining.
    d. been negative.

30. The difference between an exogenous and an endogenous variable is that an exogenous variable is __________, while an endogenous variable __________.

a. an input to the model; is an outcome of the model
b. an outcome of the model; is an input to the model
c. fixed over time; varies over time
d. an input to the model; changes over time as determined by the model builder

31. Which of the following questions would a macroeconomist be most interested in answering?

a. Why do monopolies set higher prices?
b. Why do individuals substitute across goods when prices rise?
c. Why did prices rise in many countries in the 1970s?
d. Why is a single firm's stock price rising?

32. The unemployment rate in the United States

a. has historically been higher than western Europe.
b. has historically been lower than western Europe.
c. was higher than western Europe until 1980 and has been lower than Europe since then.
d. was lower than western Europe until 1980 and has been higher than Europe since then.

33. Which of the following is NOT a step that macroeconomists take to study aggregate economic questions?

a. Document the facts.
b. Include all possible variables from the real world to construct a comprehensive model.
c. Make assumptions about the real world to simplify the construction of the model.
d. Shock the model to make other predictions.

34. At the height of the Great Recession, the U.S. unemployment rate

a. rose to about 9 percent.
b. was the highest it has ever been.
c. fell dramatically.
d. remained relatively stable.

35. In a simple model of supply and demand, the equation for the demand curve is given by $Q = 20 – 10P$ and the equation for the supply curve is given by $Q = 5 + 5P$. P and Q are

a. microfoundations.
b. parameters.
c. exogenous variables.
d. endogenous variables.

36. The largest increase in U.S. unemployment occurred during the

a. Great Recession.
b. Reagan-Volker recession.
c. Covid-19 pandemic.
d. Great Depression.
e. 1970s oil crisis.

37. During the Covid-19 pandemic,

a. both unemployment and inflation rates fell.
b. the U.S. dollar depreciated against all other currencies.
c. the Federal Reserve raised its policy interest rate.
d. unemployment rose and inflation initially fell and then began to rise.
e. economic growth remained the same.

38. Macroeconomics is the study of an individual market.

a. True
b. False

39. These four steps, in the following order, are used to study macroeconomic behavior:
(1) document the facts,
(2) develop a model,

(3) compare the predictions of the model to the original facts, and
(4) use the model to make other predictions that eventually may be tested.

a. True
b. False

40. These four steps, in the following order, are used to study macroeconomic behavior:
(1) document the facts,
(2) use the model to make other predictions that may eventually be tested,
(3) compare the predictions of the model to the original facts, and
(4) develop a model.

a. True
b. False

41. A main concern of long-run macroeconomics is the causes of economic growth.

a. True
b. False

42. A main concern of long-run macroeconomics is the causes of economic fluctuations.

a. True
b. False

43. A main concern of short-run macroeconomics is the causes of economic fluctuations and how to fix them.

a. True
b. False

44. A main concern of short-run macroeconomics is the causes of economic growth.

a. True
b. False

45. An economic model is an exact replica of the economy.

a. True
b. False

46. An endogenous variable is often called a parameter.

a. True
b. False

47. An exogenous variable is one that is taken as a given when constructing a model.

a. True
b. False

48. A main concern of long-run macroeconomics is to provide insight into how low-income countries, such as Haiti, can have the same standard of living as high-income countries, such as New Zealand.

a. True
b. False

49. In a simple model of supply and demand, the equation for the demand curve is given by $Q = 20 – 10P$ and the equation for the supply curve is given by $Q = 5 + 5P$. The solution of the model is

a. $Q = 10; P = 10$.
b. $Q = 1; P = 1$.
c. $Q = 10; P = 1$.
d. $Q = 1; P = 10$.

50. The positive budget deficit since the early 2000s in the United States implies that

a. federal government spending exceeds federal government revenue.
b. federal government revenue exceeds federal government spending.
c. the United States exports more than it imports.
d. the United States imports more than it exports.

51. We can solve a model for all the endogenous variables if it has five equations and six unknowns.

a. True
b. False

52. Over the long term, economic growth swamps economic fluctuations.

a. True
b. False

53. Potential output is a measure of future per capita GDP.

a. True
b. False

54. One reason economic activity fluctuates is that the central bank leads the economy into a recession in order to bring down inflation.

a. True
b. False

55. A model comparing income in the United States and Algeria is successful if it predicts that the United States is richer than Algeria but not how much richer.

a. True
b. False

56. In most rich countries, inflation has been relatively high since the 1980s.

a. True
b. False

57. In part, macroeconomists study individual behavior and microeconomic theories to create theories of aggregate economic activity.

a. True
b. False

58. What are four of the main concerns of the study of macroeconomics?

59. What are the steps that macroeconomists typically use to analyze the economy?

60. Describe the differences between the short run and the long run.

61.
Consider the following model of the labor market from the text:
Labor Supply: $L^s = (\bar{a}w + \bar{l})$ Labor Demand: $L^d = \bar{f} - w$ (a) Identify the model's parameters.
(b) Identify the endogenous variables.
(c) Solve the model.
(d) What must the relationship between $\bar{f}$ and $\bar{l}$ be?(e) If the supply and demand for labor were given as
$L^s = 2w + 2$
and
$L^d = 3 - 3w$,
then what would be the equilibrium wage and level of labor in the labor market?

Answer Key

Chapter 1

1. Answer: B
2. Answer: C
3. Answer: B
4. Answer: E
5. Answer: A
6. Answer: C
7. Answer: C
8. Answer: A
9. Answer: D
10. Answer: B
11. Answer: C
12. Answer: D
13. Answer: D
14. Answer: A
15. Answer: C
16. Answer: C
17. Answer: D
18. Answer: A
19. Answer: A
20. Answer: C
21. Answer: C
22. Answer: C
23. Answer: A
24. Answer: D
25. Answer: B
26. Answer: B
27. Answer: A
28. Answer: D

29. Answer: D

30. Answer: A

31. Answer: C

32. Answer: C

33. Answer: B

34. Answer: A

35. Answer: D

36. Answer: C

37. Answer: D

38. Answer: b

39. Answer: a

40. Answer: b

41. Answer: a

42. Answer: b

43. Answer: a

44. Answer: b

45. Answer: b

46. Answer: b

47. Answer: a

48. Answer: a

49. Answer: C

50. Answer: A

51. Answer: b

52. Answer: a

53. Answer: b

54. Answer: a

55. Answer: b

56. Answer: b

57. Answer: a

58. Answer: Here are a handful of options: (a) Why does the average person today have 10 times more income than the typical person 100 years ago?
(b) What determines the rate of inflation, and how do we control it?
(c) How can we minimize the number of unemployed people?
(d) What role, if any, does the government or central bank have in promoting economic well-being?

(e) Why do unemployment rates differ across countries?
(f) Why are some countries richer than others, and how can we promote development in lower-income countries?
(g) What are the causes and fixes for economic crises?

59. Answer: (a) Document the facts; (b) develop a framework for analysis (a model); (c) test the model using empirical analysis or some other comparable analysis and compare to the observed facts; and (d) use the model to make other predictions that may eventually be tested.

60. Answer: In the short run, we are concerned with the causes of economic fluctuations, or the business cycle. In the long run, we are concerned with the determinants of economic growth. Thus, the long run is the trend of output, and the short run represents the fluctuations around the trend.

61. Answer: (a) Using the notation in the text, the parameters are $\bar{a}$, $\bar{l}$ and $\bar{f}$.(b) They are the wage, *w*, and the labor in the market, *L*. (c) Setting supply equal to demand, we get $(\bar{a}w + \bar{l}) = \bar{f} - w$ Solving this for w^* and L^*, we get $L^* = \frac{\bar{a}\bar{f}+\bar{l}}{1+\bar{a}}; w^* = (\bar{f} - \bar{l})/(1 + \bar{a})$ (d) To ensure that the wage is positive, it must be true that $\bar{f} > \bar{l}$ (e) Using the previous equation, we get w^* = 1/5 and L^* = 12/5.