1. According to the quantity theory of money, a general decline in the price level will occur only if
   A) velocity is very high.
   B) velocity is very low.
   C) the growth rate of the money supply is less than the growth rate of real GDP.
   D) the growth rate of the money supply is greater than the growth rate of real GDP.

2. Advocates of the quantity theory are likely to see a tradeoff between inflation and
   A) unemployment.
   B) distribution.
   C) growth.
   D) money.

3. Inflationary pressures increase when the economy moves
   A) to the right of the long-run Phillips curve.
   B) to the left of the long-run Phillips curve.
   C) down the short-run Phillips curve.
   D) down the long-run Phillips curve.

4. Suppose that real output is fixed and equal to 400 while velocity is fixed and equal to 5. Then, if
   the money supply increases from 200 to 250, the price level will
   A) rise by 10 percent.
   B) fall by 20 percent.
   C) rise by 25 percent.
   D) rise by 50 percent.

5. The "Goldilocks economy" of the late 1990s produced
   A) low inflation and low unemployment.
   B) low inflation and high unemployment.
   C) high inflation and low unemployment.
   D) high inflation and high unemployment.
6. Assuming velocity is constant, the rate of inflation equals the difference between 
   A) the rate of unemployment and the rate of economic growth. 
   B) the rate of growth in the money supply and the rate of growth in nominal GDP. 
   C) the rate of growth in real wages and the rate of growth in real GDP. 
   D) the rate of growth in the money supply and the rate of growth in real GDP. 

7. The quantity theory of money concludes that 
   A) changes in the price level are caused by changes in the money supply. 
   B) real GDP and the money supply are related in the long run. 
   C) changes in velocity are proportional to changes in nominal income. 
   D) changes in velocity are proportional to changes in the money supply. 

8. Economists explain the "New Economy" in the late 1990s and early 2000s as 
   A) an example of the stagflation. 
   B) an example of the movement from the long-run to the short-run Phillips curve. 
   C) an example of the movement from the short-run to the long-run Phillips curve. 
   D) a case when productivity grew much faster than expected, negating the standard Phillips curve story. 

9. Based on the long-run Phillips curve, we can conclude that expected inflation plays 
   A) no role in determining inflation. 
   B) a minor role in determining inflation. 
   C) an important role in determining inflation. 
   D) an uncertain role in determining inflation. 

10. Inflation hurts 
    A) everyone. 
    B) those on fixed incomes. 
    C) those whose incomes aren't fixed. 
    D) no one.
Use the following to answer question 11:

11. Refer to the graph above. If expected inflation is zero and the government employs an expansionary policy to reduce the rate of unemployment from 5.5 percent to 4 percent, A) inflation will increase from 0 to 6 percent. B) inflation will fall from 6 to 0 percent. C) inflation will not be affected. D) expected inflation will increase from 0 to 6 percent in the short run.

12. Low inflation boosts an economy’s long-term growth prospects for all of the following reasons except A) it reduces price uncertainty. B) it reduces the costs of trying to avoid inflation. C) it makes it easier for businesses to enter into contracts. D) it reduces the unemployment rate consistent with potential output.

13. If the money supply is 500 and the velocity is 6, then real GDP A) is 83.33. B) is 500. C) is 3000. D) cannot be determined.

14. The government of Uzbekistan follows an expansionary fiscal policy but a stable monetary policy. According to the short-run Phillips curve, inflation will A) go up and so will unemployment. B) go up and unemployment will go down. C) remain steady and unemployment will go up. D) remain steady and unemployment will go down.
15. Rational expectations, strictly speaking, are based on
A) the predictions of economic models.
B) what has happened in the past.
C) models of human behavior.
D) the continuation of past trends.

16. Which of the following factors does NOT help to explain the "Goldilocks economy" experienced during the late 1990s?
A) Increased concerns about job security and reduced concerns about real wages.
B) Rising oil prices.
C) Increased competition.
D) Unexpectedly large increases in productivity.

17. Suppose the government adopts a policy that attempts to keep output at or above potential output. Advocates of the quantity theory of money are likely to
A) unconditionally support such a policy.
B) support such a policy as long as the use of monetary policy is required.
C) support such a policy as long as the use of fiscal policy is required.
D) oppose such a policy.

Use the following to answer question 18:

![Graph showing Unemployment Rate vs Inflation with three Phillips Curves (PC1, PC2, PC3) and points A, B, C, D on LP]

- PC1 (e = 0)
- PC2 (e = 6)
- PC3 (e = 12)
18. Refer to the graph above. If expected inflation is 6 percent, the economy will be in long-run equilibrium at point
A) A.
B) B.
C) C.
D) D.

19. Extrapolative expectations are based on
A) the predictions of economic models.
B) what has happened in the past.
C) the best information available to people.
D) the continuation of past trends.

20. Suppose inflation in 1998, 1999, and 2000 was 2 percent in each year and that the economy operated at potential output in each year. Now suppose that the government announces that it will pursue much more expansionary monetary and fiscal policies in 2001. If people form their expectations rationally and if the government’s policy announcement is credible, then expected inflation for 2001
A) will not change.
B) will rise.
C) will fall.
D) could rise or fall.

21. If productivity growth is 5 percent and nominal wages increase at a rate of 6 percent, then inflation will most likely be
A) -11 percent.
B) -1 percent.
C) 1 percent.
D) 11 percent.

22. If inflation is 20 percent and your wage has increased 20 percent, your real income has
A) risen 20 percent.
B) risen 10 percent.
C) fallen 20 percent.
D) remained constant.
23. The short-run Phillips curve suggests that an increase in the rate of inflation will accompany
A) a decrease in the unemployment rate.
B) an increase in the unemployment rate.
C) an increase in expected inflation.
D) a decrease in expected inflation.

24. An incomes policy
A) guarantees a minimum level of income to every person.
B) is a laissez-faire approach.
C) places pressure on individuals and businesses to hold down their nominal wages and prices.
D) places pressure on individuals and businesses to increase productivity.

25. According to the quantity theory of money, if the monetary authorities allow the money supply
to grow at a rate of 6 percent in an economy that is growing by 2 percent in real terms, then
inflation will be
A) 2 percent.
B) 4 percent.
C) 6 percent.
D) 8 percent.

26. If expected inflation increases, the same level of unemployment will be associated with
A) a higher rate of inflation.
B) a lower rate of inflation.
C) the same rate of inflation.
D) no inflation.

27. Suppose inflation in 1997, 1998, and 1999 was 4 percent, 3 percent, and 2 percent, respectively.
If people use only this information and expect inflation to be 3 percent as a result, then their
expectations are best described as
A) adaptive.
B) rational.
C) extrapolative.
D) imperfect.
Use the following to answer question 28:

![Diagram showing the relationship between inflation and unemployment rate]

28. Refer to the graph above. The relationship represented in the figure is called
A) a labour supply curve.
B) a labour demand curve.
C) a short-run Phillips curve.
D) a long-run Phillips curve.

29. On the short-run Phillips curve, the expectations of inflation,
A) are rising.
B) are falling.
C) remain constant.
D) are rising or falling depending on how the economy is performing.

30. By issuing large quantities of money, a country can finance a budget deficit at
A) no cost.
B) an acceptable cost in terms of higher inflation.
C) the cost of higher inflation rates that may or may not be acceptable.
D) the cost of very high inflation rates that are always unacceptable.

31. If productivity growth is 2 percent and inflation is 5 percent, on average nominal wage increases will be
A) 2 percent.
B) 3 percent.
C) 5 percent.
D) 7 percent.
32. According to the quantity theory of money, persistent inflation can only be caused by
A) a low rate of unemployment.
B) money supply growth that exceeds real GDP growth.
C) a high rate of unemployment.
D) a continually growing government deficit.

33. According to the institutionalist theory of inflation, if labour markets become more competitive, inflation
A) would not change since inflation is the product of changes in the money supply.
B) would increase as wages were bid up.
C) would decrease as wages were bid down.
D) might increase or decrease depending on the number of insiders and outsiders.

34. The short-run Phillips curve tells us in theory what combinations of
A) inflation and output are possible.
B) the price level and output are possible.
C) inflation and unemployment are possible when expectations of inflation are constant.
D) the price level and unemployment are possible when expectations of inflation are constant.

35. Suppose velocity is constant but real GDP is not independent of the money supply. If this is the case, a 10 percent increase in the money supply will
A) raise inflation by 10 percent.
B) raise inflation by less than 10 percent.
C) raise inflation by more than 10 percent.
D) have an unpredictable effect on inflation.

36. Which of the following statements is not consistent with the quantity theory of money?
A) Monetary policy should not be used in the short run to try to steer the economy.
B) The money supply should be increased by a predetermined percentage, say 3 percent per year, to allow for changes in productivity and growth.
C) Expansionary monetary policy is the only way to prevent a mild recession from developing into a serious recession or depression.
D) A prescribed monetary policy should be followed regardless of what's happening in the economy.
37. Stagflation is the combination of
A) high and accelerating inflation and low unemployment.
B) high and accelerating inflation and high unemployment.
C) low and decelerating inflation and high unemployment.
D) low and decelerating inflation and low unemployment.

38. At each point on the long-run Phillips curve, expected inflation is
A) lower than actual inflation.
B) higher than actual inflation.
C) equal to actual inflation.
D) unrelated to actual inflation.

39. If an economist focuses on social pressures in his or her discussion of inflation, that economist likely supports the
A) quantity theory of inflation.
B) institutionalist theory of inflation.
C) insider theory of inflation advocate.
D) outsider theory of inflation advocate.

Use the following to answer question 40:

![Graph showing the long-run Phillips curve with points A, B, and C labeled. The axes are labeled 'Unemployment rate' on the horizontal axis and 'Inflation' on the vertical axis. Point A is at (4, 9), point B is at (5.5, 6), and point C is at (7.5, 3).]

40. Refer to the graph above. Suppose an economy begins at point B but then adopts an expansionary monetary policy. In the long run, this policy would most likely
A) raise inflation to 9 percent, but leave unemployment at 5.5 percent.
B) lower inflation to 3 percent, but leave unemployment at 5.5 percent.
C) raise inflation to 9 percent, but lower unemployment to 4 percent.
D) lower inflation to 3 percent, but raise unemployment to 7.5 percent.
41. According to quantity of money theorists, the policy that is most likely to produce high levels of growth is
A) an expansionary monetary policy.
B) an expansionary fiscal policy.
C) a policy that produces price stability.
D) a policy that produces very low levels of unemployment.

42. Unemployment will be at a level consistent with potential output when actual inflation is
A) 3 percent and expected inflation is 3 percent.
B) 3 percent and expected inflation is 0 percent.
C) 0 percent and expected inflation is 3 percent.
D) 6 percent and expected inflation is 3 percent.

43. Unexpectededly high inflation hurts
A) lenders.
B) borrowers.
C) both lenders and borrowers.
D) neither lenders nor borrowers.

44. According to advocates of the quantity theory of money, government attempts to maintain a high level of output are likely to:
A) be successful.
B) generate a low rate of inflation.
C) generate considerable inflation, but not enough to really hurt the economy.
D) undermine the economy's future growth by producing a high level of inflation.

45. If an individual expects 4 percent inflation and wants a 2 percent real increase in his wage, he'll desire a pay-raise of
A) 0 percent.
B) 2 percent.
C) 4 percent.
D) 6 percent.

46. Unemployment rates above the target rate of unemployment lead to
A) an upward shift of the short-run Phillips curve.
B) a downward shift of the short-run Phillips curve.
C) a rightward shift of the long-run Phillips curve.
D) a leftward shift of the long-run Phillips curve.
47. The central banks of developing and transitional countries
A) issue large quantities of money because they want to reduce inflation.
B) issue large quantities of money because they want to cause hyperinflation.
C) know that issuing large quantities of money will cause inflation.
D) believe that they can issue large quantities of money without causing inflation.

Use the following to answer question 48:

![Graph showing the relationship between inflation and unemployment rate.](image)

48. Refer to the graph above. Expectations of inflation at point B are
A) 1 percent.
B) 2 percent.
C) 3 percent.
D) unknown.

49. If the growth rate of real GDP is 3 percent and the growth rate of the money supply is 5 percent, an advocate of the quantity theory of money would predict a
A) 2 percent inflation.
B) 5 percent inflation.
C) 8 percent inflation.
D) 15 percent inflation.

50. The wage and price controls instituted in Canada in the 1970's were an example of
A) fiscal policy.
B) an incomes policy.
C) a market inflation policy.
D) monetary policy.
Answer Key

1. C  
   **Response:**  
   The quantity theory of money argues that prices can only fall if the money supply fails to grow fast enough to keep pace with real GDP growth.

2. C  
   **Response:**  
   Quantity theory advocates argue that in the long run a non-inflationary environment is conducive to growth and thus there is a long-run tradeoff between inflation and growth.

3. B  
   **Response:**  
   As the economy moves to the left of the long-run Phillips curve, unemployment falls beneath the target rate, putting upward pressure on wages and eventually prices.

4. C  
   **Response:**  
   According to the quantity theory of exchange, if real output and velocity are constant, then changes in the price level will be proportional to changes in the money supply.

5. A  
   **Response:**  
   See the discussion of the Goldilocks economy in the text.

6. D  
   **Response:**  
   This follows directly from the quantity theory of money.

7. A  
   **Response:**  
   This conclusion follows from the equation of exchange and the assumptions that velocity is constant and real output is autonomous.

8. D  
   **Response:**  
   The last half of the 1990s was a period of low inflation and low unemployment which is not consistent with their Phillips curve story. Economist's explanation of this period centered on the higher than expected increases in productivity.

9. C  
   **Response:**  
   Along the long-run Phillips curve, expected inflation equals actual inflation.

10. B  
    **Response:**  
    People on fixed incomes are hurt by inflation because their incomes do not rise to keep pace with inflation.

11. A  
    **Response:**  
    Expansionary policy will cause a movement along the short-run Phillips curve to the left assuming expected inflation is constant.

12. D  
    **Response:**  
    The target rate of unemployment is determined by supply side factors that are not related to inflation.

13. D
The nominal GDP(PQ) can be determined but the real GDP cannot be determined in the absence of the price level.

14. B
Response:
Unemployment should go down because of the expansionary fiscal policy and this decrease in unemployment will increase inflation.

15. A
Response:
Although some economists believe many expectations are rational, the technical definition of rational expectations are expectations based on economic results.

16. B
Response:
Rising oil prices should boost inflation and increase unemployment, the opposite of what Canada experienced during this period.

17. D
Response:
Quantity theorists would oppose such a policy because it runs the risk of triggering inflation that would then undermine the economy's long-term prospects.

18. C
Response:
Long-run equilibrium occurs when expected inflation equals actual inflation. This is true at point C on the long-run Phillips curve because both actual and expected inflation equal 6 percent at this point.

19. D
Response:
See the definition of extrapolative expectations in the text.

20. B
Response:
Economic models indicate that more expansionary monetary and fiscal policies tend to increase inflation. If people form their expectations rationally, they will know this and will increase their inflationary expectations accordingly.

21. C
Response:
The inflation rate is roughly equal to the difference between the rate of change in nominal wages and productivity growth.

22. D
Response:
If all prices have risen equally, relative prices have remained constant.

23. A
Response:
The Phillips curve suggests that there is a tradeoff between inflation and unemployment. The higher the unemployment rate, the lower the inflation and vice versa.

24. C
Response:
An incomes policy is a policy that places direct pressure on individuals to hold down their nominal prices and wages.

25. B
Response:
Since velocity is assumed constant in the quantity theory, nominal GDP grows at the same rate as the money supply. Since real GDP rises by 2 percent in this case, nominal GDP can rise by 6 percent only if the price level increases by 4 percent.

26. A
Response:
If everyone expects a higher inflation, each will raise his or her price while supplying the same amount of goods or labour. Thus, the same level of unemployment will be associated with a higher rate of inflation.

27. A
Response:
Adaptive expectations rely only on the past behavior of a variable and do not infer trends or projections. Expectations are most likely to be adaptive here because the expected inflation rate equals the average inflation between 1997 and 1999.

28. C
Response:
See the graphical representation of a short-run Phillips curve in the text.

29. C
Response:
The short-run Phillips curve shows the trade off between inflation and unemployment when expectations of inflation are constant.

30. C
Response:
Central bankers know the relationship between money supply growth and inflation but also know that the alternative of not financing the deficit may be worse in some cases.

31. D
Response:
Nominal wage increases are the sum of inflation and productivity growth.

32. B
Response:
The quantity theory of money argues that prices can only increase if the money supply grows more rapidly than real GDP.

33. C
Response:
Institutionalist theories of inflation are based on imperfectly competitive markets. The greater the level of competition, the smaller wage increases are and hence the lower is inflation.

34. C
Response:
See the definition of the short-run Phillips curve in the text.

35. D
Response:
If real GDP is not independent of the money supply as quantity theorists assume, then changes in the money supply can affect real output, making it impossible to predict what the consequences for inflation will be in this case.

36. C
Response:
Advocates of the quantity theory of money believe in a monetary rule. Using expansionary monetary policy to affect economic activity is not consistent with such a rule.

37. B
Response:
The term stagflation arose in the 1970s to describe the combination of high and accelerating inflation and high unemployment.

38. C  
Response:  
Along the long-run Phillips cure, expected inflation equals actual inflation.

39. B  
Response:  
The book describes two general theories of inflation; social pressures definitely fit with the Institutionalist theory. One type of Institutionalist theory of inflation is the insider/outsider model, but that is not presented as a choice.

40. A  
Response:  
Expansionary policy initially moves the economy to point A, but as inflation expectations adjust, the short-run Phillips curve shifts up and the economy returns to 5.5 percent unemployment at the higher 9 percent inflation.

41. C  
Response:  
Such a policy produces the best environment for growth because inflation undermines the economy's long-term growth prospects according to quantity theorists.

42. A  
Response:  
Unemployment is at its target rate when inflation and expected inflation are equal.

43. A  
Response:  
Lenders receive a lower real return on their loans in this case than they expected.

44. D  
Response:  
Inflation undermines growth by creating uncertainty, by making it more difficult for businesses to enter into contracts, and by increasing the costs of avoiding inflation.

45. D  
Response:  
To keep his wage constant, he'll have to raise his wage by 4 percent. To increase his real wage, he must add 2 percent to the 4 percent.

46. B  
Response:  
Unemployment climbs above the natural rate when expected inflation is above actual inflation. Once inflationary expectations adjust downward, inflation drops at each unemployment rate, causing the short-run Phillips curve to shift down.

47. C  
Response:  
Central bankers know the relationship between money supply growth and inflation.

48. C  
Response:  
Expectations of inflation equal actual inflation at any point on the long-run Phillips curve.

49. A  
Response:  
The quantity theory of money argues that inflation is the difference between the growth rate of the money supply and the growth rate of real GDP.

50. B  
Response:  
An incomes policy is a policy that places direct pressure on individuals to hold down their nominal prices and wages.