MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) If efficiency wage theory is valid, we would expect a relatively high premium over the reservation wage when:
   A) workers cannot be easily monitored.
   B) the job requires very little training.
   C) the unemployment rate is high.
   D) workers have few other options for employment in the area.
   E) all of the above

2) The natural level of employment will increase when which of the following occurs?
   A) an increase in the markup of prices over costs
   B) an increase in the actual unemployment rate
   C) an increase in unemployment benefits
   D) all of the above
   E) none of the above

3) Suppose workers and firms expect the overall price level to increase by 4%. Given this information, we would expect that:
   A) the nominal wage will increase by more than 4%.
   B) the real wage will increase by 4%.
   C) the nominal wage will increase by exactly 4%.
   D) the nominal wage will increase by less than 4%.

4) For this question, assume that \( Y = N \). Based on our understanding of the labor market model presented in Chapter 6, we know that a reduction in the markup will cause:
   A) an increase in the natural level of output.
   B) a reduction in the natural level of output.
   C) a reduction in the natural level of employment.
   D) no change in the natural level of output.

5) In the aggregate supply relation, an increase in current output causes:
   A) a shift of the aggregate supply curve.
   B) an increase in the mark-up over labor costs.
   C) an increase in the labor force.
   D) an increase in the current price level.
   E) a change in the expected price level this year.

6) The aggregate demand curve will shift to the right when which of the following occurs?
   A) a decrease in the price level
   B) a reduction in consumer confidence
   C) a decrease in taxes
   D) a decrease in the money supply
   E) a rise in the price level
7) In the aggregate demand relation, a reduction in the price level causes output to increase because of its effect on:  
   A) the expected price level.  
   B) government spending.  
   C) firms’ markup over labor costs.  
   D) the nominal wage.  
   E) the interest rate.

8) An reduction in the money supply will, in the short run, cause:  
   A) the AD curve to shift leftward.  
   B) the price setting curve to shift down.  
   C) the wage setting curve to shift downward.  
   D) the LM curve to shift downward.  
   E) the wage setting curve to shift upward.

9) Which of the following events will not change the composition of output in the medium run?  
   A) a reduction in consumer confidence  
   B) an increase in government spending  
   C) an increase in taxes  
   D) an increase in the desire to save  
   E) an increase in the money supply

10) An increase in government spending will, in the medium run, cause no change in:  
   A) the price level.  
   B) the interest rate.  
   C) unemployment.  
   D) all of the above  
   E) none of the above

11) If u > u_n, we know with certainty that:  
   A) Y > Y_n.  
   B) P > P_e.  
   C) P = P_e.  
   D) P < P_e.

12) As product markets become less competitive and the markup rises, we would expect which of the following to occur?  
   A) no change in the real wage in the medium run  
   B) a reduction in the real wage in the medium run  
   C) a reduction in the interest rate in the medium run  
   D) no change in output in the medium run  
   E) a decrease in the aggregate price level

13) When inflation has been persistent, low unemployment rates will likely be associated with:  
   A) high natural rates of unemployment.  
   B) increases in the inflation rate.  
   C) low natural rates of unemployment.  
   D) low but stable rates of inflation.  
   E) high but stable rates of inflation.
14) Suppose a worker's nominal wage is indexed. To which of the following variables is the nominal wage most likely indexed?
   A) the average wage in the country
   B) GDP
   C) unemployment
   D) productivity
   E) the price level

15) The original Phillips curve relation vanished in the 1970s because:
   A) individuals assumed the expected price level for the current year would be equal to the actual price level from the previous year.
   B) an increase in oil prices caused a decrease in the markup in wages over labor costs (m).
   C) monetary policy became contractionary.
   D) fiscal policy became contractionary.
   E) individuals changed the way they formed expectations of inflation.

16) Which of the following will tend to occur as a result of a reduction in the proportion of a country's workers who have indexed wages?
   A) the unemployment rate will be relatively high.
   B) the inflation rate will be relatively low.
   C) a given change in the unemployment rate will cause a relatively smaller change in the inflation rate.
   D) the unemployment rate will be relatively low.
   E) none of the above

17) Which of the following does NOT represent a "labor market rigidity" to which critics refer when discussing unemployment in Europe?
   A) a high degree of employment protection
   B) relatively high minimum wages
   C) restrictive monetary and fiscal policies
   D) generous unemployment insurance
   E) none of the above

18) The data suggest that in the European Union countries, the natural rate of unemployment
   A) has steadily declined over the past two decades
   B) has become less "natural," since it is now almost entirely determined by the policies of a few large corporations
   C) is no longer a relevant concept
   D) is now higher than in the U.S
   E) will soon exceed the percentage of the labor force that is working

19) Suppose policy makers underestimate the natural rate of unemployment. In situations like these, policy makers will likely implement policies that result in
   A) a steadily decreasing inflation rate.
   B) overly contractionary monetary and fiscal policy.
   C) more unemployment than necessary.
   D) an unemployment rate that is "too high."
   E) a higher inflation rate than necessary.
The Phillips curve is given by \( \pi_t - \pi_t^e = 0.3 - 5u_t \) where \( \pi_t^e = 0\pi_{t-1} \). Suppose inflation in year \( t-1 \) is 0. In year \( t \), the authorities decide to keep the unemployment rate at 4% forever.

20) Suppose \( \theta = 0 \). The inflation rate for years \( t, t+1 \) and \( t+2 \) is
- A) 10%, 20% and 30%
- B) 4%, 8% and 12%
- C) 0%, 10% and 10%
- D) 4%, 4% and 4%
- E) 10%, 10% and 10%

21) Suppose \( \theta = 1 \) and half the workers have indexed labor contracts. The inflation rate for years \( t, t+1 \) and \( t+2 \) is:
- A) 10%, 10% and 10%
- B) 20%, 40% and 60%
- C) 10%, 20% and 40%
- D) 4%, 8% and 12%

22) The “Lucas critique” is that:
- A) increasing unemployment to reduce inflation is more costly to society than economists traditionally think.
- B) policy changes affect expectations, which in turn affect the impact of the policy.
- C) in the medium run, output always returns to its natural level.
- D) macro data based on government surveys is inaccurate.
- E) policy changes can affect the economy only when they are expected.
ESSAY. Write your answer in the space provided or on a separate sheet of paper.

1. Assume the economy is at its natural level of output. Using the AS–AD and IS–LM model show the effects of an increase in money supply on the AD, AS, IS and LM curves in the short run and medium run.
   a) Explain the effects on output, consumption, investment, the interest rate, and the price level both in the short run and the medium run.
   b) What do we mean by money neutrality and is this a phenomenon that we observe here?