Exam

Name_____

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

1) Which of the following factors is not believed to affect output in the long run? 1) _____
    A) Monetary policy.
    B) The stock of capital.
    C) Technology.
    D) Education system.
    E) The saving rate.

Answer: A
Explanation: A)
               B)
               C)
               D)
               E)

2) If nominal GDP rises from \$50 trillion to \$58 trillion, while the GDP deflator rises from 3.0 to 3.5, the *percentage* change in real GDP is: 2) _____
    A) -10%.   B) 0%.   C) 20%.   D) 10%.   E) 9.1%.

Answer: B
Explanation: A)
               B)
               C)
               D)
               E)

The next question(s) refer to the following data:

Suppose a country using the Australian system of unemployment statistics has 300 million people, of whom 200 million are working age. Of these 200 million, 80 million have jobs. Of the remainder: 40 million are actively searching for jobs; 40 million would like jobs but are *not* searching; and 40 million do *not* want jobs at all.

3) Refer to the information above. The official unemployment rate is: 3) _____
    A) 0.43.   B) 0.13.   C) 0.33.   D) 0.53.   E) 0.23.

Answer: C
Explanation: A)
               B)
               C)
               D)
               E)

4) An individual is said to be a discouraged worker if he or she:

    A) wants to work, and is actively searching for a job.

    B) is working in jobs she/he is not suited for.

    C) is working part time, but would prefer a full time job.

    D) is working, but prefers not to work.

    E) wants to work, but has given up searching for a job.

4) _____

Answer: E

Explanation: A)

                    B)

                    C)

                    D)

                    E)

5) Fluctuations refer to:

    A) changes in stock prices.

    B) alternating periods of expansions and recessions.

    C) changes in bond prices.

    D) deviations of stock prices from their fundamental values.

    E) movements in prices.

5) _____

Answer: B

Explanation: A)

                    B)

                    C)

                    D)

                    E)

6) The prices for which of the following goods are included in *both* the GDP deflator *and* the consumer price index?

    A) Goods bought by domestic households.

    B) Goods bought by the foreign government.

    C) Goods bought by foreign households.

    D) Goods bought by the domestic government.

    E) Goods bought by firms.

6) _____

Answer: A

Explanation: A)

                    B)

                    C)

                    D)

                    E)

7) Which of the following expressions represents nominal GDP?

    A) $\$Y_t/P_t$ B) Y_t C) P_tY_t D) $Y_t + P_t$ E) Y_t/P_t

7) _____

Answer: C

Explanation: A)

                    B)

                    C)

                    D)

                    E)

8) By 2011, labour income in Australia accounted for approximately what share of GDP?   8) _____

    A) 25%.   B) 65%.   C) 35%.   D) 45%.   E) 55%.

Answer: E

Explanation: A)
                  B)
                  C)
                  D)
                  E)

9) Which one of the following represents a recession?   9) _____

    A) An increase in the unemployment rate.
    B) A decrease in stock prices.
    C) A decrease in bond prices.
    D) A decrease in output.
    E) A simultaneous decrease in economic activity and increase in inflation.

Answer: D

Explanation: A)
                  B)
                  C)
                  D)
                  E)

10) The Okun's law is an empirical relation which states that: 10) _____

    A) if output growth is low, unemployment will decrease.
    B) if output level is low, unemployment will increase.
    C) if output growth is low, unemployment will increase.
    D) if output growth is high, unemployment will increase.
    E) if output level is high, unemployment will decrease.

Answer: C

Explanation: A)
                  B)
                  C)
                  D)
                  E)

11) Changes in aggregate output in the medium run are determined primarily by: 11) _____

    A) fiscal policy.
    B) monetary policy.
    C) income and wages policy.
    D) demand factors.
    E) supply factors.

Answer: E

Explanation: A)
                  B)
                  C)
                  D)
                  E)

The next question(s) refer to the following data:

Suppose a country using the Australian system of unemployment statistics has 300 million people, of whom 200 million are working age. Of these 200 million, 80 million have jobs. Of the remainder: 40 million are actively searching for jobs; 40 million would like jobs but are *not* searching; and 40 million do *not* want jobs at all.

12) Refer to the information above. The labour force is: 12) _____
   A) 120 million.
   B) 80 million.
   C) 200 million.
   D) 40 million.
   E) 160 million.

   Answer: A
   Explanation: A)
                  B)
                  C)
                  D)
                  E)

13) In a given year, suppose a company spends $300 million on intermediate goods and $500 million   13) _____
   on wages, with no other expenses. Also assume that its total sales are $800 million. The value added
   by this company equals:
   A) $300 million.
   B) $500 million.
   C) $200 million.
   D) $100 million.
   E) $400 million.

   Answer: B
   Explanation: A)
                  B)
                  C)
                  D)
                  E)

14) A deflation refers to a situation where: 14) _____
   A) the inflation rate is increasing at a slower rate.
   B) both inflation and the unemployment rate are increasing.
   C) the inflation rate is falling.
   D) both inflation and the unemployment rate are falling.
   E) the inflation rate is negative.

   Answer: E
   Explanation: A)
                  B)
                  C)
                  D)
                  E)

15) Which of the following pairs of variables are explained by the Okun's law? 15) _____
    A) The money growth rate and the inflation rate.
    B) The money growth rate and the change in output growth rate.
    C) The inflation rate and the unemployment rate.
    D) The growth rate of output and the change in the unemployment rate.
    E) The inflation rate and the change in the unemployment rate.

    Answer: D
    Explanation: A)
                    B)
                    C)
                    D)
                    E)

16) Pure inflation refers to: 16) _____
    A) a faster proportional increase in pension only.
    B) a faster proportional increase in prices only.
    C) unequal proportional increases in wages and prices.
    D) a faster proportional increase in wages only.
    E) a faster proportional increase in all wages and prices.

    Answer: E
    Explanation: A)
                    B)
                    C)
                    D)
                    E)

17) In Australia, someone is classified as unemployed if he or she: 17) _____
    A) does not have a job, and has been looking for work in the last four weeks.
    B) does not have a job.
    C) does not have a job, and is collecting unemployment benefit.
    D) does not have a job, or else has a job but is looking for a different one while continuing to
        work.
    E) does not have a job, has recently looked for work, and is collecting unemployment benefit.

    Answer: A
    Explanation: A)
                    B)
                    C)
                    D)
                    E)

18) Which of the following does not represent real GDP? 18) _____
    A) GDP in (chained) 2009 dollars.
    B) GDP in current dollars.
    C) GDP in constant dollars.
    D) GDP adjusted for inflation.
    E) GDP in terms of goods.

    Answer: B
    Explanation: A)
                    B)
                    C)
                    D)
                    E)

19) When using the income approach to measure GDP, the largest share of GDP in advanced countries   19) _____
generally consists of:
   A) capital income.
   B) labour income.
   C) interest income.
   D) profit income.
   E) indirect taxes.

Answer: B
Explanation: A)
                    B)
                    C)
                    D)
                    E)

20) A firm's value added equals: 20) _____
   A) its revenue minus all of its costs.
   B) its revenue minus its wages.
   C) its revenue minus its cost of intermediate goods.
   D) its revenue minus its wages and the cost of intermediate goods.
   E) its revenue minus its wages and profit.

Answer: C
Explanation: A)
                    B)
                    C)
                    D)
                    E)

21) The GDP deflator provides a measure of which of the following?   21) _____
   A) Real GDP divided by the aggregate price level.
   B) The ratio of nominal GDP to real GDP.
   C) The ratio of GDP to the size of the population.
   D) The ratio of GDP to the number of workers employed.
   E) The price of a typical consumer's basket of goods.

Answer: B
Explanation: A)
                    B)
                    C)
                    D)
                    E)

22) Assume that 2009 is the base year. Given macroeconomic conditions in Australia over the past several decades, we know that:
    A) real GDP is always larger than nominal GDP for the period 1960 to 2008.
    B) real GDP and nominal GDP would be equal for the entire period.
    C) real GDP is smaller than nominal GDP from 1998 to 2002.
    D) real GDP is larger than nominal GDP from 2006 to 2011.
    E) nominal GDP is always larger than real GDP during the past several decades.

22) _____

Answer: A
Explanation: A)
                B)
                C)
                D)
                E)

23) By 2011, capital income in Australia accounted for approximately what share of GDP?

23) _____

    A) 25%.   B) 45%.   C) 65%.   D) 35%.   E) 55%.

Answer: B
Explanation: A)
                B)
                C)
                D)
                E)

24) Deflation generally occurs when which of the following occurs?
    A) Real GDP does not change.
    B) The consumer price index decreases.
    C) Nominal GDP does not change.
    D) The consumer price index is greater than the GDP deflator.
    E) The rate of inflation falls, for example, from 4% to 3%.

24) _____

Answer: B
Explanation: A)
                B)
                C)
                D)
                E)

25) Changes in aggregate output in the long run are determined primarily by:
    A) supply factors.
    B) demand factors.
    C) technological progress.
    D) monetary policy.
    E) fiscal policy.

25) _____

Answer: C
Explanation: A)
                B)
                C)
                D)
                E)

26) Which of the following pairs of variables are explained by the Phillips curve? 26) _____
  A) The inflation rate and the change in the unemployment rate.
  B) The change in inflation and the unemployment rate.
  C) The change in inflation and the change in the unemployment rate.
  D) The money growth rate and the inflation rate.
  E) The money growth rate and the wage rate.

Answer: B
Explanation: A)
  B)
  C)
  D)
  E)

The next question(s) refer to the following data:

Suppose a country using the Australian system of unemployment statistics has 300 million people, of whom 200 million are working age. Of these 200 million, 80 million have jobs. Of the remainder: 40 million are actively searching for jobs; 40 million would like jobs but are *not* searching; and 40 million do *not* want jobs at all.

27) Macroeconomists are concerned about unemployment because changes in the unemployment rate 27) _____
  provide information about:
  A) the welfare of those who are unemployed.
  B) the level of support payment required from the government.
  C) how efficiently the economy is utilising its human resources.
  D) Both A and B.
  E) Both A and C.

Answer: D
Explanation: A)
  B)
  C)
  D)
  E)

28) Pure inflation occurs when: 28) _____
  A) the GDP deflator prices rise faster than the CPI prices.
  B) all prices and nominal wages rise by the same percentage.
  C) all prices rise faster than nominal wages.
  D) nominal wages rise faster than all prices.
  E) the GDP deflator and consumer price index rise by the same percentage.

Answer: B
Explanation: A)
  B)
  C)
  D)
  E)

29) During the late 1990s, Japan experienced decreases in the GDP deflator. Given this information, we know with certainty that: 29) _____

    A) real GDP remained the same and the price level decreased during these periods.
    B) real GDP fell during these periods.
    C) the price level in Japan decreased during these periods.
    D) both real GDP and the price level decreased during these periods.
    E) real GDP did not change during these periods.

Answer: C
Explanation: A)
                    B)
                    C)
                    D)
                    E)

30) A very low level of unemployment can potentially lead to what kind of problem? 30) _____

    A) Overheated demand.
    B) Labour shortages.
    C) Increase in inflation.
    D) All of the above.
    E) None of the above.

Answer: D
Explanation: A)
                    B)
                    C)
                    D)
                    E)

31) A decrease in the unemployment rate will generally cause which of the following to occur? 31) _____

    A) A decrease in the size of not-in-the-labour-force pool.
    B) A decrease in the number of young workers.
    C) A decrease in the number of employed workers.
    D) An increase in the labour force participation rate.
    E) A decrease in the number of discouraged workers.

Answer: D
Explanation: A)
                    B)
                    C)
                    D)
                    E)

32) Hedonic pricing is: 32) _____

    A) the process of pricing individual characteristics of a good or service.
    B) the way that luxury goods are priced in a market economy.
    C) the tendency for the inflation rate to rise by greater and greater amounts.
    D) the tendency for nominal GDP to rise when the price level rises.
    E) the process of translating nominal GDP into real GDP.

Answer: A
Explanation: A)
                    B)
                    C)
                    D)
                    E)

33) Suppose nominal GDP in 2011 increased by 5% (over its previous level in 2010). Given this information, we know with certainty that:
    A) real GDP increased during 2010.
    B) either the price level or real GDP increased during 2010.
    C) both the price level and real GDP increased during 2010.
    D) the price level increased during 2010.
    E) more information is needed to answer this question.

33) _____

Answer: B
Explanation: A)
                      B)
                      C)
                      D)
                      E)

34) Hedonic pricing is used to:
    A) obtain chain-weight indexes.
    B) measure the rate of change in real GDP.
    C) calculate the difference between nominal GDP and real GDP.
    D) price the characteristics of a good or service.
    E) convert nominal values to real values.

34) _____

Answer: D
Explanation: A)
                      B)
                      C)
                      D)
                      E)

The next question(s) refer to the following data:

Suppose a country using the Australian system of unemployment statistics has 300 million people, of whom 200 million are working age. Of these 200 million, 80 million have jobs. Of the remainder: 40 million are actively searching for jobs; 40 million would like jobs but are *not* searching; and 40 million do *not* want jobs at all.

35) Refer to the information above. The labour force participation rate is:
    A) 0.2.   B) 0.6.   C) 0.3.   D) 0.8.   E) 0.4.

35) _____

Answer: B
Explanation: A)
                      B)
                      C)
                      D)
                      E)

36) Policy makers can become concerned if the unemployment rate is too low because:
    A) output will decrease.
    B) the economy will run into labour shortages.
    C) an exchange rate crisis will occur.
    D) stock prices will fall.
    E) employment will fall.

Answer: B

Explanation: A)
            B)
            C)
            D)
            E)

37) The Phillips curve is an empirical relation which states that:
    A) when unemployment becomes high, this leads to downward pressure on bond prices.
    B) when unemployment becomes high, this leads to upward pressure on inflation.
    C) when unemployment becomes high, this leads to downward pressure on stock prices.
    D) when unemployment becomes low, this leads to downward pressure on inflation.
    E) when unemployment becomes low, this leads to upward pressure on inflation.

Answer: E

Explanation: A)
            B)
            C)
            D)
            E)

38) Changes in aggregate output in the short run are caused primarily by:
    A) demand factors.
    B) population growth.
    C) capital accumulation.
    D) supply factors.
    E) technology.

Answer: A

Explanation: A)
            B)
            C)
            D)
            E)

39) Consider this current information in Australia: 200 million people are working, 30 million are not working but are looking for work, and 60 million are not working and have given up looking for work. The official unemployment rate for that month is:
    A) 10.0%.   B) 30.0%.   C) 13.0%.   D) 7.0%.   E) 26.0%.

Answer: C

Explanation: A)
            B)
            C)
            D)
            E)

40) When nominal GDP falls for a given period, we know with certainty that: 40) _____
    A) either real output or the price level has decreased.
    B) the price level has decreased.
    C) real output has increased and the price level has decreased.
    D) real output and the price level have both decreased.
    E) real output has decreased.

Answer: A
Explanation: A)
                B)
                C)
                D)
                E)

41) One of the reasons macroeconomists have concerns about inflation is that inflation causes: 41) _____
    A) real GDP to exceed nominal GDP.
    B) wages to rise as fast as prices.
    C) real GDP to rise.
    D) nominal GDP to fall.
    E) relative prices to change.

Answer: E
Explanation: A)
                B)
                C)
                D)
                E)

42) Which one of the following represents an expansion?   42) _____
    A) An increase in stock prices.
    B) An increase in output.
    C) An increase in bond prices.
    D) An increase in the unemployment rate.
    E) A simultaneous increase in economic activity and decrease in inflation.

Answer: B
Explanation: A)
                B)
                C)
                D)
                E)

43) Prices for which of the following are included in the GDP deflator, but not included in the   43) _____
consumer price index?
    A) Intermediate goods and services.
    B) Consumption of services.
    C) Consumption of goods.
    D) Firms' purchases of new equipment.
    E) Purchases of imported goods.

Answer: D
Explanation: A)
                B)
                C)
                D)
                E)

44) GDP in current dollars is equivalent to which of the following?   44) _____
    A) GDP in constant dollars.
    B) GDP in 2009 dollars.
    C) GDP in terms of goods.
    D) Real GDP.
    E) Nominal GDP.

Answer: E
Explanation: A)
                 B)
                 C)
                 D)
                 E)

45) The labour force in Australia is defined as: 45) _____
    A) the total number of individuals who are 18 years old and older, but not retired.
    B) the entire population.
    C) the sum of the total number of individuals who are employed, unemployed, and are
       discouraged workers.
    D) the total number of individuals who are employed.
    E) the sum of the total number of individuals who are employed and unemployed.

Answer: E
Explanation: A)
                 B)
                 C)
                 D)
                 E)

46) Between 2004 and 2011, we observed a significant increase in commodity prices. In Australia, we   46) _____
    would expect that this increase would cause:
    A) no change in the CPI and an increase in the GDP deflator.
    B) no change in the GDP deflator and an increase in the CPI.
    C) a larger increase in the CPI compared to the GDP deflator.
    D) a larger increase in the GDP deflator compared to the CPI.
    E) an equal increase in the CPI and GDP deflator.

Answer: D
Explanation: A)
                 B)
                 C)
                 D)
                 E)

47) Suppose government officials decide to change the base year to a more recent year (e.g. from 1999 to 2009). A change in the base year such as this will cause:

    A) nominal GDP in every year to increase.
    B) nominal GDP in every year to decrease.
    C) both nominal and real GDP in every year to decrease.
    D) real GDP in every year to decrease.
    E) None of the above.

47) _____

Answer: E
Explanation: A)
                        B)
                        C)
                        D)
                        E)

48) Which of the following calculations will yield the correct measure of real GDP?

    A) Multiply nominal GDP by the GDP deflator.
    B) Divide the GDP deflator by the consumer price index.
    C) Divide nominal GDP by the consumer price index.
    D) Multiply nominal GDP by the consumer price index.
    E) Divide nominal GDP by the GDP deflator.

48) _____

Answer: E
Explanation: A)
                        B)
                        C)
                        D)
                        E)

49) Suppose an individual wishes to provide a definition of GDP for a given period. Which of the following phrases would be used when defining GDP?

    A) Final and intermediate goods and services.
    B) Final and intermediate goods and services produced by the private sector only.
    C) Final goods and services purchased by domestic households.
    D) Final goods and services.
    E) Final and intermediate goods and services, plus raw materials.

49) _____

Answer: D
Explanation: A)
                        B)
                        C)
                        D)
                        E)

50) Which of the following prices will be used when calculating the rate of growth of real GDP   50) _____
between the years 2010 and 2011 using the chain method?
   A) Prices in 2010, 2011, and in 2009 (the base year).
   B) Prices in 2005.
   C) Prices in 2011.
   D) The average of prices in 2010 and 2011.
   E) Prices in the base year (2009).

Answer: D
Explanation: A)
                        B)
                        C)
                        D)
                        E)

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

51) First, define nominal GDP and real GDP. Second, is it possible for nominal GDP in a year to be less than real
GDP in the same year? Explain.

Answer: Nominal GDP represents the value of goods and services produced using current prices. Real GDP
measures the value of the same goods and services using some base year prices (or constant prices). It is
possible for nominal GDP to be less than real GDP in a given year. Given the definitions of the two
variables, this will occur if prices in that year are simply less than prices in the base year. If, for example,
the base year is 2009, it will generally be the case that nominal GDP will be less than real GDP for those
years prior to 2009 given that prices have generally risen in all years.

52) What is the impact of the commodity price increase in 2004-11 on the GDP deflator and the CPI?

Answer: Given that Australia is a major commodity exporter, the Australian dollar (or the exchange rate) tends to
appreciate when commodity prices rise. As the index measure of commodity prices doubled during
2004-11 and pushed up the exchange rate, this implies that import prices would become cheaper and
hence causing a smaller increase in the CPI compared with that in the GDP deflator.

53) Explain the three ways GDP can be measured.

Answer: GDP can be measured three ways. First, GDP represents the market value of the final goods and services
produced in the economy during a given period. This would be obtained by adding the production of all
final goods and services. Second, GDP is the sum of the value added by firms. The value added for a firm
equals the value of the production (at that stage of the production process) minus the value of the
intermediate goods (excluding labour services). The final value of aggregate output can be calculated by
either summing the value of all final goods and services OR by summing the value added of all goods
and services at each stage of production. And finally, GDP is also the sum of all incomes (labour and
capital incomes) earned in a given period.

54) Explain what factors cause changes in output in: (1) the short run; (2) the medium run; and (3) the long run.

Answer: In the short run, demand factors primarily cause changes in output, e.g., changes in consumer confidence.
In the medium run, supply factors such as the level of technology, the stock of capital, and the skill and
size of the labour force affect output. And in the long run, the education system, saving rate, and role of
government affect the level of economic activity.

55) Explain the empirical relation known as Okun's law.

Answer: Okun's law summarises the relationship between changes in the unemployment rate and output growth. For the unemployment rate to decrease, output growth must rise. In particular, output growth would have to rise above some normal growth rate (using Australian data 1960-2011, the normal growth rate is 3.75%). In other words, output growth needs to be 3.75% (in the Australian context) to keep the unemployment rate constant.

56) Explain the difference between the unemployment rate and the participation rate.

Answer: The unemployment rate is the percentage of the labour force (the total of those employed and unemployed) that is unemployed. The participation rate is the percentage of the working age population that is in the labour force.

57) Explain the difference between the GDP deflator and the CPI.

Answer: The GDP deflator is defined as the ratio of nominal GDP to real GDP. It provides a measure of the average price level of output produced in the domestic economy (e.g., Australia). The CPI measures the average price level of a "basket" of goods and services purchased by domestic residents. Some of the goods included in the GDP deflator (some investment goods) are not included in the CPI. Some of the goods included in the CPI (foreign produced goods) are not included in the GDP deflator.

58) Explain how inflation can lead to distortions.

Answer: First, not all prices and wages adjust automatically when inflation occurs. Some prices are fixed by law or regulations, hence their changes lag behind the other prices and wages in the economy, thus leading to changes in relative prices. Second, variations in relative prices (which occurs when it is not pure inflation) can lead to uncertainty. Given the relative price variation, it is harder for firms to make investment decisions, which is usually a forward-looking decision-making process. Inflation can also lead to distortions if the tax system is not adjusted when inflation occurs (e.g., nominal income tax brackets).

59) Why are economists interested in unemployment in relation to output?

Answer: Given that the GDP data is only available in Australia on a quarterly basis, the unemployment rate allows economists and policymakers to track the progress of the economy on a monthly basis. The unemployment rate provides an indication of the speed at which the economy is operating relative to the normal level of activity. In addition, it is a gauge of the efficient utilisation of labour resources in the economy. A low unemployment rate may be signalling that the economy is operating at a speed above normal and over-utilising its resources, which may lead to labour shortages.

60) What are the social and economic implications of unemployment? Explain.

Answer: Social implications include the emotional and psychological suffering that occurs as a result of being unemployed. The problem becomes particularly acute when the economy is in a protracted recession and unemployment stays high. Not only are more people unemployed, but they also stay unemployed for a longer period of time, which erodes their skills and employability. The economic implication is that monitoring the movement of the unemployment rate provides an indicator of the economic activity and a measure of the efficiency of labour resource utilisation.

61) Explain the relation known as the Phillips curve.

Answer: The Phillips curve summarises the relationship between changes in inflation and the unemployment rate. When unemployment becomes low, there is pressure on inflation to increase, and vice versa. In particular, if unemployment is below the natural rate of unemployment, the economy is operating above its potential and would thus lead to an increase in inflation.

62) Briefly explain why the reported official unemployment rate in Spain in 1994 may have provided an over-estimate of unemployment in Spain.

Answer: The relatively high unemployment rate in Spain is partly the result of a relatively large underground economy. The underground economy is that part of the economy not measured in official statistics. After taking into account those individuals who are "employed" in the underground economy, the unemployment rate in Spain would have been lower (but still relatively high).

63) What are the two reasons why the rate of growth of output has to be at least equal to the normal growth rate of output (which is 3.75% using Australian data 1960-2011) to prevent the unemployment rate from rising? Explain.

Answer: To maintain a constant unemployment rate, output growth must equal 3.75% (which is the Australian normal growth rate for 1960-2011). The normal growth rate consists of two components. First, as population grows over time, employment growth must equal the rate of growth of the labour force. Second, there is productivity growth over time, or output per worker is increasing over time, which implies that output growth is higher than employment growth. Therefore output growth must be equal to labour force growth plus output per worker growth to maintain a given unemployment rate.

64) Explain whether it is possible for nominal GDP to increase and real GDP to decrease in the same period.

Answer: Nominal GDP can rise because either the price level is rising or the real quantity of goods and services produced has increased. Nominal GDP can increase while real GDP falls if the increase in the aggregate price level is larger (in a proportionate sense) than the fall in real economic activity.

65) First, what do discouraged workers represent? Second, explain whether the existence of discouraged workers causes the official unemployment rate to provide an over-estimate or under-estimate of the extent to which labour resources are unemployed.

Answer: Discouraged workers are those individuals who have decided to stop searching for employment because they have become "discouraged" about employment opportunities. At some point, these individuals will no longer be considered as part of the labour force. The existence of discouraged workers will cause the official unemployment rate to provide an under-estimate of the under-utilisation of labour.

66) Explain why economists care about inflation.

Answer: Inflation is a minor inconvenience if all prices and wages move proportionately - this is called *pure inflation.* However, prices and wages often do not move proportionately, and this leads to two broad problems. First, the distribution of income is affected. For people relying on fixed income sources (e.g., retirees), they are made worse off in relation to other groups. Second, inflation leads to changes in relative prices. Variations in relative prices will lead to further tax distortions and uncertainty that may reduce, for example, the level of investment by firms.

67) Do the CPI and GDP deflator always move together? Explain.

Answer: No, they do not. For example, if the price of imported goods decreases relative to the price of goods produced in the economy, the GDP deflator increases faster than the CPI. Since the prices of imported goods are included in the CPI and not in the GDP deflator, when the exchange rate appreciates, imports become cheaper which leads to a smaller increase in the CPI compared to the GDP deflator.

1) A
2) B
3) C
4) E
5) B
6) A
7) C
8) E
9) D
10) C
11) E
12) A
13) B
14) E
15) D
16) E
17) A
18) B
19) B
20) C
21) B
22) A
23) B
24) B
25) C
26) B
27) D
28) B
29) C
30) D
31) D
32) A
33) B
34) D
35) B
36) B
37) E
38) A
39) C
40) A
41) E
42) B
43) D
44) E
45) E
46) D
47) E
48) E
49) D
50) D

51) Nominal GDP represents the value of goods and services produced using current prices. Real GDP measures the value of the same goods and services using some base year prices (or constant prices). It is possible for nominal GDP to be less than real GDP in a given year. Given the definitions of the two variables, this will occur if prices in that year are simply less than prices in the base year. If, for example, the base year is 2009, it will generally be the case that nominal GDP will be less than real GDP for those years prior to 2009 given that prices have generally risen in all years.

52) Given that Australia is a major commodity exporter, the Australian dollar (or the exchange rate) tends to appreciate when commodity prices rise. As the index measure of commodity prices doubled during 2004-11 and pushed up the exchange rate, this implies that import prices would become cheaper and hence causing a smaller increase in the CPI compared with that in the GDP deflator.

53) GDP can be measured three ways. First, GDP represents the market value of the final goods and services produced in the economy during a given period. This would be obtained by adding the production of all final goods and services. Second, GDP is the sum of the value added by firms. The value added for a firm equals the value of the production (at that stage of the production process) minus the value of the intermediate goods (excluding labour services). The final value of aggregate output can be calculated by either summing the value of all final goods and services OR by summing the value added of all goods and services at each stage of production. And finally, GDP is also the sum of all incomes (labour and capital incomes) earned in a given period.

54) In the short run, demand factors primarily cause changes in output, e.g., changes in consumer confidence. In the medium run, supply factors such as the level of technology, the stock of capital, and the skill and size of the labour force affect output. And in the long run, the education system, saving rate, and role of government affect the level of economic activity.

55) Okun's law summarises the relationship between changes in the unemployment rate and output growth. For the unemployment rate to decrease, output growth must rise. In particular, output growth would have to rise above some normal growth rate (using Australian data 1960-2011, the normal growth rate is 3.75%). In other words, output growth needs to be 3.75% (in the Australian context) to keep the unemployment rate constant.

56) The unemployment rate is the percentage of the labour force (the total of those employed and unemployed) that is unemployed. The participation rate is the percentage of the working age population that is in the labour force.

57) The GDP deflator is defined as the ratio of nominal GDP to real GDP. It provides a measure of the average price level of output produced in the domestic economy (e.g., Australia). The CPI measures the average price level of a "basket" of goods and services purchased by domestic residents. Some of the goods included in the GDP deflator (some investment goods) are not included in the CPI. Some of the goods included in the CPI (foreign produced goods) are not included in the GDP deflator.

58) First, not all prices and wages adjust automatically when inflation occurs. Some prices are fixed by law or regulations, hence their changes lag behind the other prices and wages in the economy, thus leading to changes in relative prices. Second, variations in relative prices (which occurs when it is not pure inflation) can lead to uncertainty. Given the relative price variation, it is harder for firms to make investment decisions, which is usually a forward-looking decision-making process. Inflation can also lead to distortions if the tax system is not adjusted when inflation occurs (e.g., nominal income tax brackets).

59) Given that the GDP data is only available in Australia on a quarterly basis, the unemployment rate allows economists and policymakers to track the progress of the economy on a monthly basis. The unemployment rate provides an indication of the speed at which the economy is operating relative to the normal level of activity. In addition, it is a gauge of the efficient utilisation of labour resources in the economy. A low unemployment rate may be signalling that the economy is operating at a speed above normal and over-utilising its resources, which may lead to labour shortages.

60) Social implications include the emotional and psychological suffering that occurs as a result of being unemployed. The problem becomes particularly acute when the economy is in a protracted recession and unemployment stays high. Not only are more people unemployed, but they also stay unemployed for a longer period of time, which erodes their skills and employability. The economic implication is that monitoring the movement of the unemployment rate provides an indicator of the economic activity and a measure of the efficiency of labour resource utilisation.

61) The Phillips curve summarises the relationship between changes in inflation and the unemployment rate. When unemployment becomes low, there is pressure on inflation to increase, and vice versa. In particular, if unemployment is below the natural rate of unemployment, the economy is operating above its potential and would thus lead to an increase in inflation.

62) The relatively high unemployment rate in Spain is partly the result of a relatively large underground economy. The underground economy is that part of the economy not measured in official statistics. After taking into account those individuals who are "employed" in the underground economy, the unemployment rate in Spain would have been lower (but still relatively high).

63) To maintain a constant unemployment rate, output growth must equal 3.75% (which is the Australian normal growth rate for 1960-2011). The normal growth rate consists of two components. First, as population grows over time, employment growth must equal the rate of growth of the labour force. Second, there is productivity growth over time, or output per worker is increasing over time, which implies that output growth is higher than employment growth. Therefore output growth must be equal to labour force growth plus output per worker growth to maintain a given unemployment rate.

64) Nominal GDP can rise because either the price level is rising or the real quantity of goods and services produced has increased. Nominal GDP can increase while real GDP falls if the increase in the aggregate price level is larger (in a proportionate sense) than the fall in real economic activity.

65) Discouraged workers are those individuals who have decided to stop searching for employment because they have become "discouraged" about employment opportunities. At some point, these individuals will no longer be considered as part of the labour force. The existence of discouraged workers will cause the official unemployment rate to provide an under-estimate of the under-utilisation of labour.

66) Inflation is a minor inconvenience if all prices and wages move proportionately - this is called *pure inflation*. However, prices and wages often do not move proportionately, and this leads to two broad problems. First, the distribution of income is affected. For people relying on fixed income sources (e.g., retirees), they are made worse off in relation to other groups. Second, inflation leads to changes in relative prices. Variations in relative prices will lead to further tax distortions and uncertainty that may reduce, for example, the level of investment by firms.

67) No, they do not. For example, if the price of imported goods decreases relative to the price of goods produced in the economy, the GDP deflator increases faster than the CPI. Since the prices of imported goods are included in the CPI and not in the GDP deflator, when the exchange rate appreciates, imports become cheaper which leads to a smaller increase in the CPI compared to the GDP deflator.