Do not forget to write your full name, student number and section on the top.

Turn off your cell phone and put it away. During the exam if you are seen with a cell phone, on or off, your exam will be taken away instantaneously.

Put away all your lecture notes, books, etc.

There are 60 multiple choice questions and 8 pages in the exam. Make sure you have them all.

Please put all your answers in your answer key. Do not forget to put your exam type on your answer key.

You have 90 minutes. GOOD LUCK!!

1. Last year real GDP in the imaginary nation of Oceania was 561.0 billion and the population was 2.2 million. The year before, real GDP was 500.0 billion and the population was 2.0 million. What was the growth rate of real GDP per person during the year?
   (a) 12 percent
   (b) 10 percent
   (c) 4 percent
   (d) 2 percent
   ANSWER: d - Moderate

2. In 2010, the imaginary nation of Bovina had a population of 5,000 and real GDP of 600,000. In 2011 it had a population of 5,200 and real GDP of 636,480. During 2011 real GDP per person in Bovina grew by
   (a) -4 percent
   (b) -2 percent
   (c) 2 percent
   (d) 4 percent
   ANSWER: c - Challenging

3. Last year the imaginary nation of Panglossia had real GDP of 400 billion. This year it had real GDP of 472.5 billion. Which of the following changes in population is consistent with a 5 percent growth rate of real GDP per person over the last year?
   (a) The population decreased from 75 million to 72 million.
   (b) The population decreased from 60 million to 50 million.
   (c) The population increased from 70 million to 80 million.
   (d) The population increased from 80 million to 90 million.
   ANSWER: d - Challenging

4. Over the last ten years productivity grew faster in Mapoli than in Romeria while the population and total hours worked remained the same in both countries. It follows that
   (a) real GDP per person grew faster in Mapoli than in Romeria.
(b) real GDP per person must be higher in Mapoli than in Romeria.
(c) the standard of living must be higher in Mapoli than in Romeria.
(d) All of the above are correct.
ANSWER: d - Moderate

5. Gramps Potato Chips produces 2560 bags of potato chips a day. Each employee at Gramps works 8 hours. If the company's productivity is 20 bags per hour, how many people does Gramps employ?
   (a) 8
   (b) 16
   (c) 24
   (d) None of the above is correct.
ANSWER: b - Moderate

6. In 2010, Acme Foods produced 300,000 bags of pretzels, employing 12,000 hours of labor. In 2011, it produced 322,000 bags of pretzels, employing 14,000 hours of labor. Acme Foods productivity
   (a) decreased by 8%.
   (b) was unchanged.
   (c) increased by 6.8%.
   (d) increased by 7.3%.
ANSWER: a - Moderate

7. Which of the following are human capital and physical capital, respectively?
   (a) for an accounting firm: the accountants’ knowledge of tax laws and computer software
   (b) for a grocery store: grocery carts and shelving
   (c) for a school: chalkboard and desks
   (d) for a library: the building and the reference librarians’ knowledge of the Internet
ANSWER: a - Easy

8. In a particular production process, if the quantities of all inputs used double, then the quantity of output doubles as well. This means that
   (a) the production process cannot be enhanced by technological advances.
   (b) no mathematical representation of the relevant production function can be formulated.
   (c) the relevant production function has the limits-to-growth property.
   (d) the relevant production function has the constant-returns-to-scale property.
ANSWER: d - Moderate

9. All else equal, if there are diminishing returns, then if a country raised its capital by 100 units last year and by 100 units this year,
   (a) the increase in output was greater for this year than last year.
   (b) the increase in output was greater last year than this year.
   (c) the increase in output is the same in both years.
   (d) None of the above is necessarily correct.
ANSWER: b - Moderate

10. All else equal, if there are diminishing returns and constant returns to scale, then what happens to productivity if capital and labor both increase but capital increases by more?
    (a) Productivity will definitely fall.
    (b) Productivity will definitely be unchanged.
    (c) Productivity will definitely rise.
    (d) None of the above are necessarily correct.
ANSWER: c - Challenging

11. Suppose that there are diminishing returns to capital. Suppose also that two countries are the same except one has more capital per worker and so it has more real GDP per worker than the other. Finally, suppose that the saving rate in both countries increases from 4 percent to 7 percent. Over the next ten years we would expect that
    (a) the growth rate will not change in either country.
    (b) the country that started with less capital per worker will grow faster.
    (c) the country that started with more capital per worker will grow faster.
    (d) both countries will grow and at the same higher rate.
ANSWER: b - Moderate

12. In a closed economy, what does \((Y - T - C)\) represent?
    (a) national saving
    (b) government tax revenue
    (c) public saving

13. Suppose a closed economy had public saving of -$1 trillion and private saving of $3 trillion. What are national saving and investment for this country?

(a) $2 trillion, $2 trillion  
(b) $2 trillion, $3 trillion  
(c) $3 trillion, $3 trillion  
(d) $4 trillion, $2 trillion

ANSWER: a - Easy

14. Suppose that in a closed economy GDP is equal to 20,000, consumption equal to 15,000, government purchases equal 4,000 and taxes equal 3,000. What are private saving, public saving, and national saving?

(a) -2,000, 1,000, and 2,000, respectively.  
(b) 1,000, 2,000, and 3,000, respectively.  
(c) 2,000, -1,000, and 1,000, respectively.  
(d) 2,000, 1,000, and 2,000, respectively.

ANSWER: c - Challenging

15. A budget surplus

(a) occurs when the government has debt equal to zero.  
(b) causes government debt to increase.  
(c) exists when government spending is greater than tax revenues.  
(d) reduces the government’s debt.

ANSWER: d - Moderate

16. In a closed economy, if Y and T remained the same, but G rose and C fell but by less than the rise in G, what would happen to public and national saving?

(a) public and national saving would rise  
(b) public and national saving would fall  
(c) public saving would rise and national saving would fall  
(d) public saving would fall and national saving would rise

ANSWER: b - Moderate

17. Kathleen is considering expanding her dress shop. If interest rates rise she is

(a) less likely to expand. This illustrates why the supply of loanable funds slopes downward.  
(b) more likely to expand. This illustrates why the supply of loanable funds slopes upward.  
(c) less likely to expand. This illustrates why the demand for loanable funds slopes downward.  
(d) more likely to expand. This illustrates why the demand for loanable funds slopes upward.

ANSWER: c - Moderate

18. What would happen in the market for loanable funds if the government were to increase the tax on interest income?

(a) The supply of loanable funds would shift right.  
(b) The demand for loanable funds would shift right.  
(c) The supply of loanable funds would shift left.  
(d) The demand for loanable funds would shift left.

ANSWER: c - Moderate

19. Olga owns her own business. Sven is an unpaid worker in his family’s business. Who is included in the employed category?

(a) only Olga  
(b) only Sven  
(c) both Olga and Sven  
(d) neither Olga nor Sven

ANSWER: c - Moderate

20. Which of the following is a requirement to place someone in the unemployed category?

(a) The person must have worked no more than 10 hours during the past week.  
(b) The person must have tried to find employment during the previous four weeks.  
(c) The person may not have been laid off.  
(d) All of the above are correct.

ANSWER: b - Moderate

21. Gwen is an unpaid worker in her family’s restaurant. Gwen is counted as

(a) unemployed and in the labor force.  
(b) unemployed and not in the labor force.  
(c) employed and in the labor force.  
(d) employed and not in the labor force.
22. Who is not included in the labor force?
   (a) Anita, who is on temporary layoff
   (b) Lauren, who has retired and is not looking for work
   (c) Raymond, who does not have a job but has applied for several in the last week
   (d) None of the above is correct.

   ANSWER: b - Moderate

23. In June 2009 the Bureau of Labor Statistics reported an adult population of 234.9 million, unemployment of 12.4 million, and employment of 141.6 million. Based on these numbers the labor-force participation rate was
   (a) 154/234.9.
   (b) 141.6/234.9.
   (c) 141.6/154.
   (d) None of the above is correct.

   ANSWER: a - Moderate

24. Suppose that some country had an adult population of about 25 million, a labor-force participation rate of 60 percent, and an unemployment rate of 6 percent. How many people were employed?
   (a) 0.9 million
   (b) 14.1 million
   (c) 15 million
   (d) 23.5 million

   ANSWER: b - Challenging

25. Suppose that some people report themselves as unemployed when, in fact, they are working in the underground economy. If these persons were counted as employed, then
   (a) both the unemployment rate and labor-force participation rate would be higher.
   (b) both the unemployment rate and labor-force participation rate would be lower.
   (c) the unemployment rate would be higher, and the labor-force participation rate would be higher.
   (d) the unemployment rate would be lower, and the labor-force participation rate would be unaffected.

   ANSWER: d - Challenging

26. Jenna is searching for a job that suits her tastes about where to live. Mary is looking for a job that makes best use of her skills.
   (a) Jenna and Mary are both frictionally unemployed.
   (b) Jenna and Mary are both structurally unemployed.
   (c) Jenna is frictionally unemployed, and Mary is structurally unemployed.
   (d) Jenna is structurally unemployed, and Mary is frictionally unemployed.

   ANSWER: a - Moderate

27. Unemployment that results because the number of jobs available in some labor markets may be insufficient to give a job to everyone who wants one is called
   (a) the natural rate of unemployment.
   (b) cyclical unemployment.
   (c) structural unemployment.
   (d) frictional unemployment.

   ANSWER: c - Easy

28. Money is
   (a) the most liquid asset and a perfect store of value.
   (b) the most liquid asset but an imperfect store of value.
   (c) not the most liquid asset but a perfect store of value.
   (d) neither the most liquid asset and nor a perfect store of value.

   ANSWER: b - Moderate

29. If an economy used gold as money, its money would be
   (a) commodity money, but not fiat money.
   (b) fiat money, but not commodity money.
   (c) both fiat and commodity money.
   (d) functioning as a store of value and as a unit of account, but not as a medium of exchange.

   ANSWER: a - Easy

30. If a bank desires to hold no excess reserves, the reserve requirement is 8 percent, and it receives a new deposit of $500,
   (a) its required reserves increase by $40.
   (b) its total reserves initially increase by $460.
   (c) it will be able to make a new loan of up to $492.
   (d) All of the above are correct.

   ANSWER: a - Moderate
31. If the reserve ratio is 12.5 percent, then $2,000 of additional reserves can create up to
   (a) $8,000 of new money.
   (b) $16,000 of new money.
   (c) $32,000 of new money.
   (d) None of the above is correct.
   ANSWER: b - Easy

32. The Central Bank can increase the money supply by conducting open-market
   (a) sales or by raising the discount rate.
   (b) sales or by lowering the discount rate.
   (c) purchases or by raising the discount rate.
   (d) purchases or by lowering the discount rate.
   ANSWER: d - Moderate

33. If the Central Bank increases the interest rate on bank deposits at the Central Bank, banks will want to hold
   (a) fewer reserves, so the reserve ratio will fall.
   (b) fewer reserves, so the reserve ratio will rise.
   (c) more reserves, so the reserve ratio will fall.
   (d) more reserves, so the reserve ratio will rise.
   ANSWER: d - Moderate

34. Suppose that the Central Bank lowered the reserve requirement from 12 percent to 10 percent. Other things the same this should have
   (a) increased both the money multiplier and the money supply.
   (b) decreased both the money multiplier and the money supply.
   (c) increased the money multiplier and decreased the money supply.
   (d) decreased the money multiplier and increased the money supply.
   ANSWER: a - Moderate

35. If people decide to hold more currency relative to deposits, the money supply
   (a) falls. The larger the reserve ratio is, the more the money supply falls.
   (b) falls. The larger the reserve ratio is, the less the money supply falls.

36. When the money market is drawn with the value of money on the vertical axis, if the price level is above the equilibrium level, there is an
   (a) excess demand for money, so the price level will rise.
   (b) excess demand for money, so the price level will fall.
   (c) excess supply of money, so the price level will rise.
   (d) excess supply of money, so the price level will fall.
   ANSWER: b - Challenging

37. Open-market purchases by the Central Bank make the money supply
   (a) increase, which makes the value of money increase.
   (b) increase, which makes the value of money decrease.
   (c) decrease, which makes the value of money decrease.
   (d) decrease, which makes the value of money increase.
   ANSWER: b - Moderate

38. When the money market is drawn with the value of money on the vertical axis, the price level increases if
   (a) either money demand or money supply shifts right.
   (b) either money demand or money supply shifts left.
   (c) money demand shifts right or money supply shifts left.
   (d) money demand shifts left or money supply shifts right.
   ANSWER: d - Moderate

39. According to the classical dichotomy, when the money supply doubles, which of the following also doubles?
   (a) the price level
   (b) nominal wages
   (c) nominal GDP
   (d) All of the above are correct.
   ANSWER: d - Easy

40. Monetary neutrality means that a change in the money supply
(a) does not change real variables. Most economists think this is a good description of the economy in the short run and in the long run.

(b) does not change real variables. Most economists think this is a good description of the economy in the long run but not the short run.

(c) does not change nominal variables. Most economists think this is a good description of the economy in the short run and the long run.

(d) does not change nominal variables. Most economists think this is a good description of the economy in the long run but not the short run.

ANSWER: b - Easy

41. In which case is velocity the highest?

(a) the price level equals 4, the money supply equals 5,000, and output equals 20,000.

(b) the price level equals 4, the money supply equals 20,000 and output equals 5,000.

(c) the price level equals 2, the money supply equals 5,000, and output equals 20,000.

(d) the price level equals 2, the money supply equals 20,000 and output equals 5,000.

ANSWER: a - Moderate

42. According to the quantity equation, the price level would change less than proportionately with a rise in the money supply if there were also

(a) either a rise in output or a rise in velocity.

(b) either a rise in output or a fall in velocity.

(c) either a fall in output or a rise in velocity.

(d) either a fall in output or a fall in velocity.

ANSWER: b - Challenging

43. Suppose over some period of time the money supply tripled, velocity doubled, and real GDP doubled. According to the quantity equation the price level is now

(a) 6 times its old value.

(b) 3 times its old value.

(c) 1.5 times its old value.

(d) 0.75 times its old value.

ANSWER: b - Moderate

44. The Fisher effect

(a) says the government can generate revenue by printing money.

(b) says there is a one for one adjustment of the nominal interest rate to the inflation rate.

(c) explains how higher money supply growth leads to higher inflation.

(d) explains how prices adjust to obtain equilibrium in the money market.

ANSWER: b - Easy

45. Peru has exports of $31.5 million and imports of $30 million. Peru

(a) sells more overseas then it buys from overseas; it has a trade deficit.

(b) sells more overseas then it buys from overseas; it has a trade surplus.

(c) buys more from overseas then it sells overseas; it has a trade deficit.

(d) buys more from overseas then it sells overseas; it has a trade surplus.

ANSWER: b - Moderate

46. If a country had a trade surplus of $100 billion and then its exports rose by $40 billion and its imports rose by $30 billion, its net exports would now be

(a) $110 billion

(b) $90 billion.

(c) $70 billion.

(d) $60 billion.

ANSWER: a - Challenging

47. A Japanese bank buys U.S. government bonds, this purchase

(a) increases U.S. net capital outflow and has no affect on Japanese net capital outflow.

(b) increases U.S. net capital outflow and increases Japanese net capital outflow.

(c) increases U.S. net capital outflow, but decreases Japanese net capital outflow.

(d) decreases U.S. net capital outflow, but increases Japanese net capital outflow.

ANSWER: d - Moderate

48. If a country has negative net capital outflows, then its net exports are
(a) positive and its saving is larger than its domestic investment.

(b) positive and its saving is smaller than its domestic investment.

(c) negative and its saving is larger than its domestic investment.

(d) negative and its saving is smaller than its domestic investment.

ANSWER: d - Challenging

49. In an open economy, gross domestic product equals $1,650 billion, government expenditure equals $250 billion, and savings equals $550 billion. What is consumption expenditure?

(a) $250 billion

(b) $300 billion

(c) $550 billion

(d) $850 billion

ANSWER: d - Challenging

50. Other things the same, the real exchange rate between U.S. and Belgian goods would be higher if

(a) prices in the U.S. were higher, or the number of euro the dollar purchased were higher.

(b) prices in the U.S. were higher, or the number of euro the dollar purchased were lower.

(c) prices in the U.S. were lower, or the number of euro the dollar purchased were higher.

(d) prices in the U.S. were lower, or the number of euro the dollar purchased were lower.

ANSWER: a - Moderate

51. In the U.S. a candy bar costs $1. If the nominal exchange rate were 6 Chinese yuan per dollar and the real exchange rate were 1.2, then, what would be the price of a candy bar in China?

(a) 7.2 yuan

(b) 6 yuan

(c) 5 yuan

(d) 3.6 yuan

ANSWER: c - Challenging

52. The nominal exchange rate is .80 euros per U.S. dollar and a basket of goods in France costs 1,000 euros while the same basket costs $800 in the U.S. The nominal exchange rate is 1.2 Australian dollars per U.S. dollar and a basket of goods in Australia costs 960 Australian dollars while the same basket costs $800 in the U.S.. Which country has purchasing-power parity with the U.S.?

(a) both France and Australia

(b) France but not Australia

(c) Australia but not France

(d) neither France nor Australia

ANSWER: c - Moderate

53. A country has output of $600 billion, consumption of $350 billion, government expenditures of $90 billion and investment of $60 billion. What is its supply of loanable funds?

(a) $160 billion

(b) $150 billion

(c) $60 billion

(d) $30 billion

ANSWER: a - Moderate

54. If a country has a positive net capital outflow, then

(a) on net it is purchasing assets from abroad. This adds to its demand for domestically generated loanable funds.

(b) on net it is purchasing assets from abroad. This subtracts from its demand for domestically generated loanable funds.

(c) on net other countries are purchasing assets from it. This adds to its demand for domestically generated loanable funds.

(d) on net other countries are purchasing assets from it. This subtracts from its demand for domestically generated loanable funds.

ANSWER: a - Moderate

55. Suppose the supply of loanable funds shifts left. This will

(a) increase the net capital outflow and increase the quantity of loanable funds demanded.

(b) increase the net capital outflow and decrease the quantity of loanable funds demanded.
(c) decrease the net capital outflow and increase the quantity of loanable funds demanded.

(d) decrease the net capital outflow and decrease the quantity of loanable funds demanded.

ANSWER: d - Challenging

56. Suppose the real exchange rate is such that the market for foreign-currency exchange has a surplus. This surplus will lead to

(a) an appreciation of the domestic currency, an increase in the domestic net exports, and so an increase in the quantity of domestic currency demanded in the foreign exchange market.

(b) an appreciation of the domestic currency, a decrease in the domestic net exports, and so a decrease in the quantity of domestic currency demanded in the foreign exchange market.

(c) a depreciation of the domestic currency, an increase in the domestic net exports, and so an increase in the quantity of domestic currency demanded in the foreign exchange market.

(d) a depreciation of the domestic currency, a decrease in the domestic net exports, and so a decrease in the quantity of domestic currency demanded in the foreign exchange market.

ANSWER: c - Challenging

57. A German company wants to buy dollars to purchase U.S. bonds. In the open-economy macroeconomic model of the U.S., this transaction would be accounted for in

(a) the supply of currency in the foreign exchange market, and the supply of loanable funds.

(b) the supply of currency in the foreign exchange market, and the demand for loanable funds.

(c) the demand for currency in the foreign exchange market, and the supply of loanable funds.

(d) the demand for currency in the foreign exchange market, and the demand for loanable funds.

ANSWER: b - Challenging

58. If a country raises its budget deficit, then net capital outflow

(a) rises, so the supply of its currency shifts right in the market for foreign-currency exchange.

(b) rises, so the demand for its currency shifts right in the market for foreign-currency exchange.

(c) falls, so the supply of its currency shifts left in the market for foreign-currency exchange.

(d) falls, so the demand for its currency shifts right in the market for foreign-currency exchange.

ANSWER: c - Moderate

59. Suppose the Turkey removes an import quota on steel. Turkish exports

(a) increase, the real exchange rate of the TL appreciates, and Turkish net capital outflow increases.

(b) increase, the real exchange rate of the TL depreciates, and Turkish net capital outflow is unchanged.

(c) decrease, the real exchange rate of the TL appreciates, and Turkish net capital outflow is unchanged.

(d) decrease, the real exchange rate of the TL depreciates, and Turkish net capital outflow decreases.

ANSWER: b - Challenging

60. When a country experiences capital flight its currency

(a) appreciates and net exports rise.

(b) appreciates and net exports fall.

(c) depreciates and net exports fall.

(d) depreciates and net exports rise.

ANSWER: c - Moderate