

First Midterm (October 2014)

Instructions: Please fill in your name and student number on every page of the exam questionnaire and on the Answer Sheet provided. Use the Answer Sheet to answer the Multiple Choice questions. There are 43 questions in total (40 multiple choice plus 3 short answers). This exam has 11 pages -- check that this copy has all of them. You may use a calculator. Good luck !!

Multiple Choice Questions (80 points -- 2 points per question)

Identify the letter of the choice that best completes the statement or answers the question.

1. The country of Aquilonia does not trade with any other country. Its GDP is \$30 billion. Its government purchases \$5 billion worth of goods and services each year, collects \$7 billion in taxes, and provides \$3 billion in transfer payments to households. Private saving in Aquilonia is \$5 billion. What is consumption?
 - a. \$18 billion
 - b. \$21 billion
 - c. \$13 billion
 - d. There is not enough information to answer the question.
2. After the terrorist attacks on September 11, 2001, governments raised expenditures to increase security at airports. How are these purchases of goods and services treated in GDP?
 - a. They are not included in GDP since they are not productive.
 - b. They are not included in GDP since governments will have to raise taxes to pay for them.
 - c. They are included in GDP since government expenditures are included in GDP.
 - d. They are included in GDP only to the extent that the federal, and not provincial or local governments, paid for them.
3. How is the value of housing service provided by the economy's stock of houses included in GDP?
 - a. It is not included in GDP since it is not sold on the market.
 - b. It is counted and is valued as the mortgage payment made on the house.
 - c. It is counted and uses only the purchase price of the house in the year it is sold.
 - d. It is counted and is based on an estimate of its rental value.
4. Suppose that the government were to replace the income tax with a consumption tax. What would happen to the interest rate and investment, respectively?
 - a. increase and increase
 - b. decrease and decrease
 - c. increase and decrease
 - d. decrease and increase
5. The price of imported athletic shoes produced by a Canadian company operating in Thailand increases. By itself, what effect will this change have on the Canadian GDP deflator and CPI?
 - a. The GDP deflator and the CPI will both increase.
 - b. The GDP deflator will increase, and the CPI will be unaffected.
 - c. The GDP deflator and the CPI will both be unaffected.
 - d. The GDP deflator will be unaffected, and the CPI will increase.

6. Why do birth rates tend to be lower in developed countries than in developing countries?
 - a. because people are older in developed countries
 - b. because education is more expensive in developed countries
 - c. because women in developed countries have greater access to jobs and it becomes too costly to spend time with children
 - d. because government policies in developing countries reward families with children
7. In 2010 real GDP in Latania was \$750 billion and the population was 3 million. In 2011 real GDP was \$990 billion and the population was 3.3 million. What was the approximate growth rate of real GDP per person?
 - a. 11 percent
 - b. 14 percent
 - c. 17 percent
 - d. 20 percent
8. Over the past 100 years, Canadian real GDP per person has doubled about every 35 years. If in the next 100 years it doubles every 25 years, then what will Canadian real GDP per person be a century from now?
 - a. 4 times higher than it is now
 - b. 8 times higher than it is now
 - c. 12 times higher than it is now
 - d. 16 times higher than it is now
9. Suppose Mexico increases its saving rate. Which of the following will happen in the long run?
 - a. The growth rates of productivity and real GDP per person will increase.
 - b. Productivity and real GDP per person will increase.
 - c. The growth rate of productivity will increase, and real GDP per person will decrease.
 - d. Productivity will increase, and the growth rate of real GDP per person will increase.
10. Suppose that in a closed economy GDP is equal to 10000, taxes (net of transfers) are equal to 2500, consumption equals 6500, and government expenditures equal 2000. What is private saving?
 - a. 1500
 - b. 1000
 - c. 500
 - d. 0
11. A worker in Bangladesh can earn \$1 per day making cotton cloth on a hand loom. A worker in Canada can earn \$100 per day making cotton cloth with a mechanical loom. What accounts for the difference in wages?
 - a. Canadian textile workers belong to a union.
 - b. There is little demand for cotton cloth in Bangladesh and great demand in Canada.
 - c. Labour is more productive making cotton cloth with a mechanical loom than with a hand loom.
 - d. Bangladesh has a low-wage policy to make its textile industry more competitive in world markets.
12. Henry buys a bond issued by Ralston Purina, which uses the funds to buy new machinery for one of its factories. Who is investing and who is saving?
 - a. Henry and Ralston Purina are both investing.
 - b. Henry and Ralston Purina are both saving.
 - c. Henry is investing; Ralston Purina is saving.
 - d. Henry is saving; Ralston Purina is investing.

Use the following information to answer the following questions.

In the country of Shem, the CPI is calculated using a market basket consisting of 5 apples, 4 loaves of bread, 3 robes, and 2 litres of gasoline. The per-unit prices of these goods have been as follows:

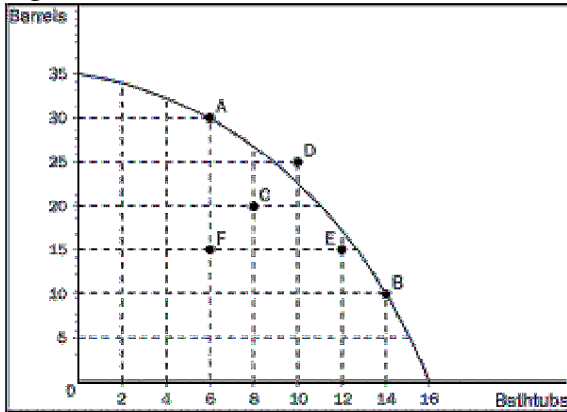
Table 6-3

Year	Apples	Bread	Robes	Gasoline
2007	\$1.00	\$2.00	\$10.00	\$1.00
2008	\$1.00	\$1.50	\$9.00	\$1.50
2009	\$2.00	\$2.00	\$11.00	\$2.00
2010	\$3.00	\$3.00	\$15.00	\$2.50

13. **Refer to Table 6-3.** What was the inflation rate, as measured by the CPI, between 2009 and 2010?
 - a. 40 percent
 - b. 40.25 percent
 - c. 46.46 percent
 - d. It is impossible to determine without knowing the base year.
14. Suppose that an apartment complex converts to a condominium where the renters are now owners of their former apartments. What is included in GDP?
 - a. The rent was included in GDP; the purchases of the condominiums are not.
 - b. The rent was included in GDP, and so is the purchase of the condominiums.
 - c. The rent was not included in GDP; the purchases of the condominiums are.
 - d. The rent was not included in GDP; the purchases are not included either.
15. What do the two loops in the circular-flow diagram represent?
 - a. the flow of goods and the flow of services
 - b. the flow of dollars and the flow of financial assets
 - c. the flow of inputs and outputs and the flow of dollars
 - d. the flow of capital goods and the flow of consumer goods
16. What is the amount of goods and services produced from each hour of a worker's time?
 - a. total output
 - b. productivity
 - c. marginal product
 - d. efficiency
17. Which of the following concepts is NOT illustrated by the production possibilities frontier?
 - a. efficiency
 - b. opportunity cost
 - c. equity
 - d. tradeoffs
18. Suppose that investment rises and interest rates fall. Which of the following best explains these changes?
 - a. The government went from surplus to deficit.
 - b. The government instituted an investment tax credit.
 - c. The government reduced the tax rate on savings.
 - d. The government repealed an investment tax credit.

19. Suppose that the country of Samiam produces only eggs and ham. In 2010 it produced 100 units of eggs at \$3 each and 50 units of ham at \$4 each. In 2006, the base year, eggs sold for \$1.50 per unit and ham sold for \$5 per unit. What can we conclude?
- Nominal GDP is \$500, real GDP is \$400, and the GDP deflator is 80.
 - Nominal GDP is \$500, real GDP is \$400 and the GDP deflator is 125.
 - Nominal GDP is \$400, real GDP is \$400, and the GDP deflator is 100.
 - Nominal GDP is \$400, real GDP is \$500, and the GDP deflator is 125.
20. Which of the following is the most accurate statement about economic models?
- Economic models attempt to mirror reality exactly.
 - Economic models are useful, but should not be used for policymaking.
 - Economic models omit many details to allow us to see what is truly important.
 - Economic models cannot be used in the real world because they omit details.

Figure 2-8



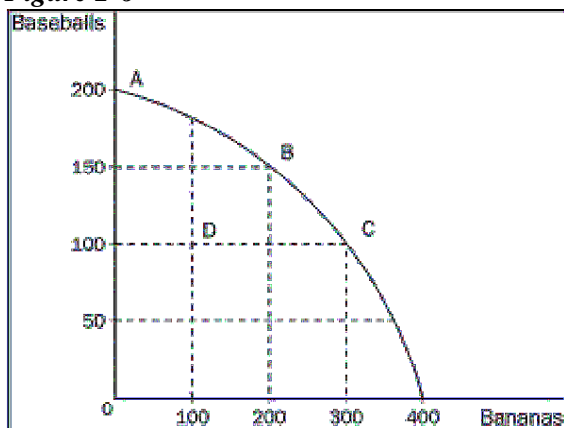
21. Refer to Figure 2-8. Which of the following combinations is impossible for this economy to produce?
- 30 barrels and 6 bathtubs
 - 25 barrels and 10 bathtubs
 - 20 barrels and 8 bathtubs
 - 10 barrels and 14 bathtubs
22. Which of the following statements best describes the relationship between the initial wealth and the growth rate of a country?
- Countries with the highest growth rates over the last 100 years are the ones that had the highest level of real GDP 100 years ago.
 - Countries that were rich a century ago had little fluctuation around their average growth rates during the past 100 years.
 - Though the catch-up effect may suggest otherwise, the data show no strong relationship between initial conditions and growth rates.
 - Over the last 100 years, Japan had the highest real GDP growth rate, and now it has the highest real GDP per person.

23. You have two sets of estimates of national account numbers for a closed economy for next year. In the first set, government expenditures will be \$30 billion, transfer payments will be \$10 billion, and taxes will be \$45 billion. Under the second set, GDP will be \$200 billion, taxes will be \$50 billion, transfer payments will be \$20 billion, consumption will be \$120 billion, and investment will be \$40 billion. Based on these numbers, what are the respective estimated results?
- \$15 billion surplus and a \$10 billion surplus
 - \$15 billion surplus and a \$10 billion deficit
 - \$5 billion surplus and a \$10 billion surplus
 - \$5 billion surplus and a \$10 billion deficit
24. What was Canadian GDP per person in 2012?
- \$35,000
 - \$43,000
 - \$51,000
 - \$59,000
25. Which of the following is the best example of a marginal change?
- The price of water rose in Calgary by 2% last year.
 - Kim gets a big promotion at work. She also gets a raise from \$25,000 per year to \$40,000 per year.
 - Mark graduates from university and takes a job. His income increases from \$10,000 per year to \$50,000 per year.
 - A drought hits Saskatchewan and the price of wheat increases from \$4.00 per bushel to \$8.00 per bushel.
26. Which of the following would most likely happen in the market for loanable funds if the government were to decrease the tax rate on interest income?
- The supply of and demand for loanable funds would shift to the right.
 - The supply of and demand for loanable funds would shift to the left.
 - The supply of loanable funds would shift to the right and the demand for loanable funds would shift to the left.
 - The supply of loanable funds would shift to the right and the demand for loanable funds will remain unchanged.
27. Which of the following terms refers to institutions that help to match one person's saving with another person's investment?
- the Bank of Canada
 - the banking system
 - the monetary system
 - the financial system
28. Suppose that an economy with constant returns to scale doubled its physical capital stock, doubled its available natural resources, and doubled its human capital, but kept the size of the labour force the same. How does the change in output compare to the change in productivity?
- Output would stay the same and so would its productivity.
 - Output and productivity would increase, but by less than double.
 - Output and productivity would increase by more than double.
 - Output would increase by less than double, but productivity would double.

29. Which is the most correct statement about the relationship between inflation and unemployment?
- In the short run, reducing inflation is associated with falling unemployment.
 - In the short run, reducing inflation is associated with rising unemployment.
 - In the long run, reducing inflation is associated with falling unemployment.
 - In the long run, reducing inflation is associated with rising unemployment.
30. Suppose your management professor has been offered a corporate job with a 30% pay increase. He has decided to take the job. What happened for him?
- The marginal cost of leaving was greater than the marginal benefit.
 - The marginal benefit of leaving was greater than the marginal cost.
 - The marginal benefit of teaching was greater than the marginal cost.
 - The marginal cost of teaching was greater than the marginal benefit.
31. Which of the following is an important difference between the GDP deflator and the consumer price index?
- The GDP deflator reflects the prices of goods and services bought by producers, whereas the consumer price index reflects the prices of goods and services bought by consumers.
 - The GDP deflator reflects the prices of all final goods and services produced domestically, whereas the consumer price index reflects the prices of some goods and services bought by consumers.
 - The GDP deflator reflects the prices of all final goods and services produced by a nation's citizens, whereas the consumer price index reflects the prices of final goods and services bought by consumers.
 - The GDP deflator reflects the prices of all goods and services bought by producers and consumers, whereas the consumer price index reflects the prices of final goods and services bought by consumers.
32. The price index is 180 in one year and 210 in the next. What is the inflation rate?
- 11.1 percent
 - 14.3 percent
 - 16.7 percent
 - 19.0 percent
33. In the late 1970s, nominal interest rates were high and inflation rates were very high. As a result, what were real interest rates?
- very high
 - moderately high
 - low, and in some years they were negative
 - low, but never negative
34. Daniel decides to spend the last two hours of the night before his economics exam studying instead of sleeping. For Daniel, what would his tradeoff be?
- nothing, since no dollar value can be put on sleep
 - nothing, since studying would be more beneficial than sleep
 - the six hours of sleep he could have had if he had gone to bed before midnight
 - the two hours of rest he would have gotten

35. Which of the following is included in the consumption component of GDP?
- a. CPP/QPP payments
 - b. purchases of foreign goods and services
 - c. purchases of newly constructed homes
 - d. goods produced, but not sold during the reference period
36. A leading environmental group recently published a report contending that humans are running a "resource deficit" because we are using natural resources faster than they can be regenerated. The group claims that this means that economic growth will eventually stop, and will even be reversed. How would an economist respond to this report?
- a. An economist would agree with the report, and would point to rising natural resource prices as evidence.
 - b. An economist would agree with the report, but wouldn't think it was important because growth will not slow down for several centuries.
 - c. An economist would disagree with the report, in part because it ignores the mitigating effects of technological change.
 - d. An economist would disagree with the report because labour and capital are the primary determinants of growth, and since they are plentiful, growth will not slow down.

Figure 2-6



37. Refer to Figure 2-6. What is the opportunity cost to society of the movement from point A to point C?
- a. 50 baseballs
 - b. 100 baseballs
 - c. 100 bananas
 - d. 300 bananas

38. Welfare payments are indexed for inflation using the CPI. A recent newspaper editorial claimed that welfare recipients are harmed by years of low inflation because they do not receive as large an increase in their payments as they do in years of high inflation. Is the newspaper editorial correct?
- The newspaper editorial is correct.
 - The newspaper editorial is correct if the market basket consumed by welfare recipients is the same as the market basket used to compute the CPI.
 - The newspaper editorial is correct if the prices of the goods consumed by welfare recipients increase faster than the prices of the goods in the market basket used to compute the CPI.
 - The newspaper editorial is correct if the prices of the goods consumed by welfare recipients increase slower than the prices of the goods in the market basket used to compute the CPI.
39. For some racquet sports there have been increases in the size of the racquets and the methods and materials used for making them have improved. Which of the following problems in the construction of the CPI is this change in racquets most relevant to?
- substitution bias
 - introduction of new goods
 - unmeasured quality change
 - income bias
40. Suppose Japanese-based Sony Corporation builds and operates a new chip factory in Canada. What would the future production from such an investment do?
- increase Canadian GNP more than it would increase Canadian GDP
 - increase Canadian GDP more than it would increase Canadian GNP
 - not affect Canadian GNP, but it would increase Canadian GDP
 - have no effect on Canadian GNP or GDP

Short Answer Questions (20 points)
Answer in the space provided.

1. (7 points) Using a graph representing the market for loanable funds, show and explain what happens to interest rates and investment if a government goes from a deficit to a surplus.

2. (7 points) The catch-up effect says that countries with low income can grow faster than countries with higher income. However, in statistical studies that include many diverse countries, we do not observe the catch-up-effect unless we take account of (or control for) other variables that affect productivity. Briefly explain how the catch-up effect works. Then, considering the determinants of productivity, list and explain four factors that would tend to prohibit or limit a poor country's ability to catch up with the rich ones.

