

Econ 20B, Spring2008

Sample First Mid-term

I. Multiple Choice. Choose the one that best answers the question.

1. In the United States in 2004, consumption represented approximately
 - a. 40 percent of GDP.
 - b. 50 percent of GDP.
 - c. 60 percent of GDP.
 - d. 70 percent of GDP.

2. Babe Ruth, the famous baseball player, earned \$80,000 in 1931. Today, the best baseball players can earn more than 300 times as much as Babe Ruth earned in 1931. However, prices also have risen since 1931. We can conclude that
 - a. the best baseball players today are about 300 times better off than Babe Ruth was in 1931.
 - b. because prices have risen also, the standard of living of baseball stars hasn't changed since 1931.
 - c. one cannot make judgments about changes in the standard of living based on changes in prices and changes in incomes.
 - d. one cannot determine whether baseball stars today enjoy a higher standard of living than Babe Ruth did in 1931 without additional information regarding increases in prices since 1931.

3. Unemployment compensation is
 - a. part of GDP because it represents income.
 - b. part of GDP because the recipients must have worked in the past to qualify.
 - c. not part of GDP because it is a transfer payment.
 - d. not part of GDP because the payments reduce business profits.

4. On the basis of theory and empirical evidence economists have concluded several things concerning growth. Which of the following is *not* one of these conclusions?
 - a. A relatively simple way to increase growth rates permanently is to increase a country's saving rate.
 - b. Growth is generally inhibited rather than promoted by policies like protective tariffs.
 - c. Well-established property rights that are enforced by fair and efficient courts are important to economic growth.
 - d. Countries with few domestic natural resources still have opportunities for economic growth.

5. Some poor countries appear to be falling behind rather than catching up with rich countries. Which of the following could explain the failure of a poor county to catch up?

- a. The poor country has outward-oriented trade policies.
 - b. The poor country allows foreign direct investment.
 - c. The poor country has poorly developed property rights.
 - d. All of the above are correct.
6. The CPI is calculated
- a. monthly by the Department of Commerce.
 - b. monthly by the Bureau of Labor Statistics.
 - c. quarterly by the Department of Commerce.
 - d. quarterly by the Bureau of Labor Statistics.
7. An increase in the saving rate would, other things the same,
- a. increase growth more for a poor country than a rich country, and raise growth permanently.
 - b. increase growth more for a poor country than a rich country, but raise growth temporarily.
 - c. increase growth more for a rich country than a poor country, and raise growth permanently.
 - d. increase growth more for a rich country than a poor country, but raise growth temporarily.
8. Suppose that real GDP grew more in Country A than in Country B last year.
- a. Country A must have a higher standard of living than country B.
 - b. Country A's productivity must have grown faster than country B's.
 - c. Both of the above are correct.
 - d. None of the above is correct.
9. Suppose there are constant returns to scale. Now suppose that over time a country doubles its workers, its natural resources, and its human capital, but its technology is unchanged. Which of the following would double?
- a. both output and productivity
 - b. output, but not productivity
 - c. productivity, but not output
 - d. neither productivity nor output
10. In the calculation of the CPI, coffee is given greater weight than tea if
- a. consumers buy more coffee than tea.
 - b. the price of coffee is higher than the price of tea.
 - c. it costs more to produce coffee than it costs to produce tea.
 - d. coffee is more readily available than is tea to the typical consumer.
11. Greg, a U.S. citizen, works only in Canada. The value that his labor contributes to U.S. output is
- a. included in both U.S. GDP and U.S. GNP.
 - b. included in U.S. GDP, but it is not included in U.S. GNP.
 - c. included in U.S. GNP, but it is not included in U.S. GDP.
 - d. included in neither U.S. GDP nor U.S. GNP.

12. Which of the following lists contains, in this order, natural resources, human capital, and physical capital?
- For a restaurant: the land the restaurant was built on, the things the Chef learned at Cooking School, the freezers where the chops and steaks are kept.
 - For a furniture company: wood, the company cafeteria, saws.
 - For a railroad: fuel, railroad engines, railroad tracks.
 - None of the above is correct.
13. In an imaginary economy, consumers buy only shirts and pants. The fixed basket consists of 6 shirts and 4 pairs of pants. A shirt cost \$20 in 2006 and \$25 in 2007. A pair of pants cost \$30 in 2006 and \$40 in 2007. Using 2006 as the base year, which of the following statements is correct?
- For the typical consumer, the number of dollars spent on shirts is equal to the number of dollars spent on pants in each of the two years.
 - The consumer price index is 134 in 2007.
 - The rate of inflation is 29.17% in 2007.
 - All of the above are correct.
14. Andrew is offered a job in Little Rock, where the CPI is 80, and a job in New York, where the CPI is 125. Andrew's job offer in Little Rock is for \$42,000. How much does the New York job have to pay in order for the two salaries to represent about the same purchasing power?
- \$74,667
 - \$65,625
 - \$60,900
 - \$52,500
15. Samantha deposits \$1,000 in a saving account that pays an annual interest rate of 4 percent. Over the course of a year the inflation rate is 1 percent. At the end of the year Samantha has
- \$50 more in her account, and her purchasing power has increased by about \$30.
 - \$40 more in her account, and her purchasing power has increased by about \$40.
 - \$40 more in her account, and her purchasing power has increased by about \$30.
 - \$30 more in her account and her purchasing power has increased by about \$50.
16. In a certain economy in 2005, the value of imports amounted to 80 percent of the value of exports. Consumption, investment, and government purchases added up to \$5,000. The market value of all final goods and services produced within the economy was \$5,500. It follows that the economy exported
- \$500 worth of goods and services.
 - \$1,000 worth of goods and services.
 - \$1,500 worth of goods and services.
 - \$2,500 worth of goods and services.

II. Calculations. Calculate your answers carefully and provide concise explanations.

21. The table below pertains to an economy with only two goods -- books and calculators. The fixed basket consists of 5 books and 10 calculators.

Year	Price of books	Price of calculators
2002	\$24	\$8
2003	30	12
2004	32	15

21.1) Taking 2002 as the base year, calculate the consumer price index for 2002, 2003, and 2004.

21.2) taking 2004 as the base year, calculate the consumer price index for 2002, 2003, and 2004.

21.3) Calculate the inflation rates using 2002 as the base year and using 2004 as the base year. Are they the same? Why? Or Why not?

22. The table below pertains to an economy that produces only two goods – Sandwiches and Magazines.

Prices and Quantities				
Year	Price of Sandwiches	Quantity of Sandwiches	Price of Magazines	Quantity of Magazines
2006	\$4.00	100	\$2.00	180
2007	\$5.00	120	\$2.50	200
2008	\$6.00	150	\$3.50	200

22.1) Calculate nominal GDP of 2006, 2007 and 2008

2006 nominal GDP: $\$4 \times 100 + \$2 \times 180 = \$760$.

2007 nominal GDP: $\$5 \times 120 + \$2.5 \times 200 = \$1100$

2008 nominal GDP: $\$6 \times 150 + \$3.5 \times 200 = \$1600$

22.2) Calculate real GDP of 2006, 2007 and 2008 using 2006 as the base year. What is the growth rate of real GDP from 2007 to 2008?

22.3) Calculate real GDP of 2006, 2007 and 2008 using 2007 as the base year. What is the growth rate of real GDP from 2007 to 2008?

22.4) Are the growth rate of real GDP from 2007 to 2008 equal? Why? Or why not?

III. Short Essay. Provide your answers to the following question.
Partial credits will be given.

24. 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 control for other variables that affect productivity. Considering the determinants of productivity, list and explain some things that would tend to prohibit or limit a poor country's ability to catch up with the rich ones.