

EconS 102: Mid Term 2
Date: July 7th, 2017

Instructions

- Write your name and WSU ID on the paper.
- All questions are worth 1 point.
- You have 40 minutes.
- This test is out of 15 points (like midterm 1). There is a total of 18 questions.
- **Answer all 18 questions. I will count the best 15. If you get more than 15 right, your score will be 15/15.**
- Circle the answer you choose (A, B, C or D). Make sure it is clear. Any ambiguity will mean you get a 0 on that question.
- You are allowed one A4 size paper as a cheat sheet.
- You can use calculators. However, do not use your phone, iPads and other such devices as calculators.
- Good luck!! 😊

Name: _____ WSU ID: _____

1. If real GDP rises while nominal GDP falls, then prices on average have:

- A) risen.
- B) fallen.
- C) stayed the same.
- D) decreased and then have been offset by an equal increase.

Answer: B) Nominal GDP falling would mean either prices have fallen or real GDP has fallen (or both). Since Real GDP has not fallen, prices must have fallen.

Use the following to answer question 2.

Scenario: Good A and Good B

The town of York produces two goods, Good A and Good B. The following is information regarding York's production of these two goods and their prices the following three years.

	Year 2009	Year 2010	Year 2011
Quantity of good A	3	4	5
Price of good A	\$500	\$550	\$550
Quantity of good B	10	10	10
Price of good B	\$2	\$4	\$5

2. (Scenario: Good A and Good B) According to the **Scenario: Good A and Good B**, in 2010, nominal GDP is:

- A) greater than the nominal GDP in 2011.
- B) greater than the nominal GDP in 2009.

C) equal to the nominal GDP in 2011.

D) equal to the nominal GDP in 2009.

Answer: B) $Nominal\ GDP\ in\ 2010 = (4 * 550) + (10 * 4) = 2240.$
 $Nominal\ GDP\ in\ 2009 = (3 * 500) + (10 * 2) = 1520.$ 2240 is greater than 1520.

3. To be counted as unemployed, one must:

A) have had a job previously.

B) be out of work and be actively looking for a job.

C) have had a job before and be actively looking for work.

D) be actively looking for a job and have at least a high-school diploma or its equivalent.

Answer: B) This is the most basic requirement to be counted as unemployed. Also, options A, C and D talk about the person's diplomas and whether the person has worked before. These do not matter.

4. If there are discouraged workers, the measured:

A) unemployment rate may overstate the percentage of people who would like to work but are unable to find jobs.

B) unemployment rate may understate the percentage of people who would like to work but are unable to find jobs.

C) size of the labor force will overstate the number of people available for work.

D) labor force participation rate will overstate the true labor force participation.

Answer: B) Discouraged workers are those who have given up looking for work because they could not find it. This puts them out of the category of those "actively looking for a job". However, they do not choose to remain unemployed, they just do not have a choice. Thus, not counting them understates unemployment.

5. If actual unemployment is 6.2 percent and the natural rate of unemployment is 4 percent, cyclical unemployment is:

A) 6.2 percent.

B) 10.2 percent.

C) 4 percent.

D) 2.2 percent.

Answer: D) All unemployment that is not natural is cyclical. $6.2\% - 4\% = 2.2\%$.

6. An efficiency wage:

A) can only be secured with the help of a labor union.

B) is one that causes greater frictional unemployment.

C) is offered by an employer to encourage workers to work harder.

D) results in a less productive work force.

Answer: C) As per definition.

Use the following to answer question 7.

Table: Price Levels

2011	221.3
2012	227.7
2013	232.2
2014	234.8

7. (Table: Price Levels) Given the price levels in the **Table: Price Levels**, calculate the rate of inflation between 2013 and 2014.

- A) 1.1 percent
- B) 2.6 percent
- C) 2.9 percent
- D) 2.0 percent

Answer: A) $Inflation = \left(\frac{234.8 - 232.2}{232.2} \right) * 100 = 1.1\%$

8. In periods of inflation, lenders benefit because the money that they are repaid has more purchasing power than the money they loaned initially.

- A) True
- B) False

Answer: B) Lenders lose out because the money they get paid back is not worth as much as when they had loaned it out.

9. In a hypothetical country, a market basket of goods and services cost \$130 in 2009, \$140 in 2010, and \$160 in 2011. Based on this information and considering 2009 as the base year, inflation from 2009 to 2011 was:

- A) 7.14 percent.
- B) 7.69 percent.
- C) 14.28 percent.
- D) 23.07 percent.

Answer: D) $Inflation = \left(\frac{160 - 130}{130} \right) * 100 = 23.07\%$

10. Suppose the price index in Year 1 is 116 and the price index in Year 2 is 110. What is the inflation rate between Year 1 and Year 2?

- A) 6 percent
- B) 0 percent
- C) -10 percent
- D) -5.2 percent

Answer: D) $Inflation = \left(\frac{110-116}{116} \right) * 100 = -5.2\%$

11. The aggregate production function exhibits:

- A) diminishing returns to physical capital.
- B) constant returns to physical capital.
- C) increasing returns to physical capital.
- D) negative returns to physical capital.

Answer: A) Keeping labor fixed, more and more capital gives more output, but at a diminishing rate (see text book or slides).

Use the following to answer question 12.

Scenario: Capital

An economy initially has 200 units of physical capital per worker. Each year it increases the amount of physical capital by 10 percent. According to the aggregate production function for this economy, each 1 percent increase in physical capital per worker, holding human capital and technology constant, increases output per worker by one-fourth of 1 percent, or 0.25 percent.

12. (Scenario: Capital) According to the **Scenario: Capital**, if there is no inflation in this economy and output per worker is initially \$1000, what does the estimated output per worker equal after one year?

- A) \$1250
- B) \$2500
- C) \$1225
- D) \$1025

Answer: D) This will give output of $1000 + 1000 * (0.0025 * 10) = 1025$. Note, we use 0.0025 because $0.25\% = \frac{0.25}{100} = 0.0025$.

13. As a limit to economic growth, environmental problems are more difficult to solve than resource problems because:

- A) environmental problems don't automatically provide incentives for changed behavior.

- B) resource problems don't automatically provide incentives for changed behavior.
- C) the opportunity cost of solving environmental problems in terms of GDP sacrificed is larger.
- D) most scientists haven't determined the relationship between greenhouse gas emissions and climate change.

Answer: A) Unlike with resources for production, firms do not feel immediate effects of things like pollution. Hence, there are no incentives to automatically fix behavior.

14. Which is an example of a government policy aimed at promoting economic growth in the United States?

- A) building infrastructure and providing public goods.
- B) implementing a monetary policy that increases inflation.
- C) implementing a fiscal policy that increases inflation
- D) increasing the interest rate charged on student loans

Answer: A) This is the most likely to promote economic growth.

15. Albania has a real GDP per capita of \$25,000, while England has a real GDP per capita of \$50,000. If real GDP per capita in Albania grows at a 7 percent rate and England's real GDP per capita grows at a 3.5 percent rate, how long will it take for real GDP per capita in the two nations to converge?

- A) 10 years
- B) 20 years
- C) 25 years
- D) 35 years

Answer: B) Use 70-year rule formula (see slides).

16. Which CANNOT properly be called a part of infrastructure?

- A) power lines
- B) roads and bridges
- C) human capital
- D) seaports

Answer: C) Human capital are not considered infrastructure. The others are.

17. The inflation-adjusted measure of aggregate output typically used by economists is called:

- A) aggregated output.
- B) nominal gross national product.
- C) net domestic product.
- D) real gross domestic product.

Answer: D) The term "real" is the hint, since it means it is adjusted for inflation (as asked in the question)

18. The increased availability of ATM machines has decreased the shoe-leather costs of high inflation.

- A) True

B) False

Answer: A) More ATMs makes it easier to find machines, wasting less time. This reduces opportunity costs.

Mid Term 2 Test Score: _____ / 15 (For the instructor's use only)

Rough Work