

ECO 103, Winter 2015, Exam #1

Name:

Instructions: Answer all parts of all questions. You have 80 minutes to complete the exam. This exam is open note. You are welcome to use any written materials that you might find helpful. Calculators, but no other electronic devices, are allowed. Here are some things to keep in mind.

- i. Explain all of your answers. Unsupported answers will receive little or no credit.
- ii. On true/false questions, I only care about the quality of your explanation. Simply writing “true” or “false” will yield no credit.
- iii. Avoid extensive irrelevance, this will also cost you points. Your goal should be to provide clear and concise explanations.
- iv. It is more important to demonstrate that you understand the correct method. Minor math errors will result in only minor deductions.
- v. All parts of all questions are worth the same amount.
- vi. Many questions ask you about a deviation from something that we did in class. If you simply copy down what we did in class, I will award no credit.

1. Consider the following data on employment:

Table 1: employment Data

Category	Number
Employed	100
Unemployed (actively seeking work)	20
Discouraged Workers	20
Part Time due being Students	10
Part time but wants to be full time	10
Other Adults	100

a. Calculate the **U-6** unemployment rate.

b. What would happen to the U-6 rate if the unemployed all became discouraged workers?

c. What is the labor force participation rate?

d. What has happened to U-6 and the labor force participation rate in the U.S. since 2009?

2. Assorted Questions

a. Suppose that the Federal Reserve sells \$100 million of government bonds. What will happen to interest rates, and the money supply?

b. Why are stocks not counted in any definition of money?

c. True or False? The $M1$ money multiplier is always larger than the $M2$ money multiplier.

d. What is meant by the Federal Reserve's "dual mandate?"

e. What has happened to the U.S. money supply over the past several years?

f. Does a growth disaster require that a country's per capita GDP decreases over time?

g. Provide two major and distinct reasons why U.S. GDP is higher today than in 1900.

3. Discuss whether each of the following statements are True or False about the Solow Model. Graphs, appropriately used, are encouraged while one word answers (*e.g.* “False”) will always get zero points. All variables referenced are per-capita.

a. Institutions that better protect property rights will increase output.

b. If both A and d increase, then so will per capita consumption.

c. Consumption always increases when the savings rate increases.

d. If $Y = A$, then a decrease in the savings rate will also reduce output.

Bonus: If $Y = A$ in the Solow Model, what savings rate results in the most output per capita?