ECO 150, Winter 2022, Exam #3

Name:

Instructions:

1. This exam consists of thirteen questions and a bonus. Answer them all (5 points on the bonus is the same as 5 points on another question). You are encouraged to use the models from class when formulating your answers.

2. Some questions are open ended. You will be graded more on the quality of your explanation than your specific answers. On "true/false" questions, for example, answering only "true" or "false" will receive no credit, even if correct.

3. Do not just copy from the course materials. Doing so will receive no credit.

4. This is an open note exam. You may use your notes, the textbook, and all course materials from the website. These must be printed. **No electronic devices may be used**. Feel free to leave answers as fractions when computing GDP, unemployment, or inflation.

Please sign the following statement:

In completing this exam, I did not communicate with any other student or person about this exam. I understand that doing so would be a violation of the Student Conduct Policy.

Sign:

Printed Name:

1. Suppose that government spending can be set at either 10% of GDP, or 20% of GDP. Further assume that the former initially results in GDP of $10,000 and 2% growth while the latter yields GDP of $20,000 and 1% growth. Which policy results in higher levels of social welfare?

2. In 2018, the U.S. Congress enacted a major round of tax cuts. During 2018, the U-3 unemployment fell from 4.0% to 3.8%. How should we evaluate the impact of this tax cut on unemployment?

For questions #3-4, consider the following data:

Table 1: Labor Market North of the Wall

Group	# of People
Full Time Employed	20
Unemployed, Actively Seeking Work	5
Children	10
Discouraged Workers	5

3. Calculate the labor force participation rate and U-6 unemployment rate North of the Wall.

4. What would happen to unemployment if all 5 unemployed workers (actively seeking work) gave up and became discouraged workers?

5. Why do most economists believe that pursuing an unemployment rate (U-3 or U-6) equal to zero is both futile and a bad idea?

6. Provide two distinct reasons why GDP underestimates the amount of economic activity in a country.

For Questions #7-8 use the following data:

Table 2: Good and Services Purchased in 2021-22

Good or Service	Quantity (21)	Price (21) ($)	Quantity (22)	Price (22) ($)
Vegetables	3	4	10	5
Fertilizer	7	5	2	30
Imported Books	4	9	9	4
Private Schooling	1	12	2	9

7. Calculate real GDP growth in 2022. Use 2021 as the base year.

8. Using 2022 as the base year, construct a consumer price index with at least two items, and calculate inflation.

9. True or False? Inflation is socially costly because it means that the average household can afford fewer goods and services.

10. Why might a government choose to cut taxes as a way to boost short-term economic performance?

11. Using the AD/AD model, show how declining asset prices can cause a recession.

12. True or False? 3% annual GDP growth would be better than the historical average.

13. What is the relationship between property rights and economic growth? explain why this relationship exists.

Bonus: Suppose that the U.S. economy experiences rising unemployment and higher inflation. Is lower government spending or lower worker productivity more likely to be the culprit?