



Fraser International College

Economics 105 Midterm Exam (Summer 2022)

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FIC Student Number:

Total: 50 Points

Instructions:

1. This exam contains 4 questions.
2. You are required to answer all questions in the exam and type out the answers on the original exam paper. No typing no marks.
3. You are required to put down the steps and explanations for each question. No explanations no points.
4. You are expected to submit the exam ON TIME. If you are late, each minute late will be deducted for 1 point until 50 points are gone. Please plan your time wisely.
5. Please make sure that your hand-drew diagrams are inserted to the corresponding questions or they will not be graded.
6. Your submission file must be in either Word or PDF; other formats will not be graded.
7. You can only submit one file. Please put all your answers in one file.
8. Good luck!

Section I: True or False Questions

Please identify the following statements as true or false. For the correct statement please put down "true" and no explanation needed. For the incorrect statements please put down "false" and explain why. (3 points each totaling 24 points)

- a) With specialization and trade, a country can ~~produce~~ ^{consume} at a point outside its PPF.

F
①

②

- b) A good's relative price can fall even when its money price rises.

T
③

- c) The law of demand tells us that as the price of a good rises, demand ^{quantity demanded} decreases.

F
①

②

- d) Suppose the demand for PCs increases while the cost of producing them decreases. The equilibrium quantity of PCs will rise and the price will ~~always fall~~ ^{be ambiguous}.

F
①

②

- e) If exports currently equal imports, then GDP must equal consumption plus investment plus government ~~expenditure~~ ^{purchases}.

F
①

②

- f) Net exports are used in the ~~income~~ ^{expenditure} approach to measuring GDP.

F
①

②

- g) If underground economic activity was included in GDP calculations, measuring GDP levels would be higher.

T (3)

- h) The CPI overstates the inflation rate because it ignores substitution toward higher-quality goods by households.

T (3)

Section II: Calculation and Analytical Questions

1. [14 points in total]

	Bananas		Coconuts		Grapes	
	Price (\$)	quantity	Price (\$)	quantity	Price (\$)	quantity
2012	2	100	3	100	5	100
2013	2	120	4	105	6	110
2014	4	110	4	120	7	110

- a) Use 2014 as the base year, what are the GDP deflators in all three years? (6 points)

$$\text{GDP deflator}_{2012} = \frac{200 + 300 + 500}{400 + 400 + 700} \times 100 = \frac{1000}{1500} \times 100 = 66.67$$

$$\text{GDP deflator}_{2013} = \frac{240 + 420 + 660}{480 + 420 + 770} \times 100 = \frac{1320}{1670} \times 100 = 79.04$$

$$\text{GDP deflator}_{2014} = 100$$

- b) Use 2014 as the base year, what are the CPIs in all three years? (6 points)

$$CPI_{2012} = \frac{220 + 360 + 550}{440 + 480 + 770} \times 100 = \frac{1130}{1690} \times 100 = 66.86$$

$$CPI_{2013} = \frac{220 + 480 + 660}{440 + 480 + 770} \times 100 = \frac{1360}{1690} \times 100 = 80.47$$

$$CPI_{2014} = 100$$

- c) Please list two reasons why using CPI and GDP deflator to calculate inflation rate they give different numbers? (4 points)

- ① GDP deflator includes prices for all domestic goods, while CPI includes prices for g&s that a typical consumer buys.
- ② CPI uses a fixed basket of g&s while GDP deflator uses a variable weight.

2. Consider the following economic activities. Identify to which of the market in the circular flow each activity belongs. Give a one-line reason for each answer. [3 points in total]

- a) Fred of the Forest buys a new loincloth in preparation for his date with Angela. (2 points)

G&S mkt: purchases of a good.

- b) Fred goes back to school at the University of Saskatoon to get his BA in Vine Swinging. (2 points)

G&S mkt: purchase of an educational services.

- c) Fred has graduated and is getting paid to knock down trees by Treetop City. (2 points)

Factor mkt: fred is working for wage income.

- d) Fred buys his first house. (2 points)

G&S mkt: purchase of a good. (I)

3. One way a country might increase its Real GDP per capita is by increasing its population. However, explain why economists are generally skeptical that raising a country's population is a way to create sustained growth in a country's Real GDP per capita. [4 points in total]

① it dilutes the capital stock ②

③ it stretches natural resources ④