c) Calculate the size of the working-age population. Show your work.

LF is 18.1 million people
LPPR is 67.4%
+2

$\frac{18.1}{x} = 0.674$

$\frac{18.1}{0.674} = \frac{0.674x}{0.674}$

26.85 million people

d) Calculate the employment-to-population ratio. Show your work.

+2 $\frac{E}{Pop}$ $\frac{17 mil}{26.85 mil.} = 0.633$

+2 e) Out of the three indicators of labour market performance, Professor Gray expressed a preference for one of them. I might add that the textbook authors agree with him. Which one was it, and why?

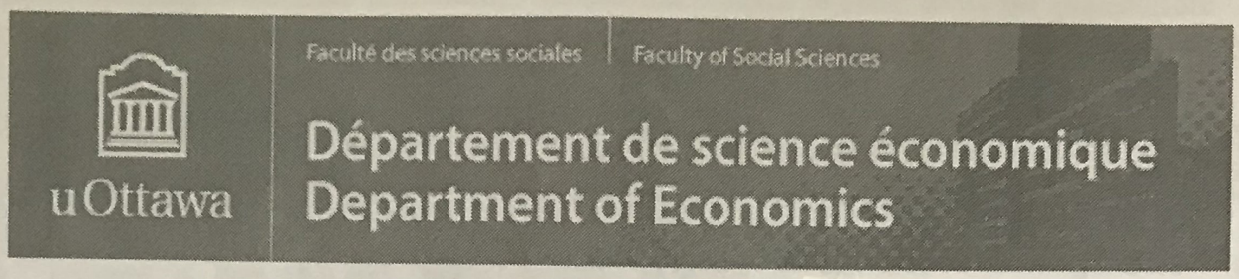
The employment-to-population ratio is the best indicator of labour market performance as it shows how much of the working age population is employed.

9. (3 points) Currently, the official unemployment rate in the USA is 4.1 %, while the corresponding figure for Canada is 5.7 %. Nevertheless, I argued in class that basing the relative labour market performances based only on a comparison of those two figures yield a misleading conclusion that the aggregate labour market in Canada is weaker. I argued the contrary. How did I explain my case that the labour market in Canada is actually stronger?

+3

More of the jobless Americans are labeled as not being in the labour force and so they are not counted as unemployed. By comparison, a larger portion of jobless Canadians are labeled as being in the labour force and so contribute to our higher unemployment rate.

49 (X6)



FIRST MID-TERM EXAMINA

Professor: David Gray

Student N

Winter 2018

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CUSTOMER RECEIPT PAGE 01/01

You may not consult with any written documents whatso
and no conversation is permitted while the examination is
The use of smart-phones and programmable calculators is strictly forbidd
telephones. There are a total of 50 points.

****

1. Respond to all of the following 3 questions (3 points). I mentioned the answers to all of them in class a number of times.

a) What is the approximate rate of real GDP growth in Canada that would be desirable and realistic? I mentioned this in class a number of times.

eal GDP growth rate of 2% is desirable and realistic.

b) What is the approximate current level of nominal, current dollar GDP in Canada?

Current GDP is approximately 1.53 trillion. USD

c) What is the approximate annual rate of price inflation?

Approximate annual rate of price inflation is 2%

60pts total

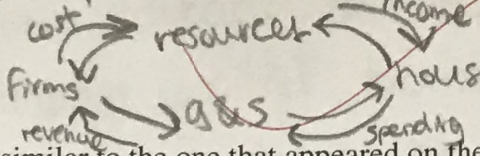
2. In the exercise on national accounting, the estimated value of GDP using the expenditure approach is equal, in theory, to the value produced by using the factor incomes approach. Why is this the case? (3 points)

circular flow model

Every dollar spent is simultaneously one economic agents expenditure and another's income. This is illustrated in the circular flow diagram.

+3

ie what a household spends on goods and savings = what it earns in wages
what a firm spends on ressources = what it earns in revenue.



3. This problem is very similar to the one that appeared on the examination that is posted on the courseweb, but it is not the same. (10 points)

Consider the following fictional transactions that took place in the economy of the land of make believe last year. The figures are denominated in billions of $.

Wages, salaries, and other labour income	824
Consumption expenditure	891
Profits of corporations and government enterprises	231
gross investment expenditure	309
government purchases	375
income from farms and unincorporated businesses	93
net exports	25
saving	550
depreciation	208
interest and miscellaneous investment income	81
government transfer payments	333
indirect taxes	163

a) Calculate the GDP level using the expenditure approach, and explain your work. It is insufficient to write only numbers.

expenditure approach = C + I + G + NX

+2

= 891 + 309 + 375 + 25 = 1600 in billions of dollars

sum of consumption expenditure, investment expenditure, government purchases, and net exports is equal to GDP.

b) Calculate the GDP level using the factor incomes approach, and explain your work. It is insufficient to write only numbers.

factor incomes approach = wages + rent + interest + profits

0

= 824 + 93 + 81 + 231 = 1229

X

d) What is the third approach to national accounting called? There is no-need to describe it.

+2 The third is the Added-Value approach.

4. (16 points) Identify and give the significance of the following four points. You must furnish explanations as to how the topic fits into what we have studied. In other words, why did I bother to bring it up at all? Usually three sentences will suffice.

a) human capital

+4 Refers to how educated, skillful, and trained a worker is. Increased human capital boosts productivity. Real increases in productivity lead to real increases in wages and, on average, living standards increase.

+3 b) unmeasured quality change in the context of the CPI (consumer price index) ie computes e price of a good remains constant but its quality increases, seem that the cost of living remained constant when in ty it is lesser because now consumers get better goods servicer for the same amount of money

c) economic models (what is their purpose?)

e models simplify and illustrate the behaviour of economic nts and the flow of resources and money.

+2

d) the convergence theory (also known as the catch-up effect)

Poor countries may experience pereds of rapid grouth for a while but will eventually slow down to a smaller rate of growth, like one experienced by a country that was already wealthy. ie South Korea's growth slowing down, Canada's growth always having been relatively steady In other words, there are diminishing returns, so increments adding to real GDP remain positive but decrease in magnitude.

5. (4 points) Suppose that the base year for the consumer price index (CPI) is 2002. The value of this price index in 2008 was 114.1. I obtained these figures right out of the textbook.

a) How does one interpret the value in 2008?

nce the CPI increased from 2002 to 2008, we know that
e cost of living rose.

b) If the rate of inflation from between 2007 and 2008 was + 2.33 %, what was the level of the price index in 2007? Show your work.

$\left(\frac{CPI_{2007}}{CPI_{2008}} - 1\right) \times 100 = 2.33$

$\frac{CPI_{2007}}{114.1} = 1.0233$

$CPI_{2007} = 116.76$

$\frac{CPI_{2007}}{114.1} - 1 = 0.0233$

6. (8 points) Consider the following historical data on GDP. You must show your work in order to receive any credit. The base year for the deflator is 2002.

$\frac{\text{nominal}}{\text{deflator}} \times 100$

year	Nominal GDP (in billions)	real GDP (in billions)	GDP deflator
1980	314.4	625.0	blank
1985	~~[illegible]~~ 485.7	716.4	67.8

a) What was the value of the deflator for the year 1980? I have left it blank. deflator = X

$\frac{\text{nominal GDP 1980}}{X} \times 100 = \frac{\text{real GDP 1980}}{}$

$\frac{314.4}{X} \times 100 = 6250$

$\frac{314.4}{6.25} = X$

$X = 503$

b) What was the growth rate of the GDP deflator between 1985 and 2002? How do we interpret this figure in economic terms?

85: 67.8
2: 100

$\frac{100 - 67.8}{67.8} \times 100 = 47.5\%$

e deflator grew by a rate of 47.5% in this time period.
s means that the economy experienced inflation,
d a 1985 dollar went further (could purchase more
ods and services) than a 2002 dollar.

c) What was the growth rate of real GDP between 1980 and 1985? Explain what this means in economic terms.

80: 6250
85: 7164 +2

$\frac{7164 - 625}{625} \times 100 = 14.624\%$

Between 1980 and 1985 the economy experienced real growth - not just inflated prices

d) The growth rate of nominal GDP is higher than the growth rate of real GDP. Explain why this is the case. No calculation is necessary for this part.

+2

growth rate of nominal GDP is higher than the growth rate of real GDP because of the inflation rate. The growth rate of inflation is higher than that of GDP.

7. (3 points) The production process involves a high level of non-market activity. What repercussions does this have for the use of the official GDP accounts (produced by Statistics Canada) as an indicator of economic welfare? Does it cause an overstatement or an understatement, and why?

Official GDP accounts overstate economic well being in that they do not account for economic bads (like damage to the environment), or time allocated to leisure, or, for example, work you did to your own home.

8. (10 points) Consider the following figures that I obtained from the textbook. These are actual data referring to June 2008 and June 2009.

- The labour force participation rate (LFPR) in June 2008 was 67.4 %
- The total number of unemployed workers in June 2008 was about 1.1 million
- The total number of employed workers in June 2008 was 17 million

a) Calculate the size of the labour force. Show your work. (Easy)

+2

$LF = U + E$

$LF = 1{,}100{,}000 + 17{,}000{,}000$

$LF = 18.1$ million people

b) Calculate the unemployment rate. Show your work. (Pretty Easy)

2

$UR = \frac{U}{LF} \times 100\%$

$= \frac{1.1 \text{ million}}{18.1 \text{ million}} \times 100\%$

$= 6.1\%$