

**Attention:** Not all questionnaires are the same. This is questionnaire **A**. On the answer sheet, you must indicate the letter of your questionnaire with the course's number as follows: **ECO2143A**. You must answer according to **the material seen in this course**. Read all answer choices before choosing your answer. Calculator permitted. GOOD LUCK!

## QUESTIONNAIRE A

### I. MULTIPLE CHOICE QUESTIONS (2 points each)

1. Which of the following is generally true?
  - (a) With perfect capital mobility, a higher savings rate leads to a higher GDP per worker.
  - (b) In a closed economy, a higher savings rate leads to a higher GDP. ✓
  - (c) With perfect capital mobility, a higher savings rate leads to a higher marginal product of labor.
  - (d) With perfect capital mobility, GDP and GNP are equal.
2. According to the data that we have studied in the course, which of the following can be said about economic growth and trade openness.
  - (a) Poor economies tend to grow faster when they are closed.
  - (b) There does not seem to be any link between the degree of trade openness and the speed of convergence of poor economies with the rich world.
  - (c) Trade openness seems to be a necessary prerequisite for the convergence of poor economies with the rich world. ✓
  - (d) It is difficult to find examples of countries that began to grow faster after opening up their economy to the rest of the world.
  - (e) There are many examples of countries that became rich while being virtually closed to trade with the rest of the world.
3. According to observations, which of the following assertions is generally TRUE?
  - (a) Productivity differences between the countries of the world are not very important. We should thus look elsewhere to target development aid.
  - (b) Differences in the quantities of accumulated factors of production between the countries of the world are not very important. We should thus look elsewhere to target development aid.
  - (c) For most of the countries of the world, differences in the quantities of accumulated factors of production are the most important to explain differences in wealth levels. Development should thus target solely factor accumulation in the form of physical and human capital.
  - (d) For most of the countries of the world, differences in productivity are the most important to explain differences in wealth levels. Development should thus target solely increases in productivity.
  - (e) All of the above are generally false. ✓

4. According to an article written by Eggertsson titled “Great Expectations and the End of the Depression”, the turn around that the USA economy experienced in 1933 should be *directly* attributed to
- (a) increased current government deficits.
  - (b) lower current government deficits.
  - (c) a shift in expectations. ✓
  - (d) increased current money supply.
  - (e) the coming of the second world war.
5. Regarding technological progress in Western Europe and the USA, which of the following is generally TRUE?
- (a) The first industrial revolution began in Spain around 1500 soon after the discovery of America.
  - (b) The productivity slowdown that began in the early 1970’s is still going on today.
  - (c) The high productivity growth rates that occurred during the first and second industrial revolutions were never matched (or exceeded) during the 20th century.
  - (d) The productivity slowdown of the early 1970’s can clearly be attributed to a slowdown in technological progress.
  - (e) All of the above are false. ✓
6. Assume that the economy can be represented by the Solow model with the following output function  $Y = K^\alpha (eL)^{1-\alpha}$ , where each variable is defined as seen in class. Suppose the investment rate is  $\gamma = 10\%$ , the depreciation rate is  $\delta = 5\%$ , the growth of the labor force size is  $n = 3\%$  per year and the rate of technological progress is  $\hat{e} = 2\%$  per year. What will be the long-run, steady-state growth rate of *output per worker*?
- (a) 0%
  - (b) 10%
  - (c) 5%
  - (d) 3%
  - (e) 2% ✓
7. Suppose that the returns to education are 13.4% for the first four years of schooling (grades 1-4), 10.1% per year for the next four years (grades 5-8), and 6.8% per year for education beyond eight years. What fraction of wages is due to human capital for a worker who has 11 years of education?
- (a) 0%
  - (b) 28%
  - (c) 33%
  - (d) 52%
  - (e) 66% ✓
8. In a case study discussed in class which compared the growth experiences of Singapore and Hong Kong since 1960, it was seen that even though both countries had experienced similar output growth rates, productivity growth in Singapore was much lower than in Hong Kong. This led us to make the following observation:
- (a) Singapore’s output growth rate will not be able to keep up with Hong Kong’s in the long run because of diminishing returns to capital. ✓

- (b) Hong Kong's output growth rate will not be able to keep up with Singapore's in the long run because of diminishing returns to capital.
  - (c) Singapore's output growth rate will not be able to keep up with Hong Kong's in the long run because of increasing returns to productivity.
  - (d) Hong Kong's output growth rate will not be able to keep up with Singapore's in the long run because of increasing returns to productivity.
  - (e) All of the above are false.
9. Which of the following statement is clearly FALSE?
- (a) Generally, a patent has a life of about 7 to 10 years. ✓
  - (b) The patent system has been created in order to solve the problem of exclusion in the use of new ideas.
  - (c) Physical capital is considered a rival factor of production.
  - (d) Human capital is considered a rival factor of production.
  - (e) Because of investment portfolio diversification possibilities, financial markets play an important role in promoting technological progress through R&D.
10. Over the past 130 years, the average yearly growth rate of income per capita in Canada and the USA has been approximately (give the closest value)
- (a) -1%
  - (b) 0%
  - (c) 2% ✓
  - (d) 5%
  - (e) 8%
11. According to a recent study on the evolution of income inequalities between all persons in the world since 1820, it appears that
- a) World inequalities have increased mainly because of an increase in inequalities between countries. ✓
  - b) World inequalities have increased mainly because of an increase in inequalities within countries.
  - c) World inequalities have decreased mainly because of a decrease in inequalities between countries.
  - d) World inequalities have decreased mainly because of a decrease in inequalities within countries.
  - e) World inequalities have remained roughly the same.
12. Suppose that the yield to maturity of a two-year bond is 1% and that of a ten-year bond is 3%. Which of the following is generally TRUE?
- (a) Short term interest rates are expected to decrease.
  - (b) Short term interest rates are expected to increase. ✓
  - (c) Two-year bonds constitute a bad investment.
  - (d) The no-arbitrage condition must be violated.
  - (e) Ten-year bonds are priced too high.
13. Regarding expectations and government expenditures, which of the following is generally FALSE?
- (a) A no-deficit increase in government expenditures today is not likely to increase GDP today.

- (b) There is no compelling empirical evidence that a deficit-financed increase in government expenditures today will increase GDP today.
- (c) When looking for evidence that increased government expenditures increase GDP, one should look at when the increase was announced rather than when it actually took place.
- (d) For the USA economy, there is general agreement that the multiplier effect linked to government expenditures is above 1. ✓
14. A study has estimated the quantity of capital per worker in Mexico to be worth 42 991\$(US2000), while that of India is worth 6 270\$(US2000). Which property of the national production function allows us to anticipate that an additional unit of capital will have a larger impact on production in India than in Mexico?
- (a) If capital increases, output increases.
- (b) The marginal product of capital is decreasing. ✓
- (c) Constant returns to scale.
- (d) An efficient use of capital.
- (e) capital depreciation.
15. Suppose that there are only two goods produced in the world: computers and ice cream. Computers are traded on world markets but not ice cream. The following table provides information about output quantities and prices for countries  $A$  and  $B$ .

Country	computers output per capita	ice cream output per capita	price computers local currency	price ice cream local currency
A	4	10	3\$A	4\$A
B	2	5	2\$B	1\$B

- What should the PPP exchange rate be between the two currencies?
- (a) 0.173\$B/\$A
- (b) 0.250\$B/\$A
- (c) 0.346\$B/\$A ✓
- (d) 0.666\$B/\$A
- (e) 1.500\$B/\$A
16. Suppose that technology grows at rate  $\hat{A}$  and that population grows at rate  $n$ . The capital depreciation rate is  $\delta$  and the investment rate is a  $\gamma$  proportion of the output. Let  $e = A^{\frac{1}{1-\alpha}}$ . Which of the following statements regarding the long-run steady-state growth rate of aggregate output  $\hat{Y}$  is true?
- (a) There is no growth rate of long-run aggregate output  $\hat{Y}$  because of “Decreasing Returns to Capital”.
- (b) The long-run steady-state growth rate of aggregate output is equal to zero.
- (c) It is equal to the growth rate of technological progress growth  $\hat{e}$ .
- (d) It is equal to the labour force growth rate  $n$  plus the growth rate of technological progress  $\hat{e}$ . ✓
- (e) None of the above is correct since it depends on whether we start above or below the country specific steady-state.
17. Which of the following is generally false?

- (a) Instead of using the market exchange rate, the use of an exchange rate adjusted for purchasing power parity to compare income levels tends to make poor countries look better.
  - (b) Instead of using the market exchange rate, the use of an exchange rate adjusted for purchasing power parity to compare income levels tends to make rich countries look even richer. ✓
  - (c) The use of an exchange rate adjusted for purchasing power parity accounts for the fact that non-tradable goods and services are cheaper in poorer countries.
  - (d) The market exchange rate tends to be determined by the law of one price for tradeable goods.
18. Suppose that in a certain country, one-fifth of the females die in infancy; two-fifths die at age 30; and two-fifths live to age 60. Furthermore, women bear one child at age 22, one child at age 26, one child at age 29, and one child at age 32. Where one-half of all children born are girls, what is the net rate of reproduction for this country (NRR)?
- (a) 1.25
  - (b) 1.4 ✓
  - (c) 1.0
  - (d) 2.0
  - (e) 0.75
19. According to historical observations,
- (a) nutrition cannot be an important factor in explaining income differences between countries because even though there exists large differences in nutrition levels, nutrition does not have a significant impact on people's capacity to produce.
  - (b) nutrition cannot be an important factor in explaining income differences between countries because nutrition levels are roughly the same across the world.
  - (c) the role of nutrition in explaining economic growth in the UK since 1780 does not appear to be significant.
  - (d) better nutrition plays an important role in explaining income levels because not only can workers work better, but it also allows the previously worst fed people to work when they were too weak to work before. ✓
  - (e) the impact of better nutrition is mostly due to the fact that it allows the previously worst fed people to work when they were too weak to work before, but it does not have an important impact on those who already work.
20. Which of the following is FALSE?
- (a) In the past 200 years or so in the UK, it has been estimated that better nutrition accounts for a significant share of overall growth in income.
  - (b) In developed economies, payments to education explain a larger share of total national income than payments to physical capital.
  - (c) In developing economies, payments to education explain a smaller share of total national income than payments to physical capital. ✓
  - (d) In a country like Canada, one of the most important part of the costs of education takes the form of the opportunity cost of students' time.
  - (e) Variations in education between countries explain some of the variation in income per worker among countries.