Homework 8 – KEY

Due on 29/10/2024, by 23:00

Average: 87.11 + 0pts GI bonus

The tasks in this assignment were designed for the average student to solve independently after mastering the material. The answers provided here are written in an instructional manner to help you understand the problem-solving process for each task. If you continue to struggle with a task after reviewing this key, the difficulty may stem not from the task itself, but from having missed or overlooked some parts of the required material.

1. Which of the following is most likely to determine fertility according to the Malthusian theory?
   - A. Religion.
   - B. Science.
   - 100% C. **Income.** *[Malthus claimed that the population should increase in times of prosperity and decrease in times of famine]*
   - D. Geopolitics.

2. Which of the following is most likely to be the reason why poorer countries often exhibit higher economic growth than developed countries?
   - A. Because poorer countries receive financial assistance from richer countries. *[Highly debatable]*
   - B. Because poorer countries have increased fertility. *[Population growth does not cause catch-up growth]*
   - 99% C. **Because poorer countries benefit from technologies invented in wealthier economies.** *[This is the definition of catch-up growth]*
   - D. Because poorer countries export natural resources. *[Most of them do not]*

3. Greece recently introduced a 6-day work week. Which of the following could be a result of such a policy?
   - 11% A. Increase in output produced. *[The extra working hours could add to output]*
   - B. Decrease in productivity. *[Working hours increased but available capital did not increase. This may cause diminishing returns]*
   - 84% C. **Both A and B.**
   - D. None of the above.

4. Which of the following is most likely to decrease a country's aggregate saving?
   - A. An increase in the interest rate. *[High interest rates incentivize more saving]*
   - 96% B. **The expectation that the GDP per capita will increase in the future.** *[When people expect their future income to increase, they tend to spend more and save less]*
   - C. The expectation that income tax will increase in the future. *[When people expect their future income to decrease, they tend to save more today]*
   - D. Government offering tax benefits to pension plans. *[Tax reductions on savings destined for pension plans would incentivize employees to save more]*

5. According to the Solow model, which of the following is most likely to increase a country's steady-state output?

64% A. An increase in K. *[Changes in K do not shift the dk or sY curves, but trigger a movement along them]*

26% B. An increase in L. *[This would increase Y and, correspondingly, sY, thus steady state GDP would also increase]*

C. An increase in d. *[This would lead to a lower steady-state output]*

D. It is not possible for an economy to increase its steady-state output.

6. In the Solow model, which of the following curves will shift if workers become more productive?

83% A. sY.

B. dK.

C. sY and dK.

11% D. None of the above.

[Labor productivity will affect Y, thus sY. It does not affect dK]

7. An economy has sY and dK curves that yield a steady-state output of 100. Its current output is 78. Which of the following is most likely for the next year according to the Solow model?

A. The economy will have $Y = 78$.

98% B. The economy will have $78 < Y \le 100$. *[The economy will grow towards its steady-state]*

C. The economy will have $Y = 100$. *[Theoretically possible, but not the best answer]*

D. The economy will have $100 < Y$. *[The economy cannot pass its steady-state]*

8. Which of the following is most likely to be an example of catch-up growth?

A. Germany reaching Turkey's real GDP.

B. Singapore reaching Indonesia's GDP growth rate.

C. Malaysia surpassing Greece's capital accumulation.

94% D. Mexico reaching USA's GDP per capita.

[Catch-up growth occurs when a less developed economy benefits from technological spillovers by a more developed country, enabling the poorer country to grow at a faster rate than the richer one]

9. Real GDP per capita in a country increased by 5%. Which of the following is certain?

A. Population increased. *[Nothing from the question justifies this]*

B. Inequality decreased. *[Inequality could have increased if the new wealth benefited only the elite]*

C. Poverty decreased. *[Same argument as above]*

97% D. None of the above.

10. Which of the following is most likely to be a result of the exponential nature of GDP growth?

A. Large differences in growth rates lead to small differences in GDP in the future.

12% B. Large differences in growth rates lead to large differences in GDP in the future.

C. Small differences in growth rates lead to small differences in GDP in the future.

87% D. Small differences in growth rates lead to large differences in GDP in the future. *[Because growth compounds over the years]*