

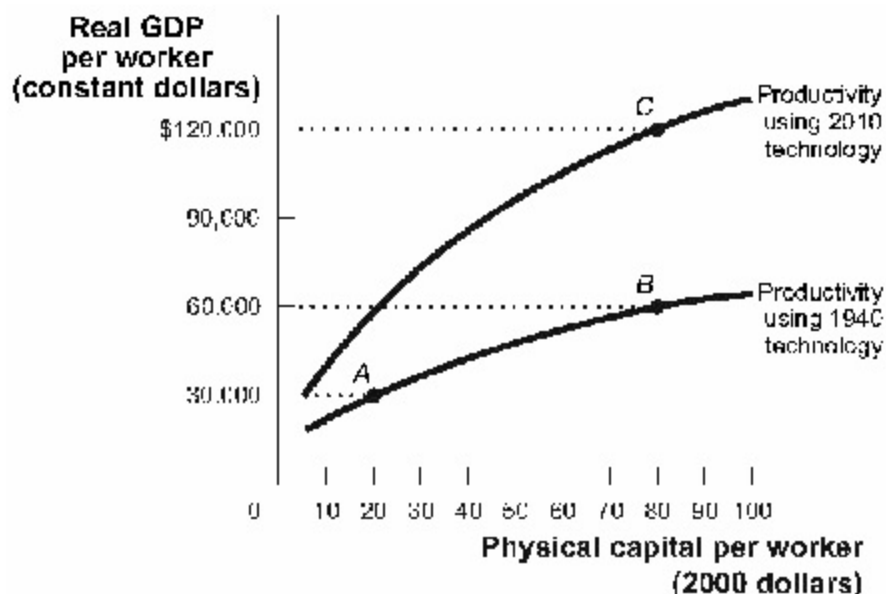
Name: _____ Date: _____

1. An increase in the amount of physical capital per worker _____, while technological progress _____.
 - A) makes the aggregate production function steeper; changes the slope of the aggregate production function
 - B) makes the aggregate production function steeper; makes the aggregate production function flatter
 - C) moves the economy along the aggregate production function; shifts up the aggregate production function
 - D) shifts up the aggregate production function; moves the economy along the aggregate production function
2. Which of the following accurately describes what is happening along a typical aggregate production function?
 - A) At some point, increasing the amount of physical capital per worker will reduce productivity.
 - B) Increases in physical capital per worker will always bring about an increase in productivity that is worth the cost of the additional physical capital.
 - C) Due to diminishing returns, increasing the amount of physical capital per worker will eventually bring smaller and smaller increases in productivity.
 - D) Adding workers results in real GDP per worker rising at an increasing rate throughout the function.
3. The aggregate production function does NOT depend on which of the following?
 - A) the quantity of physical capital per worker
 - B) human capital per worker
 - C) the state of technology
 - D) the amount of natural resources
4. The sources of funds for investment spending are:
 - A) savings by households, government, and foreigners.
 - B) taxes and transfer payments.
 - C) always equal to U.S. spending on imports.
 - D) directed to their most productive uses by the U.S. government.
5. Technological progress is advanced through:
 - A) research and development.
 - B) government regulation.
 - C) consumption.
 - D) infrastructure.

6. Long-run economic growth is:
- A) higher in countries with a weak rule of law and excessive government intervention.
 - B) lower in countries with a strong government and independent judiciary.
 - C) lower in countries whose courts enforce property rights and whose government protects its citizens.
 - D) higher in countries with a strong rule of law and political stability.
7. A country's growth rate depends very highly on how it has invested in its physical capital. Generally, countries that have:
- A) used foreign direct investment as a source of their capital have exhibited the highest growth rate.
 - B) used domestic saving as a source of their investment on physical capital have exhibited the highest growth rate.
 - C) used foreign portfolio investment as a source of their capital have exhibited the highest growth rate.
 - D) used contracted globalization as a source of their capital have exhibited the highest growth rate.
8. When the government invests resources in a nation's educational system, the government is said to be investing in:
- A) private property.
 - B) human capital.
 - C) political stability.
 - D) infrastructure.
9. The East Asian countries have exhibited tremendous economic growth during the last 40 years because of all of the following EXCEPT:
- A) a significant increase in physical capital per worker made possible by very high rate of saving.
 - B) a significant increase in human capital made possible by very good basic education.
 - C) a substantial achievement in technological progress.
 - D) intervening governments with lots of regulations.
10. Economic growth will likely involve:
- A) a reduction in investment.
 - B) a decrease in the capital stock.
 - C) higher saving.
 - D) lower saving.

Use the following to answer questions 11-12:

Figure: Technological Progress and Productivity Growth



11. (Figure: Technological Progress and Productivity Growth) If there is a significant increase in human capital per worker (all other factors remaining unchanged), it would be best indicated by a move from:
- A) *A to B.*
 - B) *B to A.*
 - C) *C to B.*
 - D) *B to C.*
12. (Figure: Technological Progress and Productivity Growth) If there is an increase in physical capital per worker (all other factors remaining unchanged), it would be best indicated by a move from:
- A) *A to B.*
 - B) *B to A.*
 - C) *C to B.*
 - D) *B to C.*
13. Economies with higher growth rates tend to be those that increase their:
- A) government regulation.
 - B) human capital.
 - C) consumption.
 - D) resources.

14. Which of the following institutions is important in channeling savings into investment?
- A) schools
 - B) religious institutions
 - C) banks
 - D) the federal government
15. Among the factors that are important for economic growth are:
- A) property rights.
 - B) growth accounting.
 - C) natural resources.
 - D) convergence.
16. Ireland's recent economic growth and improving living standard are due primarily to:
- A) its refusal to join the European Union and abandon its own currency for the euro.
 - B) the capture and imprisonment of Sinn Fein leader Gerry Adams.
 - C) the large number of immigrants to the nation from Eastern Europe.
 - D) an excellent physical and human infrastructure, including a good education system, airports, telecommunications, and shipping facilities.
17. Which of the following is an important measure of economic growth over time?
- A) inflation
 - B) increases in real per capita GDP
 - C) decline in real interest rates
 - D) increases in the available labor supply
18. The standard of living in a country can be best measured by:
- A) nominal GDP per capita.
 - B) real GDP per capita.
 - C) the productivity growth rate.
 - D) the business cycles.
19. Suppose a panel of economists predicts that a nation's real GDP per capita will double in approximately 20 years. Based upon the rule of 70, what must be the predicted annual growth rate of real GDP per capita?
- A) 140%
 - B) 3.5%
 - C) 2.85%
 - D) 14%

20. Suppose a panel of economists predicts that a nation's real GDP per capita will have an average annual growth rate of 2%. Based upon the rule of 70, how many years will it take for this nation's real GDP per capita to double?
- A) 35
 - B) 70
 - C) 140
 - D) 20
21. The rule of 70 indicates that a 6% annual increase in the potential level of real GDP would lead to the potential output doubling in _____ years.
- A) 6
 - B) 12
 - C) 24
 - D) 30
22. Productivity declines when:
- A) the number of hours worked exceeds the number of workers.
 - B) population growth exceeds real GDP growth.
 - C) the ratio of adult civilians employed outside the home rises.
 - D) real GDP growth exceeds the population growth.
23. Over the course of the twentieth century, the real GDP per capita in the United States rose mostly as a result of:
- A) rising population.
 - B) rising employment.
 - C) rising productivity.
 - D) reduced vacation time.
24. The term *human capital* describes:
- A) improvement made possible by better machines and the equipment available.
 - B) improvement in the technology available to the work force.
 - C) improvement in a worker's skills made possible by education, training and knowledge.
 - D) improvement in the robotics technology that can substitute for a human worker.
25. Which of the following will NOT increase the productivity of labor?
- A) technological improvements
 - B) an increase in the capital stock
 - C) improvements in education
 - D) an increase in the size of the labor force

26. Rising high school graduation rates are an example of an increase in:
- A) technological progress.
 - B) human capital.
 - C) population stock.
 - D) fertility rates.
27. Physical capital includes:
- A) the education or knowledge a worker has in his or her physical being.
 - B) the tools a worker has to work with.
 - C) the money available for the worker to use.
 - D) shares of stock.
28. To acquire human capital a person would:
- A) save to buy a printing press.
 - B) purchase a printing press rather than use his or her money on consumption.
 - C) learn to use a printing press.
 - D) sell the books that the printing press produces.
29. Diminishing returns to physical capital means that as more and more physical capital is combined with a fixed amount of human capital and a fixed technology, eventually:
- A) aggregate output or real GDP declines.
 - B) aggregate output or real GDP grows.
 - C) additions to aggregate output or real GDP decline.
 - D) additions to aggregate output or real GDP increase.
30. Growth accounting estimates the:
- A) increase in the population rate over time.
 - B) increase in the inflation rate over time.
 - C) contribution of each major factor in the aggregate production function to economic growth.
 - D) contribution of the technology factor in the aggregate production function to economic growth.
31. Natural resources are:
- A) more important determinants of productivity today than ever before.
 - B) the reason behind the fast development of countries like Japan.
 - C) the reason behind the slow development of countries like Nigeria.
 - D) less reliable indicators of productivity today than they were a century ago.