LO.a: Compare factors favoring and limiting economic growth in developed and developing economies.

1. Which of the following is *least likely* a factor that limits economic growth in developing countries?
   A. Low saving and investment.
   B. Political instability.
   C. No restrictions on trade and capital flow.

LO.b: Describe the relation between the long-run rate of stock market appreciation and the sustainable growth rate of the economy.

2. For a developed economy, the forecasted long term growth rate of potential GDP is 3% and the forecasted long-term inflation rate is 2%. The long-term equity market appreciation in this economy will be closest to:
   A. 2%.
   B. 3%.
   C. 5%.

LO.c: Explain why potential GDP and its growth rate matter for equity and fixed income investors.

3. Which of the following statements is *least accurate*?
   A. Higher rates of potential GDP growth translate into lower real interest rates.
   B. All else equal, slower estimated potential GDP growth raises the perceived risk of bonds.
   C. Government budget deficit typically increase during recessions and decrease during expansions.

LO.d: Distinguish between capital deepening investment and technological progress and explain how each affects economic growth and labor productivity.

4. Which of the following represents a move along the production function?
   A. Capital deepening.
   B. Technological progress.
   C. Both capital deepening and technological progress.

LO.e: Forecast potential GDP based on growth accounting relations.

5. The projected growth rate in potential GDP is 5%. The labor force is expected to grow at 3% per year. According to the growth accounting equation, the expected growth rate in labor productivity is *closest* to:
   A. 8%.
   B. 5%.
   C. 2%

LO.f: Explain how natural resources affect economic growth and evaluate the argument that limited availability of natural resources constrains economic growth.

6. Which of the following statements *most accurately* describes the 'Dutch disease'?
   A. Countries with less natural resources experience low growth as compared to countries with more natural resources.
   B. The manufacturing sector of countries rich in natural resources becomes globally uncompetitive leading to slow economic growth.
   C. Countries with less non-renewable resources as compared to renewable resources experience low growth,

LO.g: Explain how demographics, immigration, and labor force participation affect the rate and sustainability of economic growth.

7. Which of the following will *most likely* have a positive impact on economic growth?
   A. Decrease in the Labor force participation rate.
   B. Immigration into the country.
   C. Decrease in the average hours worked.

LO.h: Explain how investment in physical capital, human capital, and technological development affects economic growth.

8. Analyst 1: Non - ICT spending should eventually lead to capital deepening and thus have less impact on potential GDP growth.
   Analyst 2: ICT spending through their externality impact may boost the growth rate of potential GDP more than ICT spending.
   A. Analyst 1 is correct.
   B. Analyst 2 is correct.
   C. Both analysts are correct.

LO.i: Compare classical growth theory, neoclassical growth theory, and endogenous growth theory.

9. According to which of the following, will increasing the saving rate permanently increase the rate of economic growth of a country?
   A. Endogenous growth theory.
   B. Neoclassical model.
   C. Classical model.

LO.j: Explain and evaluate convergence hypotheses.

10. 'Countries that have the same population growth rate, savings rate and production function will converge over time'. The type of convergence described here is *most likely*:
    A. absolute convergence.
    B. club convergence.

C. conditional convergence.

LO.k: Describe the economic rationale for governments to provide incentives to private investment in technology and knowledge.

LO.l: Describe the expected impact of removing trade barriers on capital investment and profits, employment and wages, and growth in the economies involved.

11. Which of the following policies will *least likely* lead to high economic growth?
    A. High level of spending on R&D and human capital development.
    B. Inward oriented policies.
    C. Outward oriented policies.

Solutions

1. C is correct. Factors limiting growth include the following:
    - Low saving and investment
    - Poorly developed financial markets
    - Weak and corrupt legal systems; poor law enforcement
    - Lack of property rights
    - Political instability
    - Poor public education and health services
    - Tax and regulatory policies which discourage entrepreneurship
    - Restrictions on trade and capital flow

2. C is correct. In the long run, the increase in stock prices will approximately be the same as the increase in the nominal GDP.

3. A is correct. Higher rates of potential GDP growth translate into higher real interest rates.

4. A is correct. Capital deepening means an increase in the capital to labor ratio. It is reflected by a move along the production function. Technological progress causes an upward shift in the entire production function.

5. C is correct. According to the growth accounting equation, Growth rate in potential GDP = Long-term growth rate of labor force + Long-term growth rate in labor productivity. Therefore, Growth rate in labor productivity = 5 – 3 = 2%.

6. B is correct. Dutch disease is a situation where currency appreciation driven by strong export demand for resources makes other segments of the economy, in particular manufacturing, globally uncompetitive.

7. B is correct. Immigration increase the labor force of the country thereby increasing economic growth.

8. C is correct. Non-ICT spending should eventually result in capital deepening and thus have less impact on potential GDP growth. In contrast, a growing share of ICT investments in the economy, through their externality impacts, may actually boost the growth rate of potential GDP.

9. A is correct. Unlike the neoclassical model, there are *no diminishing marginal returns to capital for the economy as a whole* in the endogenous growth models. So increasing the saving rate permanently increases the rate of economic growth.

10. C is correct. Conditional convergence implies that convergence is conditional on the countries having the same saving rate, population growth rate and production function. If these conditions hold the model implies convergence to the same level of per capita output as well as the same steady state growth rate.

11. B is correct. Inward-oriented policies attempt to develop domestic industries by restricting imports. Instead of importing goods and services, these policies encourage the production of domestic substitutes, despite the fact that it may be more costly to do so, which can hamper economic growth. In general more open and trade-oriented economies will grow at a faster rate.

