

Multiple choice: Choose the best response to each prompt.

1. If workers in any economy over time become more highly educated and more highly trained, what is the likely impact on labor demand?
 - (a) Decrease in labor demand
 - (b) Increase in labor demand
 - (c) Cannot be determined from the information given
 - (d) No change in labor demand

2. Suppose consumers increase their demand for final goods and services. What will be the impact on the aggregate labor market?
 - (a) Decrease in labor supply
 - (b) Decrease in labor demand
 - (c) Increase in labor supply
 - (d) Increase in labor demand

3. Which of the following characterizes unemployment in the market for labor?
 - (a) A disequilibrium in the labor market where the market wage is below the equilibrium wage, causing a labor market surplus
 - (b) A disequilibrium in the labor market where the market wage is below the equilibrium wage, causing a labor market shortage
 - (c) A disequilibrium in the labor market where the market wage is above the equilibrium wage, causing a labor market surplus
 - (d) A disequilibrium in the labor market where the market wage is above the equilibrium wage, causing a labor market shortage

4. How would a sharp increase in global raw materials prices likely affect aggregate labor demand in an economy?
 - (a) Ambiguous effect on employment and prices.
 - (b) Increase in labor supply
 - (c) Decrease in labor supply
 - (d) Decrease in labor demand

5. If there is a cultural shift leading to more individuals prioritizing leisure over work, resulting in a decrease in the labor force participation rate, what is the expected impact on equilibrium wage and employment?
- (a) Equilibrium wage decreases, employment increases
 - (b) Equilibrium wage and employment both decrease
 - (c) Equilibrium wage and employment both increase
 - (d) Equilibrium wage increases, employment decreases
6. Suppose there is a drop in labor demand, but no immediate change in the market wage. Which of the following may result?
- (a) An increase in worker shortage
 - (b) A decrease in unemployment
 - (c) An increase in unemployment
 - (d) A decrease in labor supply
7. Suppose there is an economy-wide decrease in labor productivity. What is the impact on the labor market equilibrium?
- (a) Increase in employment and an increase in wage
 - (b) Increase in employment and a decrease in wage
 - (c) Decrease in employment and decrease in wage
 - (d) Decrease in employment and an increase in wage
8. Suppose businesses have a pessimistic outlook for future profitability. Which of the following would occur in the loanable funds market?
- (a) A leftward shift in the demand for investment
 - (b) A rightward shift in the supply of savings
 - (c) A rightward shift in the demand for investment
 - (d) A leftward shift in the supply of savings
9. Which of the following is the definition of capital used in a macroeconomics context?
- (a) Stocks and bonds that were purchased by individual investors.
 - (b) Stocks and bonds that were purchased by businesses.
 - (c) Physical goods that will be used in the production of other goods and services.
 - (d) The amount of money a business has on hand to conduct business.

10. Which of the following is a type of savings and a component of saving supply?
- (a) Net capital inflows (the negative of net exports)
 - (b) Government taxes
 - (c) Consumer spending
 - (d) Government spending
11. Which of the following would lead to a rightward shift in saving supply?
- (a) A decrease in private consumer savings
 - (b) An increase in government borrowing
 - (c) A decrease in net exports
 - (d) A change in government policies that lead to a decrease in tax revenue and an increase in government expenditures
12. Which of the following leads to a leftward shift in saving supply?
- (a) An equal increase in government expenditures and taxes
 - (b) A downturn in the economy which leads consumers to hold back spending and increase savings as a precautionary measure.
 - (c) An increase in taxes and a decrease in government spending
 - (d) An improvement in consumer confidence that leads to an increase in consumer spending, financed by borrowing
13. Suppose businesses expect a drop in consumer spending. Which of the following would occur in the market for loanable funds?
- (a) Saving supply shifts to the left and interest rate increases
 - (b) Investment demand shifts to the left and interest rate increases
 - (c) Investment demand shifts to the left and interest rate decreases
 - (d) Saving supply shifts to the left and interest rate decreases
14. The government introduces a tax credit for companies investing in renewable energy. What is the likely impact on equilibrium investment in the renewable energy sector and interest rates?
- (a) No change in investment, no change in interest rates
 - (b) Increase in investment, increase in interest rates
 - (c) Decrease in investment, increase in interest rates
 - (d) Increase in investment, decrease in interest rates

15. A government decides to pay down its national debt, reducing budget deficits. How will this affect government saving and equilibrium outcomes for investment and interest rates?
- (a) Increase in government saving, increase in investment, decrease in interest rates
 - (b) Decrease in government saving, increase in investment, decrease in interest rates
 - (c) Increase in government saving, decrease in investment, increase in interest rates
 - (d) Decrease in government saving, decrease in investment, increase in interest rates
16. Suppose consumers experience a sustained decrease in income, leading both to a decrease in savings and a sustained decrease in spending. What is the impact on the market for loanable funds?
- (a) Increase in saving supply and a decrease in investment demand
 - (b) Decrease in saving supply and a decrease in investment demand
 - (c) Decrease in saving supply and an increase in investment demand
 - (d) Decrease in saving supply and no change in investment demand
17. What scenario would lead to a decrease in the equilibrium level of investment and a decrease in the equilibrium level of interest rates?
- (a) A significant increase in the demand for money.
 - (b) An increase in uncertainty leads to higher saving rates among consumers.
 - (c) Businesses become more optimistic about the future economic outlook.
 - (d) The government introduces new regulations that increase costs for businesses.
18. Which of the following is the best measure of economic well being to compare across countries and across time?
- (a) Real GDP per capita
 - (b) Real GDP
 - (c) Nominal GDP per capita
 - (d) Inflation per capita
19. Which of the following best describes the United States during the last two decades?
- (a) One of the middle-income countries in the world and with a relatively low rate of economic growth.
 - (b) One of the middle-income countries in the world and with a relatively high rate of economic growth.
 - (c) One of the richest countries in the world and with a relatively low rate of economic growth.
 - (d) One of the richest countries in the world and with a relatively high rate of economic growth.

20. Which of the following is a source of aggregate productivity growth?
- (a) Technological improvements
 - (b) Growth in GDP deflator per capita
 - (c) Growth in the labor force
 - (d) Growth in exports per capita
21. Which of the following is defined as the skills and knowledge that are applied to producing goods and services?
- (a) Human capital
 - (b) Technological stock
 - (c) Labor stock
 - (d) Capital stock
22. Which of the following is the reason the productivity curve is upward sloping but at a curve with a decreasing rate?
- (a) Negative marginal product of capital
 - (b) Diminishing marginal product of labor
 - (c) Diminishing marginal product of capital
 - (d) Negative marginal product of labor
23. What is the effect of an improvement in health and wellness programs on the aggregate productivity curve?
- (a) No change.
 - (b) It shifts the curve outward.
 - (c) It shifts the curve inward.
 - (d) It can shift the curve in either direction depending on other factors.
24. Which of the following government policies can lead to long-run improvements in real GDP per worker?
- (a) Use and enforce patents to encourage research and development
 - (b) Cut taxes without decreasing government spending
 - (c) Encourage more people to work
 - (d) Decrease inflation

25. Which of the following leads to an increase in long-run real GDP per worker?

- (a) Positive economic outlook by businesses which influences their investment decisions
- (b) A movement by consumers to put their savings in the stock market rather than banks
- (c) A movement by consumers to put their savings in the banks rather than the stock market
- (d) A movement by governments to decrease financial support unemployed people

Short-answer and problem-solving questions: Provide written answers to each question in the space provided.

26. (5 points) In recent years, there has been a push for increasing the retirement age in several countries. Describe and illustrate the impact on equilibrium wages and employment.

27. (5 points) The COVID-19 pandemic greatly increased the need for healthcare professionals in 2020-2021. Describe and illustrate the impact on equilibrium wages and employment in the healthcare sector.

28. (5 points) Suppose a decrease in immigration leads to both fewer workers entering the labor force and a decrease in demand for final goods and services. Describe and illustrate the impact on equilibrium wages and employment.

29. (5 points) Suppose while keeping government budget deficits the same, the government has introduced a new policy that provides tax credits for businesses to expand research and development efforts, which eventually lead to improvements in technology. Describe and illustrate the effect on the equilibrium levels of investment and interest rates.
30. (5 points) Suppose the government finds efficiencies that allow them to cut government expenditures, while maintaining its services, and while keeping tax revenues the same. Describe and illustrate the impact on the equilibrium level of investment and interest rate.
31. (5 points) Suppose a government increases its spending on infrastructure such as roads, electrical lines, and communications infrastructure, all of which make business more productive. Suppose the government does this while keeping tax revenues the same. Describe and illustrate the impact on equilibrium investment and interest rate.

32. (5 points) Suppose the government finds efficiencies to cut costs, allowing for a decrease in government expenditures while maintaining the same level of taxes and the same quality of services and support for its citizens. Describe and illustrate the long-run impact on investment, interest rate, and real GDP per worker.
33. (5 points) Suppose while maintaining a balanced budget, the government increases availability of subsidized loans and grants to support people getting two-year and four-year college degrees. Describe and illustrate the impact this may have on long-run output per worker.
34. (5 points) Suppose a country reduces its legal barriers to foreign direct investment, which makes it more profitable for foreign companies to develop manufacturing and service facilities in a country. Describe and illustrate the long-run impact on investment, interest rate, and real GDP per worker.

35. (5 points) Suppose governments create policies to encourage collaboration between academic researchers and corporate research and development into new technologies. Describe and illustrate the long-run impact on real GDP per worker.