Chapter 9
Saving, Investment, and Interest Rates

Multiple Choice Questions

Choose the one alternative that best completes the statement or answers the question.

1. According to the life-cycle theory of consumption, households
   (a) consume more, when they make more income, in their youth.
   (b) consume more when they are young and old, than mature (in middle age).
   (c) earn more income when they are old than when they are mature.
   (d) earn less income when old, more income when young and when mature.
   (e) make spending decisions using a long-run view.

   Answer: E

2. According to the life-cycle theory of consumption, households
   (a) base current consumption decisions on current income earnings.
   (b) base current consumption decisions solely on future income earnings.
   (c) base current consumption decisions on expected future and current income earnings.
   (d) base current consumption decisions on their savings decisions.
   (e) None of the above.

   Answer: C

3. If inflation is anticipated to grow at 4% and the real rate of interest is 2%, then the nominal rate is
   (a) 8%.
   (b) 6%.
   (c) 4%.
   (d) 2%.
   (e) None of the above.

   Answer: B

4. If inflation is anticipated to grow at 2% and the nominal rate of interest is 6%, then the real rate is
   (a) 8%.
   (b) 6%.
   (c) 4%.
   (d) 2%.
   (e) None of the above.

   Answer: C
5. If inflation is anticipated to grow at 2% and the real rate of interest is 2%, then the nominal rate is
(a) 8%.
(b) 6%.
(c) 4%.
(d) 2%.
(e) None of the above.
Answer: C

6. According to the Federal Reserve Board Survey of Consumer Finances,
(a) the average household consumes mostly using current income.
(b) the median household consumes mostly using current income.
(c) the average elderly household has relatively little net worth.
(d) the median elderly household net worth suggests a prominent bequest motive.
(e) None of the above.
Answer: D

7. According to the Federal Reserve Board Survey of Consumer Finances,
(a) the average household consumption pattern supports the life-cycle hypothesis.
(b) the median household consumption pattern does not support the life-cycle hypothesis.
(c) the average elderly household has relatively little net worth.
(d) the median elderly household has relatively little net worth.
(e) All of the above.
Answer: A

8. According to the Federal Reserve Board Survey of Consumer Finances,
(a) the average household net worth was $350,000.
(b) household net worth in 2002 fell by almost $2 trillion.
(c) the average elderly household does not fit the stereotype of poor.
(d) both the mean and median household’s net worth pattern supports the life-cycle hypothesis.
(e) All of the above.
Answer: E

9. Firms will carry out investments as long as
(a) they have investment projects greater than their earnings.
(b) the market interest rate is greater than their rate of return.
(c) their rate of return is greater than the market interest rate.
(d) the project with the highest rate of return is greater than the market interest rate.
(e) None of the above.
Answer: C
10. An increase in household thrift will
   (a) shift the saving function to the left, increasing the interest rate.
   (b) shift the saving function to the right, decreasing the interest rate.
   (c) shift the investment function to the left, decreasing the interest rate.
   (d) shift the investment function to the right, increasing the interest rate.
   (e) None of the above.
   Answer: B

11. Stock markets are sensitive gauges of
   (a) the economic growth rate in the last year.
   (b) the current interest rate and investment plans of companies.
   (c) investor expectations of the future.
   (d) speculation about the current earnings of companies.
   (e) All of the above.
   Answer: C

12. Capital markets serve the function of
   (a) coordinating private and foreign savings.
   (b) equating interest rates among different types of bonds.
   (c) bringing together savers and businesses that wish to invest.
   (d) equating personal income and personal savings.
   (e) promoting business investment.
   Answer: C

13. In the classical model of macroeconomics, interest rates adjust to equate
   (a) desired consumption and savings.
   (b) desired savings with desired investment.
   (c) desired consumption with desired investment.
   (d) the marginal propensity to consume and the marginal propensity to save.
   (e) desired government spending and consumption spending.
   Answer: B
14. According to Figure 9.1, when income is $400 billion, consumption is _____ billion.  
   (a) $200  
   (b) $250  
   (c) $400  
   (d) $550  
   (e) $600  
   Answer: C

15. According to Figure 9.1, when consumption is $550 billion, income is approximately _____ billion.  
   (a) $200  
   (b) $250  
   (c) $400  
   (d) $550  
   (e) $600  
   Answer: E

16. The classical economists believed that an increase in desired saving would lead to a corresponding increase in  
   (a) the money supply.  
   (b) employment.  
   (c) prices.  
   (d) desired investment through a lower interest rate.  
   (e) All of the above.  
   Answer: D
17. According to Figure 9.2, when income is $100 billion, saving is _____ billion.
   (a) $10
   (b) –$10
   (c) $12
   (d) $20
   (e) –$20
   Answer: E

18. According to Figure 9.2, when income is $200 billion, consumption is _____ billion.
   (a) $200
   (b) $180
   (c) $150
   (d) $120
   (e) $100
   Answer: B
Figure 9.3

19. For the economy in Figure 9.3, savings will be negative at
   (a) all income levels less than $1,000 billion.
   (b) all income levels greater than $500 billion.
   (c) $1,000 billion.
   (d) all income levels less than equilibrium income (not shown on the diagram).
   (e) all income levels greater than $1,500 billion.
   Answer: A

20. Which of the following correctly completes this statement? Private saving is
   (a) what remains of personal income after personal consumption expenditures.
   (b) the value of all assets, including real estate, stocks and bonds.
   (c) the difference between exports and imports.
   (d) personal income minus taxes.
   (e) personal disposable income minus personal consumption expenditures.
   Answer: E

21. The equality of saving and investment means that
   (a) what people want to save always equals what people want to invest.
   (b) the value of stocks and bonds equals the amount of annual saving.
   (c) some mechanism is required to bring desired saving into equality with desired investment.
   (d) national income cannot equal net national product.
   (e) private saving typically results in investment in stocks, bonds, or certificates of deposit.
   Answer: C
22. Suppose that in 1999, macroeconomic income is $4 trillion, but consumers purchase $3.5 trillion in output. In the classical view of macroeconomics, if $4 trillion is an equilibrium level of output,
   (a) savings by the United States could be offset by foreign savings.
   (b) a decline in the price level would increase purchases to $4 trillion.
   (c) “dissaving” and a lack of investment is $.5 trillion.
   (d) the fixed supply of real output could be taken off the market if interest rates fall, and consumption increases.
   (e) desired saving and investment must be $.5 trillion.
   Answer: E

23. Business firms will fund investment projects
   (a) as long as the market interest rate is greater than the rate of return.
   (b) so long as the firm has investment projects with a positive rate of return.
   (c) the firm’s management is optimistic about the state of the economy.
   (d) until the rate of return on the last project is equal to the market interest rate.
   (e) until the firm runs out of internal funds from corporate profits.
   Answer: D

24. The nominal rate of interest is best defined as
   (a) the market interest rate minus expected inflation.
   (b) the home mortgage loan rate.
   (c) the prime rate of interest banks charge to their best customers.
   (d) the interest rate observed in financial markets.
   (e) the discount rate charged by the Federal Reserve System.
   Answer: D

25. Demand for investment by the entire economy increases as
   (a) the rate of return on investment declines.
   (b) business expectations become more optimistic.
   (c) the interest rate declines.
   (d) the pool of available savings rises.
   (e) GDP declines.
   Answer: C

26. One important implication of the idea of life-cycle consumption is that
   (a) permanent consumption and savings are determined by anticipated (future) interest rates.
   (b) permanent consumption out of disposable income is always the same.
   (c) the lifetime marginal propensity to consume is lower than the short-run marginal propensity to save.
   (d) life-cycle savings are matched by life-cycle consumption.
   (e) over a person’s lifetime, consumption does not vary as much as income.
   Answer: E
27. In the Keynesian theory, equilibrium GDP occurs when
(a) desired savings equals desired investment.
(b) interest rates are stable.
(c) imports equals exports.
(d) desired consumption and national income are equal.
(e) businesses are increasing the amount of inventory held.
Answer: A

28. The real rate of interest in the United States in the late 1990s was about
(a) 1%.
(b) 3%.
(c) 5%.
(d) 7%.
(e) 10%.
Answer: B

29. The structure of interest rates is affected by
(a) risk.
(b) maturity.
(c) liquidity.
(d) All of the above.
Answer: D

30. The equilibrium interest rate equates
(a) consumption and investment.
(b) price and marginal cost.
(c) the real and the nominal interest rate.
(d) the quantity demanded and quantity supplied of loanable funds.
(e) the nominal interest rate and the expected rate of inflation.
Answer: D

31. Which of the following is not a source of profits?
(a) Entry restrictions.
(b) Risk taking.
(c) Innovation.
(d) Competition.
(e) All of the above.
Answer: D

32. Which of the following correctly completes this statement? The stock of capital grows when
(a) saving equals investment.
(b) the interest rate equates the supply and demand for capital.
(c) the rate of capital accumulation is positive.
(d) the rate of capital accumulation exceeds capital depreciation.
(e) saving is greater than investment.
Answer: D
33. The real interest rate is
   (a) the interest rate at which the economy is in equilibrium.
   (b) the prime rate minus the rate of interest on government bonds.
   (c) the inflation rate plus the nominal rate of interest.
   (d) the prime interest rate.
   (e) the nominal interest rate minus the expected rate of inflation.
   Answer: E

34. Which of the following is correct? Entrepreneurs are individuals who
   (a) are monopolists.
   (b) own scarce factors of production.
   (c) engage in risk taking and innovation.
   (d) earn pure economic rents.
   (e) earn economic profits due to their exceptional managerial skills.
   Answer: C

35. Which of the following is correct? The interest rate is
   (a) the price of money.
   (b) the rate of return on all capital goods.
   (c) the expected rate of inflation.
   (d) the rate of return on land.
   (e) the price of credit.
   Answer: E

36. If the interest rate is 20 percent, the most anyone would be willing to pay now to receive $1,000 in one year’s time is
   (a) $800.
   (b) $1,100.
   (c) $666.
   (d) $833.
   (e) $200.
   Answer: D

37. The demand curve for loanable funds is negatively sloped because
   (a) people save more at higher interest rates.
   (b) people save more at lower interest rates.
   (c) the interest rate equates supply and demand in credit markets.
   (d) government spends more at higher interest rates.
   (e) as the interest rate rises, the amount of investment businesses wish to undertake falls.
   Answer: E

38. An important technological improvement would
   (a) raise the productivity of capital.
   (b) increase the demand for loanable funds.
   (c) drive up the interest rate, ceteris paribus.
   (d) All of the above.
   Answer: D
39. Which of the following is correct? Credit markets permit
   (a) households to specialize in saving.
   (b) firms to specialize in seeking out profitable investment alternatives.
   (c) the separation of the act of saving from the act of investing.
   (d) All of the above.
   Answer: D

40. Borrowers with good credit ratings pay lower interest rates because of the effect of
   (a) liquidity.
   (b) maturity.
   (c) risk.
   (d) margin requirements.
   (e) inflationary expectations.
   Answer: C

41. The supply curve of loanable funds is positively sloped because
   (a) business firms wish to invest more at low interest rates.
   (b) business firms wish to invest less at low interest rates.
   (c) the government wishes to borrow more at high interest rates.
   (d) money is cheap during periods of inflation.
   (e) higher interest rates provide a larger reward to households and businesses for saving.
   Answer: E

42. If the population becomes more thrifty, one would expect
   (a) capital to become more productive.
   (b) interest rates to rise.
   (c) business to borrow less.
   (d) interest rates to fall.
   Answer: D

43. Assume that in the first period, there is no inflation, and the nominal interest rate is 5 percent. In the
    second period, the inflation rate is 4 percent. In order for the real interest rate to remain the same, the
    nominal interest rate must
   (a) fall from 5 percent to 1 percent.
   (b) rise from 5 percent to 7 percent.
   (c) rise from 5 percent to 7 percent.
   (d) rise from 5 percent to 9 percent.
   (e) fall from 5 percent to 4 percent.
   Answer: D

44. Profits earned by cable-TV companies with municipal franchises are examples of profits due to
   (a) innovation.
   (b) low interest rates.
   (c) risk taking.
   (d) accounting profits.
   (e) entry restrictions.
   Answer: E
45. Assume that in the first period, there is 3 percent inflation, and the nominal interest rate is 5 percent. In the second period, the inflation rate is 4 percent. In order for the real interest rate to remain the same, the nominal interest rate must
(a) fall from 5 percent to 1 percent.
(b) rise from 5 percent to 6 percent.
(c) rise from 5 percent to 7 percent.
(d) rise from 5 percent to 9 percent.
(e) fall from 5 percent to 4 percent.

Answer: B