4.1 Consumption and Saving

1) Desired national saving equals
   A) $Y - C^d - G$.
   B) $C^d + I^d + G$.
   C) $I^d + G$.
   D) $Y - I^d - G$.
   Answer: A

2) With no inflation and a nominal interest rate ($i$) of .03, a person can trade off one unit of current consumption for ______ units of future consumption.
   A) 0.97
   B) 1.03
   C) .03
   D) -.03
   Answer: B

4) When a person gets an increase in current income, what is likely to happen to consumption and saving?
   A) Consumption increases and saving increases.
   B) Consumption increases and saving decreases.
   C) Consumption decreases and saving increases.
   D) Consumption decreases and saving decreases.
   Answer: A
6) The fraction of additional current income that a person consumes in the current period is known as the
   A) consumption-smoothing motive.
   B) consumption deficit.
   C) saving rate.
   D) marginal propensity to consume.
Answer: D
   Diff: 1
   Topic: Section 4.1
   Question Status: Previous Edition

7) An increase in expected future output while holding today’s output constant would
   A) increase today’s desired consumption and increase desired national saving.
   B) increase today’s desired consumption and decrease desired national saving.
   C) decrease today’s desired consumption and increase desired national saving.
   D) decrease today’s desired consumption and decrease desired national saving.
Answer: B
   Diff: 2
   Topic: Section 4.1
   Question Status: Previous Edition

8) When a person receives an increase in wealth, what is likely to happen to consumption and saving?
   A) Consumption increases and saving increases.
   B) Consumption increases and saving decreases.
   C) Consumption decreases and saving increases.
   D) Consumption decreases and saving decreases.
Answer: B
   Diff: 2
   Topic: Section 4.1
   Question Status: Previous Edition

9) Aunt Agatha has just left her nephew $5000. The most likely response is for her nephew to
   A) increase current consumption, but not future consumption.
   B) decrease current consumption, but increase future consumption.
   C) increase future consumption, but not current consumption.
   D) increase both current consumption and future consumption.
Answer: D
   Diff: 2
   Topic: Section 4.1
   Question Status: Previous Edition

10) The stock market just crashed; the Dow Jones Industrial Average fell by 750 points. You would expect the
    effect on aggregate consumption to be the largest if which of the following facts was true?
    A) The crash had been preceded by a large run-up in the price of stocks.
    B) Most stocks were owned by insurance companies.
    C) Most stocks were owned by pension funds that invested in the market.
    D) Many individuals had invested in the stock market immediately prior to the crash.
Answer: D
    Diff: 2
    Topic: Section 4.1
    Question Status: Previous Edition

12) If the substitution effect of the real interest rate on saving is smaller than the income effect of the real interest
    rate on saving, then a rise in the real interest rate leads to a ______ in consumption and a ______ in
saving, for someone who's a lender.

A) fall; fall
B) fall; rise
C) rise; rise
D) rise; fall
Answer: D
Diff: 1
Topic: Section 4.1
Question Status: Previous Edition

13) With a nominal interest rate of 4%, an expected inflation rate of 1%, and interest income taxed at a rate of 25%, what is the expected after-tax real interest rate?
   A) 3%
   B) 2%
   C) 1%
   D) 0%
Answer: B
Diff: 2
Topic: Section 4.1
Question Status: Previous Edition

16) The yield curve generally slopes upward because
   A) longer maturity bonds typically pay higher interest rates than shorter maturity bonds.
   B) longer maturity bonds typically pay lower interest rates than shorter maturity bonds.
   C) shorter maturity bonds have more default risk.
   D) longer maturity bonds are not taxable.
Answer: A
Diff: 1
Topic: Section 4.1
Question Status: New

17) If an investor has a tax rate on interest income of 25% and the inflation rate is 4%, which bond has the lowest expected after-tax real interest rate?
   A) A Treasury bond paying 9%
   B) A corporate bond paying 8%
   C) A Treasury bond paying 7%
   D) A municipal bond paying 6%
Answer: C
Diff: 2
Topic: Section 4.1
Question Status: Previous Edition

20) Desired national saving would decrease unambiguously if there were
   A) a decrease in current output and a decrease in taxes.
   B) an increase in expected future output and a decrease in government purchases.
   C) an increase in both expected future output and the expected real interest rate.
   D) a fall in both government purchases and expected future output.
Answer: A
Diff: 2
Topic: Section 4.1
Question Status: New

21) The Ricardian equivalence proposition suggests that a government deficit caused by a tax cut
A) causes inflation.
B) causes a current account deficit.
C) raises interest rates.
D) doesn’t affect consumption.

Answer: D

Diff: 1
Topic: Section 4.1
Question Status: Previous Edition

22) If the government cuts taxes today, issuing debt today and repaying the debt plus interest next year, a rational taxpayer will
A) spend the full amount of the tax cut today and reduce consumption next year.
B) increase consumption today, before taxes go up next year.
C) increase saving today, leaving consumption unchanged.
D) leave a smaller gross bequest to her or his heirs.

Answer: C

Diff: 1
Topic: Section 4.1
Question Status: Previous Edition

23) Which of the factors listed below might cause the Ricardian equivalence proposition to be violated?
A) There may be international capital inflows and outflows.
B) Consumers may not understand that an increase in government borrowing today is likely to lead to higher future taxes.
C) There may be constraints on the level of government spending.
D) There may be constraints on the level of government taxation.

Answer: B

Diff: 1
Topic: Section 4.1
Question Status: Previous Edition

4.2 Investment

1) The user cost of capital is given by the following formula, where \( p \) is the real price of capital goods, \( d \) is the depreciation rate, and \( r \) is the expected real interest rate.
A) \( uc = (r + d) / p \)
B) \( uc = p / (r + d) \)
C) \( uc = d p / r \)
D) \( uc = (r + d) p \)

Answer: D

Diff: 1
Topic: Section 4.2
Question Status: Previous Edition

5) Calculate the user cost of capital of a machine that costs $5000 and depreciates at a rate of 25%, when the nominal interest rate is 10% and the expected inflation rate is 5%.
A) $150
B) $500
C) $1500
8) When a company must consider taxes in determining investment, its desired capital stock is chosen such that
   A) $MPKf = uc(1-t)$.
   B) $MPKf = uc/(1-t)$.
   C) $MPKf = t \times uc$.
   D) $t \times MPKf = uc$.
   Answer: B
   Diff: 1
   Topic: Section 4.2
   Question Status: New

9) If the rate of depreciation increases, then user cost _______ and the desired capital stock _______.
   A) falls; falls
   B) falls; rises
   C) rises; rises
   D) rises; falls
   Answer: D
   Diff: 2
   Topic: Section 4.2
   Question Status: New

11) Tobin's $q$ is equal to
    A) the ratio of capital's market value to its replacement cost.
    B) the ratio of capital's replacement cost to its market value.
    C) the expected after-tax real interest rate.
    D) the stock market value of a firm
    Answer: A
    Diff: 1
    Topic: Section 4.2
    Question Status: Previous Edition

12) If the stock market value of a firm is $10 million and the firm owns $15 million of capital, then Tobin's $q$ equals
    A) 2/3.
    B) 1.
    C) 3/2.
    D) 4.
    Answer: A
    Diff: 2
    Topic: Section 4.2
    Question Status: Previous Edition

14) A technological improvement will
    A) increase the desired capital stock.
    B) decrease the desired capital stock.
C) have no effect on the desired capital stock.
D) have the same effect on the desired capital stock as an increase in corporate taxes.
Answer: A

15) Suppose your company is in equilibrium, with its capital stock at its desired level. A permanent decline in the expected real interest rate now has what effect on your desired capital stock?
   A) Raises it, because the future marginal productivity of capital is higher
   B) Lowers it, because the future marginal productivity of capital is lower
   C) Raises it, because the user cost of capital is now lower
   D) Lowers it, because the user cost of capital is now higher
Answer: C

17) Calculate the tax-adjusted user cost of capital of a machine that costs $10,000 and depreciates at a rate of 10%, when the real interest rate is 3% and the tax rate on revenue is 5%.
   A) $1238
   B) $1300
   C) $1368
   D) $1800
Answer: C

18) Cummins, Hubbard, and Hassett studied the effects of taxes on investment by
   A) seeing if investment spending is correlated with taxes on investment.
   B) examining what happened to investment when major tax reforms took place.
   C) raising tax rates on certain businesses and testing their reaction.
   D) raising tax rates on equipment and reducing tax rates on structures.
Answer: B

20) What is the difference between gross investment and net investment?
   A) Net investment = gross investment minus taxes
   B) Net investment = gross investment minus net factor payments
   C) Net investment = gross investment minus inventory accumulation
   D) Net investment = gross investment minus depreciation
Answer: D

22) At the start of the year, your firm’s capital stock equaled $10 million, and at the end of the year it equaled $15 million. The average depreciation rate on your capital stock is 20%. Net investment during the year equaled
   A) $3 million.
23) Your firm has capital stock of $10 million and a depreciation rate of 15%. Gross investment is $3 million. How much is net investment?
   A) $1.5 million
   B) $2.0 million
   C) $2.5 million
   D) $3.5 million
   Answer: A

4.3 Goods Market Equilibrium

1) When desired national saving equals desired national investment, what market is in equilibrium?
   A) The goods market
   B) The money market
   C) The foreign exchange market
   D) The stock market
   Answer: A

4) Any change in the economy that raises desired national saving for a given value of the real interest rate will shift the desired national saving curve to
   A) the right and increase the real interest rate.
   B) the right and decrease the real interest rate.
   C) the left and increase the real interest rate.
   D) the left and decrease the real interest rate.
   Answer: B
5) An increase in the expected real interest rate tends to
   A) raise desired saving only.
   B) raise desired investment only.
   C) raise both desired saving and desired investment.
   D) raise desired saving, but lower desired investment.
   Answer: D

6) The saving-investment diagram shows that a higher real interest rate due to a leftward shift of the saving curve
   A) raises the profitability of investment for firms.
   B) causes the amount of firms' investment to increase.
   C) increases the total amount of saving because of the increase in the real interest rate.
   D) causes the total amounts of saving and investment to fall.
   Answer: D

7) A temporary decrease in government purchases would cause
   A) a rightward shift in the saving curve and a leftward shift in the investment curve.
   B) a rightward shift in the saving curve and a rightward shift in the investment curve.
   C) a rightward shift in the saving curve, but no shift in the investment curve.
   D) no shift in the saving curve, but a leftward shift in the investment curve.
   Answer: C

8) If consumers foresee future taxes completely, a reduction in taxes this year that is accompanied by an offsetting increase in future taxes would cause
   A) a rightward shift in the saving curve and a rightward shift in the investment curve.
   B) a shift in neither the saving nor the investment curve.
   C) a leftward shift in the saving curve, but no shift in the investment curve.
   D) no shift in the saving curve, but a rightward shift in the investment curve.
   Answer: B

9) An invention that raises the future marginal product of capital would cause an increase in desired investment, which would cause the investment curve to shift to the _______ and would cause the real interest rate to _______.
   A) right; increase
   B) right; decrease
   C) left; increase
   D) left; decrease
   Answer: A
10) A temporary supply shock, such as a drought, would
   A) increase the marginal product of capital and increase desired investment.
   B) decrease the marginal product of capital and decrease desired investment.
   C) have little or no effect on desired investment.
   D) decrease both the marginal product of capital and the marginal product of labor in the long-term future.
   Answer: C

11) If the government reduces the effective tax rate on capital, then the real interest rate ______ and saving ______.
   A) falls; declines
   B) falls; increases
   C) rises; increases
   D) rises; declines
   Answer: C

12) If the stock market booms and people feel wealthier, then the real interest rate ______ and investment ______.
   A) falls; declines
   B) falls; increases
   C) rises; increases
   D) rises; declines
   Answer: D