

Multiple Choice Questions

Chapter 1 Introducing the Firm and its Goal

Q1. The range of primary business goals includes:

- a. maximal wealth for owners.
- b. maximal profits.
- c. high revenue growth.
- d. all of the above.

d is correct. Because of different sizes and ownership structures of businesses, it is expected that there would be a range of goals among entities. See page 5.

Q2. Maximisation of owners' wealth

- a. uses a short-term view.
- b. fails to consider the time value of money.
- c. takes risk into consideration.
- d. relies on accounting numbers.

c is correct. Managers must consider risk if they want to maximise the owners' wealth as shareholders will expect to receive a higher rate of return to compensate for higher levels of risk. See page 6.

Q3. The chief financial goal of the firm is

- a. large market share.
- b. wealth maximisation.
- c. maximise profits.
- d. high revenue growth.

b is correct. A large market share and high revenue growth does not necessarily lead to higher profits or wealth maximisation. Maximise profits takes a short-term view whereas wealth maximisation uses a long-run perspective of the business, and has many advantages over other goals. See page 6.

Q4. Financial managers undertake the following roles:

- a. accounting and reporting functions.
- b. raising funds.
- c. audit management.
- d. all of the above.

d is correct. Financial managers are responsible for a range of tasks that include the three listed above. See pages 8–9.

- Q5. Corporate social responsibility means that the firm has responsibilities in relation to objectives and people apart from the owners. Included as other stakeholders are:**
- regulators.
 - customers.
 - general public.
 - all of the above.

d is correct. The other stakeholders include regulators, customers, the general public, employees and suppliers. See page 17.

- Q6. Ethics are:**
- rules of conduct.
 - moral principles.
 - codes of behaviour.
 - all of the above.

d is correct. Ethics are moral principles or rules of conduct that indicates the acceptability of behaviour within a community. See page 13.

- Q7. Change in the external environment has been mainly due to**
- deregulation of the financial markets.
 - advancing technology.
 - globalisation.
 - both (a) and (c).

d is correct. Globalisation and deregulation of the financial markets have been the main forces of change in the external environment. Advancing technology is a consequence of deregulation of the financial markets. See pages 18–19.

- Q8. The most important aspects of social change for businesses relate to**
- the treatment of the natural environment.
 - employees and employment conditions.
 - product safety.
 - all of the above.

d is correct. Views of what is acceptable behaviour within a community are continually changing. Currently the most important aspects relate to the safety of products, employees and employment conditions, and the treatment of the natural environment. See pages 19–20.

Q9. Which of the following statements regarding wealth maximisation is false?

- a. Wealth maximisation uses a long-run perspective of the business.
- b. Wealth maximisation takes future cash flows into account.
- c. Wealth maximisation considers the time value of money.
- d. None of the above.

d is correct. See page 7.

Q10. Which of the following is not generally considered to be a major class of financial decisions?

- a. New investment decisions
- b. Management remuneration
- c. Dividend policy
- d. Risk management

b is correct. See page 11.

Chapter 2 Business Structure & Taxation

Q1. The most common structure used by Australian businesses is a:

- a. partnership
- b. company
- c. sole proprietorship
- d. trust.

c is correct. The most common structure used by Australian businesses is the sole proprietorship. See commentary at top of page 16.

Q2. Companies in Australia are regulated by:

- a. State parliaments
- b. The Reserve Bank of Australia
- c. The Commonwealth Treasury
- d. The Australian Securities and Investments Commission (ASIC).

d is correct. See commentary at page 17.

Q3. A key advantage of the company form of business organisation is:

- a. limited legal liability of the owners for the debts of the company
- b. separation of owners from managers
- c. less regulation than for other forms of business organisation

d. lower compliance costs than for other forms of business organisation.

a is correct. Companies are subjected to greater regulation and compliance costs than either partnerships or sole proprietors. See commentary on page 17.

Q4. The most important tax from the point of view of financial managers is:

- a. income tax
- b. capital gains tax
- c. the goods and services tax
- d. all of the above.

d is correct. Financial managers need to account for and manage income tax, capital gains tax and the goods and services tax. See commentary at page 20.

Q5. If the income tax rate for companies is 30%, a shareholder who receives fully-franked dividends of \$210 receives a franking credit of:

- a. \$63.00
- b. \$90.00
- c. \$84.00
- d. \$147.00

b is correct. A fully-franked dividend of \$210 must have been paid out of a pre-tax income of \$300 ($\$210/0.7$). The company therefore paid income tax of \$90 ($\300×0.3), which is passed on to the shareholder as a franking credit. See Example 1.1 at page 25.

Q6. Which of the following transactions is subject to goods and services tax (GST)?

- a. The purchase of live animals by an abattoir
- b. The purchase of basic foodstuffs
- c. The payment of education expenses
- d. The payment of domestic water rates

a is correct. All the other items are GST-free. See commentary at page 24.

Q7. Which of the following is not a true statement?

- a. Accounting profits are rarely the same as cash flows.
- b. Accounting profits ignore the risk associated with cash flows.
- c. Accounting profits make no allowance for diminution of asset values.
- d. Accounting profits do not take into account the timing of cash flows.

c is correct. Accounting profits allow for diminution of asset values through depreciation charges. The text does not specifically mention the fact that accounting allows for diminution of asset values through depreciation charges. However, profit measurement is a

function of accounting. It follows that the limitations of accounting, indicated by the true statements, are essentially the same as the limitations of profit maximisation as an objective of the firm referred to at pages 5-7.

Q8. Taxable income is:

- a. assessable income plus allowable deductions
- b. assessable income plus franking credits
- c. assessable income less franking credits
- d. assessable income less allowable deductions.

d is correct. Taxable income is assessable income less allowable deductions. See commentary at page 22.

Q9. A principal purpose of dividend imputation is to:

- a. maximise the government's tax revenue
- b. encourage companies to increase their debt-equity ratio
- c. prevent dividend income being taxed twice
- d. encourage companies to reduce their dividend pay-out ratio.

c is correct. Before the introduction of dividend imputation dividend income was paid out of a company's after-tax profit and then taxed a second time in the hands of the shareholder. Dividend imputation ensures that Australian resident shareholders receive a credit for tax already paid by the company. See commentary at pages 25-7.

Q10. A shareholder receives a dividend of \$1400, fully franked at a company tax rate of 30%. If the shareholder's marginal tax rate is 40%, the shareholder's marginal after-tax income is:

- a. \$840
- b. \$980
- c. \$1400
- d. \$1200.

d is correct. The shareholder's marginal after-tax income is the dividend less any personal income tax payable on the dividend. Personal income tax is the grossed-up dividend (i.e. grossed-up to include company tax already paid) multiplied by the shareholder's marginal tax rate, less any franking credit attached to the dividend. The grossed-up dividend is \$2000 ($\$1400/0.7$), which carries a franking credit of \$600 ($\2000×0.3). The grossed-up dividend multiplied by the shareholder's marginal tax rate is \$800 ($\2000×0.4). The shareholder's net income tax liability is therefore \$200 ($\800 less the franking credit of \$600). The shareholder's marginal tax income is therefore \$1200 (dividend of \$1400 less personal income tax of \$200). See commentary at pages 25-7.

Q11. Which of the following is not one of the four primary types of business organisation or legal entity?

- a. Sole trader
- b. Cooperative
- c. Company
- d. Trust

b is correct. See page 34.

Q12. Which of the following is not a disadvantage of the sole proprietorship structure?

- a. The potential limited life of the firm
- b. Unlimited liability for debts
- c. The lack of formalities
- d. None of the above

c is correct. See page 35.

Q13. Which of the following is not an advantage of the sole proprietorship structure?

- a. The speed and ease of establishment
- b. The lack of formalities
- c. The freedom in decision making enjoyed by the owner
- d. None of the above

d is correct. See page 35.

Q14. Which of the following is not true regarding partnerships?

- a. Partnerships are generally easy to set up.
- b. Partnerships may legally employ the partners.
- c. Partnerships may sell or transfer ownership of their businesses by transferring the trading name and the assets.
- d. None of the above.

b is correct. See page 36.

Q15. Which of the following are powers that a company does not have under the *Corporations Act 2001*?

- a. The power to issue shares
- b. The power to give security by charging uncalled capital
- c. The power to grant options over unissued shares in the company
- d. None of the above

d is correct. See page 37.

Q16. Which of the following are essential elements of a trust?

- a. The trustee
- b. The trust deed
- c. The beneficiary
- d. All of the above

d is correct. See page 40.

Q17. Which one of the following objectives is not best suited to a company structure?

- a. Limited legal liability
- b. Low cost of establishment
- c. Likelihood of business continuity
- d. Managing income taxation

b is correct. See page 41.

Q18. Which one of the following objectives is not best suited to a partnership structure?

- a. Ease of raising capital
- b. Ease of establishment
- c. Ease of management and control
- d. All of the above

a is correct. See page 41.

Q19. Which of the following statements is true?

- a. Assessable income may be increased by allowable deductions.
- b. Assessable income equals taxable income plus legitimate deductions.
- c. Both a and b
- d. None of the above

b is correct. See page 42.

Q20. A franked dividend is a:

- a. dividend carrying an attached franking or tax credit
- b. dividend that carries a tax credit equal to the full 30% company tax paid on the underlying profit
- c. dividend that carries a tax credit less than the full 30% company tax paid on the underlying profit.
- d. all of the above.

d is correct. See page 45.

Chapter 3 Business & Financial Markets

Q1. Which of the following is not an authorised deposit-taking institution?

- a. A bank
- b. A merchant bank
- c. A building society
- d. A credit union

b is correct. Merchant banks are not registered under the *Banking Act 1959* and are not authorised deposit-taking institutions. See page 67.

Q2. Which of the following is a discount security?

- a. A share
- b. A debenture
- c. A commercial bill
- d. A corporate bond

c is correct. A commercial bill is a discount security. A share is an equity security. Debentures and corporate bonds are coupon securities. See pages 71–2.

Q3. Which of the following is not a role of financial markets?

- a. Bringing together potential lenders and borrowers
- b. Facilitating business and trade
- c. Pricing commodities
- d. Facilitating savings

c is correct. Commodities are priced in commodities markets. See pages 61–2 for commentary on the roles of financial markets.

Q4. Which of the following is not a way in which secondary markets support primary markets?

- a. Providing liquidity for holders of issued securities
- b. Facilitating risk management
- c. Providing a price-discovery mechanism for primary markets when new issues are contemplated
- d. Underwriting new issues of securities

d is correct. Secondary markets do not underwrite new issues of securities (underwriters do that). See page 66 for a commentary on ways in which secondary markets support primary markets.

Q5. Which of the following is not a source of debt?

- a. Trade credit
- b. Floor-plan finance
- c. Preference shares
- d. Debentures

c is correct. See page 74.

Q6. Banks in Australia are primarily regulated by:

- a. state parliaments
- b. the Australian Prudential Regulation Authority (APRA)
- c. the Commonwealth Treasury
- d. the Australian Securities and Investments Commission (ASIC).

b is correct. See commentary at page 76.

Q7. In order to prevent certain parties gaining privileged access to information, the Australian Stock Exchange (ASX) requires information provided to analysts in private briefings by companies to be:

- a. advertised on television
- b. advertised on the radio
- c. released to the general public
- d. advertised in the financial press.

c is correct. The ASX requires the 'gist of information given in such briefings' to be released to the general public. Companies typically do this through contemporaneous announcements to the ASX. See page 77.

Q8. Which of the following is not a debt instrument?

- a. A promissory note
- b. A commercial bill
- c. A share certificate
- d. A corporate bond.

c is correct. A share certificate is an equity instrument. The other three are debt instruments. See page 70.

Q9. If a company fails, it is placed in the hands of:

- a. its auditors
- b. its board of directors
- c. liquidators
- d. the Australian Prudential Regulation Authority (APRA).

c is correct. Liquidators specialise in liquidating failed companies. See commentary on page 69.

Q10. Which of the following equations is correct (in which A = assets, E = equity and L = liabilities)?

- a. $L = A + E$
- b. $A = L - E$
- c. $E = A - L$
- d. $A = E - L$.

c is correct. Equity = assets minus liabilities. See page 68.

Q11. Which of the following is not an equity instrument?

- a. A fully paid ordinary share
- b. A partly paid ordinary share
- c. A preference share
- d. A debenture

d is correct. A debenture is a debt instrument. The other three are types of equity instruments. See page 74.

Q12. Which international institution sets capital adequacy guidelines for banks that have been adopted by Australian regulatory authorities?

- a. The Bank for International Settlements (BIS)
- b. The International Monetary Fund (IMF)
- c. The World Bank
- d. The United Nations Organisation for Economic Cooperation and Development (OECD)

a is correct. The BIS sets capital adequacy guidelines for banks that are adopted by many countries, including Australia. See commentary at page 76.

Q13. The Reserve Bank of Australia (RBA) manages monetary policy principally through:

- a. foreign exchange controls
- b. controlling the price of money (through interest rates)
- c. lending restrictions placed on banks and other ADIs
- d. indirect taxation.

b is correct. See page 76: 'Monetary policy in Australia is essentially managed through the control of the price of money'.

Q14. Which of the following is not an instrument traded in the money market?

- a. Commercial bills
- b. Promissory notes
- c. Certificates of deposit
- d. Debentures

d is correct. Debentures are traded in capital markets. See page 72.

Q15. Overdraft finance is provided by financial institutions on:

- a. current accounts
- b. cheque accounts
- c. either of the above
- d. none of the above.

c is correct. See page 71.

Q16. Which of the following is not a government regulator of financial markets in Australia?

- a. Reserve Bank of Australia (RBA)
- b. Australian Stock Exchange (ASX)
- c. Australian Prudential Regulation Authority (APRA)
- d. Australian Securities and Investments Commission (ASIC)

b is correct. The Australian Stock Exchange plays an important regulatory role in financial markets, but is not a government regulator, as are the other three. See page 75 following the heading 'Regulators and regulation'.

Q17. Which of the following is not a role of the Australian Securities and Investments Commission?

- a. Management and maintenance of financial market integrity
- b. Consumer protection
- c. Maintenance of confidence by all stakeholders in the financial system
- d. Ensuring the stability of the financial system as a whole

d is correct. Ensuring the stability of the financial system as a whole is a function of the Reserve Bank of Australia (see top of page 77). The other three are roles of the Australian Securities and Investments Commission: see top of page 57.

Q18. Which of the following can best be described as a hybrid equity instrument with some characteristics of equity and some of debt?

- a. Debentures
- b. Partly paid shares
- c. Preference shares
- d. Promissory notes.

c is correct. Preference shares are a hybrid equity instrument with some characteristics of equity and some of debt (see margin note on page 74). Debentures and promissory notes are debt instruments, while partly paid shares are an equity instrument.

Q19. Interest on corporate bonds is usually paid:

- a. monthly
- b. annually
- c. six-monthly
- d. only on maturity.

c is correct. Interest on corporate bonds is usually paid six-monthly. See margin note at page 72.

Q20. Which of the following is not a matter which a financial manager should consider when raising debt finance?

- a. An appropriate maturity structure
- b. The effect of debt on risk
- c. The effect of debt on control
- d. The effect of debt on product sales.

d is correct. There is no reason why debt finance should impact on a firm's product sales. The other items are all pertinent to the borrowing decision. See page 68.

Q21. The roles of financial markets do not include:

- a. the matching borrowers and lenders
- b. the facilitation of business and trade
- c. to increase the poverty gap
- d. the facilitation of saving by individuals to allow for future consumption.

c. is correct. See page 61 for information on the roles of financial markets.

Q22. Price discovery is best defined as:

- a. calculating the fair value of an investment
- b. the process of finding and settling on a price which is acceptable to both parties to a transaction
- c. the matching of buyers and sellers
- d. the process of setting a price in an underwriting.

b. is correct. See page 65 for a definition of price discovery.

Q23. Private placements are:

- a. issues of securities made by negotiation directly with purchasers
- b. issues of securities to the public
- c. issues of securities made only by the government
- d. issues of securities directly onto the ASX.

a. is correct. See page 66.

Q24. Which of the following is not traded in the capital market:

- a. a Treasury bond
- b. an ordinary share
- c. a preference share
- d. a Treasury note.

d. is correct. See page 67.

Q25. The financial structure is the:

- a. market capitalisation of the firm's shares
- b. ratio of the number of ordinary shares to the number of total shares
- c. mix of all sources of debt and equity which fund the assets owned by the business
- d. all of the above.

c. is correct. See page 68.

Q26. Risk is best defined as the chance:

- a. of making a loss
- b. that the actual outcome from an investment will be equal to the expected outcome
- c. that the actual outcome from an investment will be different from the expected outcome.
- d. of bankruptcy.

c is correct. See page 69.

Q27. Financial distress occurs when:

- a. debt has been issued
- b. a firm's financial obligations cannot be met
- c. the firm's share price falls sharply
- d. expenses exceed revenues.

b. is correct. See page 69.

Q28. Which of the following is not true?

- a. Debtholders have a higher ranking claim than ordinary shareholders in the event of liquidation.
- b. Debtholders have the same voting rights as ordinary shareholders.
- c. Debtholders have a higher ranking claim than preference shareholders in the event of liquidation.
- d. Debtholders generally have the same voting rights as preference shareholders.

b. is correct. See page 69.

Q29. Trade credit is usually granted for:

- a. 3 days
- b. 2 weeks
- c. 6 months
- d. 30 days.

d. is correct. See page 71.

Q30. Recently, the average overdraft rate has been:

- a. 3.5% above the cash rate
- b. the cash rate
- c. 3.5% below the cash rate
- d. 10% above the cash rate.

a. is correct. See page 71.

Q31. Commercial bills will always:

- a. trade at a premium prior to maturity
- b. trade at a discount prior to maturity
- c. pay coupons
- d. pay interest on a compounding basis.

b. is correct. See page 71.

Q32. In early 2007, the cash rate was in the range of:

- a. 10.00–11.00%
- b. 4.55–5.00%
- c. 6.35–6.50%
- d. 6.00–6.55%

c. is correct. See page 71.

Q33. Unsecured notes usually pay:

- a. Fixed coupons
- b. Floating coupons
- c. No coupons
- d. Fixed and floating coupons.

a. is correct. See page 72.

Q34. We can generally expect Commonwealth government bonds to be assigned the following rating.

- a. AAA
- b. AA
- c. A
- d. BBB

a. is correct. See page 72.

Q35. Given that the only difference between different bonds is their level of risk and all else is equal, we would expect bonds with the following rating to trade at the highest yields.

- a. AAA
- b. AA
- c. A
- d. BBB

d. is correct. See page 72.

Q36. Which of the following is not a type of share?

- a. Ordinary shares
- b. Share options
- c. Preference shares
- d. Contributing shares

b. is correct. See page 73.

Q37. Which of the following is not a characteristic of any type of preference shares?

- a. preference shareholders outrank ordinary shareholders in the event of liquidation
- b. preference shareholders receive interest payments
- c. preference shareholders are subordinated to debtholders in the event of liquidation
- d. preference shareholders receive dividend payments

b. is correct. See page 74.

Q38. The listing requirements of the ASX apply to:

- a. stockbrokers
- b. merchant bankers
- c. companies whose shares trade on the ASX
- d. all of the above.

c. is correct. See page 77.

Q39. The *Corporations Act 2001* is administered by:

- a. APRA
- b. the RBA
- c. the ACCC
- d. ASIC.

d. is correct. See page 77.

Q40. Which of the following is not a key responsibility of the Regulatory Policy Unit?

- a. Development of ASX Rules policy
- b. Rules amendment policy
- c. Streamlining Operating Rules
- d. None of the above

d. is correct. See page 79.

Chapter 4 Financial Mathematics

Q1 Which of the following is not a cash flow?

- a. a cash receipt
- b. payment of wages
- c. a depreciation charge
- d. payment of a dividend.

c is correct. All receipts and payments are cash flows, but a depreciation charge is a book-entry item with no associated cash flow. See page 94.

Q2 The time value of money is the concept that a dollar is worth:

- a. more the later it is received
- b. more the later it is paid
- c. less the sooner it is received

d. more the sooner it is received.

d is correct. A dollar is worth more the sooner it is received. See margin note at page 95.

Q3 If I borrow \$20 000 at a simple interest rate of 6% pa, how much interest would I owe after six months?

- a. \$1200
- b. \$600
- c. \$21 200
- d. \$20 600

b is correct. An interest rate of 6% pa is equivalent to 3% over six months. $\$20\,000 \times 0.03 = \600 . See page 96.

Q4 If I borrow \$20 000 at an interest rate of 9% pa, compounded monthly and payable quarterly how much interest would I have to pay after three months?

- a. \$450.00
- b. \$150.00
- c. \$453.38
- d. \$1800.00

c is correct. Interest expense after one month would be $\$20\,000 \times 0.75\% = \150.00 . Interest expense after two months would be $\$150 + \$20\,150 \times 0.75\% = \301.125 . Interest expense after three months would be $\$301.125 + \$20\,301.125 \times 0.75\% = \453.38 . Alternatively, one can calculate the future value of \$20 000 after three months, compounding at the rate of 0.75% per month. Thus: $\$20\,000 \times (1.0075)^3 = \$20\,453.38$. Therefore the interest must be $\$20\,453.38 - \$20\,000 = \$453.38$. See page 103.

Q5 How much will I receive from issuing a 90 day commercial bill of \$50 000 at a yield of 6.6% (assuming no fees)?

- a. \$49 199.33
- b. \$50 800.67
- c. \$49 188.39
- d. \$49 186.30

a is correct. $\$50\,000 / (1 + 0.066 \times 90/365) = \$49\,199.33$. Note that b cannot be correct, because it's higher than the face value of the bill. c assumes a 360 day year. d applies 6.6% as a discount as opposed to a yield. See pages 99–100.

Q6 If I receive \$49 199.33 from issuing a 90 day commercial bill of \$50 000 what was the discount rate (assuming no fees)?

- a. 6.6%

- b. 6.49%
- c. 1.63%
- d. 1.60%

b is correct. $(\$50\,000 - \$49\,199.33)/\$50\,000 \times 365/90 = 6.49\%$. See page 101.

Q7 If you invest \$20 000 today for five years at 8% pa compounded quarterly how much will you have at the end of five years?

- a. \$28 000
- b. \$29 386.56
- c. \$29 718.95
- d. \$29 604.89

c is correct. $\$20,000 \times (1.02)^{20} = \$29,718.95$. See page 103.

Q8 What is the present value of \$10 000 to be received in 5 years if the annual discount rate is 10%?

- a. \$5000.00
- b. \$7500.00
- c. \$6139.13
- d. \$6209.21

d is correct. $\$10,000/(1.1)^5 = \$6,209.21$. See page 104.

Q9 If the nominal rate of interest is 6% pa compounded monthly, what is the effective annual rate?

- a. 7.20%
- b. 6.60%
- c. 6.17%
- d. 6.00%

c is correct. $(1.005)^{12} - 1 = 6.17\%$. See page 106.

Q10 What is the present value of an ordinary annuity of \$1000 per month for 20 years discounted at 9% pa (assume monthly compounding)?

- a. \$9128.55
- b. \$111 144.95
- c. \$109 542.55
- d. \$18 508.02

b is correct. $\$1000 \times \{[1 - (1.0075)^{-240}]/0.0075\} = \$1000 \times 111.144954 = \$111\,144.95$. See page 110.

Q11 What is the present value of the annuity in question 10 if \$1000 is received today (i.e. it is now an annuity due)?

- a. \$111 978.54
- b. \$111 144.95
- c. \$109 542.55
- d. \$112 144.95

a is correct. $\$1,000 \times \{[1 - (1.0075)^{-239}]/0.0075 + 1\} = \$1,000 \times 111.9785412 = \$111,978.54$. See page 110.

Q12 What is the present value of a preference share that is expected to pay a dividend of 12 cents per year in perpetuity if the discount rate is 7.5% pa?

- a. \$1.72
- b. \$1.60
- c. \$2.72
- d. \$2.60

b is correct. $\$0.12/0.075 = \1.60 . See page 118.

Q13 What is the present value of an annuity of \$200 per month for two years, commencing five years from now, discounted at 6% pa? (Assume monthly compounding and that the first annuity payment occurs five years and one month from now.)

- a. \$40 000
- b. \$29 890.33
- c. \$10 109.67
- d. \$3345.50

d is correct. $\$200 \times \{[1 - (1.005)^{-24}]/0.005\} / (1.005)^{60} = \$200 \times 22.56286622/1.348850153 = \$200 \times 16.72748 = \$3345.50$. See page 116.

Q14 What is the future value of an ordinary annuity of \$100 per month for two years if the interest rate is 12% pa compounded monthly?

- a. \$2124.34
- b. \$2544.00
- c. \$2697.35
- d. \$2394.47

c is correct. $\$100 \times \{[(1.01)^{24} - 1]/0.01\} = \$100 \times 26.9735 = \$2697.35$. See page 110.

Q15 If my bank manager offers me an overdraft at 9% pa charged quarterly, the effective rate of interest is:

- a. 9.00%

- b. 9.31%
- c. 9.38%
- d. 9.20%.

b is correct. $(1.0225)^4 - 1 = 9.31\%$. See page 106.

Q16 A basis point is:

- a. one percentage point
- b. one tenth of a percentage point
- c. one hundredth of a percentage point
- d. one thousandth of a percentage point.

c is correct. There are 100 basis points in a percentage point.

Q17 If I invest \$100 per month for two years at 6% pa compounded monthly, how much will I have after four years?

- a. \$2543.20
- b. \$2472.00
- c. \$2777.54
- d. \$2866.59

d is correct. $\$100 \times \{[(1.005)^{24} - 1]/0.005\} \times (1.005)^{24} = \$100 \times 25.431955 \times 1.12716 = \2866.59 . See page 103.

Q18 If I can invest at 6% pa compounded monthly, how much will I need to invest today in order to provide an allowance of \$200 per month for two years to a child commencing at boarding school two years from now? (Assume that the first monthly allowance is paid exactly two years from now.)

- a. \$4512.57
- b. \$4023.51
- c. \$4400.14
- d. \$3916.11

b is correct. $\$200 \times \{[1 - (1.005)^{-24}]/0.005\} / (1.005)^{23} = \$200 \times 22.56286622/1.121552 = \$200 \times 20.117539 = \$4023.51$. See page 116.

Chapter 5 Understanding Risk & Returns

Q1 The difference between returns from holding shares and returns from holding risk-free assets is:

- a. a realised return
- b. a capital gain
- c. the equity risk premium (ERP)
- d. the difference between average dividend yields and average bond yields.

c is correct. The equity risk premium (ERP) indicates how much additional return can be expected by moving from the risk-free asset to the market portfolio of risky assets. See margin note on page 155.

Q2 Total risk comprises:

- a. only systematic risk
- b. only unsystematic risk
- c. both systematic and unsystematic risk
- d. the difference between systematic risk and unsystematic risk.

c is correct. Total risk comprises both systematic and unsystematic risk. See margin note on page 153.

Q3 Which of the following expressions best describes the concept of reducing risk through diversification?

- a. Look before you leap.
- b. The early bird catches the worm.
- c. A stitch in time saves nine.
- d. Don't put all your eggs in one basket.

d is correct. Although the text doesn't specifically refer to this adage, it should be clear that it accurately encapsulates the notion that risk is reduced by not putting all one's eggs in one basket; i.e. by diversifying into different investments. See page 152 of the text.

Q4 Risk is less effectively reduced through diversifying into different investments when the different investments:

- a. are in the same industry
- b. are in the same country
- c. have negatively correlated returns
- d. have zero correlation with the market.

a is correct. Risk is less effectively reduced through diversifying into different investments in the same industry. See page 153.

Q5 A portfolio of three different investments compared with a portfolio of 20 different investments will have:

- a. higher expected returns but higher risk
- b. lower expected returns but lower risk
- c. the same expected returns but higher risk
- d. the same expected returns but lower risk.

c is correct. A portfolio of three investments is less diversified than a portfolio of 20 investments and is therefore more risky. However, the extra risk is unsystematic risk and investors cannot expect to get higher returns by taking on unsystematic risk. Expected returns are unaffected by the number of investments in a portfolio. See page 153.

Q6 If the expected returns on an investment are uncorrelated with the market, its beta value is:

- a. 1
- b. -1
- c. 0
- d. equal to that of the market.

c is correct. If the expected returns on an investment are uncorrelated with the market, its beta value is 0. See page 156.

Q7 If you expect a market return of 10% and a risk-free rate of 5%, the required rate of return on an investment with a beta value of 0.5 is:

- a. 10%
- b. 5%
- c. 12.5%
- d. 7.5%.

d is correct. Using the Capital Asset pricing Model (CAPM), the required rate of return is $0.05 + 0.5(0.1 - 0.05) = 0.05 + 0.025 = 0.075$ or 7.5%. See page 154.

Q8 If returns are normally distributed, the expected return plus or minus one standard deviation will cover what percentage of all possible returns?

- a. 50%
- b. 68%
- c. 95%
- d. 99.7%

b is correct. If returns are normally distributed, the expected return plus or minus one standard deviation will cover 68% of all possible returns. See page 142.

Q9 If a person chooses to take \$100 in cash instead of betting it to win \$210 on the toss of a coin, that person is:

- a. risk neutral
- b. risk averse
- c. a risk seeker
- d. indifferent to risk.

b is correct. The expected outcome of betting \$100 to win \$110 on the toss of a coin is $0.5 \times \$210 - 0.5 \times \$100 = \$5$, which is better than a fair game. In the long run a person would gain from playing such a game, but on a single toss of a coin there is a 50% chance of losing \$100 and a 50% chance of gaining \$110. A person who decides not to play the game for fear of losing is described as risk averse. See page 148.

Q10 What is the expected return from an asset having the following possible returns and associated probabilities?

| Possible return | Probability |
|-----------------|-------------|
| 25% | 20% |
| 15% | 50% |
| 5% | 30% |

- a. 15%
- b. 14%
- c. 16.5%
- d. 13.5%

b is correct. The calculation is: $25\% \times 0.2 + 15\% \times 0.5 + 5\% \times 0.3 = 14\%$. See page 138.

Q11 Between 1900 and 2006, the most likely annual return from investing in Australian shares was:

- a. between 0% and 10%
- b. between 20% and 30%
- c. between 10% and 20%
- d. between 30% and 40%.

c is correct. Between 1900 and 2006, the most likely annual return from investing in Australian shares was between 10% and 20%. See Figure 5.2 on page 136.

Q12 An investment's expected return is:

- a. based on past average returns
- b. determined by the standard deviation of past returns
- c. the most likely future return
- d. the probability-weighted average of possible outcomes associated with the investment.

d is correct. An investment's expected return is the probability-weighted average of possible outcomes associated with the investment. See margin note at page 137. Note that an investment's most likely return is not necessarily its expected return. See, for example, Question 10 above in which the most likely return is 15%, whereas the expected return is 14%.

Q13 The Allais Paradox refers to the fact that:

- a. decision makers tend to prefer uncertainty to certainty in a fair game
- b. decision makers tend to prefer certainty to uncertainty in a fair game
- c. people tend to be more willing to borrow than to lend
- d. decision makers tend to over-weight certainty in relation to other options with probability-weighted outcomes of higher monetary value.

d is correct. The Allais Paradox is named after Maurice Allais who conducted a series of experiments on investor preferences in the 1950s. See page 148.

Q14 Which of the following is not a measure of risk?

- a. Standard deviation
- b. Variance
- c. Expected return
- d. Range.

c is correct. An expected return is the probability-weighted average of possible outcomes associated with an investment (see margin note at page 103). The standard deviation and variance are both measures of dispersion around an expected outcome, while the range refers to the range of possible outcomes, from the lowest possible value to the highest possible value. All three are measures of risk. See page 140.

Q15 People have a choice between paying \$5 for a ticket allowing them to park their car in a shopping precinct car-park and risking a fine of \$50. If there is a one-in-eight chance of being fined, a person who takes that chance is:

- a. risk averse
- b. a risk seeker
- c. risk neutral
- d. loss averse.

d is correct. The expected outcome of risking a fine is \$6.25 ($\$50 \div 8$), which is more than the cost of a parking ticket. But by not buying a ticket the person is focusing on the prospect of saving \$5 and gives this possibility a higher weight than seven-eighths (the chances of not getting fined). This risk-seeking behaviour is described as loss aversion, because it is motivated by a desire to avoid incurring a loss – in this case the cost of a parking ticket. See page 148.

Q16 A required rate of return is:

- a. the maximum level of return that is acceptable to an investor, given the level of risk associated with that investment
- b. the minimum level of return that is acceptable to an investor, given the level of risk associated with that investment
- c. always greater than the expected return
- d. equal to the expected return.

b is correct. A required rate of return is the minimum level of return that is acceptable to an investor, given the level of risk associated with that investment. See page 152. Note that the expected return on an investment should be greater than the investor's required rate of return in order to induce the investor to select that particular investment. The Capital Asset Pricing Model (CAPM) can be used to calculate a security's required rate of return, which is assumed equal to its expected return in an equilibrium situation.

Q17 Correlation is a measure of:

- a. dispersion
- b. central tendency
- c. the way two variables move relative to each other
- d. the equity risk premium (ERP).

c is correct. Correlation is a measure of the way two variables move relative to each other. See margin note on page 152.

Q18 The benchmark used by the Capital Asset Pricing Model (CAPM) for assessing the performance of risky assets is:

- a. the return on a portfolio of all risky assets
- b. the long-term bond rate
- c. the yield on bank-accepted bills
- d. the return on the market.

d is correct. See commentary on page 154.

Q19 The equity risk premium (ERP) is:

- a. the difference between the holding period return on a given share and the risk-free rate
- b. the difference between the return on a portfolio of all risky assets and the risk-free rate
- c. the difference between the return on the market and the bank-bill rate
- d. the difference between the return on the market and the risk-free rate.

d is correct. The equity risk premium (ERP) is the difference between the return on the market and the risk-free rate. Remember that the return on the market is used as the benchmark for the performance of risky assets. See page 155.

Q20 Beta is a measure of an asset's:

- a. systematic risk
- b. unsystematic risk
- c. total risk
- d. correlation with market returns.

a is correct. See page 156. Note that although a share's beta value is influenced by its correlation with the market, it is not determined by that factor alone. A share's beta value is also determined by the standard deviation of its returns and the standard deviation of market returns.

Q21 A risk-free rate of 5% and an expected market return of 12%, the CAPM predicts an expected return of which of the following given a beta of 1.6:

- a. 15%
- b. 16.2%
- c. 17%
- d. 21%.

b is correct. See page 154.

Q22 Given only information on beta, which of the following stocks is considered the least risky:

- a. Stock A beta = 1.45
- b. Stock B beta = 2.34
- c. Stock C beta = 0.68
- d. Stock D beta = 0.90.

c is correct. Lower beta implies lower risk. See page 156.

Q23 A share bought for \$20 at the start of the period and sold for \$15 at then end of the period which paid dividend of \$2 and \$3 in the interim generated a holding period return of:

- a. 50%
- b. -50%
- c. 0%
- d. 100%.

c is correct. See page 134.

Q24 A share sold for \$10 which generated a holding period return of 25% and paid no dividends implies a purchase price of:

- a. \$8

- b. \$9
- c. \$10
- d. \$11.

a is correct. See page 134.

Q25 A stock which has possible returns of 40% and -5% each with equal likelihood has an expected return of:

- a. 20%
- b. 10%
- c. 15.5%
- d. 17.5%.

d is correct. See page 137.

Q26 Suppose a particular stock's return is perfectly characterised by the normal distribution. This stock has a mean return of 10% and standard deviation of 3%. Within what range will approximately 95% of all possible returns on this stock lie:

- a. 2% to 18%
- b. -2% to 22%
- c. 4% to 10%
- d. 4% to 16%.

d is correct. See page 142.

Q27 Given that a stock has generated returns of 6%, 18%, -5% and 20% over the last four years, the average annual return on this stock over the period was:

- a. 9.75%
- b. 10.50%
- c. 39%
- d. 97.5%.

a is correct. See page 134.

Q28 The ex post variance of stock returns given the data in Q27 was:

- a. 0.013492
- b. 0.028970
- c. 0.024930
- d. 0.017423.

a is the correct answer. See page 144.

Q29 The ex post standard deviation of stock returns given the data in Q27 was:

- a. 12.46%
- b. 11.62%
- c. 9.03%
- d. 10.50%.

b is the correct answer. See page 145.

Q30 Given the following series of annual returns for a managed fund: 5%, 6%, 23%, –15%, 20%, –29%, 40%, –40%, 23%, the average annual return over the period was:

- a. 5%
- b. 25%
- c. 3.67%
- d. 6.37%.

c is the correct answer. See page 134.

Q31 The ex post variance of stock returns given the data in Q30 was:

- a. 0.0845
- b. 0.0791
- c. 0.0744
- d. 0.0708.

d is the correct answer. See page 144.

Q32 The ex post standard deviation of stock returns given the data in Q30 was:

- a. 28.0%
- b. 26.6%
- c. 25%
- d. 5%.

b is the correct answer. See page 145.

Q33 A risk averse person will:

- a. participate in fair game
- b. pay to participate in a fair game
- c. have to be compensated to participate in a fair game.
- d. none of the above.

c is the correct answer. See pages 147-48.

Q34 A risk neutral investor will assess investment alternatives based on their:

- a. relative expected risks
- b. relative expected returns
- c. relative expected risks and returns
- d. None of the above.

a is the correct answer. Risk neutral investors do not care about risk and therefore ignore it when comparing or ranking investments. See page 148.

Q35 We generally assume that ‘more wealth is preferred to less wealth’ for which of the following class of investors?

- a. Risk averse investors
- b. Risk neutral investors
- c. Risk-seeking investors
- d. All of the above.

d is the correct answer. This is based on rational investor behaviour. See page 148.

Q36 Randomly adding securities to a portfolio can be expected to bring diversification benefits because:

- a. different securities have different betas
- b. some stocks are less risky than other stocks
- c. some stocks have no risk
- d. almost all stocks are less than perfectly positively correlated with one another.

d is the correct answer. See page 153.

Q37 Within a portfolio, diversification leads to the reduction of:

- a. firm-specific risk
- b. market risk
- c. firm-specific and market risk
- d. None of the above.

a is the correct answer. See page 152.

Q38 According to CAPM theory, shares lying below the security market line are:

- a. underpriced
- b. overpriced
- c. fairly priced
- d. none of the above.

b is the correct answer. See page 158.

Q39 A share is priced to return 10% but according to the CAPM its expected return is 7%. According to CAPM theory, we can expect the price of this share to:

- a. stay the same
- b. fall
- c. rise
- d. uncertain

c is the correct answer. See page 158.

Q40 Assets with betas greater than one have:

- a. lower levels of non-systematic risk than the market portfolio
- b. lower levels of systematic risk than the market portfolio
- c. higher levels of Systematic risk than the market portfolio
- d. none of the above.

c is the correct answer. See page 156.

Chapter 6 Valuation of Bonds and Shares

Q1 Interest on bonds is most usually paid:

- a. annually
- b. monthly
- c. quarterly
- d. twice-yearly.

d is correct. See commentary on pages 187–8.

Q2 Which of the following is not a security?

- a. An ordinary share
- b. A bond
- c. A preference share
- d. None of the above

d is correct.

Q3 The value of a share is:

- a. the highest current bid
- b. the lowest current offer
- c. the last price at which the share traded
- d. what the share is worth to a particular person.

d is correct. The value of an asset is what that asset is worth to a person. See page 181.

Q4 The book value of an ordinary share in a company is:

- a. the company's total assets divided by the number of issued ordinary shares
- b. (the company's total assets less the company's total liabilities) divided by the number of issued ordinary shares
- c. the company's total profit after tax divided by the number of issued ordinary shares
- d. the company's total profit before tax divided by the number of issued ordinary shares.

b is correct. The book value of an ordinary share in a company is: (the company's total assets less the company's total liabilities) divided by the number of issued ordinary shares. See page 183.

Q5 The intrinsic value of a bond is:

- a. the present value of the bond's future cash flows, discounted at the bondholder's required rate of return
- b. the future value of the bond's future cash flows, compounded at the bondholder's required rate of return

- c. the face value of the bond
- d. the maturity value of the bond.

a is correct. The intrinsic value of a bond is the present value of the bond's future cash flows, discounted at the bondholder's required rate of return. See page 187. (Note that bonds are redeemed at their maturity value, which is typically the same as their face value.)

Q6 Coupon payments are:

- a. the regular interest payments received by the holder of an ordinary share
- b. the regular interest payments received by the holder of a preference share
- c. the regular interest payments received by the holder of a bond
- d. the regular interest payments received by the holder of a bank deposit.

c is correct. Coupon payments are the regular interest payments received by the holder of a bond. See margin note at page 183. (Note that although the holder of a preference share may receive regular dividends of a fixed amount per share, these are not 'regular interest payments' and are not normally referred to as coupon payments.)

Q7 Which of the following does not provide a means of calculating the intrinsic value of an ordinary share?

- a. Dividend discount model
- b. Constant dividend growth model
- c. Market price
- d. Price-earnings ratio.

c is correct. The market price of a share is not regarded as its intrinsic value, which will vary from one person to another. See page 181.

Q8 A security is worth buying when its:

- a. book value is greater than its market price
- b. intrinsic value is greater than its market price
- c. price-earnings ratio is negative
- d. dividend growth rate is positive.

b is correct. A security is worth buying when its intrinsic value exceeds its market price. See section on price and value on page 181.

Q9 The intrinsic value of a zero coupon bond is:

- a. always equal to its face value
- b. sometimes greater than its face value
- c. invariant to interest rates
- d. always less than its face value.

d is correct. See Equation 6.3 on page 186.

Q10 The intrinsic value of a preference share is calculated in a similar way to:

- a. annuities
- b. perpetuities
- c. coupon bonds
- d. zero coupon bonds.

b is correct. See Equation 6.5 on page 189.

Q11 Utility is a measure of:

- a. satisfaction
- b. wealth
- c. income
- d. value.

a is correct. Utility is a measure of satisfaction. See page 196.

Q12 Price-earnings (PE) ratio is:

- a. current share price divided by current earnings per share
- b. a share's intrinsic value divided by its current earnings per share
- c. a share's current book value divided by forecast earnings per share
- d. current share price divided by forecast earnings per share.

d is correct. See page 197.

Q13 Market capitalisation is:

- a. the number of shares issued multiplied by the current book value per share
- b. the number of shares issued multiplied by the current market value per share
- c. the number of shares issued multiplied by current earnings per share
- d. the number of shares issued multiplied by forecast earnings per share.

b is correct. Market capitalisation is the number of shares issued multiplied by the current market value per share. See margin note on page 197.

Q14 Which of the following companies would a 'green' investor be most likely to invest in?

- a. BHP-Billiton (BHP)
- b. Western Mining Resources (WMR)
- c. Willmott Forests (WFL)
- d. Earth Sanctuaries Ltd (ESL)

d is correct. Earth Sanctuaries Ltd is an Australian company that specialises in conserving native plants and animals BHP and WMR are mining companies, while WFL is involved in woodchipping. See pages 199–200 for commentary.

Q15 A blue chip company is a company that:

- a. is listed on the Australian Stock Exchange (ASX)
- b. has operations offshore
- c. is well established with a good track record for being financially stable
- d. pays interim and final dividends every year.

c is correct. Although each of the above answers is applicable to most blue chip companies in Australia, answer c best describes the key distinguishing characteristic of a blue chip company. See page 195.

Q16 A company has just paid a dividend on 20 cents per ordinary share. If dividends are expected to grow indefinitely at the rate of 5% pa and an investor's required rate of return is 15%, what is the share's intrinsic value?

- a. \$2.00
- b. \$1.33
- c. \$1.40
- d. \$2.10

d is correct. Use Equation 6.7 on page 193. Next year's dividend is expected to be 21 cents per share. The denominator is $r_e - g$: i.e. $15\% - 5\% = 10\%$. $\$0.21 \div 0.1 = \2.10 .

Q17 A company has just paid an annual dividend of 15 cents per preference share. If the required rate of return is 15%, what is the share's intrinsic value?

- a. \$1.00
- b. \$1.15
- c. \$1.50
- d. \$1.65.

a is correct. Use Equation 6.5 on page 189: i.e. $\$0.15 \div 0.15 = \1.00 .

Q18 A zero coupon bond will be redeemed at its face value of \$100 five years from now. If the required rate of return is 15%, what is its intrinsic value?

- a. \$666.67
- b. \$15.00
- c. \$49.72
- d. \$100.

c is correct. Use Equation 6.3 on page 186. In this case the denominator is $(1.15)^5 = 2.011357$. $\$100 \div 2.011357 = \49.72 .

Q19 A coupon bond pays interest twice per year. It has just paid \$40 in interest and will be redeemed five years from now at its face value of \$1000. If an investor's required rate of return is 10% pa, what is the bond's intrinsic value?

- a. \$922.78
- b. \$1,077.22
- c. \$772.55
- d. \$924.18

a is correct. Use the equation on page 188. Use the present value of an annuity part to calculate the present value of the coupons:

$$\text{i.e. PV of coupons} = \$40 \left[\frac{1 - (1.05)^{-10}}{0.05} \right] = \$308.87$$

$$\text{Then calculate the PV of the face value} = \frac{\$1000}{(1.05)^{10}} = \$613.91$$

$$\$308.87 + \$613.91 = \$922.78.$$

Q20 The current price of a share is \$3.00. Its current earnings are 20 cents per share. Earnings are expected to grow indefinitely at 5% pa. The PE ratio is:

- a. 15.00
- b. 14.29
- c. 15.75
- d. 14.75.

b is correct. A PE ratio is the current price of a share divided by forecast earnings per share (EPS), see margin note and commentary on page 197. In this case forecast EPS are $\$0.20 \times 1.05 = \0.21 . Therefore the PE ratio is $\$3.00 \div \$0.21 = 14.29$.

Q21 Value is best defined as the:

- a. amount of money needed to acquire an asset
- b. worth of an asset to an individual
- c. accounting measure of an asset's worth
- d. none of the above.

b is correct. See page 181.

Q22 When calculating the intrinsic value of an investment according to the principles of discounted cash flows, which of the following will lead to an increase in intrinsic value, all else the same?

- a. An increase in the discount rate
- b. A decrease in cash flows
- c. An increase in cash flows

d. A stable discount rate

c is correct. See page 184.

Q23 Cash flows for an investment for today, next year and the year after are forecast to be \$4000, \$5000 and \$6600. Given a required return of 7%, the intrinsic value of this investment is:

- a. \$14 437
- b. \$15 875
- c. \$13 966
- d. \$13 668

a is correct. See page 184.

Q24 A zero coupon bond has a face value of \$1000 and two years to maturity. The bondholder's required rate of return is 10% p.a. compounded quarterly. The current price of this bond is:

- a. \$780
- b. \$905
- c. \$820
- d. \$842

c is correct. See page 186.

Q25 A zero coupon bond has a face value of \$1000 and 6 years to maturity. If the current price is \$564 then bondholders required return is:

- a. 9% p.a. compounded annually
- b. 10% p.a. compounded annually
- c. 11% p.a. compounded annually
- d. 12% p.a. compounded annually

b is correct. See page 186.

Q26 A zero coupon bond has a face value of \$2000 and a current price of \$624. Bondholders have a required rate of return of 12%p.a. compounded semi-annually. This bond has:

- a. 8 years to maturity
- b. 10 years to maturity
- c. 12 years to maturity
- d. 14 years to maturity.

b is correct. See page 186.

Q27 A 10-year coupon bond has a coupon rate of 15% and pays coupons semi-annually. The bond has a face value of \$1000. If bondholders current required rate of return is 13%, the current price of this bond would be:

- a. \$1230
- b. \$1190
- c. \$1080
- d. \$1110.

d is correct. See page 188.

Q28 The price of the bond in Q27 assuming that everything else is the same coupons except that coupons are paid quarterly is:

- a. \$1111
- b. \$1222
- c. \$1011
- d. \$1230.

a is correct. See page 188.

Q29 Redrock Ltd is about issue preference shares paying \$5 per year. If preference shareholder's have a required rate of return of 12%, the current price of Redrock's preference shares is:

- a. \$50
- b. \$5.60
- c. \$42
- d. \$100.

c is correct. See page 189.

Q30 DC Airport Corporation's preference shares are trading at \$33.33. Given that investor's required return is 18%, the current dividend yield on DC's preference shares is:

- a. 16%
- b. 24%
- c. 6%
- d. 18%.

d is correct. See page 189.

- Q31** Given that the required return on a preference share is 10% and that the preference share's current price is \$7.50, then the dividend payment per preference share is:
- a. 7.5%
 - b. 75%
 - c. 10%
 - d. 5.5%.

a is correct. See page 189.

- Q32** Given a current dividend of \$0.5, a constant growth rate of 5% and a required return of 10%, the intrinsic value of the share in question is:
- a. \$11
 - b. \$12
 - c. \$10.50
 - d. \$11.50

c is correct. See page 193.

- Q33** A share is expected to pay dividends of \$1 in one year, \$1.20 in two years and then \$1.30 in three years with this amount lasting in perpetuity. The current intrinsic value of this share given a discount rate of 5% is:
- a. \$25.62
 - b. \$38.43
 - c. \$26.43
 - d. \$25.10.

a is correct. See pages 189-195.

- Q34** Given that ZXC Ltd had expenses of \$1 000 000 and revenues of \$800 000 in the last financial year and that the number of shares on issue over the course of the last financial year was constant at 100 000, EPS for ZXC stock were:
- a. \$2
 - b. -\$2
 - c. \$200 000
 - d. \$1.

b is correct. See page 198.

- Q35** Given and EPS of \$1.50 and a PE ratio of \$8, this implies a share value of:
- a. \$9.50
 - b. \$6.50
 - c. \$12

d. None of the above.

c is correct. See page 198.

Q36 Which of the following is true?

- a. Earnings and dividends are independent of one another
- b. Dividends tend to be more volatile than earnings
- c. Both a and b
- d. None of the above

d is correct. See pages 197–9.

Q37 Which of the following is false?

- a. Bonds can have fixed interest rates.
- b. Bonds can have variable interest rates.
- c. Both a and b.
- d. None of the above.

d is correct. See page 188.

Q38 Which of the following is true?

- a. Ordinary shares are a form of hybrid instrument.
- b. Preference shares generally pay a variable dividend.
- c. Bonds generally have a variable coupon rate.
- d. None of the above.

d is correct.

Q39 Dividend valuation models are best applied to:

- a. internet stocks
- b. oil exploration stocks
- c. bank stocks
- d. none of the above.

c is correct. See page 195.

Q40 Which of the following is false?

- a. Intrinsic value is the present value of expected future cash flows discounted at the investor's required rate of return.
- b. Australian companies normally pay dividends semi-annually
- c. Dividend discount models tend to be robust to the choice of estimate for the relevant estimates used within the model.

d. Dividend valuation models are best applied to blue chip companies.

c is correct. It can be seen that the intrinsic value calculated according to a particular dividend discount model is sensitive to the choice of estimates used within the model. Hence, such valuation methodology tends not to be robust to the choice of estimates used within the model.

Chapter 7 Cost of Capital

Q1 Which of the following is not a source of capital?

- a. Borrowings
- b. Preference shares
- c. Ordinary shares
- d. Trade credit

d is correct. Trade credit is a source of short term finance, but is not part of a company's capital structure and is not included in calculations of weighted average cost of capital. See discussion on page 215.

Q2 Cost of capital is:

- a. the maximum rate of return on the firm's investments that will compensate suppliers of capital to the firm
- b. the minimum rate of return on the firm's investments that will compensate suppliers of capital to the firm
- c. equal to a firm's dividend yield
- d. equal to a firm's dividend yield plus expected growth.

b is correct. Cost of capital is the minimum rate of return on the firm's investments that will compensate suppliers of capital to the firm. See margin note on page 215.

Q3 The cost of raising the next dollar from a particular source of capital is referred to as:

- a. average cost
- b. incremental cost
- c. marginal cost
- d. opportunity cost.

c is correct. The cost of raising the next dollar from a particular source of capital is referred to as marginal cost. See margin note on page 216.

Q4 When calculating a firm's weighted average cost of capital, the preferred method of weighting each source of capital is to use:

- a. book values
- b. amortised historical costs
- c. current market values
- d. target weights.

d is correct. See commentary on page 238.

Q5 A firm is financed using one-third debt and two-thirds equity. If the cost of debt is 9% pa and the cost of equity 12% pa, the firm's weighted average cost of capital:

- a. 10.5% pa
- b. 10.0% pa
- c. 11.0% pa
- d. 11.5% pa

c is correct. $9 \times 1/3 + 12 \times 2/3 = 3 + 8 = 11 = 11\%$ pa. See page 237.

Q6 A firm is planning to issue 1 million shares at \$5 each. If the costs of the issue are \$50 000, the net proceeds of the issue are:

- a. \$4 500 000
- b. \$4 950 000
- c. \$4 995 000
- d. \$4 999 500

b is correct. $1\,000\,000 \times \$5 - \$50\,000 = \$5\,000\,000 - \$50\,000 = \$4\,950\,000$. See page 218.

Q7 A firm has the following capital structure:

| Source | After-tax cost % pa | Market value \$'000 |
|-------------------|------------------------|------------------------|
| Term loans | 9.00 | 3,000 |
| Preference shares | 11.00 | 1,000 |
| Ordinary shares | 13.00 | 5,000 |

Its after-tax weighted-average cost of capital is:

- a. 11.00%
- b. 11.44%
- c. 11.66%
- d. 10.88%.

b is correct. The weighted average can be calculated as follows: $(9 \times 3 + 11 + 13 \times 5) \div 9 = (27 + 11 + 65) \div 9 = 103 \div 9 = 11.44\%$. (Note that the denominator 9 represents the sum of the market values, which is \$9 million.). See page 237.

- Q8 A company has recently paid an annual dividend of \$1.30 per share. What is the after-tax cost of retained earnings if dividends are expected to grow indefinitely at the rate of 8% pa and the shares are currently priced at \$28.08?**
- a. 12.63%
 - b. 4.63%
 - c. 13.00%
 - d. 5.00%

c is correct. Using Equation 7.12 on page 232, the calculation is: $(1.3 \times 1.08) \div 28.08 + 0.08 = 1.404/28.08 + 0.08 = 0.05 + 0.08 = 0.13 = 13\%$

- Q9 A company has a beta value of 1.4. The risk-free rate is 5.5% and the equity risk premium is 8%. What is the after-tax cost of the company's ordinary shares using the Capital Asset Pricing Model?**
- a. 16.70%
 - b. 15.70%
 - c. 13.50%
 - d. 11.21%

a is correct. The calculation is: $5.5 + 1.4 \times 8 = 5.5 + 11.2 = 16.70\%$ See page 233.

- Q10 The main difference between estimating the cost of new ordinary shares and estimating the cost of retained earnings is the use of:**
- a. net proceeds rather than book value
 - b. net proceeds rather than intrinsic value
 - c. net proceeds rather than current market price
 - d. retained earnings per share rather than current market price.

c is correct. The main difference between estimating the cost of new ordinary shares and estimating the cost of retained earnings is the use of net proceeds rather than current market price. See commentary at page 232.

- Q11 Which of the following is not an important component of the cost of capital for Australian companies?**
- a. Fixed interest debt
 - b. Ordinary shares
 - c. Preference shares
 - d. Zero coupon bonds.

d is correct. Zero coupon bonds do not represent an important component of the cost of capital for Australian companies. See commentary at page 219.

Q12 A zero coupon bond has a face value of \$100 000 and matures in three years. If the net proceeds from issuing the bond were \$90 000, the implied annual cost is:

- a. 5.00%
- b. 3.51%
- c. 3.58%
- d. 3.57%

d is correct. See formula 7.2 on page 219. Note that the discount rate on a zero coupon bond can be determined using the following equation:

$$r_b = \left[\left(\frac{F}{NP_b} \right)^{\frac{1}{n}} - 1 \right] * 100$$

where r_b = bondholder's required return

F = face value of bond

NP_b = net issue proceeds per bond

n = number of periods to maturity

$$= [(10/9)^{1/3} - 1] \times 100$$

$$= (1.111^{1/3} - 1) \times 100$$

$$= 0.035744 \times 100$$

$$= 3.57\%$$

Q13 If the before-tax cost of debt is 10% and the tax rate is 30%, the after-tax cost of debt is:

- a. 3.00%
- b. 7.00%
- c. 14.29%
- d. 13.00%.

b is correct. The after-tax cost of debt is $10\% \times (1 - t)$, where t is the tax rate: i.e. $10\% \times (1 - 0.3) = 10\% \times 0.7 = 7.00\%$. See page 224.

Q14 The main sources of corporate capital can be ranked according to their risk (from most risky to least risky) as follows:

- a. bonds, preference shares, ordinary shares
- b. preference shares, bonds, ordinary shares
- c. ordinary shares, preference shares, bonds
- d. preference shares, ordinary shares, bonds.

c is correct. Interest is paid on bonds ahead of preference shares dividends. Ordinary shareholders have a residual claim to profits after all other claims have been settled.

Q15 If all of a company's shareholders are Australian residents, we would expect to see that company:

- a. minimising its dividend pay-out ratio
- b. paying out the largest possible fully franked dividend
- c. increasing its debt to equity ratio
- d. maximising its use of retained profits to finance new projects.

b is correct. If all of a company's shareholders are Australian residents, we would expect to see that company paying out the largest possible fully franked dividend. This would ensure that shareholders gain maximum benefit from available imputation credits. See commentary on page 235.

Q16 When the marginal investor in a company cannot use imputation credits, we would expect to see that company:

- a. focusing on generating capital gains
- b. paying out the largest possible fully franked dividend
- c. reducing its debt to equity ratio
- d. minimising its use of retained profits to finance new projects.

a is correct. When the marginal investor in a company cannot use imputation credits, we would expect to see that company focusing on generating capital gains. This is because shareholders who cannot use imputation credits are likely to benefit more from capital gains than from the receipt of dividends. See commentary on page 235.

Q17 A company's share price is currently \$4.72. Its most recent dividend was 50 cents per share; dividends are expected to grow indefinitely at a rate of 4% pa and the tax rate is 30%. The company's before-tax cost of retained earnings is:

- a. 19.74%
- b. 19.13%
- c. 14.59%
- d. 15.02%

a is correct. See Equation 7.11 on page 230.

$$\begin{aligned}
k_{re,bt} &= \frac{D_1}{P_0(1-t_c)} + g \\
&= \frac{0.50(1+0.04)}{4.72(1-0.30)} + 0.04 \\
&= \frac{0.52}{4.72} + 0.04 \\
&= 0.157 + 0.04 \\
&= 0.1974 \\
&= 19.74\%
\end{aligned}$$

Q18 It is more appropriate for a company to use its before-tax weighted average cost of capital (WACC) rather than its after-tax WACC when:

- its marginal investor is a non-resident foreigner
- a minority of its shareholders are Australian residents
- a majority of its shareholders are Australian residents
- its marginal investor is an Australian resident able to take advantage of imputation credits.

d is correct. If a company's shareholders are able to take advantage of imputation credits, they receive tax credits for income tax paid by the company. Because income tax paid by the company does not therefore burden its shareholders, future cash flows should be projected on a before-tax basis and discounted at the company's before-tax WACC.

Q19 It is more appropriate for a company to use its after-tax weighted average cost of capital (WACC) rather than its before-tax WACC when:

- its marginal investor is a non-resident foreigner who is unable to benefit from franking credits
- a minority of its shareholders are Australian residents
- imputation credits are not reflected in the price of the company's shares
- a minority of its shareholders are Australian residents.

a is correct. Although all of these alternatives might justify a company using its after-tax WACC, the first is the most persuasive. Share prices are set by the marginal investor. If that investor is unable to benefit from imputation credits, those credits will not be reflected in the company's share price. Because income tax paid by the company burdens the marginal shareholder, future cash flows should be projected on an after-tax basis and discounted at the company's after-tax WACC.

Q20 Foreign investors are more likely to invest in Australia's largest, rather than smallest, companies because:

- a. larger companies are less risky than smaller companies
- b. larger companies pay higher dividends than smaller companies
- c. larger companies are more likely to pay fully-franked dividends than smaller companies
- d. of the need to minimise transaction costs.

d is correct. Foreign investors typically invest large amounts in Australian companies and are more likely to select large companies because they face higher transaction costs than resident investors. Transaction costs include the cost of searching for information. Those costs will be minimised by investing in a few large companies rather than a multitude of smaller companies.

Q21 With issue costs of 5% and a per security issue price of \$20, net proceeds per security from the issue are:

- a. \$16
- b. \$17
- c. \$19
- d. \$21.

d is correct. See page 218.

Q22 A zero-coupon bond has a face value of \$1000 and 10 years to maturity. Bondholder's have a required return of 12% p.a. compounded annually. The net proceeds per bond from the issue are:

- a. \$400
- b. \$350
- c. \$284
- d. \$322.

d is correct. See page 219.

Q23 A 3-year zero-coupon bond with a face value of \$100 000 was issued at an interest rate of 10% p.a. compounded semi-annually. The net proceeds from this bond issue were:

- a. \$74 622
- b. \$71 890
- c. \$65 823
- d. \$72 099.

a is correct. See page 219.

- Q24** A 2-year zero-coupon bond issued with a face of \$1000 resulted in issue proceeds of \$742. If bondholder's required that their return be compounded monthly, the annual interest rate at which the bonds were issued is:
- a. 13% p.a.
 - b. 14% p.a.
 - c. 15% p.a.
 - d. 16% p.a.

c is correct. See page 220.

- Q25** Assume a zero-coupon bond was issued with a face value of \$1 000 000 and net proceeds from the issue were 95% of this amount. If the bond had 10 years to maturity, calculate the approximate before-tax cost of this zero-coupon bond:
- a. 5.21%
 - b. 12%
 - c. 5%
 - d. 0.51%

d is correct. See page 220.

- Q26** Given a marginal tax rate of 30% and a before-tax cost of debt of 7%, the after tax cost of debt is:
- a. 9.1%
 - b. 4.9%
 - c. 23%
 - d. 37%.

b is correct. See page 224.

- Q27** If the marginal tax rate is 30% and the after tax cost of debt is 8.4%, then the before-tax cost of debt must be:
- a. 8.4%
 - b. 25.2%
 - c. 16%
 - d. 20%.

a is correct. See page 224.

- Q28** Preference shares promise a fixed dividend payment of \$1.50 and preference shareholders have a required return on 10% p.a. The net proceeds per preference share are:
- a. \$20

- b. \$15
- c. \$10
- d. \$0.50

b is correct. See page 227.

Q29 Given that preference shareholders have a required return of 8% p.a. and preference shares pay a dividend of \$5 per year, the net proceeds per share are:

- a. \$15
- b. \$62.50
- c. \$70
- d. \$25.

b is correct. See page 227.

Q30 Given a company tax rate of 30%, dividend payments of \$5 and net proceeds of from issue of \$70, the before-tax cost of preference shares is:

- a. 11%
- b. 13.25%
- c. 8.65%
- d. 10.20%.

d is correct. See page 228.

Q31 Given a growth rate of 8%, a current dividend of \$2 and shareholder's required return of 8.5%, the intrinsic value of an ordinary share is:

- a. \$50.20
- b. \$40.20
- c. \$43.20
- d. \$30.

c is correct. See page 229.

Q32 Given a share price of \$18, current dividends of \$0.65 and a growth rate of 4.80%, the after tax cost of retained earnings is:

- a. 8.6%
- b. 8%
- c. 9.4%
- d. 10%.

a is correct. See page 230.

Q33 Given the data in Q32 and a company tax rate of 30%, the before-tax cost of retained earnings is:

- a. 10.2%
- b. 10.1%
- c. 11%
- d. 12%.

a is correct. See page 230.

Q34 The ordinary shares of ABC Company are currently trading at \$6. A new share would be made at an offer price of \$5.90. Issue costs are expected to be 4% of the proceeds of the issue. The last dividend was \$0.60 and the next dividend is due a year from now. The estimated growth rate is 4% p.a. What is ABC Company's after tax cost of an ordinary share issue is:

- a. 13%
- b. 14%
- c. 15%
- d. 16%.

c is correct. See page 232.

Q35 Use the data in Q34 and assume a corporate tax rate of 30%. ABC Company's before-tax cost of a new issue of ordinary shares is:

- a. 20%
- b. 21%
- c. 22%
- d. 23%.

a is correct. See page 233.

Q36 XYZ Company has a beta of 2.5. The expected return on the market is 15% and the ERP is 7%. The after-tax cost for the ordinary shares of XYZ Company is:

- a. 22%
- b. 25.5%
- c. 17.5%
- d. 26.5%

b is correct. See page 234.

Q37 A problem(s) with applying the CAPM to calculate the cost of ordinary shares is the:

- a. difficulty associated with estimating beta
- b. CAPM does not incorporate flotation costs

- c. difficulties associated with using CAPM to calculate the before-tax cost of ordinary shares.
- d. All of the above.

d is correct. See page 234.

Q38 Which of the following statements is incorrect?

- a. Foreign shareholders do not get a cash rebate for unused franking credits.
- b. Foreign investors are much more likely to invest in large Australian companies.
- c. Foreign investors are likely to prefer unfranked dividends.
- d. None of the above.

d is correct. See page 236.

Q39 Which of the following is not a limitation of EBIT-EPS analysis?

- a. EBIT–EPS analysis is not appropriate when shareholders can fully utilise dividend imputation credits.
- b. EBIT–EPS analysis ignores increases in financial risk.
- c. EBIT–EPS analysis allows for the evaluation of the impact of changes in capital structure on EPS.
- d. EBIT–EPS analysis ignores the variability of EBIT.

c is correct. See page 249.

Q40 JJJ Removals is financed with preference shares (20%) and ordinary shares (80%). The cost of each of these sources of capital is 8% and 12% respectively. The Weighted Average Cost of Capital (WACC) for JJJ Removals is:

- a. 11.2%
- b. 10.2%
- c. 11%
- d. 10%

a is correct. See page 237.

Q1 Which of the following is not an investment?

- a. The purchase of new manufacturing plant
- b. The replacement of an old production machine
- c. Payment of interest
- d. The purchase of a licence to manufacture a new product.

c is correct. The payment of interest is a cost of debt finance. The other items are examples of capital outlays with a view to gaining future benefits. See margin note and commentary on page 269.

Q2 Which of the following is not a common characteristic of investment decisions?

- a. Zero risk
- b. Relatively long time frame
- c. Relatively large initial outlay
- d. Difficult to reverse.

a is correct. Risk *is* a common characteristic of investment decisions. See commentary on pages 269–70.

Q3 New projects should be adopted only after they have been analysed and have shown themselves capable of:

- a. repaying the initial outlay
- b. generating future cash flows sufficient to service debt and maintain dividends
- c. maintaining current share price
- d. increasing shareholder wealth.

d is correct. New projects should be adopted only after they have been analysed and have shown themselves capable of increasing shareholder wealth.

Q4 Which of the following is the rarest?

- a. Perfect hindsight
- b. Intuition
- c. Perfect foresight
- d. Analytical ability.

c is correct. Everyone has perfect hindsight. Most of us have intuition and some have analytical ability, but virtually no-one has perfect foresight; i.e. an ability to foresee the future. It is important to remember this in the context of investing because it emphasises the uncertainty that typically characterises future cash flows.

Q5 Opportunity costs are:

- a. cash outflows required in the daily activities of a project
- b. cash outflows that occur prior to the evaluation of a project
- c. cash outflows that occur at the end of a project
- d. cash flows forgone when a particular course of action is chosen.

d is correct. Opportunity costs are cash flows forgone when a particular course of action is chosen. See margin note and commentary on page 274. The other alternatives are respectively operating costs, sunk costs and terminal value.

Q6 Sunk costs are cash outflows that occur:

- a. at the start of a project
- b. during a project
- c. at the end of a project
- d. before the evaluation of a project.

d is correct. Sunk costs are cash outflows that occur prior to the evaluation of a project. See margin note and commentary on page 275.

Q7 Which of the following does not affect net working capital?

- a. Depreciation
- b. Increases in stocks of raw materials
- c. Increases in stocks of finished goods
- d. Increases in accounts payable.

a is correct. Depreciation is an expense. The other items are changes in current assets or liabilities, all of which affect working capital. See Example 8.2 on page 277.

Q8 The following forecasts relate to the end of a project. Gross proceeds from disposal of project assets: \$200 000. Cost of dismantling project asset: \$20 000. Site restoration costs: \$10 000. Return of net working capital: \$15 000. The terminal value of the project is:

- a. \$155 000
- b. \$180 000
- c. \$170 000
- d. \$185 000

d is correct. The terminal value is: $\$200\,000 - \$20\,000 - \$10\,000 + \$15\,000 = \$185\,000$. See Example 8.6 on page 282.

Q9 The sum of the discounted net cash flows received over the life of a project, less the project's initial outlay is:

- a. the internal rate of return (IRR) of the project
- b. the project's forecast profit
- c. the project's present value
- d. the project's net present value (NPV).

d is correct. The sum of the discounted net cash flows received over the life of a project, less the project's initial outlay is the project's net present value. See margin note and Equation 8.1 on page 283.

Q10 Increased dividend payout ratios occur because companies:

- a. have become more profitable

- b. have become less profitable
- c. are generating higher net cash flows
- d. can identify fewer value-adding investment opportunities.

d is correct.

Q11 The minimum rate of return that will make a project acceptable is the:

- a. internal rate of return
- b. weighted average cost of capital (WACC)
- c. hurdle rate
- d. risk-free rate.

c is correct. The hurdle rate is the minimum rate of return that will make a project acceptable. See margin note on page 286. Note that a company's WACC may be used as a hurdle rate, although that is not always the case. Frequently the hurdle rate is set above (but never below) a company's WACC.

Q12 Which of the following investments is least risky?

- a. Electricity generation
- b. Motor vehicle manufacture
- c. Plantation timber
- d. Buying government bonds.

d is correct.

Q13 Which of the following characteristics of a project would make it impossible to calculate an internal rate of return (IRR)?

- a. A terminal value that is higher than the initial outlay
- b. A positive net cash flow followed by a negative net cash flow in the next period
- c. A negative net present value (NPV)
- d. Zero initial outlay.

d is correct. If a project has no initial outlay an IRR cannot be calculated because there is no investment on which to base the return. See commentary on page 288.

Q14 The one advantage of IRR over NPV is it:

- a. assumes that project cash inflows are reinvested at the IRR of the project
- b. assumes that project cash inflows are reinvested at the discount rate
- c. assumes that project cash inflows are reinvested at the WACC
- d. is easier for people without a formal finance background to interpret a rate of return than it is to understand what the dollar NPV means.

d is correct. See commentary on page 289.

Q15 Which of the following investment proposals is most likely to be suggested by non-management employees?

- a. A new product line
- b. A new market segment
- c. Replacement of existing assets
- d. A new joint-venture.

c is correct. People on the factory floor are often in the best position to know when a machine is past its prime and should therefore be replaced. The other investments require a more strategic focus and are more likely to be generated by senior management.

Q16 An engaged couple are evaluating what sort of wedding they should have. Which of the following is a sunk cost?

- a. Cost of bridal gown
- b. Cost of engagement ring
- c. Cost of catering
- d. Cost of venue hire.

b is correct. If the couple are engaged, the cash flow associated with the cost of the engagement ring must have occurred prior to any evaluation of wedding options. The cost of the engagement ring has already been incurred: it is not an incremental cash flow in relation to the wedding and is therefore irrelevant to the evaluation process. See page 275.

Q17 Each week Joan Smith spends an average of \$200 at the local supermarket, including two kilograms of lemons at \$3.00 per kilogram. A local grower sells lemons from his farm gate at a price of \$1.50 per kilogram. The cost of petrol for a return trip to the supermarket is \$2.00 and \$4.00 for a return trip to the farm gate. Any journey to the farm gate would take Joan past the supermarket. Joan's most rational purchase strategy is to:

- a. buy lemons at the supermarket because it's not worth spending \$4.00 on petrol in order to save \$3.00 on the purchase of lemons
- b. buy lemons at the farm gate before going to the supermarket because that would cost an extra \$2.00 on petrol for a saving of \$3.00
- c. buy lemons at the supermarket because savings from buying lemons at the farm gate would be an insignificant proportion (about half of one percent) of total spending
- d. make a special trip to the farm gate once per week to buy lemons.

b is correct. The incremental cost of driving to the supermarket via the farm gate is \$2.00 for a saving of \$3.00, so the net gain is \$1.00. The fact that this is only half of one percent of total spending should not influence the decision. However, Joan would need to be

certain that other incremental costs (such as vehicle wear and tear) were not significant and that lemons would always be available at the farm gate.

- Q18** A company is considering manufacturing a new product for which it requires a new machine. The purchase price of the new machine is \$650 000. Inwards freight and installation costs would be \$1500. It would cost \$2000 to train an operator of the machine. Initial advertising to promote the new product would cost \$5000. The new machine would replace an old machine with a net salvage value of \$4000. The new machine would be installed at the same location as the old machine. It would occupy 24 square metres of a machine shop measuring 30 metres × 20 metres. Occupancy costs of the machine shop are \$6000 per year. The initial outlay for the new product is:
- \$651 500
 - \$653 500
 - \$654 500
 - \$654 740

c is correct. The initial outlay would be: \$650 000 + \$1500 + \$2000 + \$5000 – \$4000 = \$654 500. Note that occupancy costs are *not* an incremental cost of the project. See pages 276–279.

- Q19** A project has an initial outlay of \$400 000, annual net operating cash flows of \$75 000 for eight years and a terminal value of \$60 000. If the hurdle rate is 10% pa, the project's net present value (NPV) is:
- \$28 110
 - \$428 110
 - \$119
 - \$400 119

a is correct. See page 283. The NPV may be calculated as follows:

| Year | Cash Flow | PV of cash flow |
|---------------------|-----------|-------------------------|
| | \$ | \$ |
| 1 | 75 000 | 68 181.82 |
| 2 | 75 000 | 61 983.47 |
| 3 | 75 000 | 56 348.61 |
| 4 | 75 000 | 51 226.01 |
| 5 | 75 000 | 46 569.10 |
| 6 | 75 000 | 42 335.54 |
| 7 | 75 000 | 38 486.86 |
| 8 | 135 000 | <u>62 978.50</u> |
| | | 428 109.91 |
| Less initial outlay | | <u>400 000.00</u> |
| NPV | | <u><u>28 109.91</u></u> |

Q20 Which of the following is not an incremental cash flow for the purposes of project evaluation?

- a. Initial outlay
- b. Net operating cash flows
- c. Sunk costs
- d. Terminal value.

c is correct. Sunk costs are cash outflows that occur prior to the evaluation of a project. They do not result from acceptance of the project and are therefore not incremental cash flows. See margin note and commentary on page 273.

Q21 Which of the following is not a common characteristic of investment decisions?

- a. Relative small initial outlay
- b. Relatively long horizons
- c. Projects can be difficult to reverse
- d. Projects have risk

a is correct. Large initial outlays are to expected. See page 269.

Q22 Which of the following is not an overhead cost?

- a. Fixed utility costs
- b. Management salaries
- c. Operating wages
- d. Rates

c is correct. See page 274.

Q23 Which of the following are not categories of cash flows?

- a. Initial outlay
- b. Net operating cash flows
- c. Terminal value
- d. All of the above

d is correct. See page 276.

Q24 XYZ Company is looking at expanding its production by buying a new machine. The purchase price of the machine is \$2 million. Shipping and road transport costs are expected to be \$180 000. Installation costs are \$40 000. The installed cost for this project is:

- a. \$2 000 000
- b. \$2 180 000

- c. \$2 220 000
- d. \$2 040 000

c is correct. See page 279.

Q25 Assume that the old machine (which is being replaced) is Q24 can be sold for \$200 000 and that it will cost \$5000 to dismantle. The total installed cost of the replacement project in Q24 is therefore:

- a. \$2 025 000
- b. \$2 395 000
- c. \$2 220 000
- d. \$2 005 000

a is correct. See page 279.

Q26 A machine is sold for \$1 000 000 with a dismantling cost of \$20 000. The cash inflow is:

- a. \$1 000 000
- b. \$20 000
- c. \$980 000
- d. \$1 020 000

c is correct. See page 282.

Q27 A project will generate cash inflows of \$10 000 next year and \$20 000 in the following year. Initial costs are \$5000. The cost of capital is 8% The NPV of this project is:

- a. \$20 000
- b. \$22 400
- c. \$21 406
- d. \$23 295

c is correct. See page 283.

Q28 A project's initial cost is \$100 000. The project is expected to generate net cash inflows of \$100 000 for each year for the next 50 years. The project's terminal value is estimated to be \$20 000. Assuming a cost of capital of 10%, the expected NPV of this project is:

- a. \$891 652
- b. \$778 932
- c. \$666 093
- d. \$887 152

a is correct. See page 283.

Q29 A project has an initial outflow of \$400 000. However, the project will generate an instantaneous inflow of \$150 000. The project will generate a net inflow of \$2 000 000 next year, an outflow of -\$100 000 the year after. In the following year, a terminal value of \$50 000 is expected to be realised. Given a cost of capital of 15%, the expected NPV of this project is:

- a. \$1 698 230
- b. \$1 509 873
- c. \$1 446 392
- d. \$1 289 094

c is correct. See page 283.

Q30 If the hurdle rate is 10% and the IRR is 11%, then the firm should:

- a. reject the project
- b. accept the project
- c. wait
- d. unable to determine

b is correct. See page 286.

Q31 A negative NPV project would:

- a. be accepted by the firm
- b. have an IRR that is greater than the cost of capital
- c. have an IRR that is less than the cost of capital
- d. none of the above.

c is correct. See page 288.

Q32 An advantage of IRR over NPV is:

- a. it is an easier concept for non-finance people to grasp
- b. the assumption of reinvestment of all cash flows is realistic
- c. when a project's net cash flows have a reversal of sign, IRR will always give a straightforward decision
- d. none of the above.

a is correct. See page 289.

Q33 All else the same, projects with IRRs greater than the cost of capital should:

- a. increase firm value
- b. decrease firm value
- c. leave firm value unchanged
- d. uncertain.

a is correct. See pages 286-287.

Q34 Which of the following is not true regarding IRR and NPV rules?

- a. Both NPV and IRR are discounted cash flow techniques.
- b. Both NPV and IRR require detailed cash flow forecasts.
- c. Both NPV and IRR frequently give different decisions for projects with typical cash flow patterns.
- d. Both NPV and IRR are consistent with wealth maximisation.

c is correct. See page 288.

Q35 Which of the following is not true?

- a. Positive NPV projects should be accepted.
- b. Negative NPV projects should be rejected.
- c. Projects with an IRR greater than the hurdle rate should be accepted.
- d. None of the above.

d is correct. See page 288.

Q36 Which of the following is true regarding opportunity costs?

- a. Opportunity costs should be included within a discounted cash flow analysis.
- b. Opportunity costs and sunk costs are often identical.
- c. There are many occasions when relevant opportunity costs should not be included in a discounted cash flow analysis.
- d. All of the above.

a is correct. See page 274.

Q37 Which of the following best defines a sunk cost?

- a. A sunk cost is the cash flow foregone when one path of action is chosen.
- b. A sunk cost is the cash outflow required in the daily activities of the project.
- c. A sunk cost is the expected cash flow associated with disposal of the project assets at the end of the project's life.
- d. A sunk cost is a cash outflow that occurs prior to the evaluation of the project.

d is correct. See page 275.

Q38 A project had an initial outlay of \$40 000 and is expected to generate net cash inflows of \$10000 for each year in perpetuity. Given a cost of capital of 12%, the expected NPV of the project is:

- a. \$83 333
- b. \$43 333
- c. \$123 333

d. \$50 000

b is correct. See page 283.

Q39 A project which has an outlay of \$2000 and net inflows of \$400 for each of the next 12 years. Given a cost of capital of 6.5%, the NPV of this project is:

- a. -\$1029
- b. -\$1263
- c. \$1029
- d. \$1263

d is correct. See page 283.

Q40 The cost of capital is an appropriate benchmark when a project:

- a. has more risk than the average of the projects currently being undertaken
- b. has less risk than the average of the projects currently being undertaken
- c. cost of capital is never an appropriate benchmark
- d. none of the above.

d is correct. See page 287.

Q1 Working capital is defined as the funds invested in:

- a. non-current assets
- b. inventory
- c. receivables
- d. current assets.

d is correct. Working capital is defined as the funds invested in current assets. See margin note and commentary at page 360.

Q2 Net working capital is the excess of:

- a. current liabilities over current assets
- b. current assets over current liabilities
- c. receivables over payables
- d. payables over receivables.

b is correct. Net working capital is the excess of current assets over current liabilities. See margin note and commentary at page 360.

Q3 Which of the following is not a concern of working capital management?

- a. Maintaining liquidity
- b. Maintaining the required rate of return on assets
- c. Maintaining the dividend pay-out ratio

d. Managing the cost and risk of short-term funding

c is correct. Dividend policy is not a function of working capital management. See page 360.

Q4 Which of the following correctly lists items in order of liquidity, from most to least liquid?

- a. Cash, bank current account balances, investments in shares (listed on the ASX), trade accounts receivable
- b. Cash, investments in shares, trade accounts receivable, bank current account balances
- c. Cash, trade accounts receivable, bank current account balances, investments in shares
- d. Cash, investments in shares, bank current account balances, trade accounts receivable

a is correct. Cash is 100% or totally liquid, followed by bank current account balances, investments in shares listed on the ASX (which can be sold for three-day cash settlement) and trade accounts receivable. See discussion at page 361.

Q5 A normal yield curve shows that lenders expect:

- a. future short-term interest rates to be lower than current rates over the medium term
- b. future long-term interest rates to be lower than current short-term rates over the medium term
- c. future short-term interest rates to be higher than current rates over the medium term
- d. higher risk projects to have higher returns than lower risk projects over the medium term.

c is correct. A normal yield curve shows that lenders expect future short-term interest rates to be higher than current rates over the medium term. See margin note and commentary at page 362.

Q6 A retail toy store (which is a proprietary company) places a large order for toys to be sold during the lead-up to Christmas. The toys are delivered in mid-October for payment by 30 November. The store will have insufficient funds to pay the invoice until close of business Christmas Eve. The store's best course of action is to:

- a. delay payment until the New Year
- b. issue more shares to raise extra cash
- c. lay-off staff to save on wages
- d. arrange a short-term financing facility.

d is correct. Delaying payment may create ill-feeling with the supplier and is unsound business practice. Issuing more shares raises long-term capital, but only short-term finance is required. Laying-off staff in order to save wages would be most impractical, bearing in mind that the lead-up to Christmas is the busiest time of the year, when most toy stores employ extra (temporary) staff or pay existing staff overtime. See discussion at pages 362–3.

Q7 Which of the following is not classified as permanent funding?

- a. Commercial bills
- b. Long-term debt
- c. Leases
- d. Ordinary shares.

a is correct. Commercial bills provide short-term funding. The other items raise funds with maturities greater than one year and are therefore classified as permanent funding. See page 363.

Q8 Which of the following is likely to be the lowest cost source of short-term finance?

- a. commercial bills
- b. bank overdraft
- c. factoring
- d. floor-plan finance.

a is correct.

Q9 Which of the following is not a ‘spontaneous source of funding’?

- a. Bank overdraft
- b. Accrued wages
- c. Pay-as-you-go tax instalments withheld from employees, pending payment to the tax office
- d. Trade creditors

a is correct. A bank overdraft has to be arranged with the bank. The other sources of funds occur spontaneously in the normal course of business. See margin note and commentary at page 363.

Q10 Floor-plan finance is most likely to be used by:

- a. a supermarket
- b. a real estate agent
- c. a retailer of motor vehicles
- d. a firm of public accountants.

c is correct. See discussion at pages 374–5. Note that floor-plan finance can only be used when the business has readily-identifiable, high-value items for sale. Service providers such as real estate agents and firms of public accountants carry no inventory to support floor-plan finance.

Q11 The best business plan for dealers using floor-plan finance is to:

- a. sell current stock at the highest possible mark-ups
- b. keep current stock on the showroom floor for as long as possible

- c. sell current stock at a profit as fast as possible
- d. persuade customers to order purchases direct from the distributor.

c is correct. The best business plan for dealers using floor-plan finance is to sell current stock at a profit as fast as possible. See commentary at page 375.

Q12 Which of the following types of inventory is most suitable to use as security for short-term finance?

- a. Coffee beans
- b. Wheat
- c. Gold
- d. Ladies shoes.

c is correct. Gold is not perishable (as are coffee beans and wheat) and not subject to the vagaries of fashion (as are ladies shoes). However, gold is a commodity the price of which fluctuates so the loan-to-value ratio (LVR) would always be less than 100%. See discussion on LVRs at page 373.

Q13 Which of the following assets is likely to have the highest loan-to-value ratio (LVR) as security for short-term finance?

- a. Vacant land in a non-residential area
- b. Inventories of fashion goods
- c. Existing trade receivables
- d. New invoices.

d is correct. New invoices are a self-liquidating asset that can be expected to be realised in full in the absence of bad debts. Existing trade receivables are more likely to include slow payers and/or bad debts. Fashion goods have uncertain market value and may be difficult to liquidate at undiscounted prices. Vacant land in a non-residential area may be of uncertain value and difficult to liquidate. Using land as security for finance incurs high transaction costs. Unless held as inventory for resale purposes, land is better suited for securing longer-term finance. See discussion on LVRs at page 373.

Q14 Which of the following is not a source of short-term finance?

- a. Factoring
- b. Accrued wages
- c. Bank accepted commercial bills
- d. Bonds.

d is correct. Bonds are a source of long-term finance.

Q15 A firm purchases on credit. Credit terms require settlement by the end of the month following the month of invoicing, but a discount of 2% is offered for settlement within 7 days of invoicing. The firm decides to take the prompt settlement discount on all invoices received after the 20th day of the month. What is the cost of forgoing the discount on the other invoices (assuming an average credit period of 50 days)?

- a. 14.90%
- b. 15.89%
- c. 14.6%
- d. 15.55%

a is correct. The calculation is $(2 \div 98) \times 365/50 = 0.020408 \times 7.3 = 0.1490 = 14.90\%$. See page 367.

Q16 Interest on a bank overdraft is usually charged on:

- a. minimum monthly balances and debited to accounts quarterly
- b. maximum monthly balances and debited to accounts quarterly
- c. daily balances and debited to accounts quarterly
- d. daily balances and debited to accounts monthly.

d is correct. Bank fees are normally charged on daily balances and debited to accounts monthly. See comment on page 368.

Q17 Accrued wages provide a spontaneous source of funding because wages are typically paid:

- a. nine working days in advance
- b. nine working days in arrears
- c. weekly in advance
- d. monthly in arrears.

b is correct. See commentary at page 366. Wages are not normally paid in advance. If they were, they would not be accrued and could not therefore be a source of funds. Wages are typically paid either weekly or fortnightly. Salaries may be paid monthly, but typically half-way through the month rather than in arrears.

Q18 Which of the following is most likely to account for business failure in Australia?

- a. Uninsured cyclone damage
- b. Civil disturbance
- c. Loss of funds due to failure of local bank
- d. Insufficient working capital.

d is correct. Cyclones only affect a small part of Australia. Australia is noted for its political stability: arguably there have been no major civil disturbances since the Eureka Stockade. No Australian bank has failed since federation.

Q19 Which of the following is not a trade-off to be considered in the management of working capital?

- a. Cash: cost of forgoing higher returns versus the benefit of avoiding illiquidity
- b. Debtors: cost of financing versus benefits of increased sales and customer goodwill
- c. Inventory: cost of carry versus benefit of avoiding stock-outs
- d. Office premises: freehold ownership versus leasehold possession.

d is correct. Whether to own or lease business premises is a long-term financing decision. All the others are cost-benefit analysis problems that are a feature of working capital management.

Q20 The concept of self-liquidation in regard to debt incorporates the notion that the cash:

- a. inflows that result from the investments made with the debt funding will be received at times when payments of interest are necessary
- b. inflows that result from the investments made with the debt funding will be received at times when repayments of principal are necessary
- c. outflows that result from the investments made with the debt funding will occur at times when receivables fall due for payment
- d. inflows that result from the investments made with the debt funding will be received at times when payments of creditors are necessary.

b is correct. The concept of self-liquidation in regard to debt incorporates the notion that the cash inflows that result from the investments made with the debt funding will be received at times when repayments of principal are necessary. See margin note and commentary at page 362.

Q21 Which of the following is not a source of informal short-term finance?

- a. Accrued wages
- b. Superannuation and taxes
- c. Factoring
- d. Trade credit

c is correct. Factoring is a formal source of short-term finance. See page 360.

Q22 Which of the following is not a source of formal short-term finance?

- a. Bank overdrafts
- b. Commercial bills
- c. Factoring
- d. Trade credit

d is correct. See page 360.

Q23 In managing the level of working capital, which of the following is generally not a concern:

- a. the cost and risk of long-term funding
- b. the need to maintain liquidity
- c. the need to earn the required rate of return on the assets
- d. none of the above.

a is correct. It is the cost and risk of short-term funding which is of concern.
See page 360

Q24 To maintain liquidity, firms may:

- a. use cash budgeting
- b. keep an overestimate of cash required on hand at all times
- c. use a bank overdraft
- d. all of the above.

d is correct. See page 361.

Q25 If short-term interest rates were expected to be equal across all maturities, the yield curve would be:

- a. normal
- b. flat
- c. inverse
- d. hump-backed.

b is correct. See page 362.

Q26 Accrued expenses are a source of:

- a. permanent funding
- b. spontaneous funding
- c. temporary funding
- d. all of the above.

b is correct. See page 363.

Q27 Which of the following statements relate to the matching principle?

- a. Permanent assets should be financed with short-term sources of funding
- b. Temporary assets should be sourced with permanent sources of funding
- c. Permanent assets should be sourced with permanent sources of funding
- d. None of the above

c is correct. See page 365.

Q28 Which of the following regarding trade credit is false?

- a. Trade credit is an informal source of finance
- b. Trade credit is most usually offered on a 'net 30 days' or 'net 7 days' basis
- c. Trade credit is generally secured
- d. Sometimes, discounts are offered for early repayment

c is correct. Trade credit is generally unsecured. See page 366.

Q29 ABC company receives trade credit for the purchase of \$40000 worth of goods, marker '2/10, net 35'. The cost of forgoing the cash discount is:

- a. 29.8%
- b. 32%
- c. 37.24%
- d. 31.2%.

a is correct. See page 367.

Q30 Suppose that a firm purchases \$1000 worth of goods on trade credit. It will receive a discount if it pays the bill within 10 days and must pay the entire bill within 30 days. If the cost of forgoing the cash discount is 96.05% p.a., this implies a percentage discount of:

- a. 2%
- b. 3%
- c. 4%
- d. 5%.

d is correct. See page 367.

Q31 Which of the following is not a common source of formal short-term finance?

- a. Bank overdrafts
- b. Factoring
- c. Trade credit
- d. None of the above

c is correct. See page 367.

Q32 Which of the following statements regarding overdrafts is false?

- a. They permit overdrawing of funds beyond the credit balance in the account

- b. Overdrafts allow businesses the flexibility to not have to track their cash with 100% accuracy everyday
- c. Overdrafts are generally attached to savings accounts
- d. None of the above

c is correct. Overdrafts are generally attached to a cheque account.

Q33 Which of the following is not a standard contract length for a BAB?

- a. 90 days
- b. 105 days
- c. 120 days
- d. 30 days

b is correct. See page 370.

Q34 A promissory note with a face value of \$500 000 has 45 days until maturity. If the relevant yield is 7% then the current price of this promissory note is:

- a. \$495 722
- b. \$498 722
- c. \$495 120
- d. \$495 788.

a is correct. See page 371.

Q35 A commercial bill with a face value of \$100 000 has a current price of \$97 711. This bill has 95 days to maturity which necessarily implies that its yield is:

- a. 8%
- b. 9%
- c. 10%
- d. 11%.

b is correct. See page 371.

Q36 A commercial bill with a face value of \$50 000 has a current price of \$49291. This bill is trading at a yield of 7.5% which necessarily implies a time to maturity of:

- a. 70 days
- b. 80 days
- c. 90 days
- d. 100 days.

a is correct. See page 371.

Q37 Factoring business normally require client firms to satisfy which of the following?

- a. Sell goods on normal, credit terms
- b. Have efficient debtors' ledgers
- c. Have a spread of debtors
- d. All of the above

d is correct. See page 373.

Q38 The lending arrangements with floor-plan finance generally do not involve which of the following parties?

- a. The lender
- b. A bank
- c. The manufacturer
- d. The dealer

b is correct. See page 376.

Q39 Which of the following statements regarding floor-plan lenders is true?

- a. Floor-plan lenders generally write loans to dealers
- b. Floor-plan lenders generally service loans to dealers
- c. Floor-plan lenders generally monitor loans to dealers
- d. All of the above

d is correct. See page 375.

Q40 Goods with \$300 are sold on account for terms '2.5/8, net 30'. The cost of forgoing the cash discount in this instance would be:

- a. 40%
- b. 62%
- c. 43%
- d. 38%.

c is correct. See page 367.

Q1 A person who applies for and buys shares issued under a prospectus and sells them on the first day of trade on the market for a profit is a:

- a. bull
- b. bear
- c. stag
- d. dead cat.

c is correct. A person who applies for and buys shares issued under a prospectus and sells them on the first day of trade on the market for a profit is referred to as a *stag*. See margin note and commentary at page 453.

Q2 Which of the following is not an example of intermediated finance?

- a. Instalment loans
- b. Fully drawn advances
- c. Interest-only loans
- d. Floating rate notes

d is correct. Floating rate notes are marketable securities, used to obtain finance directly from the market. The other sources of finance are intermediated. See page 424.

Q3 Which of the following is not a financial intermediary?

- a. Banks
- b. Finance companies
- c. The Australian Stock Exchange (ASX)
- d. Building societies

c is correct. The ASX is a financial market. The others are financial intermediaries. See commentary on financial intermediaries at page 424.

Q4 When leasing is arranged with a financial institution the

- a. lessor is both the owner and financier
- b. lessee is the owner and the lessor is the financier
- c. lessor is the owner and the lessee the financier
- d. lessee is both the owner and the financier.

a is correct. When leasing is arranged with a financial institution the lessor is both the owner and financier. See commentary at page 428.

Q5 Which of the following is not a potential benefit of leasing?

- a. Taxation benefits
- b. Speed in acquisition of assets
- c. Increased turnover
- d. Avoidance of obsolescence

c is correct. Whether an asset is leased or owned should have no impact on business turnover. The other alternatives are all potential benefits of leasing. See list at top of page 433.

Q6 Floating rate notes are loans that pay a variable coupon amount based on a short-term benchmark rate such as the:

- a. risk-free rate
- b. bank bill swap rate (BBSW)

- c. yield on 10-year Commonwealth Government Bonds
- d. bank overdraft rate.

b is correct. Floating rate notes are loans that pay a variable coupon amount based on a short-term benchmark rate such as the bank bill swap rate (BBSW). See margin note and commentary at page 440. Note that although bank overdraft rates are short-term, they vary between banks and borrowers and cannot therefore be used as a benchmark.

Q7 In the event that a firm is liquidated, subordinated debt ranks:

- a. below ordinary shares
- b. below preference shares
- c. below other similar classes of debt
- d. ahead of debentures.

c is correct. Subordinated debt ranks ahead of ordinary shares and preference shares, but behind debentures. See margin note at page 439.

Q8 Hybrid securities are securities that have characteristics of both:

- a. assets and liabilities
- b. debt and equity
- c. finance leases and operating leases
- d. intermediated and direct finance.

b is correct. Hybrid securities are securities that have characteristics of both debt and equity. See margin note at page 441.

Q9 Eurobonds are debt securities that are issued:

- a. outside the domestic capital markets of the issuer in a currency that is neither the domestic currency of the issuer nor the domestic currency of the place of issue
- b. inside the domestic capital markets of the issuer in a currency that is neither the domestic currency of the issuer nor the domestic currency of the place of issue
- c. outside the domestic capital markets of the issuer in a currency that is the domestic currency of the issuer
- d. outside the domestic capital markets of the issuer in a currency that is the domestic currency of the place of issue.

a is correct. Eurobonds are debt securities that are issued outside the domestic capital markets of the issuer in a currency that is neither the domestic currency of the issuer nor the domestic currency of the place of issue. See margin note and commentary at page 445.

Q10 Rights that can be sold on the market if the shareholder does not wish to subscribe to the issue are described as

- a. redeemable
- b. irredeemable
- c. renounceable
- d. non-renounceable.

c is correct. *Renounceable* rights can be sold on the market if the shareholder does not wish to subscribe to the issue. See margin note and commentary at page 454.

Q11 A company's shares are trading at \$14 when it decides to make a 2-for-11 rights issue at an issue price of \$10.80. The theoretical price of a right is:

- a. \$3.20
- b. \$2.71
- c. \$3.78
- d. \$13.51

b is correct. Using Equation 12.1 at page 367, the theoretical price of a right is:

$$RP = \frac{N(P_m - S)}{N + 1}$$

where RP = theoretical price of a right

N = number of shares that must be held to receive one right

P_m = price of a share with the rights entitlement attached

S = rights issue subscription price

$$\text{Therefore } RP = \frac{5.5(14 - 10.80)}{6.5} = \$2.71$$

Q12 Which of the following is not a party to a novated lease?

- a. An employee
- b. An employer
- c. A motor vehicle dealer
- d. A financial institution

c is correct. A novated lease involves a three-party agreement between an employee, an employer and a financial institution. See page 428.

Q13 Which of the following is most commonly subject to a novated lease agreement?

- a. Laptop computers
- b. Overseas holidays
- c. Private school fees
- d. Motor vehicles

d is correct. A novated lease involves a three-party agreement between an employee, an employer and a financial institution to provide a *motor vehicle* to the employee as part of a salary package. See page 428.

Q14 Which of the following benefits is unlikely to be provided by a fleet vehicle leasing agreement that includes complete fleet vehicle management?

- a. Fixed cost servicing
- b. Reduced used vehicle price risk
- c. Improved driveway service
- d. More efficient administration.

c is correct. Complete fleet vehicle management is unlikely to include improved driveway service. It is, however, likely to provide the other benefits, together with cost benchmarking to best practice standards.

Q15 Which of the following sources of finance is best suited to meeting financing requirements arising from seasonal sales variations?

- a. An overdraft or commercial bills
- b. Instalment loan
- c. Interest only loan
- d. Fully drawn advance.

a is correct. An overdraft or commercial bills provide sources of finance that are best suited to meeting financing requirements arising from seasonal sales variations. The other alternatives are sources of longer term finance.

Q16 Which of the following is not a feature of a corporate bond?

- a. Redemption at face value
- b. Regular coupons
- c. Secured
- d. Issuers have good credit ratings.

c is correct. Corporate bonds are usually unsecured. See margin note and commentary at page 438.

Q17 Which of the following is not a feature of a debenture?

- a. Redemption at face value
- b. Regular coupons
- c. Unsecured
- d. Fixed term.

c is correct. Debentures are usually secured. See page 440.

Q18 Which of the following is not a condition of convertible notes imposed by the Australian Tax Office to ensure the tax-deductibility of interest?

- a. Fixed interest rate
- b. Timing of conversion to ordinary shares decided by the note holder rather than the issuer
- c. Conversion must take place between two and ten years from date of issue
- d. Must be secured.

d is correct. Convertible notes are normally unsecured, irrespective of whether or not interest is tax-deductible. See commentary at page 441.

Q19 The Reserve Bank of Australia (RBA) defines an investor has having significant influence over the company in which it has invested when the investor owns at least how many per cent of the voting shares?

- a. 20%
- b. 15%
- c. 25%
- d. 10%

d is correct. The Reserve Bank of Australia (RBA) defines an investor has having significant influence over the company in which it has invested when the investor owns at least 10% of the voting shares. See page 443.

Q20 Which of the following is not a reason for a company issuing options to purchase its shares?

- a. To motivate employees and directors to increase the market value of the company's shares
- b. As an additional benefit to an equity issue to make the current issue more attractive
- c. As an additional benefit attached to a debt contract to secure the funds or to achieve a lower interest rate
- d. To reduce its liability to pay income tax.

d is correct. Whether or not a company issues options over its shares has no impact on its tax liability. Each of the other alternatives is a possible reason for a company issuing such options. See commentary at bottom of page 456.

Q21 Which of the following is not a form of long-term finance?

- a. Variable rate business loans
- b. Bank overdrafts
- c. Fully drawn advances
- d. Lease finance

b is correct. See page 424.

Q22 Which of the following statements best describes the term 'lessor'?

- a. A contract by which an owner of property (the lessor) allows another person or entity (the lessee) the use of an asset
- b. The owner of property being leased
- c. The person or entity that gains the use of the leased asset by entering the lease contract
- d. None of the above

b is correct. See page 428.

Q23 Which of the following is not a potential benefit of leasing?

- a. Taxation benefits
- b. Avoidance of obsolescence
- c. Lengthy delays in acquisition of assets
- d. Efficiency of asset management and disposal

c is correct. See page 433.

Q24 Which of the following statements is false?

- a. Corporate bonds are debt instruments.
- b. The issuer of corporate bonds receives the face value of the bonds at issue.
- c. The face value on corporate bonds is repaid when the bonds mature.
- d. Corporate bonds always pay semi-annual coupons.

d is correct. See page 438.

Q25 Which of the following statements is true?

- a. Subordinated debt ranks above other similar classes of debt in the event that a firm is liquidated.
- b. Unsubordinated debt takes a lower ranking than other debt of similar characteristics.
- c. Subordinated debt ranks above ordinary shareholders in the event of liquidation.
- d. All of the above.

c is correct. See page 439.

Q26 Which of the following statements regarding debentures is false?

- a. Debentures are fixed-term debt securities.
- b. Debentures are issued under a prospectus.
- c. Debentures are secured.

d. None of the above.

d is correct. See page 440.

Q27 In order for firms issuing convertible notes to claim tax deductions on interest payments, which of the following conditions must be met?

- a. The interest rate is fixed
- b. Issuers decide when to convert notes to ordinary shares
- c. Conversion must take place two and ten years from the date of issue without exception
- d. Total funds raised from the issue of convertible notes must not exceed \$500 million

a is correct. See page 441.

Q28 Which of the following statements regarding direct investment is false?

- a. The RBA defines direct investment as capital invested in an enterprise by an investor that has significant influence over the key policies of the enterprise.
- b. In order for an investment to be classified as a 'direct' investment, the investor must own at least 10% of the voting stock in the business.
- c. Both a and b
- d. None of the above

d is correct. See page 443.

Q29 Which of the following statements regarding eurobonds is false?

- a. Eurobonds are usually classified as hybrid securities having both debt and equity features.
- b. Eurobonds are issued in the currency of the issuer.
- c. Eurobonds are issued in the currency of the country in which they are issued.
- d. All of the above.

d is correct. See page 445.

Q30 Which of the following statements regarding ordinary shares is false?

- a. Ordinary shares represent part-ownership of a company.
- b. Ordinary shares have a theoretically finite life.
- c. The dividends attached to ordinary shares are paid at the discretion of the directors.
- d. None of the above.

b is correct. See page 446.

Q31 Share consolidations are normally undertaken to:

- a. increase the number of shares on issue
- b. uncover past losses
- c. increase the share price
- d. All of the above.

c is correct. See page 447.

Q32 Which of the following are features of some preference shares?

- a. Cumulativeness
- b. Non-participating
- c. Participating
- d. All of the above

d is correct. See page 448.

Q33 Which of the following is not an advantage of issuing preference shares?

- a. Ownership rights are diluted
- b. The fixed cost of preference share capital allows firms to enhance earnings per ordinary share
- c. Non-payment of dividends cannot pose the solvency risk of debt
- d. Both a and c

a is correct. See page 448.

Q34 Which of the following statements regarding initial public offers (IPOs) is false?

- a. IPOs are the first issue of capital made to the public
- b. IPOs are also known as 'floats'
- c. The *Corporations Act 2001* solely governs the conduct of IPOs
- d. None of the above

c is correct. See page 449.

Q35 Which of the following is not a reason why a firm will choose to underwrite an IPO?

- a. Firms can never be totally sure how popular an issue will be
- b. Firms want to be sure of raising the required amount of funds
- c. Directors do not want to be seen to preside over a failed float.
- d. None of the above

d is correct. See page 451.

Q36 Which of the following best describes the process of ‘staggering’?

- a. ‘Staggering’ is the practice of applying for and buying shares issued under a prospectus and selling them on the first day of trade on the market for a profit.
- b. ‘Staggering’ is the practice of buying or selling shares based on the knowledge that a client or clients will shortly place significant buy or sell orders for those shares
- c. ‘Staggering’ is the practice of underwriting an IPO
- d. None of the above

a is correct. See page 453.

Q37 Given a 2-for-15 rights issue, a current market price of \$13.50 and subscription price of \$12, this implies a theoretical rights price of:

- a. \$1.32
- b. \$1.50
- c. \$1.86
- d. \$1.39.

a is correct. See page 455.

Q38 Given a current market price of \$7.20, a subscription price of \$5.50 and a theoretical rights price of \$1.36, this implies a:

- a. 1-for-7 rights issue
- b. 2-for-9 rights issue
- c. 1-for-4 rights issue
- d. 1-for-3 rights issue.

c is correct. See page 455.

Q39 Given a 2-for-17 rights issue, a current market price of \$7 and a subscription price of \$6.50, the implied ex-rights price is:

- a. \$7.43
- b. \$6.95
- c. \$7.20
- d. \$5.10.

b is correct. See page 455.

Q40 Which of the following is not a reason that companies issue options?

- a. To set in place a programmed raising of funds in the future
- b. To reward and motivate employees
- c. To increase the interest on debt contracts
- d. To make equity issues more attractive

c is correct. See page 456.

Q1 Which of the following is the correct sequence of events when a listed company pays a dividend?

- a. Record date; announcement date; ex-dividend date; payment date
- b. Record date; ex-dividend date; announcement date; payment date
- c. Announcement date; ex-dividend date; record date; payment date
- d. Announcement date; record date; ex-dividend date; payment date.

c is correct. The correct sequence of events when a listed company pays a dividend is: announcement date; ex-dividend date; record date; payment date. See page 471.

Q2 The date of the directors' meeting at which a recommendation for dividend payment is made is known as the:

- a. recommendation date
- b. record date
- c. announcement date
- d. ex-dividend date.

c is correct. The date of the directors' meeting at which a recommendation for dividend payment is made is known as the announcement date. See commentary at page 471.

Q3 The Australian Stock Exchange (ASX) has determined the ex-dividend date to be:

- a. four business days after the record date
- b. four business days before the record date
- c. three business days after the record date
- d. three business days before the record date.

b is correct. The Australian Stock Exchange (ASX) has determined the ex-dividend date to be four business days before the record date. See commentary on page 471.

Q4 Whether to pay dividends in a publicly listed company, and how much to pay, are recommendations made by:

- a. the chief executive officer
- b. the auditors
- c. the ordinary shareholders
- d. the board of directors.

d is correct. Whether to pay dividends in a publicly listed company, and how much to pay, are recommendations made by the board of directors. See commentary at page 471.

Q5 The proportion of earnings retained in the company, not returned to shareholders as dividends is the:

- a. reinvestment ratio
- b. price earnings ratio
- c. dividend payout ratio
- d. retention ratio.

d is correct. The retention ratio is the proportion of earnings retained in the company, not returned to shareholders as dividends. See margin note at page 472.

Q6 Volatility in dividend yields is most likely attributable to fluctuations in:

- a. dividends per share
- b. earnings per share
- c. share price
- d. dividend payout ratios.

c is correct. Volatility in dividend yields is most likely attributable to fluctuations in share price. See commentary at page 473.

Q7 Which of the following is not an assumption underlying the dividend irrelevance theory?

- a. investment decisions of a company are dependent on its dividend policy
- b. no business or personal taxes
- c. no transaction costs relating to the purchase or sale of shares
- d. complete and costless information about companies is available to investors.

a is correct. The dividend irrelevance theory assumes that the investment decisions of a company *independent of* its dividend policy. See commentary at page 478.

Q8 If a dividend is fully franked, the after-tax amount received by a shareholder entitled to receive the imputation tax credit is given by which of the following equations?

- a. After-tax dividend = $D_f \left[\frac{1-t_c}{1-t_p} \right]$
- b. After-tax dividend = $D_f \left[\frac{1-t_p}{1-t_c} \right]$
- c. After-tax dividend = $D_f \left[\frac{t_c}{1-t_c} \right]$
- d. After-tax dividend = $D_f \left[\frac{t_p}{1-t_c} \right]$

Where D_f = fully franked dividend

t_p = investor's marginal tax rate
 t_c = company tax rate

b is correct. See Equation 13.7 at page 484.

Q9 Which of the following is not an alternative to paying a cash dividend?

- a. dividends reinvested in shares
- b. bonus shares instead of dividends
- c. shares repurchased by company
- d. share purchase plan.

d is correct. A share purchase plan is an offer to shareholders to subscribe for additional shares.

Q10 Which of the following is least likely to be a dividend policy of an Australian company earning profits and paying taxes in Australia?

- a. residual dividend policy
- b. constant payout ratio policy
- c. zero payout policy
- d. stable dividend policy.

c is correct. An Australian company earning profits and paying taxes in Australia would be able to pay fully franked dividends to its Australian resident shareholders. It would be most unlikely that such a company would never pass on the imputation tax credits to its shareholders.

Q11 In the absence of transaction costs, we would expect the dividend drop-off ratio to be defined by which of the following equations?

- a. $\frac{P_{CD} - P_{XD}}{D_f} = \frac{1 - t_p}{(1 - t_c)(1 - t_g)}$
- b. $\frac{P_{CD} - P_{XD}}{D_f} = \frac{1 - t_c}{(1 - t_p)(1 - t_g)}$
- c. $\frac{P_{CD} - P_{XD}}{D_f} = \frac{t_p}{(1 - t_c)(1 - t_g)}$
- d. $\frac{P_{CD} - P_{XD}}{D_f} = \frac{1 - t_g}{(1 - t_c)(1 - t_p)}$

Where P_{CD} = cum-dividend share price
 P_{XD} = ex-dividend share price
 D_f = fully franked dividend
 t_p = investor's marginal tax rate
 t_c = company tax rate

t_g = tax rate on capital gain

a is correct. See Equation 13.9 at page 487.

Q12 A company has 10 million issued ordinary shares and pays a dividend of 12 cents per share. If the company's after tax profit was \$2 million, its retention ratio was:

- a. 60%
- b. 40%
- c. 6%
- d. 4%

b is correct. The dividend payout was $10 \text{ million} \times 12 \text{ cents} = \1.2 million . Therefore the dividend payout ratio was: $1.2 \div 2 = 60\%$. Therefore the retention ratio was: $1 - 0.6 = 0.4 = 40\%$. See margin note and commentary at page 472.

Q13 Over the twelve years a company's annual dividend has averaged 21 cents per share (cps). On four occasions the annual dividend was less than the previous year's dividend by the following amounts: 3 cps, 9cps, 12 cps and 10 cps. The company's dividend instability index is:

- a. 1.62
- b. 0.278
- c. 15.905
- d. 0.159

d is correct. The index is the sum of the squares of each drop in dividend, divided by the average dividend = $(0.0009 + 0.0081 + 0.0144 + 0.01) \div 0.21 = 0.0334 \div 0.21 = 0.159$. See page 474.

Q14 In the life cycle of a typical company, the start-up phase is immediately followed by which of the following phases?

- a. high growth
- b. rapid expansion
- c. maturity
- d. decline.

b is correct The start-up phase of a typical company is immediately followed by the rapid expansion phase. See Figure 13.10 at page 497.

Q15 An optimal dividend policy refers to the policy that:

- a. maximises share price
- b. maximises dividend per share
- c. maximises total dividends

d. maximises the market value of the firm.

d is correct. An optimal dividend policy refers to the policy that maximises the market value of the firm. See commentary at page 496.

Q16 ABC Company announced that its final dividend for its financial year ending 30 September 2007 would be 83 cents per share, fully franked at the company tax rate of 30%. On Friday 12 November 2007 an investor bought 350 ABC shares at the day's closing price of \$28.45 per share. On Monday 15 November 2007 ABC shares went ex-dividend and the investor sold all 350 ABC shares at the opening price of \$27.62. Brokerage was \$19.95 on each buy and sell transaction. If the investor's personal marginal tax rate is 43.5%, his/her after-tax profit/loss would be:

- a. \$234.48 profit
- b. \$211.93 profit
- c. \$70.34 profit
- d. \$47.80 profit

d is correct. The calculation is as follows:

| | |
|--|-----------------|
| Proceeds from sale of shares: $350 \times \$27.62 - \19.95 | \$9,647.05 |
| Less cost of shares: $350 \times \$28.45 + \19.95 | <u>9,977.45</u> |
| Trading loss | (330.40) |
| Dividend receipts: $350 \times \$0.83$ | <u>290.50</u> |
| | (39.90) |
| Net tax credit (see below): | <u>87.70</u> |
| After-tax profit | <u>\$47.80</u> |

Calculation of net tax credit:

| | |
|---|-----------------|
| Imputation tax credit: $350 \times \$0.83 \times 0.3/0.7$ | <u>\$124.50</u> |
| Investor's tax liability: | |
| Grossed-up dividend: $350 \times \$0.83 \times 1/0.7$ | \$415.00 |
| Less trading loss | <u>330.40</u> |
| Taxable income | <u>84.60</u> |
| Tax @ 43.5%: | \$36.80 |
| Less imputation tax credit (from above) | <u>124.50</u> |
| Net tax credit | <u>\$87.70</u> |

Note: (1) In this case the investor's tax on capital gains/losses is equal to his/her income tax rate of 43.5%. (2) The investor has been able to make an after-tax profit as the dividend drop-off ratio was less than that required to eliminate an arbitrage profit. (3) All the data used in this problem are an accurate portrayal of actual events on the indicated dates. (4) The type of profit illustrated in this problem can be referred to as an *arbitrage* profit, which was made from a successful *dividend stripping* trade. (5) The abnormally high trading volumes in ABC shares on the ex-dividend date suggest that a number of players were involved in dividend stripping.

(See pages 486-488 for commentary on dividend drop-off ratios.)

Q17 Which of the following factors is least likely to influence a company's dividend policy?

- a. stage of the company's life cycle
- b. balance of its franking account
- c. liquidity
- d. the company's effective rate of income tax.

d is correct. The rate of income tax paid by a company is unlikely to influence its dividend policy, particularly if the company is an Australian company of which most of its shareholders are Australian residents able to benefit from imputation tax credits.

Q18 If a superannuation fund receives a dividend of \$14,000, fully-franked at the rate of 30%, its after-tax dividend is:

- a. \$14,000
- b. \$9,800
- c. \$17,000
- d. \$20,000

c is correct. A superannuation fund pays income tax at the rate of 15%, so its after-tax dividend is $\$14,000 \times (1 - 0.15)/(1 - 0.3) = \$14,000 \times 0.85/0.7 = \$17,000$. See Equation 13.7 at page 484.

Q19 In calculating a superannuation fund's liability to income tax relating to profits on the disposal of assets held for more than 12 months, the following discount is allowed:

- a. 25%
- b. 50%
- c. one third
- d. nil.

c is correct. When calculating income tax, superannuation funds are allowed to discount by one third capital gains on assets held for more than 12 months. See commentary at pages 484-485.

Q20 If the after-tax cash inflow from selling shares after their ex-dividend date is equal to the after-tax cash outflow when buying the same shares before their ex-dividend date, an investor is unable to make which of the following types of profit?

- a. speculative
- b. capital gain
- c. arbitrage
- d. cumulative.

c is correct. If the after-tax cash inflow from selling shares after their ex-dividend date is equal to the after-tax cash outflow when buying the same shares before their ex-dividend date, an investor is unable to make an *arbitrage* profit.

Q21 The announcement date is:

- a. The date used to identify all shareholders on the register of members so they can receive a dividend
- b. Four working days prior to the record date
- c. The date of the directors' meeting when the dividend is recommended
- d. None of the above

c is correct. See page 471.

Q22 The record date is:

- a. The date of the directors' meeting when the dividend is recommended.
- b. The date used to identify all shareholders on the register of members so they can receive a dividend
- c. Four working days prior to the announcement date
- d. None of the above

b is correct. See page 471.

Q23 Given earnings per share of \$4 and a dividend payout ratio of 0.25, this implies dividends per share of:

- a. \$1
- b. \$10
- c. \$2
- d. \$20

a is correct. See page 472.

Q24 Given a growth rate of 10% and a retention ratio of 30%, the return on equity is:

- a. 20%
- b. 50%
- c. 300%
- d. 33%

d is correct. See page 472.

Q25 Which of the following statements regarding the dividend stability indicator is false:

- a. It is based on the incidence of cuts to dividend payout
- b. It considers only downward movements in dividends
- c. Both a and b
- d. None of the above

d is correct. See page 474.

Q26 Which of the following statements is false:

- a. The dividend payout ratio is very low in Australia compared to the USA
- b. Since the mid-80s dividend yields in Australia have been much higher than those of the UK
- c. Both a and b
- d. None of the above

c is correct. See page 476.

Q27 Given a fully franked dividend of \$2 and a company tax rate of 30%, this implies an imputation tax credit of:

- a. \$2.86
- b. \$0.86
- c. \$3.57
- d. \$1.86

b is correct. See page 482.

Q28 Given a grossed up dividend of \$9.17 and a tax rate of 40%, this implies a cash dividend of:

- a. \$4.80
- b. \$5.50
- c. \$6.00
- d. \$7.20

b is correct. See page 482.

Q29 Which of the following are dividend relevance arguments:

- a. Riskiness of capital gains
- b. Signalling and asymmetric information
- c. Agency costs
- d. All of the above

d is correct. See pages 489-490.

Q30 Which of the following are dividend irrelevance arguments:

- a. Riskiness of capital gains
- b. Agency costs
- c. Both a and b
- d. None of the above

d is correct. See pages 477-481.

Q31 Given earnings of \$100000 and number of shares outstanding prior to and after a buyback of 1000000 and 900000 respectively, this implies an EPS of before buyback of:

- a. \$1
- b. \$1.11
- c. \$0.90
- d. None of the above

a is correct. See page 491.

Q32 Which of the following is not a type of buyback under the *Corporations Act 2001*:

- a. Equal access purchase
- b. Even lot purchase
- c. Selective purchase
- d. None of the above

b is correct. See page 492.

Q33 Which of the following statements regarding dividend reinvestment plans (DRPs) is false:

- a. A DRP allows existing shareholders to acquire more shares in the company without incurring transactions costs
- b. DRPs are often offered at a premium to the current market price
- c. Participation in the DRP is voluntary
- d. Both a and b

b is correct. See page 495.

Q34 Which of the following are types of commonly used dividend policies:

- a. A residual dividend policy
- b. A constant payout ratio policy
- c. A fluctuating dividend policy
- d. Both a and b

d is correct. See page 499.

Q35 Given a current market price of \$4 and dividends of \$0.30, the dividend yield is:

- a. 15%
- b. 7%
- c. 23%
- d. None of the above

d is correct. See page 472.

Q36 The retention ratio is 30%. The return on equity is 10%. The growth rate is:

- a. 3%
- b. 7%
- c. 20%
- d. None of the above

a is correct. See page 472.

Q37 Given a dividend yield in period 1 of 10%, a dividend yield in period 2 of 15% and a dividend yield in period 3 of 20%, this implies a standard deviation in dividend yields of:

- a. 10%
- b. 5%
- c. 7%
- d. None of them above

b is correct. See page 473.

Q38 Given a dividend in period 1 of \$0.10, a dividend in period 2 of \$0.15 and a dividend in period 3 of \$0.20, this implies a dividend instability indicator of:

- a. 5
- b. 10
- c. 0
- d. 20

c is correct. See page 474.

Q39 Which of the following statements are true:

- a. Volatility in dividend yields are always attributable to fluctuations in share prices
- b. Dividend irrelevance theory argues that what a company pays in dividends has no influence on its share value
- c. Both a and b are true
- d. None of the above

b is correct. See page 477.

Q40 Given a marginal tax rate of 20%, a company tax rate of 35% and a fully franked dividend of \$1.90, the after tax dividend is:

- a. \$5.43
- b. \$9.50
- c. \$2.14
- d. \$2.34

d is correct. See page 484.

Q1 In relation to a company, which of the following is least likely to foreshadow impending financial distress?

- a. a fish tank in the chief executive officer's office
- b. recent resignations of key executives
- c. negative 'industry gossip'
- d. financial targets published in the company's annual report or on the company website.

d is correct. A company 'brave enough to publish financial targets' signals confidence in its future.

Q2 Which of the following is not a financial statement?

- a. share register
- b. balance sheet
- c. income statement
- d. statement of cash flows.

a is correct. See margin note at page 512. A share register is not a financial statement.

Q3 Which of the following is not recorded within a company's accounting system?

- a. sales revenue
- b. staff salaries and wages
- c. minutes of meetings of the board of directors
- d. purchases of raw materials.

c is correct. The minutes of meetings of a company's board of directors are recorded, but not within the company's accounting system. An accounting system is concerned only with financial transactions. See margin note and commentary at page 512.

Q4 Which of the following is not recorded in a balance sheet?

- a. assets
- b. liabilities
- c. cost of goods sold
- d. equity.

c is correct. Cost of goods sold may be included in an income statement, but never in a balance sheet. See page 513.

Q5 Companies listed on the Australian Stock Exchange (ASX) are required to produce reports every:

- a. month
- b. quarter
- c. half-year
- d. year.

c is correct. Companies listed on the ASX are required to produce half-yearly reports. See commentary at page 512.

Q6 Which of the following is not recorded in an income statement?

- a. equity
- b. revenue
- c. expenses
- d. net profit or loss.

a is correct. See page 513.

Q7 The balance sheet and income statement are linked because, in the absence of changes in contributed equity, the change in net assets over the reporting period is matched by:

- a. net profit for that period
- b. dividends declared for that period
- c. change in retained earnings
- d. changes in liabilities over that period.

c is correct. The balance sheet and income statement are linked because, in the absence of changes in contributed equity, the change in net assets over the reporting period is matched by the change in retained earnings. See commentary page 513.

Q8 Which of the following is not a category within a statement of cash flows? Cash flows from:

- a. operating activities
- b. sales activities
- c. investing activities
- d. financing activities.

b is correct. Receipts from customers are an item within cash flows from operating activities. Sales receipts are not a separate category within a statement of cash flows. See commentary at page 515.

Q9 Which of the following had the least negative impact on Qantas's cash flows during the period 11 September 2001 to 30 June 2004?

- a. the continuing threat of terrorism
- b. the SARS epidemic in parts of South-East Asia
- c. the rise in the value of the Australian dollar against the US dollar
- d. rising oil prices.

c is correct. Oil is priced in US dollars so the rise in the value of the Australian dollar against the US dollar reduced Qantas's fuel costs.

Q10 In forecasting a future income statement it is common practice to express items in the income statement as a percentage of:

- a. past sales
- b. forecast sales
- c. forecast gross profit
- d. forecast purchases.

b is correct. See page 524.

Q11 Return on equity (ROE) is the ratio between:

- a. EBIT and ordinary shareholders' equity
- b. gross profit and ordinary shareholders' equity
- c. net profit and the book value of ordinary shareholders' equity
- d. net profit and the market value of ordinary shareholders' equity.

c is correct. See page 532.

Q12 Which of the following is not a property of an intangible asset?

- a. non-physical
- b. difficult to separate from the business
- c. difficult to value
- d. constant value.

d is correct. Intangible assets are written down (amortised) over time for accounting purposes and therefore do not have a constant value. See margin note and commentary at page 532.

Q13 Times interest earned is calculated as which of the following as a multiple of annual interest expense?

- a. revenue
- b. gross profit
- c. profit before interest and tax
- d. net profit after tax.

c is correct. See page 534.

Q14 Which of the following ratios is least likely to be affected by the capital structure of a firm?

- a. gross profit margin
- b. earnings per share
- c. return on equity
- d. times interest earned.

a is correct. Unlike the other ratios, a firm's gross profit margin is unlikely to be affected by its capital structure.

Q15 Which of the following is the least likely consequence of a low debt-to-equity ratio?

- a. higher times interest earned
- b. greater capacity to use more debt in the future
- c. lower return on equity
- d. higher return on equity.

d is correct. Other things being equal, a company with a low debt-to-equity ratio is likely to have a lower return on equity than a company with a higher debt-to-equity ratio. See page 533.

Q16 In the context of a company, which of the following groups is least likely to be able to predict impending financial distress?

- a. the company's shareholders
- b. the company's directors
- c. senior credit managers within the company's major suppliers
- d. insolvency practitioners.

a is correct. Shareholders rely on published financial statements, which report past performance. Company insiders (such as the directors and senior management) and outside professionals (such as senior credit managers and insolvency practitioners) 'have access to much more useful information than the published financial statements to predict events like insolvency'.

Q17 Which of the following is a current asset?

- a. plant and equipment
- b. cash
- c. payables
- d. retained profits.

b is correct. Cash is a current asset. Plant and equipment are non-current assets, payables are a liability and retained profits are part of equity. See page 513.

Q18 Which of the following is not an equity item within a balance sheet?

- a. contributed equity

- b. reserves
- c. inventories
- d. retained profits.

c is correct. Inventories are a current asset. The others are all equity items. See page 513.

Q19 Which of the following items would be classified as ‘extraordinary’?

- a. bad debts incurred as a result of the bankruptcy of a customer
- b. higher borrowing costs as a result of interest rates being unexpectedly increased
- c. losses resulting from suspected petty theft by employees
- d. uninsured losses from a major fire.

d is correct. A major fire is an event that is not part of a firm’s ordinary operations and is unlikely to occur in the next reporting period. The other items may be undesirable, but nevertheless tend to occur in the course of a firm’s ordinary operations.

Q20 Which of the following is not a cash flow from operating activities?

- a. receipts from customers
- b. borrowings costs
- c. repayment of borrowings
- d. payment of income tax.

c is correct. Repayment of borrowings is a financing cash flow. The other items are all operating cash flows. See page 515.

Q21 Which of the following is not a balance sheet item:

- a. Revenue
- b. Assets
- c. Equity
- d. All of the above

a is correct. See page 513.

Q22 Which of the following is not a current asset:

- a. Accounts receivable
- b. Inventory
- c. Creditors
- d. Marketable securities held

c is correct. See page 513.

Q23 Which of the following is not a category of cash flows on the cash flow statement:

- a. Cash flows from operating activities
- b. Cash flows from investing activities
- c. Cash flows from funding activities
- d. None of the above

c is correct. See page 515.

Q24 Given a net profit of \$1000000 and a number of shares on issue of 4000000, the EPS is:

- a. \$4
- b. \$0.40
- c. \$2.50
- d. \$0.25

d is correct. See page 531.

Q25 An EPS of 0.33 and a net profit of \$50000, the number of shares on issue is:

- a. 50000
- b. 100000
- c. 150000
- d. 200000

c is correct. See page 531.

Q26 Given dividends paid of \$140000 and a number of shares on issue of 250000, the DPS is:

- a. \$1.79
- b. \$0.68
- c. \$1.40
- d. None of the above

b is correct. See page 531.

Q27 Given a net profit of \$10000 and shareholders equity of \$20000, ROE was:

- a. 150%
- b. 200%
- c. 100%
- d. None of the above

d is correct. See page 532.

Q28 Given current assets of \$10000, non-current assets of \$20000, current liabilities of \$2000, non-current liabilities of \$10000, tangible assets of \$13000 and number of ordinary shares of 20000, the NTA is:

- a. \$0.55
- b. \$0.25
- c. \$0.30
- d. None of the above

a is correct. See page 532.

Q29 Given total liabilities of \$100000 and ordinary shareholders equity of \$80000, debt-to-equity ratio is:

- a. 1.2
- b. 0.8
- c. 1
- d. 1.8

a is correct. See page 533.

Q30 Given financial assets of \$100000, financial liabilities of \$500000 and ordinary shareholders equity of \$1000000, the net debt to capital employed ratio is:

- a. 0.7 times
- b. 0.6 times
- c. 0.4 times
- d. 0.29 times

d is correct. See page 534.

Q31 Given a net debt to capital employed ratio of 0.2, ordinary shareholders equity \$80000 and total financial assets of \$5000, financial liabilities worth:

- a. \$13000
- b. \$17000
- c. \$15000
- d. None of the above

c is correct. See page 534.

Q32 Given profit before interest and tax of \$900000 and annual interest expense of \$90000, times interest earned is:

- a. 0.10 times
- b. 10 times
- c. 81 times
- d. 3 times

b is correct. See page 534.

Q33 Given a times interest earned of 10 and an annual interest expense of \$20000, profit before interest and tax is:

- a. \$20000
- b. \$2000
- c. \$2000000
- d. \$200000

d is correct. See page 534.

Q34 Which of the following is not a financial statement:

- a. Balance sheet
- b. Income statement
- c. Cash budget
- d. Cash flow statement

c is correct. See page 512.

Q35 Which of the following is not a type of current liability:

- a. Payables
- b. Receivables
- c. Both a and b
- d. None of the above

b is correct. See page 513.

Q36 Which of the following statements best describes 'assets':

- a. Assets are future sacrifices of economic benefits that the firm is obliged to make
- b. Assets are probable future economic benefits that the firm is able to utilise
- c. Assets are the book value of the ownership interest in the firm
- d. Assets are inflows of future economic benefits that come from the operation of the firm

b is correct. See page 513.

Q37 Which of the following statements best describes 'liabilities':

- a. Liabilities are future sacrifices of economic benefits that the firm is obliged to make
- b. Liabilities are probable future economic benefits that the firm is able to utilise
- c. Liabilities are the book value of the ownership interest in the firm
- d. Liabilities are inflows of future economic benefits that come from the operation of the firm

a is correct. See page 513.

Q38 Which of the following statements best describes 'expenses':

- a. Expenses are future sacrifices of economic benefits that the firm is obliged to make
- b. Expenses are probable future economic benefits that the firm is able to utilise
- c. Expenses are the book value of the ownership interest in the firm
- d. Expenses are consumption or losses of future economic benefits

d is correct. See page 513.

Q39 Which of the following statements best describes 'revenues':

- a. Revenues are future sacrifices of economic benefits that the firm is obliged to make
- b. Revenues are probable future economic benefits that the firm is able to utilise
- c. Revenues are inflows of future economic benefits that come from the operations of the firm

d. Revenues are consumption or losses of future economic benefits

c is correct. See page 513.

Q40 Equity is best defined as:

- a. Total assets minus total liabilities
- b. The book value of the ownership interest in the firm
- c. The excess of revenues over expenses
- d. The collection of records of financial transactions

b is correct. See page 512.