

### **Net working capital**

- i. Net working capital may be defined as current assets minus current liabilities. This also defines the current ratio.
  - a. True
  - b. False

### **Motives for holding cash**

- ii. Firms hold cash balances in order to complete transactions that are necessary in business operations and as compensation to banks for providing loans and services.
  - a. True
  - b. False

### **Cash discounts**

- iii. If you receive some goods on April 1 with the following terms; 3/20, net 30, June 1 dating, it means that you will receive a 3 percent discount if the bill is paid on or before June 20 and that the full amount must be paid 30 days after receipt of the goods.
  - a. True
  - b. False

### **Target cash balance**

- iv. The cash balances of most firms consist of transactions, compensating, precautionary, and speculative balances. We can produce a total desired cash balance by calculating the amount needed for each purpose and then summing them together.
  - a. True
  - b. False

### **Working capital**

- v. Other things held constant, which of the following will cause an increase in working capital?
  - a. Cash is used to buy marketable securities.
  - b. A cash dividend is declared and paid.
  - c. Merchandise is sold at a profit, but the sale is on credit.
  - d. Long-term bonds are retired with the proceeds of a preferred stock issue.
  - e. Missing inventory is written off against retained earnings.

### **Cash budget**

- vi. Which of the following is typically part of the cash budget?
  - a. Payments lag.
  - b. Payment for plant construction.

- c. Cumulative cash.
- d. All of the above.
- e. Only answers a and c above.

**Cash conversion cycle**

- vii. Which of the following actions are likely to reduce the length of a company's cash conversion cycle?
- a. Adopting a just-in-time inventory system which reduces the inventory conversion period.
  - b. Reducing the average days sales outstanding (DSO) on its accounts receivable.
  - c. Reducing the amount of time the company takes to pay its suppliers.
  - d. All of the answers above are correct.
  - e. Answers a and b are correct.

**Working capital policy**

- viii. Although short-term interest rates have historically averaged less than long-term rates, the heavy use of short-term debt is considered to be an aggressive working capital financing strategy because of the inherent risks of using short-term financing.
- a. True
  - b. False

**Permanent current assets**

- ix. Permanent current assets reflect the fact that current assets do not shrink to zero even when business is at a seasonal or cyclical low. Thus, permanent current assets represent a minimum level of current assets the firm must finance.
- a. True
  - b. False

**Trade credit**

- x. If a firm fails to take trade credit discounts it may cost the firm money, but generally such a policy has a negligible effect on the firm's income statement and no effect on the firm's balance sheet.
- a. True
  - b. False

**Cost of trade credit**

**Answer: a Diff: E**

- xi. The calculated cost of trade credit is reduced by paying late.
- a. True
  - b. False

**Cost of trade credit**

**Answer: a Diff: E**

xii. The calculated cost of trade credit for a firm that buys on terms of 2/10, net 30, is lower (other things held constant) if the firm pays in 40 days than if it pays in 30 days.

- a. True
- b. False

**Working capital financing policy**

**Answer: c Diff: M**

xiii. Which of the following statements is most correct?

- a. Accruals are an expensive way to finance working capital.
- b. If the lender who has financed the purchase of a company's inventory has a blanket lien against the inventory, this prevents the company from freely selling its inventory.
- c. If a company receives trade credit under the terms 2/10 net 30, this implies the company has 10 days of free trade credit.
- d. Answers a and b are correct.
- e. None of the answers above is correct.

**Short-term financing**

**Answer: a Diff: M**

xiv. Which of the following statements is most correct?

- a. Under normal conditions, a firm's expected ROE would probably be higher if it financed with short-term rather than with long-term debt, but the use of short-term debt would probably increase the firm's risk.
- b. Conservative firms generally use no short-term debt and thus have zero current liabilities.
- c. A short-term loan can usually be obtained more quickly than a long-term loan, but the cost of short-term debt is likely to be higher than that of long-term debt.
- d. If a firm that can borrow from its bank buys on terms of 2/10, net 30, and if it must pay by Day 30 or else be cut off, then we would expect to see zero accounts payable on its balance sheet.
- e. If one of your firm's customers is "stretching" its accounts payable, this may be a nuisance but does not represent a real financial cost to your firm as long as the firm periodically pays off its entire balance.

**Sales collections**

**Answer: d Diff: E**

xv. The Danser Company expects to have sales of \$30,000 in January, \$33,000 in February, and \$38,000 in March. If 20 percent of sales are for cash, 40 percent are credit sales paid in the month following the sale, and 40 percent are credit sales paid 2 months following the sale, what are the cash receipts from sales in March?

- a. \$55,000
- b. \$47,400

- c. \$38,000
- d. \$32,800
- e. \$30,000

**Cash budget**

**Answer: c Diff: E**

xvi. Chadmark Corporation's budgeted monthly sales are \$3,000. Forty percent of its customers pay in the first month and take the 2 percent discount. The remaining 60 percent pay in the month following the sale and don't receive a discount. Chadmark's bad debts are very small and are excluded from this analysis. Purchases for next month's sales are constant each month at \$1,500. Other payments for wages, rent, and taxes are constant at \$700 per month. Construct a single month's cash budget with the information given. What is the average cash gain or (loss) during a typical month for Chadmark Corporation?

- a. \$2,600
- b. \$ 800
- c. \$ 776
- d. \$ 740
- e. \$ 728

**Maturity matching**

**Answer: e Diff: E**

xvii. Wildthing Amusement Company's total assets fluctuate between \$320,000 and \$410,000, while its fixed assets remain constant at \$260,000. If the firm follows a maturity matching or moderate working capital financing policy, what is the likely level of its long-term financing?

- a. \$ 90,000
- b. \$260,000
- c. \$350,000
- d. \$410,000
- e. \$320,000

**Cost of trade credit**

**Answer: a Diff: E**

xviii. A firm is offered trade credit terms of 3/15, net 45. The firm does not take the discount, and it pays after 67 days. What is the nominal annual cost of not taking the discount?

- a. 21.41%
- b. 22.07%
- c. 22.95%
- d. 23.48%
- e. 24.52%

**Discount interest face value**

**Answer: c Diff: E**

xix. Picard Orchards requires a \$100,000 annual loan in order to pay laborers to tend and harvest its fruit crop. Picard borrows on a discount interest basis at a nominal annual rate of 11 percent. If Picard must actually receive \$100,000 net proceeds to finance its crop, then what must be the face value of the note?

- a. \$111,000
- b. \$100,000
- c. \$112,360
- d. \$ 89,000
- e. \$108,840

**Permanent assets financing**

**Answer: c Diff: M**

xx. Wicker Corporation is determining whether to support \$100,000 of its permanent current assets with a bank note or a short-term bond. The firm's bank offers a two-year note where the firm will receive \$100,000 and repay \$118,810 at the end of two years. The firm has the option to renew the loan at market rates. Alternatively, Wicker can sell 8.5 percent coupon bonds with a 2-year maturity and \$1,000 par value at a price of \$973.97. How many percentage points lower is the interest rate on the less expensive debt instrument?

- a. 0%; the rates are equal.
- b. 1.2%
- c. 1.0%
- d. 1.8%
- e. 0.6%

**Add-on interest loan**

**Answer: d Diff: M**

xxi. Coverall Carpets Inc. is planning to borrow \$12,000 from the bank. The bank offers the choice of a 12 percent discount interest loan or a 10.19 percent add-on, one-year installment loan, payable in 4 equal quarterly payments. What is the approximate (nominal) rate of interest on the 10.19 percent add-on loan?

- a. 5.10%
- b. 10.19%
- c. 12.00%
- d. 20.38%
- e. 30.57%

i. Net working capital

**Answer: b Diff: E**

ii. Motives for holding cash

**Answer: a Diff: E**

iii. Cash discounts

**Answer: b Diff: E**

iv. Target cash balance

**Answer: b Diff: M**

v. Working capital

**Answer: c Diff: E**

vi. Cash budget

**Answer: d Diff: E**

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**vii. Cash conversion cycle**

**Answer: e Diff: M N**

Statements a and b are both correct; therefore, statement e is the appropriate choice. Delaying payments to suppliers increases the length of the cash conversion cycle.

viii. Working capital policy

Answer: a Diff: E

ix. Permanent current assets

Answer: a Diff: E

x. Trade credit

Answer: b Diff: M

xi. Cost of trade credit

Answer: a Diff: E

xii. Cost of trade credit

Answer: a Diff: E

xiii. Working capital financing policy

Answer: c Diff: M

xiv. Short-term financing

Answer: a Diff: M

Under normal conditions the yield curve is upward sloping, thus, short-term interest rates are lower than long-term interest rates. Consequently, a firm financing with short-term debt will pay less interest than a firm financing with long-term debt--increasing its ROE. However, a firm increases its risk by financing with short-term debt because such debt must be "rolled over" frequently, and the firm is exposed to the volatility of short-term rates. The other statements are false.

**xv. Sales collections**

**Answer: d Diff: E**

March receipts =  $(0.20)(\$38,000) + (0.40)(\$33,000) + (0.40)(\$30,000) = \$32,800.$

**xvi. Cash budget**

**Answer: c Diff: E**

Construct a simplified cash budget:

Sales	\$3,000	
Collections (same month's sales)	1,176	$(0.98 \times 0.40 \times$

\$3,000)		
Collections (last month's sales)	<u>1,800</u>	(1.00 × 0.60 × \$3,000)
Total collections	2,976	
Purchases payments	1,500	
Other payments	<u>700</u>	
Total payments	<u>2,200</u>	
Net cash gain (loss)	<u>\$ 776</u>	
Net cash gain is \$776.00.		

xvii. Maturity matching Answer: e Diff: E

A maturity matching policy implies that fixed assets and permanent current assets are financed with long-term sources. Thus, since the minimum balance that total assets approach is \$320,000, and \$260,000 of that balance is fixed assets, permanent current assets equal \$60,000. The likely level of long-term financing is \$320,000.

Long-term debt financing = Permanent cash assets + Fixed assets.

Permanent cash assets = Low end of total assets - Fixed assets  
= \$320,000 - \$260,000 = \$60,000.

Long-term debt financing = \$60,000 + \$260,000 = \$320,000.

xviii. Cost of trade credit

$$\text{Nominal percentage cost} = \frac{3\%}{97\%} \times \frac{360}{52} = 21.41\%.$$

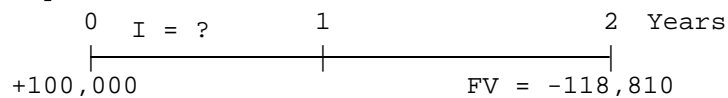
xix. Discount interest face value Answer: c Diff: E

$$\begin{aligned} \text{Face value} &= \frac{\text{Funds required}}{1.0 - \text{Nominal rate (decimal)}} \\ &= \frac{\$100,000}{1.0 - 0.11} = \frac{\$100,000}{0.89} = \$112,359.55 \approx \$112,360. \end{aligned}$$

xx. Permanent assets financing Answer: c Diff: M

Time lines: Note that the cash flows viewed from the firm's perspective involve inflows at time 0, and repayment of coupon and/or maturity value in the future.

2-year note:



2-year bond:

