PRACTICE MULTIPLE-CHOICE QUESTIONS

**10-1.** (LO 1)

The time period for classifying a liability as current is one year or the operating cycle, whichever is:

(a) longer.

(b) shorter.

(c) probable.

(d) possible.

**Answer**

(a) longer.

**10-2.** (LO 1)

To be classified as a current liability, a debt must be expected to be paid within:

(a) one year.

(b) the operating cycle.

(c) 2 years.

(d) (a) or (b), whichever is longer.

**Answer**

(a) one year.

**10-3.** (LO 2)

Maggie Sharrer SA borrows R$88,500 on September 1, 2017, from Sandwich Bank by signing an R$88,500, 12%, one-year note. What is the accrued interest at December 31, 2017?

(a) R$2,655.

(b) R$3,540.

(c) R$4,425.

(d) R$10,620.

**Answer**

(b) R$3,540.

**10-4.** (LO 3)

Becky Sherrick SE has total proceeds from sales of €4,515. If the proceeds include sales taxes of 5%, the amount to be credited to Sales Revenue is:

(a) €4,000.

(b) €4,300.

(c) €4,289.25.

(d) No correct answer given.

**Answer**

(b) €4,300.

**10-5.** (LO 3)

Sensible Insurance collected a premium of £18,000 for a 1-year insurance policy on April 1. What amount should Sensible report as a current liability for Unearned Service Revenue at December 31?

(a) £0.

(b) £4,500.

(c) £13,500.

(d) £18,000.

**Answer**

(b) £4,500.

**10-6.** (LO 4)

The term used for bonds that are unsecured is:

(a) callable bonds.

(b) indenture bonds.

(c) debenture bonds.

(d) bearer bonds.

**Answer**

(c) debenture bonds.

**10-7.** (LO 5)

Karson Ltd. issues 10-year bonds with a maturity value of £200,000. If the bonds are issued at a premium, this indicates that:

(a) the contractual interest rate exceeds the market interest rate.

(b) the market interest rate exceeds the contractual interest rate.

(c) the contractual interest rate and the market interest rate are the same.

(d) no relationship exists between the two rates.

**Answer**

(a) the contractual interest rate exceeds the market interest rate.

**10-8.** (LO 6)

Gester Ltd. retires its HK$1,000,000 face value bonds at 105 on January 1, following the payment of semiannual interest. The carrying value of the bonds at the redemption date is HK$1,037,450. The entry to record the redemption will include a:

(a) credit of HK$37,450 to Loss on Bond Redemption.

(b) debit of HK$1,037,450 to Bonds Payable.

(c) credit of HK$12,550 to Gain on Bond Redemption.

(d) debit of HK$50,000 to Bonds Payable.

**Answer**

(b) debit of HK$1,037,450 to Bonds Payable.

**10-9.** (LO 7)

Andrews Inc. issues a €497,000, 10%, 3-year mortgage note on January 1. The note will be paid in three annual installments of €200,000, each payable at the end of the year. What is the amount of interest expense that should be recognized by Andrews in the second year?

(a) €16,567.

(b) €49,700.

(c) €34,670.

(d) €346,700.

**Answer**

(c) €34,670.

**10-10.** (LO 7)

Howard Corporation issued a 20-year mortgage note payable on January 1, 2017. At December 31, 2017, the unpaid principal

balance will be reported as:

(a) a current liability.

(b) a non-current liability.

(c) part current and part non-current liability.

(d) interest payable.

**Answer**

(c) part current and part non-current liability.

**10-11.** (LO 8)

For 2017, Kim Corporation reported net income of ₩300,000. Interest expense was ₩40,000 and income taxes were ₩100,000. The times interest earned ratio was:

(a) 3 times.

(b) 4.4 times.

(c) 7.5 times.

(d) 11 times.

**Answer**

(d) 11 times.

**\*10-12.** (LO 9)

On January 1, Besalius plc issued £1,000,000, 9% bonds for £938,554. The market rate of interest for these bonds is 10%. Interest is payable annually on December 31. Besalius uses the effective-interest method of amortizing bond discount. At the end of the first year, Besalius should report unamortized bond discount of:

(a) £54,900.

(b) £57,591.

(c) £51,610.

(d) £51,000.

**Answer**

(b) £57,591.

**\*10-13.** (LO 9)

On January 1, Dias SA issued R$1,000,000, 10%, 5-yearbonds with interest payable annually on December 31. The bonds sold for R$1,072,096. The market rate of interest for these bonds was 12%. On the first interest date, using the effective-interest method, the debit entry to Interest Expense if for:

(a) R$120,000.

(b) R$125,581.

(c) R$128,652.

(d) R$140,000.

**Answer**

(c) R$128,652.

**\*10-14.** (LO 10)

On January 1, 2017, Hurley Ltd. issues NT$5,000,000, 5-year, 12% bonds at 96 with interest payable annually on December 31. The entry on December 31, 2018, to record payment of bond interest and the amortization of bond discount using the straight-line method will include a:

(a) debit to Interest Expense NT$300,000.

(b) debit to Interest Expense NT$600,000.

(c) credit to Bonds Payable NT$40,000.

(d) credit to Bonds Payable NT$20,000.

**Answer**

(d) credit to Bonds Payable NT$20,000.

**\*10-15.** (LO 10)

For the bonds issued in Question \*10-14 above, what is the carrying value of the bonds at the end of the third interest period?

(a) NT$4,920,000.

(b) NT$4,880,000.

(c) NT$4,860,000.

(d) NT$4,640,000.

**Answer**

(a) NT$4,920,000.

QUESTIONS

**10-1.** Brenda Gable believes a current liability is a debt that can be expected to be paid in one year. Is Brenda correct? Explain.

**10-2.** Delhi Ltd. obtains Rs300,000 in cash by signing a 9%, 6-month, Rs300,000 note payable to First Bank on July 1. Delhi's fiscal year ends on September 30. What information should be reported for the note payable in the annual financial statements?

**10-3.** (a) Your roommate says, “Sales taxes are reported as an expense in the income statement.” Do you agree? Explain.

(b) Planet Hollywood has cash proceeds from sales of £7,400. This amount includes £400 of sales taxes. Give the entry to record the proceeds.

**10-4.** Rotterdam University sold 10,000 season football tickets at €90 each for its five-game home schedule. What entries should be made (a) when the tickets were sold, and (b) after each game?

**10-5.** What is liquidity? What are two measures of liquidity

**10-6.** (a) What are non-current liabilities? Give three examples. (b) What is a bond?

**10-7.** (a) As a source of long-term financing, what are the major advantages of bonds over ordinary shares? (b) What are the major disadvantages in using bonds for long-term financing?

**10-8.** Contrast the following types of bonds: (a) secured and unsecured, and (b) convertible and callable.

**10-9.** The following terms are important in issuing bonds: (a) face value, (b) contractual interest rate, (c) bond indenture, and (d) bond certificate. Explain each of these terms.

**10-10.** Describe the two major obligations incurred by a company when bonds are issued.

**10-11.** Assume that Bedazzled Ltd. sold bonds with a face value of €100,000 for €104,000. Was the market interest rate equal to, less than, or greater than the bonds' contractual interest rate? Explain.

**10-12.** If a 6%, 10-year, R$800,000 bond is issued at face value and interest is paid semiannually, what is the amount of the interest payment at the end of the first semiannual period?

**10-13.** If the Bonds Payable account has a balance of HK$8,400,000 and the amount of the unamortized bond discount is HK$600,000, what is the face value of the bonds?

**10-14.** Which accounts are debited and which are credited if a bond issue originally sold at a premium is redeemed before maturity at 97 immediately following the payment of interest?

**10-15.** Roy Toth, a friend of yours, has recently purchased a home for €125,000, paying €25,000 down and the remainder financed by a 6.5%, 20-year mortgage, payable at €745.57 per month. At the end of the first month, Roy receives a statement from the bank indicating that only €203.90 of principal was paid during the month. At this rate, he calculates that it will take over 40 years to pay off the mortgage. Is he right? Discuss.

**10-16.** In general, what are the requirements for the financial statement presentation of non-current liabilities?

**\*10-17.** Ginny Bellis is discussing the advantages of the effective-interest method of bond amortization with her accounting staff. What do you think Ginny is saying?

**\*10-18.** Redbone AG issues CHF500,000 of 8%, 5-year bonds on January 1, 2014, at 104. If Redbone uses the effective-interest method in amortizing the premium, will the annual interest expense increase or decrease over the life of the bonds? Explain.

**\*10-19.** Explain the straight-line method of amortizing discount and premium on bonds payable.

**\*10-20.** Fleming Ltd. issues £400,000 of 7%, 5-year bonds on January 1, 2017, at 105. Assuming that the straight-line method is used to amortize the premium, what is the total amount of interest expense for 2017?

**\*10-21.** Identify three taxes commonly withheld by the employer from an employee's gross pay.

BRIEF EXERCISES

**BE10-1.** *Identify whether obligations are current liabilities*.

(LO 1)

Cardinal SpA has the following obligations at December 31: (a) a note payable for €100,000 due in 2 years, (b) a 10-year mortgage payable of €300,000 payable in ten €30,000 annual payments, (c) interest payable of €12,000 on the mortgage, and (d) accounts payable of €60,000. For each obligation, indicate whether it should be classified as a current liability. (Assume an operating cycle of less than one year.)

**BE10-2.** *Prepare entries for an interest-bearing note payable*.

(LO 2)

Becky Company borrows £60,000 on July 1 from the bank by signing a £60,000, 10%, one-year note payable.

(a) Prepare the journal entry to record the proceeds of the note.

(b) Prepare the journal entry to record accrued interest at December 31, assuming adjusting entries are made only at the end of the year.

**BE10-3.** *Compute and record sales taxes payable*.

(LO 3)

Goodwin Auto Supply does not segregate sales and sales taxes at the time of sale. The register total for March 16 is £12,826. All sales are subject to a 6% sales tax. Compute sales taxes payable, and make the entry to record sales taxes payable and sales.

**BE10-4.** *Prepare entries for unearned revenues*.

(LO 3)

Hamburg University sells 4,000 season basketball tickets at €180 each for its 10-game home schedule. Give the entry to record (a) the sale of the season tickets and (b) the revenue recognized for playing the first home game.

**BE10-5.** *Compare bond versus share financing*.

(LO 4)

Shaffer Ltd. is considering two alternatives to finance its construction of a new €2 million plant.

(a) Issuance of 200,000 ordinary shares at the market price of €10 per share.

(b) Issuance of €2 million, 6% bonds at face value.

Complete the following table, and indicate which alternative is preferable.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Issue Shares** | | |  | **Issue Bonds** | | |
| Income before interest and taxes |  | €900,000 |  |  |  | €900,000 |  |
| Interest expense from bonds |  |  |  |  |  |  |  |
| Income before income taxes |  |  |  |  |  |  |  |
| Income tax expense (30%) |  |  |  |  |  |  |  |
| Net income |  | € |  |  |  | € |  |
| Outstanding shares |  |  |  |  |  | 500,000 |  |
| Earnings per share |  | € |  |  |  | € |  |

**BE10-6.** *Prepare entries for bonds issued at face value*.

(LO 5)

Meera Ltd. issued 4,000, 8%, 5-year, £1,000 bonds dated January 1, 2017, at 100. Interest is paid each January 1.

(a) Prepare the journal entry to record the sale of these bonds on January 1, 2017.

(b) Prepare the adjusting journal entry on December 31, 2017, to record interest expense.

(b) Prepare the journal entry on January 1, 2018, to record interest paid.

**BE10-7.** *Prepare entries for bonds sold at a discount and a premium*.

(LO 5)

Nasreen Company issues €2 million, 10-year, 8% bonds at 97, with interest payable on July 1 and January 1.

(a) Prepare the journal entry to record the sale of these bonds on January 1, 2017.

(b) Assuming instead that the above bonds sold for 104, prepare the journal entry to record the sale of these bonds on January 1, 2017.

**BE10-8.** *Prepare entries for bonds issued*.

(LO 5)

Frankum SpA has issued three different bonds during 2017. Interest is payable semiannually on each of these bonds.

1. On January 1, 2017, 1,000, 8%, 5-year, €1,000 bonds dated January 1, 2017, were issued at face value.

2. On July 1, €900,000, 9%, 5-year bonds dated July 1, 2017, were issued at 102.

3. On September 1, €400,000, 7%, 5-year bonds dated September 1, 2017, were issued at 98.

Prepare the journal entry to record each bond transaction at the date of issuance.

**BE10-9.** *Prepare entry for redemption of bonds*.

(LO 6)

The statement of financial position for Miley Consulting reports the following information on July 1, 2017.

|  |  |
| --- | --- |
| Non-current liabilities |  |
| Bonds payable | £940,000 |

Miley decides to redeem these bonds at 101 (face value of bonds £1,000,000) after paying annual interest. Prepare the journal entry to record the redemption on July 1, 2017.

**BE10-10.** *Prepare entries for long-term notes payable*.

(LO 7)

Hanschu plc issues a £800,000, 10%, 10-year mortgage note on December 31, 2017, to obtain financing for a new building. The terms provide for annual installment payments of £130,196. Prepare the entry to record the mortgage loan on December 31, 2017, and the first installment payment on December 31, 2018.

**BE10-11.** *Prepare statement presentation of non-current liabilities*.

(LO 8)

Presented below are non-current liability items for Suarez AG at December 31, 2017. Prepare the non-current liabilities section of the statement of financial position for Suarez

|  |  |
| --- | --- |
| Bonds payable, due 2019 | CHF500,000 |
| Lease liability | 72,000 |
| Notes payable, due 2022 | 80,000 |

**BE10-12.** *Analyze solvency*.

(LO 3, 8)

Suppose the 2017 adidas financial statements contain the following selected data (in millions)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Current assets | €4,485 |  | Interest expense | €169 |
| Total assets | 8,875 |  | Income taxes | 113 |
| Current liabilities | 2,836 |  | Net income | 245 |
| Total liabilities | 5,099 |  |  |  |
| Cash | 775 |  |  |  |

Compute the following values and provide a brief interpretation of each.

(a) Working capital.

(b) Current ratio.

(c) Debt to assets ratio.

(d) Times interest earned.

**\*BE10-13.** *Use effective-interest method of bond amortization*.

(LO 9)

Presented below is the partial bond discount amortization schedule for Gomez SA. Gomez uses the effective-interest method of amortization.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Interest Periods** |  | **Interest to Be Paid** |  | **Interest Expense to Be Recorded** |  | **Discount Amortization** |  | **Unamortized Discount** |  | **Bond Carrying Value** |
| Issue date |  |  |  |  |  |  |  | €38,609 |  | €961,391 |
| 1 |  | €45,000 |  | €48,070 |  | €3,070 |  | 35,539 |  | 964,461 |
| 2 |  | 45,000 |  | 48,223 |  | 3,223 |  | 32,316 |  | 967,684 |

(a) Prepare the journal entry to record the payment of interest and the discount amortization at the end of period 1.

(b) Explain why interest expense is greater than interest paid.

(c) Explain why interest expense will increase each period.

**\*BE10-14.** *Prepare entries for bonds issued at a discount*.

(LO 10)

Zhu Ltd. issues HK$5 million, 10-year, 9% bonds at 96, with interest payable annually on January 1. The straight-line method is used to amortize bond discount.

(a) Prepare the journal entry to record the sale of these bonds on January 1, 2017.

(b) Prepare the journal entry to record interest expense and bond discount amortization on December 31, 2017.

**\*BE10-15.** *Prepare entries for bonds issued at a premium*.

(LO 10)

Golden plc issues £4 million, 5-year, 10% bonds at 102, with interest payable annually on January 1. The straight-line method is used to amortize bond premium.

(a) Prepare the journal entry to record the sale of these bonds on January 1, 2017.

(b) Prepare the adjusting journal entry to record interest expense and bond premium amortization on December 31,2017.

**\*BE10-16.** *Compute entry to record payroll*.

(LO 11)

Lexington AG's weekly payroll of €24,000 included Social Security taxes withheld of €1,920, income taxes withheld of €2,990, and insurance premiums withheld of €250. Prepare the journal entry to record Lexington’s payroll.

**\*BE10-17.** *Prepare entries to record profit-sharing bonus*.

(LO 11)

Mayaguez Ltd. provides its officers with bonuses based on net income. For 2017, the bonuses total £350,000 and are paid on February 15,2018. Prepare Mayaguez’s December 31, 2017, adjusting entry and the February 15, 2018, entry.

**DO IT! REVIEW**

**DO IT! 10-1.** *Answer questions about current liabilities*.

(LO 2, 3)

You and several classmates are studying for the next accounting examination. They ask you to answer the following questions:

1. If cash is borrowed on a NT$2,100,000, 9-month, 7% note on August 1, how much interest expense would be incurred by December 31?

2. The cash register total including sales taxes is NT$1,260,000, and the sales tax rate is 5%. What is the sales taxes payable?

3. If NT$1,080,000 is collected in advance on December 1 for 6-month magazine subscriptions, what amount of subscription revenue is recognized by December 31?

**DO IT! 10-2.** *Evaluate statements about bonds*.

(LO 4)

State whether each of the following statements is true or false. If false, indicate how to correct the statement.

\_\_\_\_\_\_\_\_ 1. Mortgage bonds and sinking fund bonds are both examples of debenture bonds.

\_\_\_\_\_\_\_\_ 2. Convertible bonds are also known as callable bonds.

\_\_\_\_\_\_\_\_ 3. The market rate is the rate investors demand for loaning funds.

\_\_\_\_\_\_\_\_ 4. Annual interest paid on bonds is equal to the face value times the stated rate.

\_\_\_\_\_\_\_\_ 5. The present value of a bond is the value at which it should sell in the market.

**DO IT! 10-3.** *Prepare journal entry for bond issuance and show statement of financial position presentation*.

(LO 5)

Jeon Enterprises, Ltd. issues ₩300,000,000 of bonds for ₩306,000,000. (a) Prepare the journal entry to record the issuance of the bonds, and (b) show how the bonds would be reported on the statement of financial position at the date of issuance.

**DO IT! 10-4.** *Prepare entry for bond redemption*.

(LO 6)

Jeske Industries, SA issued €400,000 of 10-year bonds at a discount. Prior to maturity, when the carrying value of the bonds was €390,000, the company retired the bonds at 99. Prepare the entry to record the redemption of the bonds.

**DO IT! 10-5.** *Prepare entries for mortgage note and installment payment on note*.

(LO 7)

Mattsen Orchard issues a R$700,000, 6%, 15-year mortgage note to obtain needed financing for a new lab. The terms call for annual payments of R$72,074 each. Prepare the entries to record the mortgage loan and the first installment payment.

**DO IT! 10-6.** *Analyze liabilities*.

(LO 8)

Grouper Company provides you with the following statement of financial position information as of December 31, 2017.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non-current assets | $26,500 |  | Equity | $12,000 |
| Current assets | 11,500 |  | Non-current liabilities | 14,000 |
| Total assets | $38,000 |  | Current liabilities | 12,000 |
|  |  |  | Total equity and liabilities | $38,000 |

In addition, Grouper reported net income for 2017 of $16,000, income tax expense of $3,200, and interest expense of $1,300

(a) Compute the debt to assets ratio for Grouper for 2017.

(b) Compute times interest earned for Grouper for 2017.

EXERCISES

**E10-1.** *Prepare entries for interest-bearing notes*.

(LO 2)

Padillio SpA had the following transactions involving notes payable.

July 1, 2017 Borrows €60,000 from Fourth National Bank by signing a 9-month, 8% note.

Nov. 1, 2017 Borrows €42,000 from Livingston Bank by signing a 3-month, 7% note.

Dec. 31, 2017 Prepares adjusting entries.

Feb. 1, 2018 Pays principal and interest to Livingston Bank.

Apr. 1, 2018 Pays principal and interest to Fourth National Bank.

***Instructions***

Prepare journal entries for each of the transactions.

**E10-2.** *Prepare entries for interest-bearing notes*.

(LO 2)

On June 1, Yoon Ltd. borrows €70,000 from First Bank on a 6-month, €70,000, 9% note.

***Instructions***

(a) Prepare the entry on June 1.

(b) Prepare the adjusting entry on June 30.

(c) Prepare the entry at maturity (December 1), assuming monthly adjusting entries have been made through November 30.

(d) What was the total financing cost (interest expense)?

**E10-3.** *Journalize sales and related taxes*.

(LO 3)

In providing accounting services to small businesses, you encounter the following situations pertaining to cash sales.

1. Kemer A.S. enters sales and sales taxes separately on its cash register. On April 10, the register totals are sales [Turkish lira symbol black.svg](http://zh.wikipedia.org/wiki/%E5%9C%9F%E8%80%B3%E5%85%B6%E9%87%8C%E6%8B%89%E7%AC%A6%E5%8F%B7)30,000 and sales taxes [Turkish lira symbol black.svg](http://zh.wikipedia.org/wiki/%E5%9C%9F%E8%80%B3%E5%85%B6%E9%87%8C%E6%8B%89%E7%AC%A6%E5%8F%B7)1,800.

2. Bodrum A.S. does not segregate sales and sales taxes. Its register total for April 15 is [Turkish lira symbol black.svg](http://zh.wikipedia.org/wiki/%E5%9C%9F%E8%80%B3%E5%85%B6%E9%87%8C%E6%8B%89%E7%AC%A6%E5%8F%B7)20,330, which includes a 7% sales tax.

***Instructions***

Prepare the entry to record the sales transactions and related taxes for each client.

**E10-4.** *Journalize unearned subscription revenue*.

(LO 3)

Nevin Ltd. publishes a monthly sports magazine, *Fishing Preview*. Subscriptions to the magazine cost £18 per year. During November 2017, Nevin sells 12,000 subscriptions beginning with the December issue. Nevin prepares financial statements quarterly and recognizes subscription revenue at the end of the quarter. The company uses the accounts Unearned Subscription Revenue and Subscription Revenue.

***Instructions***

(a) Prepare the entry in November for the receipt of the subscriptions.

(b) Prepare the adjusting entry at December 31, 2017, to record sales revenue recognized in December 2017.

(c) Prepare the adjusting entry at March 31, 2018, to record sales revenue recognized in the first quarter of 2018.

**E10-5.** *Calculate current ratio and working capital before and after paying accounts payable*.

(LO 3)

The following financial data were reported by 3M Company (USA) for 2012 and 2013 (dollars in millions).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **3M Company**  Statements of Financial Position (partial) | | | | | |
|  |  | **2013** |  | **2012** |  |
|  | Current assets |  |  |  |  |
|  | Other current assets | $2,035 |  | $2,849 |  |
|  | Inventories | 3,864 |  | 3,837 |  |
|  | Accounts receivable, net | 4,253 |  | 4,061 |  |
|  | Cash and cash equivalents | 2,581 |  | 2,883 |  |
|  | Total current assets | $12,733 |  | $13,630 |  |
|  | Current liabilities | $7,498 |  | $6,200 |  |

***Instructions***

(a) Calculate the current ratio and working capital for 3M for 2012 and 2013.

(b) Suppose that at the end of 2013, 3M management used $200 million cash to pay off $200 million of accounts payable. How would its current ratio and working capital have changed?

**E10-6.** *Evaluate statements about bonds*.

(LO 4)

Liane Hansen has prepared the following list of statements about bonds.

1. Bonds are a form of interest-bearing notes payable.

2. When seeking long-term financing, an advantage of issuing bonds over issuing ordinary shares is that shareholder control is not affected.

3. When seeking long-term financing, an advantage of issuing ordinary shares over issuing bonds is that tax savings result.

4. Secured bonds have specific assets of the issuer pledged as collateral for the bonds.

5. Secured bonds are also known as debenture bonds.

6. A conversion feature may be added to bonds to make them more attractive to bond buyers.

7. The rate used to determine the amount of cash interest the borrower pays is called the stated rate.

8. Bond prices are usually quoted as a percentage of the face value of the bond.

9. The present value of a bond is the value at which it should sell in the marketplace.

***Instructions***

Identify each statement as true or false. If false, indicate how to correct the statement.

**E10-7.** *Compare two alternatives of financing—issuance of ordinary shares vs. issuance of bonds*.

(LO 4)

Global Car Rental is considering two alternatives for the financing of a purchase of a fleet of cars. These two alternatives are:

1. Issue 60,000 ordinary shares at ¥40 per share. (Cash dividends have not been paid nor is the payment of any contemplated.)

2. Issue 7%, 10-year bonds at face value for ¥2,400,000.

It is estimated that the company will earn ¥800,000 before interest and taxes as a result of this purchase. The company has an estimated tax rate of 30% and has 90,000 ordinary shares outstanding prior to the new financing.

***Instructions***

Determine the effect on net income and earnings per share for these two methods of financing.

**E10-8.** *Prepare entries for issuance of bonds, and payment and accrual of bond interest*.

(LO 5)

On January 1, 2017, Klosterman Ltd. issued £500,000, 10%, 10-year bonds at face value. Interest is payable semiannually on January 1.

***Instructions***

Prepare journal entries to record the following.

(a) The issuance of the bonds.

(b) The accrual of interest on December 31.

(c) The payment of interest on January 1, 2018.

**E10-9.** *Prepare entries for bonds issued at face value*.

(LO 5)

On January 1, 2017, Forrester SA issued R$400,000, 8%, 5-year bonds at face value. Interest is payable annually on January 1.

***Instructions***

Prepare journal entries to record the following.

(a) The issuance of the bonds.

(b) The accrual of interest on December 31.

(c) The payment of interest on January 1, 2018.

**E10-10.** *Prepare entries to record issuance of bonds at discount and premium*.

(LO 5)

Pueblo Company issued €500,000 of 5-year, 8% bonds at 97 on January 1, 2017. The bonds pay interest annually.

***Instructions***

(a) 1. Prepare the journal entry to record the issuance of the bonds.

2. Compute the total cost of borrowing for these bonds.

(b) Repeat the requirements from part (a), assuming the bonds were issued at 105.

**E10-11.** *Prepare entries for bond interest and redemption*.

(LO 5, 6)

The following section is taken from Ohlman Ltd.'s statement of financial position at December 31, 2016.

|  |  |
| --- | --- |
| Non-current liabilities |  |
| Bonds payable, 7%, due January 1, 2021 | HK$16,000,000 |
| Current liabilities |  |
| Interest payable | 1,120,000 |

Bond interest is payable annually on January 1. The bonds are callable on any interest date.

***Instructions***

(a) Journalize the payment of the bond interest on January 1, 2017.

(b) Assume that on January 1, 2017, after paying interest, Barton calls bonds having a face value of HK$6,000,000. The call price is 103. Record the redemption of the bonds.

(c) Prepare the entry to record the accrual of interest on December 31, 2017.

**E10-12.** *Prepare entries for redemption of bonds*.

(LO 6)

Presented below are two independent situations.

1. Longbine plc redeemed £130,000 face value, 12% bonds on June 30, 2017, at 102. The carrying value of the bonds at the redemption date was £117,500. The bonds pay annual interest, and the interest payment due on June 30, 2017, has been made and recorded.

2. Tastove Ltd. redeemed £150,000 face value, 12.5% bonds on June 30, 2017, at 98. The carrying value of the bonds at the redemption date was £151,000. The bonds pay annual interest, and the interest payment due on June 30, 2017, has been made and recorded.

***Instructions***

Prepare the appropriate journal entry for the redemption of the bonds in each situation.

**E10-13.** *Prepare entries to record mortgage note and installment payments*.

(LO 7)

Jernigan Co. receives €240,000 when it issues a €240,000, 6%, mortgage note payable to finance the construction of a building at December 31, 2017. The terms provide for annual installment payments of €33,264 on December 31.

***Instructions***

Prepare the journal entries to record the mortgage loan and the first two payments.

**E10-14.** *Prepare non-current liabilities section*.

(LO 8)

The adjusted trial balance for Zhang Ltd. at the end of the current year contained the following accounts.

|  |  |
| --- | --- |
| Interest Payable | HK$ 9,000 |
| Lease Liability | 59,500 |
| Bonds Payable, due 2022 | 204,000 |

***Instructions***

Prepare the non-current liabilities section of the statement of financial position.

**\*E10-15.** *Calculate liquidity and solvency ratios; discuss impact of unrecorded obligations on liquidity and solvency.*.

(LO 3, 8)

Suppose Lin Ltd.’s 2017 financial statements contain the following selected data (in millions).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Current assets | NT$3,416.3 |  | Interest expense | NT$ 473.2 |
| Total assets | 30,224.9 |  | Income taxes | 1,936.0 |
| Current liabilities | 2,988.7 |  | Net income | 4,551.0 |
| Total liabilities | 16,191.0 |  |  |  |

***Instructions***

(a) Compute the following values and provide a brief interpretation of each.

(1) Working capital.

(2) Current ratio.

(3) Debt to assets ratio.

(4) Times interest earned.

(b) Suppose the notes to Lin’s financial statements show that subsequent to 2017, the company will have future minimum lease payments under operating leases of NT$10,717.5 million. If these assets had been purchased with debt, assets and liabilities would rise by approximately NT$8,800 million. Recompute the debt to assets ratio after adjusting for this. Discuss your result.

**\*E10-16.** *Prepare entries for issuance of bonds, payment of interest, and amortization of premium using effective-interest method*.

(LO 9)

Lorance SpA issued €400,000, 7%, 20-year bonds on January 1, 2017, for €360,727. This price resulted in an effective-interest rate of 8% on the bonds. Interest is payable annually on January 1. Lorance uses the effective-interest method to amortize bond premium or discount.

***Instructions***

Prepare the journal entries to record the following. (Round to the nearest euro.)

(a) The issuance of the bonds.

(b) The accrual of interest and the discount amortization on December 31, 2017.

(c) The payment of interest on January 1, 2018.

**\*E10-17.** *Prepare entries for issuance of bonds, payment of interest, and amortization of discount using effective-interest method*.

(LO 9)

LRNA Ltd. issued £380,000, 7%, 10-year bonds on January 1, 2017, for £407,968. This price resulted in an effective-interest rate of 6% on the bonds. Interest is payable annually on January 1. LRNA uses the effective-interest method to amortize bond premium or discount.

***Instructions***

Prepare the journal entries to record the following. (Round to the nearest pound.)

(a) The issuance of the bonds.

(b) The accrual of interest and the premium amortization on December 31, 2017.

(c) The payment of interest on January 1, 2018.

(d) The redemption of the bonds at maturity, assuming interest for the last interest period has been paid and recorded.

**\*E10-18.** *Prepare entries to record issuance of bonds, payment of interest, amortization of premium, and redemption at maturity*.

(LO 5, 10)

Adcock A/S issued €600,000, 9%, 20-year bonds on January 1, 2017, at 103. Interest is payable annually on January 1. Adcock uses straight-line amortization for bond premium or discount.

***Instructions***

Prepare the journal entries to record the following.

(a) The issuance of the bonds.

(b) The payment of interest and the premium amortization on July 1, 2017, assuming that interest was not accrued on June 30.

(c) The payment of interest on January 1, 2018.

(d) The redemption of the bonds at maturity, assuming interest for the last interest period has been paid and recorded.

**\*E10-19.** *Prepare entries to record issuance of bonds, payment of interest, amortization of discount, and redemption at maturity*.

(LO 5, 10)

Gridley Ltd. issued £800,000, 11%, 10-year bonds on December 31, 2016, for £730,000. Interest is payable annually on December 31. Gridley uses the straight-line method to amortize bond premium or discount.

***Instructions***

Prepare the journal entries to record the following.

(a) The issuance of the bonds.

(b) The payment of interest and the discount amortization on December 31, 2017.

(c) The redemption of the bonds at maturity, assuming interest for the last interest period has been paid and recorded.

**\*E10-20.** *Calculate and record net pay*.

(LO 11)

Dan Noll's gross earnings for the week were $1,780, his income tax withholding was $303, and his social security tax total was $136.

***Instructions***

(a) What was Noll's net pay for the week?

(b) Journalize the entry for the recording of his pay in the general journal. (*Note:* Use Salaries and Wages Payable; not Cash.)

(c) Record the issuing of the check for Noll's pay in the general journal.

PROBLEMS: SET A AND PROBLEMS: SET B

**P10-1A** *Prepare current liability entries, adjusting entries, and current liabilities section*.

(LO 1, 2, 3)

On January 1, 2017, the ledger of Shumway Ltd. contains the following liability accounts.

|  |  |
| --- | --- |
| Accounts Payable | £52,000 |
| Sales Taxes Payable | 5,800 |
| Unearned Service Revenue | 13,000 |

During January, the following selected transactions occurred.

Jan. 5 Sold merchandise for cash totaling £22,470, which includes 7% sales taxes.

12 Provided services for customers who had made advance payments of £10,000. (Credit Service Revenue.)

14 Paid revenue department for sales taxes collected in December 2016 (£5,800).

20 Sold 700 units of a new product on credit at £52 per unit, plus 7% sales tax.

21 Borrowed £14,000 from DeKalb Bank on a 3-month, 6%, £14,000 note.

25 Sold merchandise for cash totaling £12,947, which includes 7% sales taxes.

***Instructions***

(a) Journalize the January transactions.

(b) Journalize the adjusting entries at January 31 for the outstanding notes payable. (*Hint:* Use one-third of a month for the DeKalb Bank note.)

(c) Prepare the current liabilities section of the statement of financial position at January 31, 2017. Assume no change in accounts payable.

Current liability total £73,888

**P10-2A** *Journalize and post note transactions; show statement of financial position presentation*.

(LO 2)

The following are selected transactions of Graves ASA. Graves prepares financial statements quarterly.

Jan. 2 Purchased merchandise on account from Ally Company, €30,000, terms 2/10, n/30. (Graves uses the perpetual inventory system.)

Feb. 1 Issued a 6%, 2-month, €30,000 note to Ally in payment of account.

Mar. 31 Accrued interest for 2 months on Ally note.

Apr. 1 Paid face value and interest on Ally note.

July 1 Purchased equipment from Clark Equipment paying €8,000 in cash and signing a 7%, 3-month, €40,000 note.

Sept. 30 Accrued interest for 3 months on Clark note.

Oct. 1 Paid face value and interest on Clark note.

Dec. 1 Borrowed €15,000 from the Jonas Bank by issuing a 3-month, 6% note with a face value of €15,000.

Dec. 31 Recognized interest expense for 1 month on Jonas Bank note.

***Instructions***

(a) Prepare journal entries for the listed transactions and events.

(b) Post to the accounts Notes Payable, Interest Payable, and Interest Expense.

(c) Show the statement of financial position presentation of notes and interest payable at December 31.

(d) What is total interest expense for the year?

€1,075

**P10-3A** *Prepare entries to record issuance of bonds, interest accrual, and bond redemption*.

(LO 5, 6, 8)

On May 1, 2017, Herron Industries AG issued CHF600,000, 9%, 5-year bonds at face value. The bonds were dated May 1, 2017, and pay interest annually on May 1 and November 1. Financial statements are prepared annually on December 31.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds.

(b) Prepare the adjusting entry to record the accrual of interest on December 31, 2017.

(c) Show the statement of financial position presentation on December 31, 2017.

(d) Prepare the journal entry to record payment of interest on May 1, 2018, assuming no accrual of interest from January 1, 2018, to May 1, 2018.

Int. exp. CHF18,000

(e) Prepare the adjusting entry to record the accrual of interest on December 31, 2018.

(f) Assume that on January 1, 2019, Herron pays the accrued bonds interest and calls the bonds at 102. Record the payment of interest and redemption of the bonds.

Loss CHF12,000

**P10-4A** *Prepare entries to record issuance of bonds, interest accrual, and bond redemption*.

(LO 5, 6, 8)

Kershaw Electric Ltd. sold £600,000, 10%, 15-year bonds on January 1, 2017. The bonds were dated January 1, 2017, and paid interest on January 1. The bonds were sold at 98.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds on January 1, 2017.

(b) At December 31, 2017, the amount of unamortized bond premium is £18,000. Show the statement of financial position presentation of bond liability at December 31, 2017.

(c) On January 1, 2019, when the carrying value of the bonds was £5,896,000, the company redeemed the bonds at 102. Record the redemption of the bonds assuming that interest for the period has already been paid.

Loss £224,000

**P10-5A** *Prepare installment payments schedule and journal entries for a mortgage note payable*.

(LO 7, 8)

Talkington Electronics issues a R$400,000, 8%, 10-year mortgage note on December 31, 2016. The proceeds from the note are to be used in financing a new research laboratory. The terms of the note provide for annual installment payments, exclusive of real estate taxes and insurance, of R$59,612. Payments are due on December 31.

***Instructions***

(a) Prepare an installment payments schedule for the first 4 years.

(b) Prepare the entries for (1) the loan and (2) the first installment payment.

December 31 debit Mortgage Payable R$27,612

(c) Show how the total mortgage liability should be reported on the statement of financial position at December 31, 2017.

Current liability—2017: R$29,821

**\*P10-6A** Prepare journal entries to record issuance of bonds, payment of interest, and amortization of bond discount using effective-interest method.

(LO 5, 9)

On July 1, 2017, Lock Industries Ltd. issued £1,800,000 face value, 5%, 10-year bonds at £1,667,518. This price resulted in an effective-interest rate of 6% on the bonds. Lock uses the effective-interest method to amortize bond premium or discount. The bonds pay annual interest on January 1.

***Instructions***

(Round all computations to the nearest dollar.)

(a) Prepare the journal entry to record the issuance of the bonds on July 1, 2017.

(b) Prepare an amortization table through December 31, 2019 (3 interest periods), for this bond issue.

(c) Prepare the journal entry to record the accrual of interest and the amortization of the premium on December 31, 2017.

Amortization £100,051

(d) Prepare the journal entry to record the payment of interest on January 1, 2018.

(e) Prepare the journal entry to record the accrual of interest and the amortization of the discount on December 31, 2018.

**\*P10-7A** *Prepare entries to record issuance of bonds, payment of interest, and amortization of premium using effective-interest method. In addition, answer questions*.

(LO 5, 9)

On January 1, 2017, Jade SA issued €2,000,000 face value, 7%, 10-year bonds at €2,147,202. This price resulted in a 6% effective-interest rate on the bonds. Jade uses the effective-interest method to amortize bond premium or discount. The bonds pay annual interest on each January 1.

***Instructions***

(a) Prepare the journal entries to record the following transactions.

1. The issuance of the bonds on January 1, 2017.

2. Accrual of interest and amortization of the premium on December 31, 2017.

3. The payment of interest on January 1, 2018.

4. Accrual of interest and amortization of the premium on December 31, 2018.

(b) Show the proper non-current liabilities statement of financial position presentation for bond liability at December 31, 2018.

(c) Provide the answers to the following questions in narrative form.

1. What amount of interest expense is reported for 2018?

2. Would the bond interest expense reported in 2018 be the same as, greater than, or less than the amount that would be reported if the straight-line method of amortization were used?

**\*P10-8A** *Prepare entries to record issuance of bonds, interest accrual, and straight-line amortization for 2 years*.

(LO 5, 10)

Paris Electric sold €3,000,000, 10%, 10-year bonds on January 1, 2017. The bonds were dated January 1 and pay interest annually on January 1. Paris Electric uses the straight-line method to amortize bond premium or discount. The bonds were sold at 104.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds on January 1, 2017.

(b) Prepare a bond premium amortization schedule for the first 4 interest periods.

Amortization €12,000

(c) Prepare the journal entries for interest and the amortization of the premium in 2017 and 2018.

(d) Show the statement of financial position presentation of the bond liability at December 31, 2018.

Bonds payable €3,096,000

**\*P10-9A** *Prepare entries to record issuance of bonds, interest, and straight-line amortization of bond premium and discount*.

(LO 5, 10)

Saberhagen Ltd. sold Rs3,500,000, 8%, 10-year bonds on January 1, 2017. The bonds were dated January 1, 2017, and pay interest annually on January 1. Saberhagen Company uses the straight-line method to amortize bond premium or discount.

***Instructions***

(a) Prepare all the necessary journal entries to record the issuance of the bonds and bond interest expense for 2017, assuming that the bonds sold at 104.

Amortization Rs14,000

(b) Prepare journal entries as in part (a) assuming that the bonds sold at 96.

Amortization Rs7,000

(c) Show statement of financial position presentation for each bond issued at December 31, 2017, for both the requirements in (a) and (b).

Bonds payable Rs3,626,000

Bonds payable Rs3,473,000

**\*P10-10A** *Prepare entries to record interest payments, straight-line premium amortization, and redemption of bonds*.

(LO 6, 10)

The following is taken from the Colaw SA statement of financial position.

|  |  |
| --- | --- |
| **COLAW SA**  **Statement of Financial Position (partial)**  **December 31, 2017** | |
| Non-current liabilities |  |
| Bonds payable (face value €3,000,000), |  |
| 7% due January 1, 2028 | €3,200,000 |
| Current liabilities |  |
| Interest payable (for 12 months from |  |
| January 1 to December 31) | 210,000 |

Interest is payable annually on January 1. The bonds are callable on any annual interest date. Colaw uses straight-line amortization for any bond premium or discount. From December 31, 2017, the bonds will be outstanding for an additional 10 years (120 months).

***Instructions***

(a) Journalize the payment of bond interest on January 1, 2018.

(b) Prepare the entry to amortize bond premium and accrue the interest due on December 31, 2018.

Amortization €20,000

(c) Assume that on January 1, 2019, after paying interest, Colaw calls bonds having a face value of €1,200,000. The call price is 101. Record the redemption of the bonds.

Gain €60,000

(d) Prepare the adjusting entry at December 31, 2019, to amortize bond premium and to accrue interest on the remaining bonds.

Amortization €12,000

**Problems: Set B**

**P10-1B** *Prepare current liability entries, adjusting entries, and current liabilities section*.

(LO 1, 2, 3)

On January 1, 2017, the ledger of Zaur Ltd. contains the following liability accounts.

|  |  |
| --- | --- |
| Accounts Payable | ¥42,500 |
| Sales Taxes Payable | 5,800 |
| Unearned Service Revenue | 15,000 |

During January, the following selected transactions occurred.

Jan. 1 Borrowed ¥15,000 in cash from Platteville Bank on a 4-month, 6%, ¥15,000 note.

5 Sold merchandise for cash totaling ¥9,828, which includes 8% sales taxes.

12 Performed services for customers who had made advance payments of ¥9,400. (Credit Service Revenue.)

14 Paid government treasurer's department for sales taxes collected in December 2016, ¥5,800.

20 Sold 700 units of a new product on credit at ¥44 per unit, plus 8% sales tax.

25 Sold merchandise for cash totaling ¥16,308, which includes 8% sales taxes.

***Instructions***

(a) Journalize the January transactions.

(b) Journalize the adjusting entries at January 31 for the outstanding notes payable.

(c) Prepare the current liabilities section of the statement of financial position at January 31, 2017. Assume no change in accounts payable.

Current liability total ¥67,575

**P10-2B** *Prepare entries to record issuance of bonds, interest accrual, and bond redemption*.

(LO 5, 6, 8)

On June 1, 2017, Weller SA issued €1,200,000, 8%, 5-year bonds at face value. The bonds were dated June 1, 2017, and pay interest semiannually on June 1. Financial statements are prepared annually on December 31.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds.

(b) Prepare the adjusting entry to record the accrual of interest on December 31, 2017.

(c) Show the statement of financial position presentation on December 31, 2017.

(d) Prepare the journal entry to record payment of interest on June 1, 2018, assuming no accrual of interest from January 1, 2018, to June 1, 2018.

Int. Exp. €40,000

(e) Prepare the adjusting entry to record the accrual of interest on December 31, 2018.

(f) Assume that on January 1, 2019, Weller pays the accrued interest and calls the bonds at 102. Record the payment of interest and redemption of the bonds.

Loss €24,000

**P10-3B** *Prepare entries to record issuance of bonds, interest accrual, and bond redemption*.

(LO 5, 6, 8)

Shonrock Co. sold R$800,000, 9%, 10-year bonds on January 1, 2017. The bonds were dated January 1, 2017, and paid interest i on January 1. The bonds were sold at 105.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds on January 1, 2017.

(b) At December 31, 2017, the amount of unamortized bond premium is R$4,000. Show the statement of financial position presentation of the bond liability at December 31, 2017.

(c) On January 1, 2019, when the carrying value of the bonds was R$832,000, the company redeemed the bonds at 106. Record the redemption of the bonds assuming that interest for the period has already been paid.

Loss R$16,000

**P10-4B** *Prepare installment payments schedule and journal entries for a mortgage note payable*.

(LO 7, 8)

Crosetti's Electronics issues a £800,000, 8%, 10-year mortgage note on December 31, 2016, to help finance a plant expansion program. The terms provide for annual installment payments, exclusive of real estate taxes and insurance, of £119,224. Payments are due on December 31.

***Instructions***

(a) Prepare an installment payments schedule for the first 4 years.

(b) Prepare the entries for (1) the loan and (2) the first installment payments.

Debit Mortgage Payable £55,224

(c) Show how the total mortgage liability should be reported on the statement of financial position at December 31, 2017.

Current liability—2017; £59,642

**\*P10-5B** *Prepare entries to record issuance of bonds, payment of interest, and amortization of bond discount using effective-interest method*.

(LO 5, 9)

On January 1, 2017, Witherspoon Satellites issued £4,500,000, 9%, 10-year bonds at £4,219,600. This price resulted in an effective-interest rate of 10% on the bonds. Witherspoon uses the effective-interest method to amortize bond premium or discount. The bonds pay annual interest January 1.

***Instructions***

(Round all computations to the nearest pound.)

(a) Prepare the journal entry to record the issuance of the bonds on January 1, 2017.

(b) Prepare an amortization table through December 31, 2018 (2 interest periods) for this bond issue.

(c) Prepare the journal entry to record the accrual of interest and the amortization of the discount on December 31, 2017.

Amortization £16,960

(d) Prepare the journal entry to record the payment of interest and the amortization of the discount on December 31, 2017.

(e) Prepare the journal entry to record the accrual of interest and the amortization of the discount on December 31, 2018.

Amortization £18,656

**\*P10-6B** *Prepare entries to record issuance of bonds, payment of interest, and amortization of premium using effective-interest method.*

(LO 5, 10)

On January 1, 2017, Ashlock Chemical AG issued €4,000,000, 10%, 10-year bonds at €4,543,627. This price resulted in a 8% effective-interest rate on the bonds. Ashlock uses the effective-interest method to amortize bond premium or discount. The bonds pay annual interest on each January 1.

***Instructions***

(Round all computations to the nearest euro.)

(a) Prepare the journal entries to record the following transactions.

1. The issuance of the bonds on January 1, 2017.

2. Accrual of interest and amortization of the premium on December 31, 2017.

Amortization €36,510

3. The payment of interest on January 1, 2018.

4. Accrual of interest and the amortization of the premium on December 31, 2018.

Amortization €39,431

(b) Show the proper non-current liabilities statement of financial position presentation for the bond liability at December 31, 2018.

Bond carrying value €4,467,686

(c) Provide the answers to the following questions in narrative form.

1. What amount of interest expense is reported for 2018?

2. Would the bond interest expense reported in 2018 be the same as, greater than, or less than the amount that would be reported if the straight-line method of amortization were used?

**\*P10-7B** *Prepare entries to record issuance of bonds, interest accrual, and straight-line amortization for 2 years*.

(LO 5, 10)

Wu Ltd. sold ¥6,000,000, 8%, 20-year bonds on January 1, 2017. The bonds were dated January 1 and pay interest on January 1. Wu uses the straight-line method to amortize bond premium or discount. The bonds were sold at 96.

***Instructions***

(a) Prepare the journal entry to record the issuance of the bonds on January 1, 2017.

(b) Prepare a bond discount amortization schedule for the first 4 interest periods.

Amortization ¥12,000

(c) Prepare the journal entries for interest and the amortization of the discount in 2017 and 2018.

(d) Show the statement of financial position presentation of the bond liability at December 31, 2018.

Carrying value of bonds payable ¥5,784,000

**\*P10-8B** *Prepare entries to record issuance of bonds, interest, and straight-line amortization of bond premium and discount*.

(LO 5, 10)

Rosewell Ltd. sold £4,000,000, 7%, 10-year bonds on January 1, 2017. The bonds were dated January 1, 2017, and pay interest annually on January 1. Rosewell uses the straight-line method to amortize bond premium or discount.

***Instructions***

(a) Prepare all the necessary journal entries to record the issuance of the bonds and bond interest expense for 2017, assuming that the bonds sold at 103.

Amortization £12,000

(b) Prepare journal entries as in part (a) assuming that the bonds sold at 96.

Amortization £16,000

(c) Show statement of financial position presentation for each bond issued at December 31, 2017, for both (a) and (b).

Bonds payable £4,108,000;

**\*P10-9B** *Prepare entries to record interest payments, straight-line discount amortization, and redemption of bonds*.

(LO 5, 6, 10)

The following is taken from the Sinjh ASA statement of financial position.

|  |  |
| --- | --- |
| **SINJH ASA**  **Statement of Financial Position (partial)**  **December 31, 2016** | |
| Non-current liabilities |  |
| Bonds payable (face value €2,400,000), 9%, due |  |
| January 1, 2027 | €2,310,000 |
| Current liabilities |  |
| Interest payable (for 12 months from January 1 |  |
| to December 31) | 216,000 |

Interest is payable annually on January 1. The bonds are callable on any annual interest date. Sinjh uses straight-line amortization for any bond premium or discount. From December 31, 2016, the bonds will be outstanding for an additional 10 years (120 months).

***Instructions***

(Round all computations to the nearest euro).

(a) Journalize the payment of bond interest on January 1, 2017.

(b) Prepare the entry to amortize bond discount and to pay the interest due on December 31, 2018.

Amortization €9,000

(c) Assume that on January 1, 2018, after paying interest, Sinjh calls bonds having a face value of €800,000. The call price is 102. Record the redemption of the bonds.

Loss €43,000

(d) Prepare the adjusting entry at December 31, 2018, to amortize bond discount and to accrue interest on the remaining bonds.

Amortization €6,000

COMPREHENSIVE PROBLEM

**CP10-1.** James Ltd.'s statement of financial position at December 31, 2016, is presented below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **James Corporation**  **Statement of Financial Position**  **December 31, 2016** | | | | |
| Equipment | £43,000 |  | Share capital—ordinary | £20,000 |
| Prepaid insurance | 5,600 |  | Retained earnings | 18,600 |
| Inventory | 25,750 |  | Bonds payable | 50,000 |
| Cash | 30,500 |  | Accounts payable | 13,750 |
|  | £104,850 |  | Interest payable | 2,500 |
|  |  |  |  | £104,850 |

During 2017, the following transactions occurred.

1. James paid £2,500 interest on the bonds on January 1, 2017.

2. James purchased £241,100 of inventory on account.

3. James sold for £450,000 cash inventory which cost £250,000. James also collected £31,500 sales taxes.

4. James paid £230,000 on accounts payable.

5. James paid £2,500 interest on the bonds on July 1, 2017.

6. The prepaid insurance (£5,600) expired on July 31.

7. On August 1, James paid £12,000 for insurance coverage from August 1, 2017, through July 31, 2018.

8. James paid £24,000 sales taxes to the government.

9. Paid other operating expenses, £91,000.

10. Retired the bonds on December 31, 2017, by paying £47,000 plus £2,500 interest.

11. Issued £90,000 of 8% bonds on December 31, 2017, at 104. The bonds pay interest every June 30 and December 31.

***Adjustment data:***

1. Recorded the insurance expired from item 7.

2. The equipment was acquired on December 31, 2016, and will be depreciated on a straight-line basis over 5 years with a £3,000 residual value.

3. The income tax rate is 30%. (*Hint:* Prepare the income statement up to income before taxes and multiply by 30% to compute the amount.)

***Instructions***

(You may want to set up T-accounts to determine ending balances.)

(a) Prepare journal entries for the transactions listed above and adjusting entries.

(b) Prepare an adjusted trial balance at December 31, 2017.

Totals £652,070

(c) Prepare an income statement and a retained earnings statement for the year ending December 31, 2017, and a classified statement of financial position as of December 31, 2017.

N.I. £61,880

**CP10-2.** Eastland AG and Westside AG are competing businesses. Both began operations 6 years ago and are quite similar in most respects. The current statements of financial position data for the two companies are shown below.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Eastland AG** |  | **Westside AG** |
| Plant and equipment | CHF255,300 |  | CHF257,300 |
| Accumulated depreciation—plant and equipment | (112,650) |  | (189,850) |
| Inventory | 463,900 |  | 515,200 |
| Accounts receivable | 304,700 |  | 302,500 |
| Allowance for doubtful accounts | (13,600) |  | -0- |
| Cash | 63,300 |  | 48,400 |
| Total assets | CHF960,950 |  | CHF933,550 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Eastland AG** |  | **Westside AG** |
| Equity | CHF442,750 |  | CHF420,050 |
| Non-current liabilities | 78,000 |  | 82,000 |
| Current liabilities | 440,200 |  | 431,500 |
| Total equity and liabilities | CHF960,950 |  | CHF933,550 |

You have been engaged as a consultant to conduct a review of the two companies. Your goal is to determine which of them is in the stronger financial position.

Your review of their financial statements quickly reveals that the two companies have not followed the same accounting practices. The differences and your conclusions regarding them are summarized below.

1. Eastland Company has used the allowance method of accounting for bad debts. A review shows that the amount of its write-offs each year has been quite close to the allowances that have been provided. It therefore seems reasonable to have confidence in its current estimate of bad debts.

Westside has used the direct write-off method for bad debts, and it has been somewhat slow to write off its uncollectible accounts. Based upon an aging analysis and review of its accounts receivable, it is estimated that CHF18,000 of its existing accounts will probably prove to be uncollectible.

2. Eastland estimated a useful life of 12 years and a residual value of CHF30,000 for its plant and equipment. It has been depreciating them on a straight-line basis.

Westside has the same type of plant and equipment. However, it estimated a useful life of 10 years and a residual value of CHF10,000. It has been depreciating its plant and equipment using the double-declining-balance method.

Based upon engineering studies of these types of plant and equipment, you conclude that Westside's estimates and method for calculating depreciation are the more appropriate.

3. Among its current liabilities, Eastland has included the portions of non-current liabilities that become due within the next year. Westside has not done so.

You find that CHF16,000 of Westside's CHF82,000 of non-current liabilities are due to be repaid in the current year.

***Instructions***

(a) Revise the statements of financial position presented above so that the data are comparable and reflect the current financial position for each of the two companies.

Total assets:

Eastland CHF885,225

Westside CHF915,550

(b) Prepare a brief report to your client stating your conclusions.

MATCHA CREATIONS

(*Note*: This is a continuation of the Matcha Creations problem from Chapter 1-9.)

**MC10**Recall that Matcha Creations sells fine European mixers that it purchases from Kzinski Supply Co. Kzinski warrants the mixers to be free of defects in material and workmanship for a period of one year from the date of original purchase. If the mixer has such a defect, Kzinski will repair or replace the mixer free of charge for parts and labor.

**Go to the book's companion website**, **www.wiley.com/college/weygandt**, **to see the completion of this problem**.

**Broadening Your Perspective**

Financial Reporting and Analysis

**BYP10-1. Financial Reporting Problem: TSMC, Ltd. (TWN)**

The financial statements of TSMC appear in Appendix A. The notes to consolidated financial statements appear in the 2013 annual report, which can be found in the Investor Relations section of the company's website, *www.tsmc.com*.

***Instructions***

Refer to TSMC's financial statements and answer the following questions about liabilities.

(a) What were TSMC's total current liabilities at December 31, 2013? What was the increase/decrease in TSMC's total current liabilities from the prior year?

(b) What were the components of total current liabilities on December 31, 2013?

(c) What was TSMC's total non-current liabilities at December 31, 2013? What was the increase/decrease in total non-current liabilities from the prior year? What were the components of total non-current liabilities on December 31, 2013?

**BYP10-2. Comparative Analysis Problem: Nestlé SA (CHE) vs. Petra Foods Ltd. (SGP)**

Nestlé's financial statements are presented in Appendix B. Financial statements of Petra Foods are presented in Appendix C.

***Instructions***

(a) At the end of the most recent fiscal year reported, what was Nestlé's largest current liability account? What were its total current liabilities? What was Petra Foods' largest current liability account? What were its total current liabilities?

(b) Based on information contained in those financial statements, compute the following for each company for the most recent fiscal year reported.

1. Working capital.

2. Current ratio.

(c) What conclusions concerning the relative liquidity of these companies can be drawn from these data?

(d) Based on the information contained in those financial statements, compute the following ratios for each company for the most recent fiscal year reported.

1. Debt to total assets.

2. Times interest earned.

(e) What conclusions concerning the companies' long-run solvency can be drawn from these ratios?

**BYP10-3. Real-World Focus**

***Purpose:*** Bond or debt securities pay a stated rate of interest. This rate of interest is dependent on the risk associated with the investment. Fitch Ratings provides ratings for companies that issue debt securities.

***Address:* www.fitchratings.com**, or go to **www.wiley.com/college/weygandt**

***Instructions***

Answer the following questions.

(a) In what year did Fitch introduce its bond rating scale? (See **Our Organization**.)

(b) What letter values are assigned to debt investments that are considered “investment grade” and “speculative grade”? (See **Ratings Definitions**.)

(c) Search the Internet to identify two other major credit rating agencies.

Critical Thinking

**BYP10-4. Decision-Making Across the Organization**

On January 1, 2015, Fleming Ltd. issued £2,400,000 of 5-year, 8% bonds at 95; the bonds pay interest semiannually on January 1. By January 1, 2017, the market rate of interest for bonds of risk similar to those of Fleming had risen. As a result, the market value of these bonds was £2,000,000 on January 1, 2017—below their carrying value. Debra Fleming, president of the company, suggests repurchasing all of these bonds in the open market at the £2,000,000 price. To do so the company will have to issue £2,000,000 (face value) of new 10-year, 11% bonds at par. The president asks you, as controller, “What is the feasibility of my proposed repurchase plan?”

***Instructions***

With the class divided into groups, answer the following.

(a) What is the carrying value of the outstanding Fleming 5-year bonds on January 1, 2017? (Assume straight-line amortization.)

(b) Prepare the journal entry to retire the 5-year bonds on January 1, 2017. Prepare the journal entry to issue the new 10-year bonds.

(c) Prepare a short memo to the president in response to her request for advice. List the economic factors that you believe should be considered for her repurchase proposal.

**BYP10-5. Communication Activity**

Ron Seiser, president of Seiser AG, is considering the issuance of bonds to finance an expansion of his business. He has asked you to (1) discuss the advantages of bonds over equity financing, (2) indicate the types of bonds he might issue, and (3) explain the issuing procedures used in bond transactions.

***Instructions***

Write a memo to the president, answering his request.

**BYP10-6. Ethics Case**

Dylan Horn is the president, founder, and majority owner of Wesley Medical Ltd., an emerging medical technology products company. Wesley is in dire need of additional capital to keep operating and to bring several promising products to final development, testing, and production. Dylan, as owner of 51% of the outstanding shares, manages the company's operations. He places heavy emphasis on research and development and on long-term growth.

The other principal shareholder is Mary Sommers who, as a non-employee investor, owns 40% of the shares. Mary would like to deemphasize the R&D functions and emphasize the marketing function, to maximize short-run sales and profits from existing products. She believes this strategy would raise the market price of Wesley's shares.

All of Dylan's personal capital and borrowing power is tied up in his 51% share ownership. He knows that any offering of additional shares will dilute his controlling interest because he won't be able to participate in such an issuance. But, Mary has money and would likely buy enough shares to gain control of Wesley. She then would dictate the company's future direction, even if it meant replacing Dylan as president and CEO.

The company already has considerable debt. Raising additional debt will be costly, will adversely affect Wesley's credit rating, and will increase the company's reported losses due to the growth in interest expense. Mary and the other minority shareholders express opposition to the assumption of additional debt, fearing the company will be pushed to the brink of bankruptcy. Wanting to maintain his control and to preserve the direction of “his” company, Dylan is doing everything to avoid a share issuance. He is contemplating a large issuance of bonds, even if it means the bonds are issued with a high effective-interest rate.

***Instructions***

(a) Who are the stakeholders in this situation?

(b) What are the ethical issues in this case?

(c) What would you do if you were Dylan?

A LOOK at U.S. GAAP

IFRS and GAAP have similar definitions of liabilities. IFRSs related to reporting and recognition of liabilities are found in *IAS 1 (revised)* (“Presentation of Financial Statements”) and *IAS 37* (“Provisions, Contingent Liabilities, and Contingent Assets”). The general recording procedures for payroll are similar although differences occur depending on the types of benefits that are provided in different countries. For example, companies in other countries often have different forms of pensions, unemployment benefits, welfare payments, and so on. The accounting for various forms of compensation plans under IFRS is found in *IAS 19* (“Employee Benefits”) and *IFRS 2* (“Share-based Payments”). *IAS 19* addresses the accounting for a wide range of compensation elements, including wages, bonuses, post-employment benefits, and compensated absences. Both of these standards were recently amended, resulting in significant convergence between IFRS and GAAP.

**Key Points**

**Similarities**

* + The basic definition of a liability under GAAP and IFRS is very similar. Liabilities may be legally enforceable via a contract or law but need not be; that is, they can arise due to normal business practice or customs.
  + Both GAAP and IFRS classify liabilities as current or non-current on the face of the statement of financial position. IFRS specifically states, however, that industries where a *presentation* based on liquidity would be considered to **provide more** useful information (such as financial institutions) can use that format instead.
  + The basic calculation for bond valuation is the same under GAAP and IFRS. In addition, the accounting for bond liability transactions is essentially the same between GAAP and IFRS.

**Differences**

* + Under IFRS, companies sometimes show liabilities before assets. Also, they will sometimes show noncurrent liabilities before current liabilities. Neither of these presentations is used under GAAP.
  + Under IFRS, companies sometimes will net current liabilities against current assets to show working capital on the face of the statement of financial position. This practice is not used under GAAP.
  + IFRS requires use of the effective-interest method for amortization of bond discounts and premiums. GAAP allows use of the straight-line method where the difference is not material.
  + GAAP often uses a separate discount or premium account to account for bonds payable. IFRS records discounts or premiums as direct increases or decreases to Bonds Payable. To illustrate, if a $100,000 bond was issued at 97, under GAAP a company would record:

|  |  |  |
| --- | --- | --- |
| Cash | 97,000 |  |
| Discount on Bonds Payable | 3,000 |  |
| Bonds Payable |  | 100,000 |

Under IFRS, a company would record:

|  |  |  |
| --- | --- | --- |
| Cash | 97,000 |  |
| Bonds Payable |  | 97,000 |

* + The accounting for convertible bonds differs between IFRS and GAAP. GAAP requires that the proceeds from the issuance of convertible debt be shown solely as debt. Unlike GAAP, IFRS splits the proceeds from the convertible bond between an equity component and a debt component. The equity conversion rights are reported in equity.

To illustrate, assume that Harris Corp. issues convertible 7% bonds with a face value of $1,000,000 and receives $1,000,000. Comparable bonds without a conversion feature would have required a 9% rate of interest. To determine how much of the proceeds would be allocated to debt and how much to equity, the promised payments of the bond obligation would be discounted at the market rate of 9%. Suppose that this results in a present value of $850,000. The entry to record the issuance under GAAP would be:

|  |  |  |
| --- | --- | --- |
| Cash | 1,000,000 |  |
| Bonds Payable |  | 1,000,000 |

Under IFRS, the entry would be:

|  |  |  |
| --- | --- | --- |
| Cash | 1,00,000 |  |
| Bonds Payable |  | 850,000 |
| Share Premium─Conversion Equity |  | 150,000 |

* + IFRS reserves the use of the term **contingent liability**to refer only to possible obligations that are **not**recognized in the financial statements but may be disclosed if certain criteria are met. Under GAAP, contingent liabilities are recorded in the financial statements if they are both probable and can be reasonably estimated. If only one of these criteria is met, then the item is disclosed in the notes.
  + IFRS uses the term **provisions** to refer to liabilities of uncertain timing or amount. Examples of provisions would be provisions for warranties, employee vacation pay, or anticipated losses. Under GAAP, these are considered recordable **contingent liabilities**.

**Looking to the Future**

The FASB and IASB are currently involved in two projects, each of which has implications for the accounting for liabilities. One project is investigating approaches to differentiate between debt and equity instruments. The other project, the elements phase of the conceptual framework project, will evaluate the definitions of the fundamental building blocks of accounting. The results of these projects could change the classification of many debt and equity securities.

**GAAP Practice**

**GAAP Self-Test Questions**

**1.** Which of the following is **false**?

(a) Under GAAP, current liabilities are presented before non-current liabilities.

(b) Under GAAP, an item is a current liability if it will be paid within the next 12 months or the operating cycle, whichever is longer.

(c) Under GAAP, current liabilities are shown in order of magnitude.

(d) Under GAAP, a liability is only recognized if it is a present obligation.

**Answer**

(c) Under GAAP, current liabilities are shown in order of magnitude.

**2.** The accounting for bonds payable is:

(a) essentially the same under IFRS and GAAP.

(b) different in that GAAP requires use of the straight-line method for amortization of bond premium and discount.

(c) the same except that market prices may be different because the present value calculations are different between IFRS and GAAP.

(d) not covered by IFRS.

**Answer**

(a) essentially the same under IFRS and GAAP.

**3.** Stevens Corporation issued 5% convertible bonds with a total face value of $3,000,000 for $3,000,000. If the bonds had not had a conversion feature, they would have sold for $2,600,000. Under GAAP, the entry to record the transaction would require a credit to:

(a) Bonds Payable for $3,000,000.

(b) Bonds Payable for $400,000.

(c) Share Premium—Conversion Equity for $400,000.

(d) Discount on Bonds Payable for $400,000.

**Answer**

(a) Bonds Payable for $3,000,000.

**4.** Which of the following is **true**regarding accounting for amortization of bond discount and premium?

(a) Both IFRS and GAAP must use the effective-interest method.

(b) GAAP must use the effective-interest method, but IFRS may use either the effective-interest method or the straight-line method.

(c) IFRS is required to use the effective-interest method.

(d) GAAP is required to use the straight-line method.

**Answer**

(c) IFRS is required to use the effective-interest method.

**5.** The joint projects of the FASB and IASB could potentially:

(a) change the definition of liabilities.

(b) change the definition of equity.

(c) change the definition of assets.

(d) All of the above.

**Answer**

(d) All of the above.

**GAAP Exercises**

**GAAP10-1.** Briefly describe some of the similarities and differences between GAAP and IFRS with respect to the accounting for liabilities.

**GAAP10-2.** Ratzlaff Company issues $2 million, 10-year, 8% bonds at 97, with interest payable on January 1.

**Instructions**

(a) Prepare the journal entry to record the sale of these bonds on January 1, 2017, using GAAP.

(b) Assuming instead that the above bonds sold for 104, prepare the journal entry to record the sale of these bonds on January 1, 2017, using GAAP.

**GAAP10-3.** Archer Company issued £4,000,000 par value, 7% convertible bonds at 99 for cash. The net present value of the debt without the conversion feature is £3,800,000. Prepare the journal entry to record the issuance of the convertible bonds (a) under GAAP and (b) under IFRS.

**GAAP Financial Reporting Problem: Apple Inc.**

**GAAP10-4.** The financial statements of Apple are presented on Appendix D. The company's complete annual report, including the notes to its financial statements, is available at *http://investor.apple.com*.

**Instructions**

Use the company's financial statements and notes to the financial statements to answer the following questions.

(a) What were Apple's total current liabilities at September 28, 2013? What was the increase/decrease in Apple's total current liabilities from the prior year?

(b) How much were the accounts payable at September 28, 2013?

(c) What were the components of total current liabilities on September 28, 2013?