

ANSWERS TO QUESTIONS

1.
 - (a) Long-term liabilities are obligations that are expected to be paid after one year. Examples include bonds, long-term notes, and lease obligations.
 - (b) Bonds are a form of interest-bearing notes payable used by corporations, universities, and governmental agencies.
2.
 - (a) The major advantages are:
 - (1) Stockholder control is not affected—bondholders do not have voting rights, so current stockholders retain full control of the company.
 - (2) Tax savings result—bond interest is deductible for tax purposes; dividends on stock are not.
 - (3) Earnings per share may be higher—although bond interest expense will reduce net income, earnings per share on common stock will often be higher under bond financing because no additional shares of common stock are issued.
 - (b) The major disadvantages in using bonds are that interest must be paid on a periodic basis and the principal (face value) of the bonds must be paid at maturity.
3.
 - (a) Secured bonds have specific assets of the issuer pledged as collateral. In contrast, unsecured bonds are issued against the general credit of the borrower. These bonds are called debenture bonds.
 - (b) Term bonds mature at a single specified future date. In contrast, serial bonds mature in installments.
 - (c) Registered bonds are issued in the name of the owner. In contrast, bearer (coupon) bonds are not registered. Holders of bearer bonds must send in coupons to receive interest payments.
 - (d) Convertible bonds may be converted into common stock at the bondholders' option. Callable bonds are subject to retirement at a stated dollar amount prior to maturity at the option of the issuer.
4.
 - (a) Face value is the amount of principal due at the maturity date.
 - (b) The contractual interest rate is the rate used to determine the amount of cash interest the borrower pays and the investor receives. This rate is also called the stated interest rate because it is the rate stated on the bonds.
 - (c) A bond indenture is a legal document that sets forth the terms of the bond issue.
 - (d) A bond certificate is a legal document that indicates the name of the issuer, the face value of the bonds, the contractual interest rate and maturity date of the bonds.
5. The two major obligations incurred by a company when bonds are issued are the interest payments due on a periodic basis and the principal which must be paid at maturity.
6. Less than. Investors are required to pay more than the face value; therefore, the market interest rate is less than the contractual rate.
7. \$28,000. $\$800,000 \times 7\% \times 1/2 \text{ year} = \$28,000$.
8. \$860,000. The balance of the Bonds Payable account minus the balance of the Discount on Bonds Payable account (or plus the balance of the Premium on Bonds Payable account) equals the carrying value of the bonds.

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9. Debits: Bonds Payable (for the face value) and Premium on Bonds Payable (for the unamortized balance).
Credits: Cash (for 97% of the face value) and Gain on Bond Redemption (for the difference between the cash paid and the bonds' carrying value).
10. A convertible bond permits bondholders to convert it into common stock at the option of the bondholders.
- (a) For bondholders, the conversion option gives an opportunity to benefit if the market price of the common stock increases substantially.
 - (b) For the issuer, convertible bonds usually have a higher selling price and a lower rate of interest than comparable debt securities without the conversion option.
11. No, Tim is not right. Each payment by Tim consists of: (1) interest on the unpaid balance of the loan and (2) a reduction of loan principal. The interest decreases each period while the portion applied to the loan principal increases each period.
12. (a) A lease agreement is a contract in which the lessor gives the lessee the right to use an asset for a specified period in return for one or more periodic rental payments. The lessor is the owner of the property and the lessee is the renter or tenant.
- (b) The two most common types of leases are operating leases and capital leases.
 - (c) In an operating lease, the property is rented by the lessee and the lessor retains all ownership risks and responsibilities. A capital lease transfers substantially all the benefits and risks of ownership from the lessor to the lessee, so that the lease is in effect a purchase of the property.
13. This lease would be reported as an operating lease. In an operating lease, each payment is debited to Rent Expense. Neither a leased asset nor a lease liability is capitalized.
14. In a capital lease agreement, the lessee records the present value of the lease payments as an asset and a liability. Therefore, Rondelli Company would debit Leased Asset—Equipment for \$186,300 and credit Lease Liability for the same amount.
15. The nature and the amount of each long-term liability should be presented in the balance sheet or in schedules in the accompanying notes to the statements. The notes should also indicate the interest rates, maturity dates, conversion privileges, and assets pledged as collateral.
- *16. Laura is probably indicating that since the borrower has the use of the bond proceeds over the term of the bonds, the borrowing rate in each period should be the same. The effective-interest method results in a varying amount of interest expense but a constant rate of interest on the balance outstanding. Accordingly, it results in a better matching of expenses with revenues than the straight-line method. When the difference between the straight-line method of amortization and the effective interest method is material, GAAP requires the use of the effective interest method.
- *17. Decrease. Under the effective-interest method the interest charge per period is determined by multiplying the carrying value of the bonds by the effective-interest rate. When bonds are issued at a premium, the carrying value decreases over the life of the bonds. As a result, the interest expense will also decrease over the life of the bonds because it is determined by multiplying the decreasing carrying value of the bonds at the beginning of the period by the effective-interest rate.

Questions Chapter 15 (Continued)

- *18.** No, Tina is not right. The market price of any bond is a function of three factors: (1) The dollar amounts to be received by the investor (interest and principal), (2) The length of time until the amounts are received (interest payment dates and maturity date), and (3) The market interest rate.
- *19.** The straight-line method results in the same amortized amount being assigned to Interest Expense each interest period. This amount is determined by dividing the total bond discount or premium by the number of interest periods the bonds will be outstanding.
- *20.** \$28,000. Interest expense is the interest to be paid in cash less the premium amortization for the year. Cash to be paid equals $8\% \times \$400,000$ or \$32,000. Total premium equals 5% of \$400,000 or \$20,000. Since this is to be amortized over 5 years (the life of the bonds) in equal amounts, the amortization amount is $\$20,000 \div 5 = \$4,000$. Thus, $\$32,000 - \$4,000$ or \$28,000 equals interest expense for 2012.
- 21.** PepsiCo redeemed (paid) \$226 million of long-term debt.