

- 01.** Find the yield to maturity (YTM) using sensible technique on BEXTEX, a Semi-annual coupon bond given that the bond price= \$1049, the coupon rate=8%, the face value =\$1000, and there are 8 years remaining until maturity.
- 02.** The Hashem Co. bond currently sells for Tk.995 has a 12% coupon interest rate and a Tk. 1,000 par value, pays interest annually and has 15 years to maturity. Calculate the YTM on this bond.
- 03.** The bond of Alert ltd. currently sells at Tk. 115. They have an 11% coupon rate of interest and Tk. 100 par value. The interest is paid annually and the bonds have 18 years maturity. Compute the yield to maturity of the bond. Compare the computed YTM with the coupon interest rate.
- 04.** The bonds of Navana Ltd. currently sell at Tk. 120. They have an 11% coupon rate of interest and the bonds par value is Tk.100. The interest is paid annually and the bonds have 18 years to maturity. Compute the yield to maturity of the bond. Compare the yield to maturity with coupon interest rate.
- 05.** Elliot Enterprises' bonds currently sell for Tk. 1,150, have an 11% coupon interest rate and a Tk.1, 000 par value, pay interest annually, and have 18 years to maturity. Calculate the bonds' yield to maturity (YTM).
- 06.** It is now January 1, 2013. The Tanjina Corporation has a 15%, semiannual coupon, non-callable bond issue outstanding which matures on December 31, 2032. Each bond currently sells for 112% of its Tk.1,000 par value.
 - a. What is the bond's before-tax yield to maturity?
 - b. What is the bond's effective annual YTM?
 - c. What is the bond's after-tax yield to maturity to an investor in the 28% marginal tax?
- 07.** As on July 1, 2014. The Zico Corporation has a 13.5%, semi-annual bond, maturing on December 31, 2022. The current price of bond 109.75% where the face value is Tk.1,00. Tax rate is 35%.
 - a. Find the bond's before-tax yield to maturity.
 - b. Find the bond's effective annual YTM.
 - c. Find the after-tax yield to maturity.
- 08.** KODAK is considering a cash purchase of the stock of General Motor (GM). During the years just completed. GM earned 4.25 per years share and paid cash dividend of \$ 2.55 per share (Do=\$2.55) GMs carryings and dividends are expected to grow at 25%per year for the next three years, after which they are expected to grow at 10 % per year to infinity. What is the maximum price per share that KODAK should pay for GM if it has a required return of 15%on investments with risk characteristics similar to those of GM?

- 09.** Your company is expected to pay a Tk. 10 per share dividend at the end of the years. The dividend is expected to grow at a constant rate of 7% a year. The required rate of return on the stock is 15%. What is the value per share of company's stock?
- 10.** Sameen Enterprise paid dividend of Tk. 170 per share during current year. It is expected to pay dividend of Tk. 200 per share during the next year. Investors forecast that dividend will be Tk. 300 and Tk. 350 per share respectively during the two subsequent years. And then the continuous growth rate will be 10 for an indefinite future. Calculate the intrinsic value of the share, if the investor's required rate of return is 20%
- 11.** The spark software company is currently not paying a dividend to its shareholders. Given the rapid growth forecasted for earnings, Spark is expected to pay a dividend after three years. The dividend will start at 50 paisa per share and increase by 25 paisa through year seven, after which the company is expected to slow down and grow at a constant rate of 8% per year. The required rate of return is 16% per year. Determine the value of the spark software company's.
- 12.** Uttara Finance and Investment Ltd. Currently pay dividend of Tk. 15 per share. The firm's financial managers expect that the dividend will increase at a 10 percent annual rate over next three years due to the introduction of new product. At the end of the 3rd year, the firm's mature product line is expected to result in a slowing of the dividend growth rate of 5 percent for ever. If the firm's required rate of return is 15 percent. What will be the price of the company?
- 13.** Assume that Bon Temps is a constant growth company whose last dividend (D_0 , which was paid yesterday) was Tk.2.00 and whose dividend is expected to grow indefinitely at a 6% rate.
- What is the firm's expected dividend stream over the next three years?
 - What is the firm's current stock price?
- 14.** A company is entering into a 3 years remodeling and expansion during that time, but when it is complete, it should allow the company to enjoy much improved growth in earnings and dividends. Last year the company paid a dividend of Tk. 3.40. It expects zero growth in the next year. In years 2 and 3, 5% growth is expected, in the year 4, 15% growth. In year 5 and thereafter, growth should be a constant 10% per year. What is the maximum price per share that an investor who requires a return of 14% should pay for company's stock?
- 15.** Mr. Mizan at present earns tk. 3 per share. Rate of return on equity is 25% and Mr. Mizan retains 50% of his earnings. Required rate of return is 15%. What is the intrinsic value of his stock?
- 16.** A company has a book value per share of tk. 300. Its return on equity is 12% and it follows a policy of retaining earnings 60% of its earnings. If the opportunity cost is 15%, what would be the price of the share today?

- 17.** A company's expected dividend now is Tk. 3.40 per share. Its dividend are expected to grow at 15% for six years and then at a rate of 8% indefinitely. The capitalization rate is 12%. What is the price of the share today?
- 18.** A limited company pays dividend of tk. 20 per share. The firm's financial manager expects that the dividend will increase at a 10% rate over next 3 years. At the end of 3rd year dividend will decrease and the rate is 5% to forever. If the required rate is 15% what will be the price of the share of the company?
- 19.** Beximco. Ltd. has outstanding a Tk.1,000 par-value bond with a 10% coupon interest rate. The bond has 12 years remaining to maturity date. If the interest is paid annually, find the value of the bond when the required return is 10%.
- 20.** Lahey Industries has outstanding a \$1,000 par-value bond with an 8% coupon interest rate. The bond has 12 years remaining to its maturity date.
- If interest is paid annually, find the value of the bond when the required return is (1) 7%, (2) 8%, and (3) 10%.
 - Indicate for each case in part **a** whether the bond is selling at a discount, at a premium, or at its par value.
 - Using the 10% required return, find the bond's value when interest is paid semiannually.
- 21.** Midland Utilities has outstanding a bond issue that will mature to its \$1,000 par value in 12 years. The bond has a coupon interest rate of 11% and pays interest annually.
- Find the value of the bond if the required return is (1) 11%, (2) 15%, and (3) 8%.
- 22.** Pecos Manufacturing has just issued a 15-year, 12% coupon interest rate, \$1,000-par bond that pays interest annually. The required return is currently 14%, and the company is certain it will remain at 14% until the bond matures in 15 years. Assuming that the required return does remain at 14% until maturity, find the value of the bond with (1) 15 years, (2) 12 years, (3) 9 years, (4) 6 years,(5) 3 years,
- 23.** M & J has an outstanding of \$ 1,000 per value bond with a 14% coupon interest rate; the bond has 10 years remaining to its maturity date. If interest is paid annually, find the value of the bond when the required return is 13%, 14% and, 15%. Also indicate for each case whether the bond is selling at a discount, at a premium, or it's per value.
- 24.** Casio Industries Ltd. has outstanding a tk. 1000 par value bond with a 10% coupon interest rate. The bond has 6 years remaining to its maturity date. Find the value of bond if interest is paid annually when required rate of return is 8% and 12%.
- 25.** You have just bought a 10 percent, tk. 1000 bond with 7 years maturity. The interest is payable annually. How much should you pay for the bond if your required rate of return is 12%?

26. A 10 years, 12% semiannual coupon bond, with par value of Tk.1000, may be called in 4 years at a call price of tk.1060. The bond sells for Tk. 1100. (Assume that the bond has just been issued).

- a) What is the bond's before-tax yield to maturity?
- b) What is the bond's current yield?
- c) What is the bond's capital gain or loss yield?
- d) What is bond's yield to call?

27. A ltd. company pays dividend of Tk.30 per share. The firm's dividend will increase at rate 8% over two years. At the end of 2nd year dividend will be 5% forever. If required rate is 12%. What will be the market price of the share?

28. Assume that a Reality Company is a constant growth company whose last dividend (D_0 , which was paid yesterday) was Tk.5 and whose dividend is expected to grow indefinitely at a 7% rate.

- i. What is the company's expected dividend stream over the next three years?
- ii. What is the company's current stock price?

29. Rexton Textile Inc. currently sell equity share for Tk.30 per share. The finance manager of the Inc. anticipates a constant growth rate of 10.5% and the year-end dividend paid Tk.2.50 to shareholders. If the required rate 17% from share should the stock be purchased or not?

30. NEXUS Corporation is currently paying a dividend of Tk.3.50 per year and this dividend is expected to grow at a constant rate of 8% a year. Investors require a 12% rate of return on NEXUS. What is its estimated price?

31. A Ltd. Company pays dividend of Tk.30 per share. The firm's dividend will increase at a rate 8% over two years. At the end of 2nd year dividend will be 5% forever. If required rate is 12%, what will be the market price of share?

32. The exact Company's EPS was Tk.6.50 in 2016 and Tk.4.42 in 2011. The company pays out 40% of its earnings as dividends and the stock sells for Tk.36.

- i. Calculate the growth rate in earnings for five years growth period.
- ii. Calculate the next dividend per share, if growth rate is 8.25%.
- iii. What is the cost of retained earnings for past growth rate?

33. Zunk Company's bonds will mature in 10 years. The bonds have a face value of Tk.1000 and a 10% coupon rate, paid semi-annually. The price of the bond is Tk. 1100. The bond is callable 5 years at a call price of Tk.1050.

- i. What is the yield to call?
- ii. Would you pay Tk.829 for one of these bonds if you thought that the appropriate rate of interest was 12% which is paid annually? Explain your answer.

34. Ahmedia Company wishes to estimate the value of its outstanding preferred stock. The preferred issue has Tk.90 par value and pays an annual dividend of Tk.7.50 per share. Similar-risk preferred stocks are currently earning a 9.5 percent annual rate of return.

- i. What is the stock market value of the outstanding preferred stock?
- ii. If investor purchases the preferred stock at the value calculate in part (i), how much does he or she gain or loss per share if he or she sells the stock when the required return on similar – risk preferred has risen to 11.5%? Explain.

35. For each of the following pairs of coupon rates and yields, assuming interest is paid at the end of each year, determine whether the bond will sell for more than, at or less than its par value:

Bond	Coupon	YTM
A	5%	7%
B	2%	3%
C	6%	6%
D	3%	6%
E	8%	4%

36. Consider a bond that has a current value of Tk.1081, a face value of Tk.1000, a coupon rate of 10% (paid semi-annually) and five years remaining to maturity.

- i. What is the bond's yield to maturity today?
- ii. If the bond's yield does not change, what is its value one year from today?
- iii. If the bond's yield does not change, what is its value two year from today?

37. Suppose three years ago you bought an ACI company's bond that pays 12% per year (paid semi-annually) and it has three years to maturity at its par value Tk.1000.

- i. If you sell the bond when it is priced to yield 14%, what is your gain or loss on this investment?
- ii. If you sell the bond when it is priced to yield 12%, what is your gain or loss on this investment?
- iii. If you sell the bond when it is priced to yield 10%, what is your gain or loss on this investment?

38. A Village park software firm is currently paying a dividend of Tk. 1.20. This dividend is expected to grow at the rate of 20% a year for the next 3 years, followed by a growth rate of 15% a year for the following 2 years. After 5 years the dividend is expected to grow at 10% a year. The required rate of return for this stock is 16%. What would be its intrinsic value? Explain the impact of deficit working capital in a firm.

39. A firm want to sell its preferred stock at it's per value of TK.1000 with dividend of Tk.150 per share. Maturity of the stock is 10 years. If your required rate of return is 15%. What should be the price of the preferred stock and would you buy the share?