## **Present Value & Future Value & Annuity**

- A Prime developer Company Ltd is analyzing to purchase piece of land cost Rs, 100,000. They expect that land value will be 110,000 in next year. The current interest rate is 15%. Should Company undertake the purchase of land
- 2. Investor purchase government bond which pays annual coupon of Rs 50,000 at the end of each ever forever annually. If market rate of interst15% what is the value of bond?
- 3. Investor offer to pay you Rs 4,000 per year for 15 years. 1<sup>st</sup> payment occurring one year from now. If the required rate of return is 10% what is the value of the investment? & How much you will get after 14 years
- 4. What is value of investment if payment is paid beginning of each year (annuity due)
- 5. Honest Insurance is trying to sell you insurance policy to Rs, 200,000 which pays you Rs. 15,000 forever annually. If the required rate return is 8% Is it fair deal??
- 6. You want to purchase motor vehicle, you goes to Fast Leasing PLC, Motor vehicle value 1Mn. Bank offers 15% interest for 5 years. What is annual installment if it is annual installment? if it is monthly installment

## **Cost of Capital & WACC**

- 1. ABC Plc this year dividend is 5 per share, Companies shares are traded at 25 per share.
- 2. What is the cost of equity if dividends are expected to grow at a rate of 3% per year, forever?

- 3. A limited company issues 8% preference shares which are irredeemable. The face value of share is 100 but they are issued at 105. The floatation cost is 3 per share.
- 4. ABC Company trying to determine its cost of equity. Companies have EPS of Rs. 12 & its dividend payout ratio is 25%. Companies stock currently traded at Rs 60 & companies return on equity is 15%
- 5. A company Finance its operations with 40 percent debt and 60 percent equity. Its net income is I = \$16 million and it has a Its capital budget is B = 5 million this year. The annual yield on the company's debt is = 10% and the company's tax rate is = 30%. The company's common stock trades Rs 55 per share, and its current dividend of D0 = 5 per share is expected to grow at a constant rate of g = 10% a year. What is WACC
- 6. ABC company plc considering a project investment of Rs200mn has paid a dividend of Rs 30/- per share and dividends are expected grow at 15%. Current market price of a P ABC PLC share is Rs 600/-. The shareholders fund as at 31st December 2016 is as follows:
  Stated Capital 1,000,000 ordinary shares to the amount of Rs 500mn Retained Earnings to the amount of Rs 100mn Share holders" fund Rs600mn. A 5 year bank loan could be obtained at the rate of 15% p.a. (ignore tax)

Calculate Cost of Ordinary Share Capital ,Cost of Bank Loan and WACC

7. ABC plc is evaluating its cost of capital under alternative financing arrangements. In consultation with investment bankers, ABC expects to be able to issue new debt at par with a coupon rate of 8% and to issue new preferred stock with a 2.50 per share dividend at \$5 a share. The common stock of Gaggle is currently selling for \$20.00 a share. ABC expects to pay a dividend of 1.50 per share next year. Market analysts foresee a growth in dividends in Invest stock at a rate of 5% per year. ABC tax rate is 30% if

ABC raises capital using 45% debt, 5% preferred stock, and 50% common stock, what is ABC's cost of capital?

- 8. ABC plc.a quoted company in the Colombo Stock Exchange provides the following information :
  - (1) ABC PLC has 100 million ordinary voting shares currently trading at Rs.25 per share. Dividend is paid at Rs.1.60 per share.
  - (2) The company has 5 million debentures listed in the Colombo Stock Exchange with a par value of Rs.100/- per debenture. These debentures are redeemable in 3 years and the debentures were issued at an interest rate of 15% per annum. The debentures are currently trading at Rs.95/= per debenture. The tax at the rate of 28% per annum on its profits. Calculate,
  - (a) Cost of Ordinary Share Capital.
  - (b) Cost of Debenture Capital.
  - (c) Weighted Average Cost of Capital (WACC) using the Market Value.
- 9. ABC Plc, some financials of year 2016-17 are as follows

	Rs.
Ordinary share capital (100,000 shares)	1000,000
Reserves	1,700,000
Preference shares (80,000 shares)-	800,000
Bank Loan 15%	1,200,000
Annual after tax profit	980,000
Tax rate	30%

Ordinary share dividend Rs. 5 per share (Declared)

Preference share dividend Rs. 1 per share

Market price per ordinary share Rs. 35 (Cum div)

Market price per preference share Rs.12

## Determine the WACC of the ABC Plc

## Valuation

- 1. ABC Plc paid dividends per share of Rs 4 in 2016, and dividends are expected to grow 5.5% a year forever. Required rate of return of stock holders is 15%. What is the value per share, using the Gordon Growth Model?
- 2. XYZ Company's dividends will increase rapidly and then grow at a stable rate. Next year's dividend is still expected to be 1 per share, but dividends will increase annually by 7%, then 10%, then 12%, and then steadily increase by 5% after that. By using elements of the stable model, cost of equity is 10%
- 3. ABC Plc is expected to pay a dividend of 2 in the upcoming year. Treasury bond yield is 4% and the expected return on the market portfolio is 14%. The beta of ABC Company 1.25. Analysts expect the price of Company shares to be 22 a year from now.
- 4. The growth in per share FCFE of CBS, Plc is expected to be 10%/year for the next two years, followed by a growth rate of 5%/year for three years; after this five year period, the growth in per share FCFE is expected to be 2%/year, indefinitely. The required rate of return on CBS is 12%. Last year's per share FCFE was \$2.00. What should the stock sell for today?