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CLASSES
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FINAL CA
MAY '19
REVISION NOTES
Strategic Financial Management

Valuation Of Securities

VALUATION OF SECURITIES

Q.1. Z Ltd. is foreseeing a growth rate of 12% per annum in the next 2 years. The growth rate is likely to fall to 10% for the third year and fourth year. After that the growth rate is expected to stabilise at 8% per annum. If the last dividend paid was ` 1.50 per share and the investors' required rate of return is 16%, find out the intrinsic value per share of Z Ltd. as of date. You may use the following table :

Year	0	1	2	3	4	5
Discounting Factor at 16%	1	0.86	0.74	0.64	0.55	0.48

Q.2. SP Industries has been growing at the rate of 15% per year and this trend is expected to continue for 5 more years. Thereafter, it is likely to grow at the rate of 8% which is the industry average. The investor expects a return of 12%. The dividend paid per share last year (D0) corresponding to period 0 is 5. Determine at what price an investor will be ready to buy the shares of the company at the end of year 0,1,2,3,4,5.

Present value of Re.1 at 12%.

Year 1	0.893,	Year 2	0.797,	Year 3	0.712,
Year 4	0.636,	Year 5	0.567.		

Q.3. A company has a book value per share of ₹ 137.80. Its return on equity is 15% and it follows a policy of retaining 60% of its earnings. If the opportunity cost of capital is 18%, what is the price of the share today?

Q.4. Shares of Voyage Ltd. are being quoted at a price-earnings ratio of 8 times. The company retains 45% of its earnings which are ₹ 5 per share.

You are required to compute

- (1) The cost of equity to the company if the market expects a growth rate of 15% p.a.
- (2) If the anticipated growth rate is 16% per annum, calculate the indicative market price with the same cost of capital.
- (3) If the company's cost of capital is 20% p.a. & the anticipated growth rate is 19% p.a., calculate the market price per share.

Q.5. A Co. has invested Rs.500 lakhs in assets. There are 50 lakh shares outstanding. The par value per share is ₹ 10. It earns a rate of 15% on its investment & has a policy of retaining 50% of the earnings. If the appropriate discount rate of the firm is 10%. What is the price of its share using Gardon's Model? What will happen to the price of the share if the Co. has a payout of 80% & 20%.

Q.6. Omega Foods currently pay a dividend of ₹ 2.00 per share. The growth rate, which is currently 20%, is expected to decline linearly over the next ten years to a stable rate of 5% thereafter. The required rate of return is 12%. Calculate the current value of Omega.

Q.7. Piyush Loonker and Associates presently paid a dividend of ₹ 1.00 per share and has a share price of ₹ 20.00.

- (i) If this dividend were expected to grow at a rate of 12% per annum forever, what is the firm's expected or required return on equity using a dividend-discount model approach?
- (ii) Instead of this situation in part (i), suppose that the dividends were expected to grow at a rate of 20% per annum for 5 years and 10% per year thereafter. Now what is the firm's expected, or required, return on equity?

Q.8. AXLES Limited has issued 10,000 equity shares of ₹ 10 each. The current market price per share is ₹ 30. The company has a plan to make a rights issue of one new equity share at a price of ₹ 20 for every four shares held. You are required to :

- Calculate the theoretical post-rights-price per share;
- Calculate the theoretical value of the rights alone,
- Show the effect of the rights issue on the wealth of a shareholder who has 1,000 shares assuming he sells the entire rights; and
- Show the effect if the same shareholder does not take any action and ignores the issue.

Q.9. ABC Limited's shares are currently selling at ₹ 13 per share. There are 10,00,000 shares outstanding. The firm is planning to raise ₹ 20 lakhs to Finance a new project.

Required :

What is the ex-right price of shares and the value of a right, if

- The firm offers one right share for every two shares held.
- The firm offers one right share for every four shares held.
- How does the shareholders' wealth change from (i) to (ii)? How does right issue increases shareholders' wealth?

Q.10. Monopolo Ltd. has a paid – up ordinary share capital of ₹ 2,00,00,000 represent by 4,00,000 shares of ₹ 50 each. Earnings after tax in the most recent year were ₹ 75,00,000 of which ₹ 25,00,000 was distributed as dividend. The current price / earnings ratio of these shares, as normally reported in the financial press, is 8.

The company is planning a major investment that will cost ₹ 2,02,50,000 and is expected to produce additional after tax earnings over the foreseeable future at the rate of 15% on the amount invested.

It was proposed by CFO of company to raise necessary finance by a rights issue to the existing shareholders at a price 25% below the current market price of the company's shares.

- You have been appointed as financial consultant of the company and are required to calculate:
 - The current market price of the shares already in use.
 - The price at which the rights issue will be made.
 - The number of new shares that will be issued.
 - The price at which the shares of the entity should theoretically be quoted on completion of the rights issue (i.e. the 'ex – rights price'), assuming no incidental costs and that the market accepts the entity's forecast of incremental earnings.
- It has been that, provided the required amount of money is raised and that the market is made aware of the earning power of the new investment, the financial position of existing shareholders should be the same whether or not they decide to subscribe for the rights they are offered.

You are required to illustrate that there will be no change in the existing shareholders' wealth.

Q.11. The stock of the Sonic Plc is selling for £ 50 per common stock. The company then issues rights to subscribe to one new share at £ 40 for each five rights held.

- What is the theoretical value of a right when the stock is selling rights – on?
- What is the theoretical value of one share of stock when it goes ex – rights?
- What is the theoretical value of a right when the stock sells ex – rights at £ 50?
- John Speculator has 1,000 at the time Soni Plc. Goes ex – rights at £ 50 per common stock. He feels that the price of the stock will rise to £ 60 by the time the

rights expire. Compute his return on his £ 1,000 if he (1) buys Soni Plc stock at £ 50, or (2) buys the rights at the price computed in part (c), assuming his price expectations are valid.

Q.12. Rahul Ltd. has surplus cash of ₹ 100 lakhs and wants to distribute 27% of it to the shareholders. The company decides to buy back shares. The Finance Manager of the company estimates that its share price after re-purchase is likely to be 10% above the buyback price if the buyback route is taken. The number of shares outstanding at present is 10 lakhs and the current EPs is ₹ 3.

You are required to determine :

- (i) The price at which the shares can be re-purchased , if the market a capitalization of the company should be 210 lakhs after buyback,
- (ii) The number of shares that can be re-purchased, and
- (iii) The impact of share re0purchase on the EPS, assuming that net income is the same.

Q.13. The earnings per share of a company are ₹ 8 and the rate of capitalisation applicable to the company is 10%. The company has before it an option of adopting a payout ratio of 25% or 50% or 75%. Using Walter's formula of dividend payout compute the market value of the company's share if the productivity of retained earnings is (i) 15% (ii) 10%, and (iii) 5%.

What inference can be drawn from the above exercise?

Q.14. ABC and Co. has been following a dividend policy which can maximize the market value of the firm as per Walter's model. Accordingly, each year, at dividend time the capital budget is reviewed in conjunction with the earning for the periods and alternative investment opportunities for the shareholders.

In the current year, the firm expects earnings of ₹ 5,00,000. It is estimated that firm can earn ₹ 1,00,000 if the profits are retained. The investor have alternative investment opportunities that will yield them 10% return. The firm has 50,000 shares outstanding. What should be the dividend payout ratio in order to maximize the wealth of the shareholders? Also find out the current market price of the share.

Q.15. A share with par value of ₹ 100 has current market price of ₹ 500. Annual dividend is 20%. Bonus shares are expected to be issued during the 5th year @ one share for 4 held. One shareholder intends to sell the shares at the end of 8th year. Price of a share is expected to be ₹ 900 at the end of the 8th year. Shareholders are required to bear incidental expenses on sale & purchase of shares @ 10% of Market Price of share. Dividend rate will remain same even after the bonus issue. Required rate of return is 10%. Ignore taxation. Should the share be purchased and if yes, at what maximum price?