

# Finance for business

Q-1.

13 years ago you deposited 2400 \$ into Superannuation Fund. 8 years ago added an additional 1000 \$ to this a/c. you earned 8% compounded annually for first 5 years, and 6% compounded semi-annually for last 8 years.

(a) Compute Effective Annual Int. Rate.

(b) How much money be in your a/c Today.

(c) If you wish to have \$10,000 in the Superannuation fund today, what would be int. Rate (Compounding annually) be in the last 8 years?

(d) Assume that from now on, you will put exactly \$500 into the Superannuation fund at the end of each year. Compute the amount of money you would accumulate at the end of year 10 by that cash flow only if the rate of returns is 9%, semi-annually compounding.

(e) Compute the amount of money you would accumulate by that cash flow in 15 years if the \$500 is put into your a/c at the beginning of each year. The same int. rate of 9% semi-annually compounding still applies.

(f) When you retire if the fund status to pay you the income of \$25,000 per year forever. Compute P.V. of that income. \$100 at the 1<sup>st</sup> day of your retirement. It rate is 5%.

P.V.

Q 2 you are financial investor who actively buys and sell in securities. mkt. all blue chip. share  
 \$ 11600 shares of A, \$ 7800 of share B,  
 \$ 14,900 shares of C, \$ 3200 of shares D.

(a) Calculate the weight of assets.

(b) if your portfolio with Ret. 7.6%, 12.2%, 4.7%, 13.4% over the past 4 years. respectively calculate GAR of portfolio for this period.

(c) A is 15.2% (Exp. Return), Risk Premium is 4.8%, Beta is 1.3 & inflation is 4.7%. find risk free ret. using CAPM

(d) Two shareholder 1200 Golden Sand & 400 Silver Beach

	Golden sand	Silver Beach
ER.	12%	17%
S.D.	20%	40%
Correlation of Coeff (P)	0.6%	

Find Exp. Return of portfolio.

(e) Exp. Risk (S.D.) of portfolio.

(f) Two share, 2 years ago with total investm 16,000 \$ Golden sand paid a div. of 4.4 \$/share per year. & silver beach paid a div. of 7.5 \$/share per year. Calculate Capital gain of this portfolio if you today can sell Golden sand for \$ 12/share & silver beach for \$ 18/share

Q-3. Billabong Ltd. Currently has following Capital structure

Debt: 4,00,000 \$ 0/s. Bond paid annual 9% coupon rate. with an annual yield to maturity of 8%. bond facevalue of 1000 \$ & will mature in 15 years.

Ordinary shares:

60,000 0/s. ordinary shares firm expects to pay \$ 8.50 div. per share 1 year from now & B experience a 5% annual growth rate in div. which expects continued.

Marginal Tax Rate is 30%.

- (a) find current price of Bond.
- (b) Calculate current price of ordinary shares if avg return of shares in same industry is 11%.
- (c) Current total Market value of firm?
- (d) Capital structure of firm by identify weight of debt financing & weight of share financing
- (e) Compute the weighted avg. cost of Capital, under the traditional system for the firm, using the dividend constant growth module for calculation of the Cost of Equity.

Q-4. Blacks Gold Hd. B planning a new investment project that requires a cost of \$5,000,000. firm currently have net income of \$3,500,000.

To undertaken the investment projects. two options are under the firms. Consideration option A & B firm can accept either option A or B but not both Each project will last 5 years, and have no salvage value at the end, company required rate of return for all investment project is 8%. followings are cash flows

	Option A	Option B
Cost.	\$ 178000	\$ 187000
<u>Future Cash flow.</u>		
1	40,000	47000
2	52000	64000
3	55,000	52000
4	57000	54000
5	43500	36000

- Determine dividend payout ratio
- Calculate div. payout ratio.
- Which project accept based on payback period if baseline for payback is max. 3.5 years
- Identify which project should co. accept based on NPV method. (Round up ans. 6 digit)
- If considering both methods. which option co. should choose? why?