Paper 14 - Advanced Financial Management

Case lets 1. A steel manufacturing Company is forced to choose between two machines A and B. the two machines are designed differently, but have identical capacity and do exactly the same job. Machine A costs `3,00,000 and will last for 3 years. It costs `40,000 per year to run. Machine B is an "economy" model costing only `1, 20,000, but will last only for 2 years, and costs `60,000 per year to run. These are real cash flows.

The costs are forecasted in rupees of constant purchasing power. Ignore tax. Opportunity cost of capital is 10%. Which machine Company should buy?

Case lets 2. Star Ltd is considering the possibility of manufacturing a particular component which at present is being bought from outside. The manufacture of the component would call for an investment of ` 7,00,000 in a view machine besides an additional investment of ` 50,000 in working capital. The life of the machine would be 10 years, with a salvage value of ` 50,000. The estimated cash savings (before tax) would be ` 1,50,000 p.a.

The income tax rate is 50%. The company's required rate of return is 10%. Depreciation is considered on Straight Line system. Should the Company make this investment?

Case lets 3. A UK based company is planning to set up a software development unit in India. Software developed at the Indian unit will be bought back by the UK parent at a transfer price of UK £10 MILLIONS. The unit will remain in existence in India for one year; the software is expected to get developed within this time frame.

The UK based company will be subject to corporate tax of 35% and a withholding tax of 10% in India and will not be eligible for tax credit in the UK. The software developed will be sold in the UK market for UK £ 12.0 millions. Other estimates are as follows:

Rent for fully furnished unit with necessary hardware in India	`15, 00,000
Man power cost (80 software professional will be working for 10 hours each day)	`600 per man hour
Administrative and other costs	`12, 00,000

Advise the UK Company on financial viability of the project. The rupee-pound rate is `49/£.

Case lets 4. Rihan invested in Rainbow Ltd, in which he holds 1,200 shares. Presently, the rate of dividend being paid by the company is `2 per share and the share is being sold at `25 per share in the market. However, several factors are likely to change during the course of the year as indicated below:

Particulars	Existing	Revised

Risk free rate	12%	10%
Market risk premium	6%	4%
Beta value	1.4	1.25
Expected growth rate	4%	8%

In view of the above factors whether Rihan should buy, hold or sell the shares?

Case lets 5. Mr. Roy wants to invest an amount of `520 lakhs and had approached his portfolio Manager. The portfolio manager had advised Mr.Roy to invest in the following manner:

Security	Moderate	Better	Good	Very good	Best
Amount (`lakhs)	70	80	100	120	170
Beta	0.5	1.00	0.80	1.20	1.50

You are required to advise Mr.Roy in regard to the following, using capital asset pricing methodology:

I. Expected return on the portfolio, if the Government securities are at 8% and the NIFTY is yielding 10%.
II. Advisability of replacing security 'better' with NIFTY.

Case lets 6. An oil drilling company is considering the purchase of mineral rights on a property for ` 110 lakhs. The price includes tests to indicate whether the property has type A geological formation or type B geological formation. The company will be unable to tell the type of geological formation until the purchase is made. It is known however, that 45% of the land in this area has type A formation and 55% type B formation. If the company decides to drill on the land it will cost ` 200 lakhs. If the company does drill it may hit an oil well, gas well or a dry hole. Drilling experience indicates that the probability of striking an oil well is 0.4 on type A nad 0.1 on type B formation. Probability of hitting gas is 0.2 on type A and 0.3 on type B formation. The estimated discounted cash value from an oil well is ` 1,000 lakhs and from a gas well is ` 500 lakhs. This includes everything except cost of mineral rights and cost of drilling. Use decision tree approach and recommend whether the company should purchase the mineral rights?

Case lets 7. Brand win It Ltd (BWT) are facing an option to develop 2 models; model A and Model B of personal computer. Both the models are expected to be hot sellers for next two years. The capital expenditure involved in the development of model A is `325 crore while Model B costs `250 crore. Because of familiarity of the existing users, Model A that is an improved version of existing one, offers a certain cash flow of `140 crore and `180 crore for next two years.

However in respect of Model B having capital expenditure of `250 crore, BWT is not very sure of the cash inflows. It expects a cash inflow of `150 crore in the first year with 70% possibility. Under exceptional circumstances the product may do better to yield cash inflow of `180 crore.

The cash inflows in the second year are dependent upon what happens in the first year. If the firm faces a normal cash inflow of `150 crore in the first year the chances are that it would repeat with probability of 30%, improve to `180crore with 40% chance and do exceptionally well with cash inflow of `220 having 30% probability.

If the firm faces better prospects in the first year, the chances are that it would have second year cash inflows od `220 crore, `230 crore and `250 cror with probabilities of 50%, 30% and 20% respectively.

Examine both the models and recommend to BWT which of the two models they must go ahead. Assume cost of capital of 12%.

Case lets 8. The current sales of Popular Ltd. are ` 312 lakhs. The sales projections of the firm put its next year's sales at ` 328 lakhs. The company management is considering lengthening its terms of sale to give a boost to its top-line. Such a measure is likely to slow down its receivables turnover. As a result, the blockage of funds in receivables will increase because the receivables conversion period is likely to increase from 30 days to 45 days. However, the projected sales of ` 355 lakh in the first year is what the management is aiming to achieve by this change in credit policy.

The rate of growth in top-line for the proposed policy is expected to be 11% compared to 9% under the present policy. Variable cost-to-gross sales ratio for the firm is 0.75 and is likely to be maintained in the near future as well. The appropriate risk-adjusted discount rate for the cash flows is 15%. Expected life of the product being sold by the company is 5 years.

The production equipment currently in place will have to be replaced at the end of fourth year to increase the production capacity. The expected cost of replacement would be `210 lakh. The equipment can be scrapped at a value of `175 lakh at the end of the project.

If the firm implements the proposed credit policy, the CAPEX for increasing capacity additional capacity will be made at the end of the second year for ` 280 lakh and will have a salvage value of ` 100 lakh.

The firm's policies are such that the inventory turnover is 25 times a year with this ratio based on gross sales. Under the present policy, the total bad debts is 1.5% of sales. Under the proposed policy, this is likely to increase to a level of 2% of the sales. Collection costs for the firm is not likely to change if the new policy is adopted. The firm does not offer a cash discount.

The firm is in 38.5% tax brackets and depreciates its assets from their initial value to their expected salvage value by the straight line method. It is anticipated that the inventory and the receivables shall fetch their book value.

Should the firm make proposed changes in its terms of sales ?

Case lets 9. Fortune India Ltd has ` 300 Million, 12% Bonds outstanding with 6 years remaining to maturity. Since Interest Rates are falling, Fortune Ltd is contemplating of refunding these Bonds with a ` 350 Million issue of 6 years bonds carrying a Coupon Rate of 10%. Issue Cost of the New Bonds will be ` 6 Million, and the Call Premium is 4%. ` 9 Million being the unamortized portion of issue cost of old bonds can be written off on sooner the Old Bonds are called off. Marginal Tax Rate of Fortune Ltd is 30%. You are required to analyse the bond refunding decision.

Case lets 10. Azura India Ltd. is contemplating calling ` 3 Crores of 30 Years, ` 1,000 Bond issued 5 years ago with a Coupon Interest Rate 15%. The Bonds have a Call Price of ` 1,140 and had initially collected proceeds of ` 2.91 Crores due to a discount of ` 30 per Bond. The Initial Floating Cost was ` 3,60,000.

Company intends to sell ` 3 Crores of 12% Coupon Rate, 25 years bonds to raise funds for retiring the bold bonds. It proposes to sell the New Bonds at their par value of ` 1,000. The estimated Floatation Cost is ` 4,00,000.

The Company is paying 40% tax and its after tax cost of debt is 8%. As the new bonds must first be sold and their proceeds, then used to retire old bolds, the Company expects a two months period of overlapping interest during which interest must be paid on both the old and new bonds. What is the feasibility of Refunding bonds?