FINAL
GROUP-I PAPER-2
STRATEGIC FINANCIAL
MANAGEMENT

NOV 2013

Roll No. ..............................

Total No. of Questions – 7

Total No. of Printed Pages – 11

Time Allowed – 3 Hours

Maximum Marks – 100

# KBC

**Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi medium, his / her answers in Hindi will not be valued.**

**Question No. 1 is compulsory.**

**Attempt any five out of the remaining six questions.**

**Wherever appropriate, suitable assumptions should be made and indicated in the answer by the candidate.**

**Working Notes should form part of the answer.**

**Marks**

1. (a) ABC Ltd. issued 9%, 5 year Bonds of ₹ 1,000/- each having a maturity of 3 years. The present rate of interest is 12% for one year tenure. It is expected that Forward rate of interest for one year tenure is going to fall by 75 basis points and further by 50 basis points for every next year in future for the same tenure. This bond has a beta value of 1.02 and is more popular in the market due to less credit risk. **5**

Calculate

(i) Intrinsic value of bond

(ii) Expected price of bond in the market

Marks

(b) A trader is having in its portfolio shares worth ₹ 85 lakhs at current price and cash ₹ 15 lakhs. The beta of share portfolio is 1.6. After 3 months the price of shares dropped by 3.2%. **5**

Determine :

(i) Current portfolio beta.

(ii) Portfolio beta after 3 months if the trader on current date goes for long position on ₹ 100 lakhs Nifty futures.

(c) You, a foreign exchange dealer of your bank, are informed that your bank has sold a T.T. on Copenhagen for Danish Kroner 10,00,000 at the rate of Danish Kroner 1 = ₹ 6.5150. You are required to cover the transaction either in London or New York market. The rates on that date are as under : **5**

| | | |
|---|---|---|
| Mumbai – London | ₹ 74.3000 | ₹ 74.3200 |
| London – New York | ₹ 49.2500 | ₹ 49.2625 |
| London – Copenhagen | DKK 11.4200 | DKK 11.4350 |
| New York – Copenhagen | DKK 07.5670 | DKK 07.5840 |

In which market will you cover the transaction, London or New York, and what will be the exchange profit or loss on the transaction ? Ignore brokerages.

(d) On 01-07-2010, Mr. X invested ₹ 50,000/- at initial offer in Mutual Funds at a face value of ₹ 10 each per unit. On 31-03-2011, a dividend was paid @ 10% and annualized yield was 120%. On 31-03-2012, 20% dividend and capital gain of ₹ 0.60 per unit was given. Mr. X redeemed all his 6271.98 units when his annualized yield was 71.50% over the period of holding. **5**

Calculate NAV as on 31-03-2011, 31-03-2012 and 31-03-2013.

For calculations consider a year of 12 months.

Marks

2. (a) Mr. Ram is holding the following securities : 8

| Particulars of Securities | Cost ₹ | Dividends ₹ | Market Price ₹ | Beta |
|---|---|---|---|---|
| Equity Shares : | | | | |
| Gold Ltd. | 11,000 | 1,800 | 12,000 | 0.6 |
| Silver Ltd. | 16,000 | 1,000 | 17,200 | 0.8 |
| Bronze Ltd. | 12,000 | 800 | 18,000 | 0.6 |
| GOI Bonds | 40,000 | 4,000 | 37,500 | 1.0 |

Calculate :

(i) Expected rate of return in each case, using the Capital Asset Pricing Model (CAPM).

(ii) Average rate of return, if risk free rate of return is 14%.

(b) An American firm is under obligation to pay interests of Can$ 1010000 and Can$ 705000 on 31st July and 30th September respectively. The Firm is risk averse and its policy is to hedge the risks involved in all foreign currency transactions. The Finance Manager of the firm is thinking of hedging the risk considering two methods i.e. fixed forward or option contracts. 8

It is now June 30. Following quotations regarding rates of exchange, US$ per Can$, from the firm's bank were obtained :

| Spot | 1 Month Forward | 3 Months Forward |
|---|---|---|
| 0.9284 – 0.9288 | 0.9301 | 0.9356 |

Marks

Price for a Can$ / US$ option on a U.S. stock exchange (cents per Can$, payable on purchase of the option, contract size Can$ 50000) are as follows :

| **Strike Price** | **Calls** | | **Puts** | |
|---|---|---|---|---|
| **(US $ / Can $)** | **July** | **Sept.** | **July** | **Sept.** |
| 0.93 | 1.56 | 2.56 | 0.88 | 1.75 |
| 0.94 | 1.02 | NA | NA | NA |
| 0.95 | 0.65 | 1.64 | 1.92 | 2.34 |

According to the suggestion of finance manager if options are to be used, one month option should be bought at a strike price of 94 cents and three month option at a strike price of 95 cents and for the remainder uncovered by the options the firm would bear the risk itself. For this, it would use forward rate as the best estimate of spot. Transaction costs are ignored.

Recommend, which of the above two methods would be appropriate for the American firm to hedge its foreign exchange risk on the two interest payments.

3. (a) ABC Ltd. is contemplating having an access to a machine for a period of 5 years. The company can have the use of the machine for the stipulated period through leasing arrangement or the requisite amount can be borrowed to buy the machine. In case of leasing, the company received a proposal to pay annual end of year rent of ₹ 2.4 lakhs for a period of 5 years. **10**

In case of purchase (which costs ₹ 10,00,000/-) the company would have a 12%, 5 year loan to be paid in equated installments, each installment becoming due at the beginning of each year. It is estimated that the machine can be sold for ₹ 2,00,000/- at the end of 5th year. The company uses straight line method of depreciation. Corporate tax rate is 30%. Post tax cost of capital of ABC Ltd. is 10%.

You are required to advice

(i) Whether the machine should be bought or taken on lease.

(ii) Analyse the financial viability from the point of view of the lessor assuming 12% post tax cost of capital.

| | **PV of ₹ 1 @ 10% for 5 years** | **PV of ₹ 1 @ 12% for 5 years** |
|---|---|---|
| 1 | .909 | .893 |
| 2 | .826 | .797 |
| 3 | .751 | .712 |
| 4 | .683 | .636 |
| 5 | .621 | .567 |

(b) M/s Atlantic Company Limited with a turnover of ₹ 4.80 crores is expecting growth of 25% for forthcoming year. Average credit period is 90 days. The past experience shows that bad debt losses are 1.75% on sales. The Company's administering cost for collecting receivables is ₹ 6,00,000/-. **6**

 **Marks**

It has decided to take factoring services of Pacific Factors on terms that factor will buy receivables by charging 2% commission and 20% risk with recourse. The Factor will pay advance on receivables to the firm at 16% interest rate per annum after withholding 10% as reserve.

Calculate the effective cost of factoring to the firm. (Assume 360 days in a year)

4. (a) Trupti Co. Ltd. promoted by a Multinational group "INTERNATIONAL INC" is listed on stock exchange holding 84% i.e. 63 lakhs shares. **8**

Profit after Tax is ₹ 4.80 crores.

Free Float Market Capitalization is ₹ 19.20 crores.

As per the SEBI guidelines promoters have to restrict their holding to 75% to avoid delisting from the stock exchange. Board of Directors has decided not to delist the share but to comply with the SEBI guidelines by issuing Bonus shares to minority shareholders while maintaining the same P/E ratio.

Calculate

(i) P/E Ratio

(ii) Bonus Ratio

(iii) Market price of share before and after the issue of bonus shares

(iv) Free Float Market capitalization of the company after the bonus shares.

Marks

(b) The Easygoing Company Limited is considering a new project with initial investment, for a product "Survival". It is estimated that IRR of the project is 16% having an estimated life of 5 years. **8**

Financial Manager has studied the project with sensitivity analysis and informed that annual fixed cost sensitivity is 7.8416%, whereas cost of capital (discount rate) sensitivity is 60%.

Other information available are :

Profit Volume Ratio (P/V) is 70%,

Variable cost ₹ 60/- per unit

Annual Cash Flow ₹ 57,500/-

Ignore Depreciation on initial investment and impact of taxation.

Calculate

(i) Initial Investment of the Project

(ii) Net Present Value of the Project

(iii) Annual Fixed Cost

(iv) Estimated annual unit of sales

(v) Break Even Units

Cumulative Discounting Factor for 5 years

| 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% | 16% | 17% | 18% |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.993 | 3.890 | 3.791 | 3.696 | 3.605 | 3.517 | 3.433 | 3.352 | 3.274 | 3.199 | 3.127 |

Marks

5. (a) M/s Tiger Ltd. wants to acquire M/s Leopard Ltd. The balance sheet of Leopard Ltd. as on 31st March, 2012 is as follows : **10**

| Liabilities | ₹ | Assets | ₹ |
|---|---|---|---|
| Equity Capital (70,000 shares) | 7,00,000 | Cash | 50,000 |
| Retained earnings | 3,00,000 | Debtors | 70,000 |
| 12% Debentures | 3,00,000 | Inventories | 2,00,000 |
| Creditors and other liabilities | 3,20,000 | Plants & Eqpt. | 13,00,000 |
| | **16,20,000** | | **16,20,000** |

**Additional information :**

(i) Shareholders of Leopard Ltd. will get one share in Tiger Ltd. for every two shares. External liabilities are expected to be settled at ₹ 5,00,000. Shares of Tiger Ltd. would be issued at its current price of ₹ 15 per share. Debentureholders will get 13% convertible debentures in the purchasing company for the same amount. Debtors and inventories are expected to realize ₹ 2,00,000.

(ii) Tiger Ltd. has decided to operate the business of Leopard Ltd. as a separate division. The division is likely to give cash flows (after tax) to the extent of ₹ 5,00,000 per year for 6 years. Tiger Ltd. has planned that, after 6 years, this division would be demerged and disposed of for ₹ 2,00,000.

(iii) The company's cost of capital is 16%.

Marks

Make a report to the Board of the company advising them about the financial feasibility of this acquisition.

Net present values for 16% for ₹ 1 are as follows :

| Years | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| PV | .862 | .743 | .641 | .552 | .476 | .410 |

(b) Ram buys 10,000 shares of X Ltd. at a price of ₹ 22 per share whose beta value is 1.5 and sells 5,000 shares of A Ltd. at a price of ₹ 40 per share having a beta value of 2. He obtains a complete hedge by Nifty futures at ₹ 1,000 each. He closes out his position at the closing price of the next day when the share of X Ltd. dropped by 2%, share of A Ltd. appreciated by 3% and Nifty futures dropped by 1.5%. **6**

What is the overall profit / loss to Ram ?

6. (a) A share of Tension-free Economy Ltd. is currently quoted at a price earnings ratio of 7.5 times. The retained earning being 37.5% is ₹ 3 per share. **8**

Calculate

(i) The company's cost of equity, if investors' expected rate of return is 12%.

(ii) Market price of share, if anticipated growth rate is 13% per annum with same cost of capital.

(iii) Market price per share, if the company's cost of capital is 18% and anticipated growth rate is 15% per annum, assuming other conditions remaining the same.

Marks

(b) Your bank's London office has surplus funds to the extent of USD 5,00,000/- for a period of 3 months. The cost of the funds to the bank is 4% p.a. It proposes to invest these funds in London, New York or Frankfurt and obtain the best yield, without any exchange risk to the bank. The following rates of interest are available at the three centres for investment of domestic funds there at for a period of 3 months. **8**

| | |
|---|---|
| London | 5% p.a. |
| New York | 8% p.a. |
| Frankfurt | 3% p.a. |

The market rates in London for US dollars and Euro are as under :

London on New York

| | |
|---|---|
| Spot | 1.5350/90 |
| 1 month | 15/18 |
| 2 month | 30/35 |
| 3 month | 80/85 |

London on Frankfurt

| | |
|---|---|
| Spot | 1.8260/90 |
| 1 month | 60/55 |
| 2 month | 95/90 |
| 3 month | 145/140 |

At which centre, will the investment be made & what will be the net gain (to the nearest pound) to the bank on the invested funds ?

Marks

7. Write short notes on any **four** of the following : 4×4 =16

(a) Explain the concept, 'Zero date of a Project' in project management.

(b) XYZ Bank, Amsterdam, wants to purchase Rupees 25 million against £ for funding their Nostro account and they have credited LORO account with Bank of London, London.

Calculate the amount of £'s credited. Ongoing inter-bank rates are per $, ₹ 61.3625/3700 & per £, $ 1.5260/70.

(c) What is an Exchange Traded Fund ? What are its key features ?

(d) What is an equity curve out ? How does it differ from a spin off ?

(e) What is money market ? What are its features ? What kind of inefficiencies it is suffering from ?

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