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

MAY 2010

FINAL
GROUP-I PAPER-2
MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS

Total No. of Questions—5]

[Total No. of Printed Pages—6

Time Allowed—3 Hours

Maximum Marks—100

YMK

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 who has not opted for Hindi medium, his answers in Hindi will not be valued.

Attempt **all** questions.

Working notes should form part of the answer.

Marks

1. (a) Alfa Ltd. desires to acquire a diesel generating set costing Rs. 20 lakh which will be used for a period of 5 years. It is considering two alternatives (i) taking the generating set on lease or (ii) purchasing the asset outright by raising a loan. The company has been offered a lease contract with a lease payment of Rs. 5.2 lakh per annum for five years payable in advance. Company's banker requires the loan to be repaid @ 12% p.a. in 5 equal annual instalments, each installment being due at the beginning of the each year. Tax relevant depreciation of the generator is 20% as per WDV method. At the end of 5th year the generator can be sold at Rs. 2,00,000. Marginal Tax rate of Alfa Ltd. is 30% and its post tax cost of capital is 10%. 12

Determine :

(a) The net advantage of leasing to Alfa Ltd. and recommend whether leasing is financially viable.

(b) Break even lease rental.

(b) The credit sales and receivables of M/s M Ltd. at the end of the year are estimated at Rs. 3,74,00,000 and Rs. 46,00,000 respectively. 8

The average variable overdraft interest rate is 5%. M Ltd. is considering a proposal for factoring its debts on a non-recourse basis at an annual fee of 3% on credit sales. As a result, M Ltd. will save Rs. 1,00,000 per year in administrative cost and Rs. 3,50,000 as bad debts. The factor will maintain a receivables collection period of 30 days and advance 80% of the face value thereof at an annual interest rate of 7%. Evaluate the viability of the proposal.

Note : 365 days are to be taken in a year for the purpose of calculation of receivables.

2. (a) Following informations are available in respect of XYZ Ltd. which is expected to grow at a higher rate for 4 years after which growth rate will stabilize at a lower level : 10

Base year information :

Revenues	—	Rs. 2,000 crores
EBIT	—	Rs. 300 crores
Capital expenditure	—	Rs. 280 crores
Depreciation	—	Rs. 200 crores

Information for high growth and stable growth period are as follows :

	High Growth	Stable Growth
Growth in Revenue & EBIT	20%	10%
Growth in capital expenditure and depreciation	20%	Capital expenditure are offset by depreciation
Risk free rate	10%	9%
Equity beta	1.15	1
Market risk premium	6%	5%
Pre-tax cost of debt	13%	12.86%
Debt equity ratio	1 : 1	2 : 3

For all time, Working capital is 25% of revenue and corporate tax rate is 30%.

What is the value of the firm ?

(b) A Mutual Fund has a NAV of Rs. 20 on 1.12.09. During December, 2009, it has earned a regular income of Re. 0.0375 and capital gain of Re. 0.03 per unit. On 31.12.09, the NAV was Rs. 20.06. Calculate the monthly return and annual return. 5

(c) Write a short note on the role of the financial advisor in a public sector undertaking. 5

Marks

3. (a) A call and put exist on the same stock each of which is exercisable at Rs. 60. They now trade for : 6

Market price of Stock or stock index	Rs. 55
Market price of call	Rs. 9
Market price of put	Re. 1

Calculate the expiration date cash flow, investment value, and net profit from :

(i) Buy 1.0 call

(ii) Write 1.0 call

(iii) Buy 1.0 put

(iv) Write 1.0 put.

for expiration date stock prices of Rs. 50, Rs. 55, Rs. 60, Rs. 65, Rs. 70.

(b) Mr. A is thinking of buying shares at Rs. 500 each having face value of Rs. 100. He is expecting a bonus at the ratio 1 : 5 during the fourth year. Annual expected dividend is 20% and the same rate is expected to be maintained on the expanded capital base. He intends to sell the shares at the end of seventh year at an expected price of Rs. 900 each. Incidental expenses for purchase and sell of shares are estimated to be 5% of the market price. He expects a minimum return of 12% per annum. 4

Should Mr. A buy the share ? If so, what maximum price should he pay for each share ? Assume no tax on dividend income and capital gain.

(c) Ramesh wants to invest in stock market. He has got the following information about individual securities : 10

Security	Expected Return	Beta	σ^2_{ci}
A	15	1.5	40
B	12	2	20
C	10	2.5	30
D	09	1	10
E	08	1.2	20
F	14	1.5	30

Market index variance is 10 percent and the risk free rate of return is 7%. What should be the optimum portfolio assuming no short sales ?

Marks

4. (a) ABC, a large business house is planning to sell its wholly owned subsidiary KLM. Another large business entity XYZ has expressed its interest in making a bid for KLM. XYZ expects that after acquisition the annual earning of KLM will increase by 10%. 8

Following information, ignoring any potential synergistic benefits arising out of possible acquisitions, are available :

(i) Profit after tax for KLM for the financial year which has just ended is estimated to be Rs. 10 crore.

(ii) KLM's after tax profit has an increasing trend of 7% each year and the same is expected to continue.

(iii) Estimated post tax market return is 10% and risk free rate is 4%. These rates are expected to continue.

(iv) Corporate tax rate is 30%.

	XYZ	ABC	Proxy entity for KLM in the same line of business
No. of shares	100 lakh	80 lakh	—
Current share price	Rs. 287	Rs. 375	—
Dividend pay out	40%	50%	50%
Debt : Equity at market values	1 : 2	1 : 3	1 : 4
P/E ratio	10	13	12
Equity beta	1	1.1	1.1

Assume gearing level of KLM to be the same as for ABC and a debt beta of zero.

Marks

You are required to calculate :

(a) Appropriate cost of equity for KLM based on the data available for the proxy entity.

(b) A range of values for KLM both before and after any potential synergistic benefits to XYZ of the acquisition.

(b) A Ltd. of U.K. has imported some chemical worth of USD 3,64,897 from one of the U.S. suppliers. The amount is payable in six months time. The relevant spot and forward rates are : 8

Spot rate	USD 1.5617–1.5673
6 months' forward rate	USD 1.5455–1.5609

The borrowing rates in U.K. and U.S. are 7% and 6% respectively and the deposit rates are 5.5% and 4.5% respectively.

Currency options are available under which one option contract is for GBP 12,500. The option premium for GBP at a strike price of USD 1.70/GBP is USD 0.037 (call option) and USD 0.096 (put option) for 6 months period.

The company has 3 choices :

(i) Forward cover

(ii) Money market cover, and

(iii) Currency option.

Which of the alternatives is preferable by the company ?

(c) What is a depository ? Who are the major players of a depository system ? What advantages does the depository system offer to the clearing member ? 4

5. (a) ABC Bank is seeking fixed rate funding. It is able to finance at a cost of six months LIBOR + 1/4% for Rs. 200 million for 5 years. The bank is able to swap into a fixed rate at 7.5% versus six month LIBOR treating six months as exactly half a year. 10

(a) What will be the "all in cost" funds to ABC Bank ?

Marks

(b) Another possibility being considered is the issue of a hybrid instrument which pays 7.5% for first three years and LIBOR – 1/4% for remaining two years.

Given a three year swap rate of 8%, suggest the method by which the bank should achieve fixed rate funding.

(b) What do you know about swaptions and their uses ? 4

(c) What are the reasons for stock index futures becoming more popular financial derivatives over stock futures segment in India ? 6