Test Series: February, 2014

MOCK TEST PAPER –1

FINAL COURSE: GROUP – I

PAPER – 2 : STRATEGIC FINANCIAL MANAGEMENT

*Question No. 1 is compulsory. Attempt any **five** questions from the remaining **six** questions.*
Working notes should form part of the answer.

Time Allowed – 3 Hours Maximum Marks – 100

1. (a) You as an investor had purchased a 4 month call option on the equity shares of X Ltd. of ₹ 10, of which the current market price is ₹ 132 and the exercise price ₹150. You expect the price to range between ₹ 120 to ₹ 190. The expected share price of X Ltd. and related probability is given below:

Expected Price (₹)	120	140	160	180	190
Probability	0.05	0.20	0.50	0.10	0.15

Compute the following:

(1) Expected Share price at the end of 4 months.

(2) Value of Call Option at the end of 4 months, if the exercise price prevails.

(3) In case the option is held to its maturity, what will be the expected value of the call option? *(5 Marks)*

(b) If the market price of the bond is ₹ 95; years to maturity = 6 yrs: coupon rate = 13% p.a (paid annually) and issue price is ₹ 100. What is the yield to maturity? *(5 Marks)*

(c) RBI sold a 91 day T-bill of face value of ₹ 100 at an yield of 6%. What was the issue price? *(5 Marks)*

(d) An exporter requests his bank to extend the forward contract for US$ 20,000 which is due for maturity on 31st October, 2013, for a further period of 3 months. He agrees to pay the required margin money for such extension of the contract.

Contracted Rate – US$ 1= ₹ 62.32

The US Dollar quoted on 31-10-2013:-

Spot – 61.5000/61.5200

3 months' Discount - 0.93% /0.87%

Margin money for buying and selling rate is 0.45% and 0.20% respectively.

Compute:

(i) The cost to the importer in respect of the extension of the forward contract, and

(ii) The rate of new forward contract. *(5 Marks)*

2. (a) AGD Co is a profitable company which is considering the purchase of a machine costing ₹ 32,00,000. If purchased, AGD Co would incur annual maintenance costs of ₹ 2,50,000. The machine would be used for three years and at the end of this period would be sold for ₹ 5,00,000. Alternatively, the machine could be obtained under an operating lease for an annual lease rental of ₹ 12,00,000 per year, payable in advance. AGD Co can claim depreciation @ 25% on WDV basis. Annual lease rental will be paid in the beginning of each year.

The company pays tax on profits at an annual rate of 30% and all tax liabilities are paid one year in arrears.

Required:

(1) Using an after-tax borrowing rate of 7%, evaluate whether AGD Co should purchase or lease the new machine.

(2) Suppose a bank had offered to lend AGD Co ₹ 32,00,000 for a period of five years interest payable every six months, then you are required to:

(i) Calculate the Annual Percentage Rate (APR) implied by the bank's offer with interest payable every six months.

(ii) Calculate the amount of installment payable at the end of each six-month period if the offered loan is to be repaid in equal installments. *(10 Marks)*

(b) A mutual fund made an issue of 10,00,000 units of ₹ 10 each on January 01, 2008. No entry load was charged. It made the following investments:

Particulars	*₹*
50,000 Equity shares of ₹ 100 each @ ₹ 160	80,00,000
7% Government Securities	8,00,000
9% Debentures (Unlisted)	5,00,000
10% Debentures (Listed)	5,00,000
	98,00,000

During the year, dividends of ₹ 12,00,000 were received on equity shares. Interest on all types of debt securities was received as and when due. At the end of the year equity shares and 10% debentures are quoted at 175% and 90% respectively. Other investments are at par.

Find out the Net Asset Value (NAV) per unit given that operating expenses paid during the year amounted to ₹ 5,00,000. Also find out the NAV, if the Mutual fund had distributed a dividend of ₹ 0.80 per unit during the year to the unit holders. *(6 Marks)*

3. (a) Z Ltd. importing goods worth USD 2 million, requires 90 days to make the payment. The overseas supplier has offered a 60 days interest free credit period and for additional credit for 30 days an interest of 8% per annum.

The bankers of Z Ltd offer a 30 days loan at 10% per annum and their quote for foreign exchange is as follows:

	₹
Spot 1 USD	56.50
60 days forward for 1 USD	57.10
90 days forward for 1 USD	57.50

You are required to evaluate the following options:

(I) Pay the supplier in 60 days, or

(II) Avail the supplier's offer of 90 days credit. *(8 Marks)*

(b) Nominal value of 10% bonds issued by a company is ₹100. The bonds are redeemable at ₹110 at the end of year 5.

Determine the value of the bond if required yield is (i) 5%, (ii) 5.1%, (iii) 10% and (iv) 10.1%. *(8 Marks)*

4. (a) XYZ Ltd., is considering merger with ABC Ltd. XYZ Ltd.'s shares are currently traded at ₹ 20. It has 2,50,000 shares outstanding and its earnings after taxes (EAT) amount to ₹ 5,00,000. ABC Ltd., has 1,25,000 shares outstanding; its current market price is ₹ 10 and its EAT are ₹ 1,25,000. The merger will be effected by means of a stock swap (exchange). ABC Ltd., has agreed to a plan under which XYZ Ltd., will offer the current market value of ABC Ltd.'s shares:

(i) What is the pre-merger earnings per share (EPS) and P/E ratios of both the companies?

(ii) If ABC Ltd.'s P/E ratio is 6.4, what is its current market price? What is the exchange ratio? What will XYZ Ltd.'s post-merger EPS be?

(iii) What should be the exchange ratio; if XYZ Ltd.'s pre-merger and post-merger EPS are to be the same? *(8 Marks)*

(b) Suppose that a 1-year cap has a cap rate of 8% and a notional amount of ₹ 100 crore. The frequency of settlement is quarterly and the reference rate is 3-month MIBOR. Assume that 3-month MIBOR for the next four quarters is as shown below.

Quarters	3-months MIBOR (%)
1	8.70
2	8.00
3	7.80
4	8.20

You are required to compute payoff for each quarter. *(8 Marks)*

5. (a) Sa Re Gama Electronic is in the business of selling consumer durables. In order to promote its sales it also financing the goods to its customer allowing them to make some cash down payment and balance in installments.

In a deal of LCD TV with selling price of ₹ 50,000, a customer can purchase it for cash down payment of ₹ 10,000 and balance amount by adopting any of the following option:

Tenure of Monthly Installments	Equated Monthly Installment (₹)
12	3,800
24	2,140

You are required to determine the flat and effective rate of interest for each alternative. *(6 Marks)*

(b) X Co., Ltd., invested on 1.4.2009 in certain equity shares as below:

Name of Co.	No. of shares	Cost (₹)
M Ltd.	1,000 (₹100 each)	2,00,000
N Ltd.	500 (₹10 each)	1,50,000

In September, 2009, 10% dividend was paid out by M Ltd. and in October, 2009, 30% dividend paid out by N Ltd. On 31.3.2010 market quotations showed a value of ₹220 and ₹290 per share for M Ltd. and N Ltd. respectively.

On 1.4.2010, investment advisors indicate (a) that the dividends from M Ltd. and N Ltd. for the year ending 31.3.2011 are likely to be 20% and 35%, respectively and (b) that the probabilities of market quotations on 31.3.2011 are as below:

Probability factor	Price/share of M Ltd.	Price/share of N Ltd.
0.2	220	290
0.5	250	310
0.3	280	330

You are required to:

(i) Calculate the average return from the portfolio for the year ended 31.3.2010;

(ii) Calculate the expected average return from the portfolio for the year 2010-11; and

(iii) Advise X Co. Ltd., of the comparative risk in the two investments by calculating the standard deviation in each case. *(10 Marks)*

6. (a) X Limited, just declared a dividend of ₹ 14.00 per share. Mr. B is planning to purchase the share of X Limited, anticipating increase in growth rate from 8% to 9%, which will continue for three years. He also expects the market price of this share to be ₹ 360.00 after three years.

You are required to determine:

(i) the maximum amount Mr. B should pay for shares, if he requires a rate of return of 13% per annum.

(ii) the maximum price Mr. B will be willing to pay for share, if he is of the opinion that the 9% growth can be maintained indefinitely and require 13% rate of return per annum.

(iii) the price of share at the end of three years, if 9% growth rate is achieved and assuming other conditions remaining same as in (ii) above.

Calculate rupee amount up to two decimal points.

	Year-1	Year-2	Year-3
FVIF @ 9%	1.090	1.188	1.295
FVIF @ 13%	1.130	1.277	1.443
PVIF @ 13%	0.885	0.783	0.693

(8 Marks)

(b) Yes Ltd. wants to acquire No Ltd. and the cash flows of Yes Ltd. and the merged entity are given below:

					(₹ In lakhs)
Year	1	2	3	4	5
Yes Ltd.	175	200	320	340	350
Merged Entity	400	450	525	590	620

Earnings would have witnessed 5% constant growth rate without merger and 6% with merger on account of economies of operations after 5 years in each case. The cost of capital is 15%.

The number of shares outstanding in both the companies before the merger is the same and the companies agree to an exchange ratio of 0.5 shares of Yes Ltd. for each share of No Ltd.

PV factor at 15% for years 1-5 are 0.870, 0.756; 0.658, 0.572, 0.497 respectively.

You are required to:

(i) Compute the Value of Yes Ltd. before and after merger.

(ii) Value of Acquisition and

(iii) Gain to shareholders of Yes Ltd. *(8 Marks)*

7. Write short notes on any of four of the following:

(a) Steps involved in Simulation analysis of Capital Budgeting

(b) Foreign Currency Convertible Bonds (FCCBs)

(c) Exchange Traded Funds

(d) Various kinds of Systematic Risk

(e) CAMEL Model of Credit Rating *(4 ×4 Marks = 16 Marks)*