

Test Series : August, 2012

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

QUESTIONS

1. (a) Sumana wanted to buy shares of EIL which has a range of ₹ 411 to ₹ 592 a month later. The present price per share is ₹ 421. Her broker informs her that the price of this share can sore up to ₹ 522 within a month or so, so that she should buy a one month CALL of EIL. In order to be prudent in buying the call, the share price should be more than or at least ₹ 522 the assurance of which could not be given by her broker.

Though she understands the uncertainty of the market, she wants to know the probability of attaining the share price ₹ 592 so that buying of a one month CALL of EIL at the execution price of ₹ 522 is justified. Using Risk Neutral Method you are required to find out this probability.

Take the risk free interest to be 3.60% and $e^{0.036} = 1.037$. (5 Marks)

- (b) You are given the following information.

Spot € / \$	:	0.7940/0.8007
Three-month basis points	:	25/35
Spot \$/£	:	1.8215/1.8240
Three-month basis points	:	35/25

Calculate the three-month € /£ rate. (5 Marks)

- (c) Using the chop-shop approach (or Break-up value approach), assign a value for Cornett GMBH whose stock is currently trading at a total market price of €1.70 million. For Cornett, the accounting data set forth two business segments: consumer wholesaling and specialty services centers. Data for the firm's these two segments are as follows:

Business segment	Segment sales	Segment assets	Segment income
Consumer	€1,500,000	€ 750,000	€100,000

wholesaling			
Specialty services	€800,000	€700,000	€150,000

Industry data for “pure-play” firms have been compiled and are summarized as follows:

Business segment	Capitalization/ sales	Capitalization/ assets	Capitalization/operating income
Consumer wholesaling	0.75	0.60	10.00
Specialty services	1.10	0.90	7.00

(5 Marks)

- (d) The distribution of return of security 'F' and the market portfolio 'P' is given below:

Probability	F	P
0.30	30	-10
0.40	20	20
0.30	0	30

You are required to calculate the covariance between the security 'F' and the market portfolio 'P' and beta for the security 'F'. The expected return of security 'F' and portfolio 'P' are 17% and 14% respectively.

(5 Marks)

2. (a) ABC Ltd. is considering a project in US, which will involve an initial investment of US \$ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is `48 per US \$. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project is as follows:

Year	Cash inflow
1	US \$ 20,00,000
2	US \$ 25,00,000
3	US \$ 30,00,000
4	US \$ 40,00,000
5	US \$ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

(10 Marks)

- (b) An investor has two portfolios known to be on minimum variance set for a population of three securities A, B and C having below mentioned weights:

	WA	WB	WC
Portfolio X	0.30	0.40	0.30

Portfolio Y 0.20 0.50 0.30

It is supposed that there are no restrictions on short sales.

- (i) What would be the weight for each stock for a portfolio constructed by investing ₹5,000 in portfolio X and ₹3,000 in portfolio Y?
- (ii) Suppose the investor invests ₹4,000 out of ₹8,000 in security A. How he will allocate the balance between security B and C to ensure that his portfolio is on minimum variance set? (6 Marks)

3. (a) XYZ Ltd. a US firm will need £ 3,00,000 in 180 days. In this connection, the following information is available:

Spot rate 1 £ = \$ 2.00

180 days forward rate of £ as of today = \$1.96

Interest rates are as follows:

	U.K.	US
180 days deposit rate	4.5%	5%
180 days borrowing rate	5%	5.5%

A call option on £ that expires in 180 days has an exercise price of \$ 1.97 and a premium of \$ 0.04.

XYZ Ltd. has forecasted the spot rates 180 days hence as below:

Future rate	Probability
\$ 1.91	25%
\$ 1.95	60%
\$ 2.05	15%

Which of the following strategies would be most preferable to XYZ Ltd.?

- (i) A forward contract;
- (ii) A money market hedge;
- (iii) An option contract;
- (iv) No hedging.

Show calculations in each case.

(10 Marks)

- (b) Mr. X on 1.7.2007, during the initial offer of some Mutual Fund invested in 10,000 units having face value of ₹10 for each unit. On 31.3.2008, the dividend operated by the MF was 10% and Mr. X found that his annualized yield was 153.33%. On 31.12.2009, 20% dividend was given. On 31.3.2010, Mr. X redeemed all his balance

of 11,296.11 units when his annualized yield was 73.52%. What are the NAVs as on 31.3.2008, 31.12.2009 and 31.3.2010? (6 Marks)

4. (a) A company is considering engaging a factor, the following information is available:
- (i) The current average collection period for the Company's debtors is 80 days and $\frac{1}{2}\%$ of debtors default. The factor has agreed to pay money due after 60 days and will take the responsibility of any loss on account of bad debts.
 - (ii) The annual charge for the factoring is 2% of turnover payable annually in arrears. Administration cost saving is likely to be ₹1,00,000 per annum.
 - (iii) Annual sales, all on credit, are ₹1,00,00,000. Variable cost is 80% of sales price. The Company's cost of borrowing is 15% per annum. Assume the year is consisting of 365 days.

Should the Company enter into a factoring agreement? (8 Marks)

- (b) Consider the following information on two stocks X and Y:

Year	Return on X (%)	Return on Y (%)
2008	12	10
2009	18	16

You are required to determine:

- (i) The expected return on a portfolio containing X and Y in the proportion of 60% and 40% respectively.
- (ii) The covariance of returns from the two stocks.
- (iii) Correlation co-efficient between the returns of the two stocks if the Standard Deviation of each stock is 3%.
- (iv) The risk of portfolio containing X and Y in the proportion of 60% and 40%.

(8 Marks)

5. (a) K. Ltd. is considering acquiring N. Ltd., the following information is available:

Company	Profit after Tax	Number of Equity shares	Market value per share
K. Ltd.	50,00,000	10,00,000	200.00
N. Ltd.	15,00,000	2,50,000	160.00

Exchange of equity shares for acquisition is based on current market value as above. Assuming that there is no synergy advantage available, you are required to:

- (i) Find the earning per share for company K. Ltd. after merger.
- (ii) Find the exchange ratio so that shareholders of N. Ltd. would not be at a loss.

(10 Marks)

- (b) Fair Finance, a leasing company, has been approached by a prospective customer intending to acquire a machine whose Cash Down price is ₹ 3 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3 : 2 : 1.

Depreciation can be assumed to be on straight line basis and Fair Finance's marginal tax rate is 35%. The target rate of return for Fair Finance on the transaction is 10%.

Required:

Calculate the lease rents to be quoted for the lease for three years. (6 Marks)

6. (a) X Ltd., has 8 lakhs equity shares outstanding at the beginning of the year 2012. The current market price per share is ₹ 120. The Board of Directors of the company is contemplating ₹ 6.4 per share as dividend. The rate of capitalisation, appropriate to the risk-class to which the company belongs, is 9.6%:

- (i) Based on M-M Approach, calculate the market price of the share of the company, when the dividend is – (a) declared; and (b) not declared.
(ii) How many new shares are to be issued by the company, if the company desires to fund an investment budget of ₹ 3.20 crores by the end of the year assuming net income for the year will be ₹ 1.60 crores? (8 Marks)

- (b) A call and put exist on the same stock each of which is exercisable at ₹ 60. They now trade for:

Market price of Stock	₹ 55
Market price of call	₹ 9
Market price of put	₹ 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 ₹ 50, ₹ 55, ₹ 60, ₹ 70. (8 Marks)

- 7 Write short notes on any of **four** of the following:

- (a) Limitations of Credit Rating.
(b) Are really Govt. Securities risk-free?
(c) American Depository Receipts.
(d) Buy-outs in context of Mergers and Acquisitions.
(e) Linkage of Financial Policy to Strategic Management. (4×4 Marks = 16 Marks)