

Test Series: September, 2013

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) Equity share of PQR Ltd. is presently quoted at ₹ 320. The Market Price of the share after 6 months has the following probability distribution:

Market Price	₹ 180	260	280	320	400
Probability	0.1	0.2	0.5	0.1	0.1

A put option with a strike price of ₹ 300 can be written.

You are required to find out expected value of option at maturity (i.e. 6 months)

(5 Marks)

- (b) Government of India through one of its agency has developed a new type of vaccine to cure the dengue. Among various companies pharmaceutical companies, applied for license a USA based MNC has been granted license to produce vaccine at its plant situated at Noida in India. The license has been granted on the condition that company shall start producing vaccine after 2 year when GOI will launch a drive to vaccinate the children in metropolitan cities.

The project shall require an initial investment of Rs. 190 crore and it is expected to produce a negative NPV of Rs. 15 crore @ cost of capital of 16%. Therefore company's CEO Brian is of view that it is not financial viable to produce vaccine and therefore the company should surrender back the license to GOI.

In recent Board Meeting it was decided that the traditional approach to capital budgeting is highly uncertain and on the basis of concept of Real Option the views of CEO to surrender back the license needs a relook. The current yield on Treasury Bonds is 5%. Further expected standard deviation of future cash flows is 20%.

Suppose you have been appointed as Financial Consultant and you are required to:

- (i) Determine the value of Call option of delaying the commencement of production of the vaccine.
- (ii) Give your recommendation about the acceptability of the project.

Given: Area under normal curve $N(0.20) = 0.5793$ and $(-0.08) = 0.4681$ and $e^{-0.1} = 0.904837$ (5 Marks)

- (c) ABC Ltd. has been maintaining a growth rate of 10 percent in dividends. The company has paid dividend @ ₹3 per share. The rate of return on market portfolio is 12 percent and the risk free rate of return in the market has been observed as 8 percent. The Beta co-efficient of company's share is 1.5.

You are required to calculate the expected rate of return on company's shares as per CAPM model and equilibrium price per share by dividend growth model. (5 Marks)

- (d) You sold Hong Kong Dollar 1,00,00,000 value spot to your customer at ₹ 5.70 & covered yourself in London market on the same day, when the exchange rates were

US\$ 1 = H.K.\$ 7.5880 7.5920

Local inter bank market rates for US\$ were

Spot US\$ 1 = ₹ 42.70 42.85

Calculate cover rate and ascertain the profit or loss in the transaction. Ignore brokerage. (5 Marks)

2. (a) Armada Leasing Company is considering a proposal to lease out a school bus. The bus can be purchased for ₹ 5,00,000 and, in turn, be leased out at ₹ 1,25,000 per year for 8 years with payments occurring at the end of each year:

- (i) Estimate the internal rate of return for the company assuming tax is ignored.
- (ii) What should be the yearly lease payment charged by the company in order to earn 20 per cent annual compounded rate of return before expenses and taxes?
- (iii) Calculate the annual lease rent to be charged so as to amount to 20% after tax annual compound rate of return, based on the following assumptions:
 - (a) Tax rate is 40%;
 - (b) Straight line depreciation;
 - (c) Annual expenses of ₹ 50,000; and
 - (d) Resale value ₹ 1,00,000 after the turn. (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)

3. (a) You as a dealer in foreign exchange have the following position in Swiss Francs on 31st October, 2012:

	Swiss Francs
Balance in the Nostro A/c Credit	1,00,000
Opening Position Overbought	50,000
Purchased a bill on Zurich	80,000
Sold forward TT	60,000
Forward purchase contract cancelled	30,000
Remitted by TT	75,000
Draft on Zurich cancelled	30,000

What steps would you take, if you are required to maintain a credit Balance of Swiss Francs 30,000 in the Nostro A/c and keep as overbought position on Swiss Francs 10,000? (8 Marks)

- (b) A Mutual Fund Co. has the following assets under it on the close of business as on:

Company	No. of Shares	1st February 2012	2nd February 2012
		Market price per share ₹	Market price per share ₹
L Ltd	20,000	20.00	20.50
M Ltd	30,000	312.40	360.00
N Ltd	20,000	361.20	383.10
P Ltd	60,000	505.10	503.90

Total No. of Units 6,00,000

- (i) Calculate Net Assets Value (NAV) of the Fund.

- (ii) Following information is given:

Assuming one Mr. A, submits a cheque of ₹ 30,00,000 to the Mutual Fund and the Fund manager of this company purchases 8,000 shares of M Ltd; and the balance amount is held in Bank. In such a case, what would be the position of the Fund?

- (iii) Find new NAV of the Fund as on 2nd February 2012. (8 Marks)

4. (a) NP and Co. has imported goods for US \$ 7,00,000. The amount is payable after three months. The company has also exported goods for US \$ 4,50,000 and this amount is receivable in two months. For receivable amount a forward contract is already taken at ₹ 48.90.

The market rates for ₹ and Dollar are as under:

Spot	₹ 48.50/70
Two months	25/30 points
Three months	40/45 points

The company wants to cover the risk and it has two options as under :

- (A) To cover payables in the forward market and
- (B) To lag the receivables by one month and cover the risk only for the net amount. No interest for delaying the receivables is earned. Evaluate both the options if the cost of Rupee Funds is 12%. Which option is preferable? (8 Marks)
- (b) The rates of return on the security of Company X and market portfolio for 10 periods are given below:

Period	Return of Security X (%)	Return on Market Portfolio (%)
1	20	22
2	22	20
3	25	18
4	21	16
5	18	20
6	-5	8
7	17	-6
8	19	5
9	-7	6
10	20	11

- (i) What is the beta of Security X?
- (ii) What is the characteristic line for Security X? (8 Marks)
5. (a) MSN Ltd. has total sales of ₹ 4.50 crores and its average collection period is 120 days. The past experience indicates that bad debt losses are 2 percent on sales. The expenditure incurred by the company in administering its receivable collection efforts are ₹ 6,00,000. A Factor is prepared to buy the company's receivables by charging 2 percent commission. The factor will pay advance on receivables to the company at an interest rate of 18 percent per annum after withholding 10 percent as reserve.
- You are required to calculate effective cost of factoring to the company. (8 Marks)
- (b) Expected returns on two stocks for particular market returns are given in the following table:

Market Return	Aggressive	Defensive
7%	4%	9%
25%	40%	18%

You are required to calculate:

- (i) The Betas of the two stocks.
 - (ii) Expected return of each stock, if the market return is equally likely to be 7% or 25%.
 - (iii) The Security Market Line (SML), if the risk free rate is 7.5% and market return is equally likely to be 7% or 25%.
 - (iv) The Alphas of the two stocks. (8 Marks)
6. (a) Delta Ltd.'s current financial year's income statement reports its net income as ₹ 15,00,000. Delta's marginal tax rate is 40% and its interest expense for the year was ₹ 15,00,000. The company has ₹ 1,00,00,000 of invested capital, of which 60% is debt. In addition, Delta Ltd. tries to maintain a Weighted Average Cost of Capital (WACC) of 12.6%.
- (i) Compute the operating income or EBIT earned by Delta Ltd. in the current year.
 - (ii) What is Delta Ltd.'s Economic Value Added (EVA) for the current year?
 - (iii) Delta Ltd. has 2,50,000 equity shares outstanding. According to the EVA you computed in (ii), how much can Delta pay in dividend per share before the value of the company would start to decrease? (4 Marks)
- (b) Personal Computer Division of Distress Ltd., a computer hardware manufacturing company has started facing financial difficulties for the last 2 to 3 years. The management of the division headed by Mr. Smith who is interested in a buyout on 1 April 2013. However, to make this buy-out successful there is an urgent need to attract substantial funds from venture capitalists.

VenCap, a European venture capitalist firm has shown its interest in the proposed buy-out. Distress Ltd. is interested to sell the division for ₹ 180 crore and Mr. Smith is of opinion that an additional amount of ₹ 85 crore shall be required to make this division viable. The expected financing pattern shall be as follows:

Source	Mode	Amount (₹ Crore)
Management	Equity Shares of ₹ 10 each	60.00
VenCap VC	Equity Shares of ₹ 10 each	22.50
	Debentures with attached warrant of ₹ 100 each	22.50
	8% Loan	160.00
Total		265.00

The warrants can be exercised any time after 4 years from now for 10 equity shares @ ₹ 120 per share.

The loan is repayable in one go at the end of 8th year. The debentures are repayable in equal annual installment consisting of both principal and interest amount over a period of 6 years.

MR. Smith is of view that the proposed dividend shall not be kept more than 12.5% of distributable profit for the first 4 years. The forecasted EBIT after the proposed buyout is as follows:

Year	2013-14	2014-15	2015-16	2016-17
EBIT (Rs. crore)	48	57	68	82

Applicable tax rate is 35% and it is expected that it shall remain unchanged at least for 5-6 years. In order to attract VenCap, Mr. Smith stated that book value of equity shall increase by 20% during the above 4 years (2013-17). Although, VenCap has shown their interest in investment but are doubtful about the projections of growth in the value as per projections of Mr. Smith. Further VenCap also demanded that warrants should be convertible in 18 shares instead of 10 as proposed by Mr. Smith.

You are required to determine whether or not the book value of equity is expected to grow by 20% per year. Further if you have been appointed by Mr. Smith as advisor to then whether you would suggest to accept the demand of VenCap of 18 shares instead of 10. (12 Marks)

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

- (a) Linkage of Financial Policy to Financial Management
- (b) Debt route for foreign exchange funds
- (c) Demerger
- (d) How is a stock market index calculated
- (e) Cross border leasing

(4 × 4 Marks = 16 Marks)