

MOCK TEST PAPER –1
FINAL (NEW) COURSE: GROUP – I

PAPER – 2 : STRATEGIC FINANCIAL MANAGEMENT

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

Time Allowed – 3 Hours

Maximum Marks – 100

1. (a) A Mutual Fund is holding the following assets in Rs. Crores :

Investments in diversified equity shares	90.00
Cash and Bank Balances	<u>10.00</u>
	100.00

The Beta of the portfolio is 1.1. The index future is selling at 4300 level. The Fund Manager apprehends that the index will fall at the most by 10%. Calculate the number of index futures he should short for perfect hedging. One index future consists of 50 units.

Evaluate your answer assuming the Fund Manager's apprehension will materialize. **(7 Marks)**

- (b) EFD Ltd. is an export business house. The company prepares invoice in customers' currency. Its debtors of US\$. 10,000,000 is due on April 1, 2015.

Market information as at January 1, 2015 is:

Exchange rates US\$/INR		Currency Futures US\$/INR	
Spot	0.016667	Contract size: Rs. 24,816,975	
1-month forward	0.016529	1-month	0.016519
3-months forward	0.016129	3-month	0.016118

	Initial Margin	Interest rates in India
1-Month	Rs. 17,500	6.5%
3-Months	Rs. 22,500	7%

On April 1, 2015 the spot rate US\$/INR is 0.016136 and currency future rate is 0.016134.

Recommend as to which of the following methods would be most advantageous to EFD Ltd.

- (i) Using forward contract
- (ii) Using currency futures
- (iii) Not hedging the currency risk **(7 Marks)**
- (c) Explain some of the innovative ways to finance a startup. **(6 Marks)**
2. (a) TM Fincorp has bought a 6 x 9 Rs. 100 crore Forward Rate Agreement (FRA) at 5.25%. On fixing date reference rate i.e. MIBOR turns out to be as follows:

Period	Rate (%)
3 months	5.50
6 months	5.70
9 months	5.85

You are required to calculate:

- (i) Profit/Loss to TM Fincorp. in terms of basis points.

(ii) The settlement amount.

(Assume 360 days in a year)

(8 Marks)

- (b) The risk-free rate of return R_f is 9 percent. The expected rate of return on the market portfolio R_m is 13 percent. The expected rate of growth for the dividend of Platinum Ltd. is 7 percent. The last dividend paid on the equity stock of firm A was Rs. 2.00. The beta of Platinum Ltd. equity stock is 1.2.

(i) Calculate the equilibrium price of the equity stock of Platinum Ltd.?

(ii) Also, calculate the equilibrium price when

- The inflation premium increases by 2 percent?
- The expected growth rate increases by 3 percent?
- The beta of Platinum Ltd. equity rises to 1.3?

(8 Marks)

(c) Describe the characteristics of financial instruments.

(4 Marks)

3. (a) On January 1, 2013 an investor have a portfolio of 5 shares as given below:

Security	Price	No. of Shares	Beta
A	349.30	5,000	1.15
B	480.50	7,000	0.40
C	593.52	8,000	0.90
D	734.70	10,000	0.95
E	824.85	2,000	0.85

The cost of capital to the investor is 10.5% per annum.

You are required to calculate:

- (i) The beta of his portfolio.
- (ii) The theoretical value of the NIFTY futures for February 2013.
- (iii) The number of contracts of NIFTY the investor needs to sell to get a full hedge until February for his portfolio if the current value of NIFTY is 5900 and NIFTY futures have a minimum trade lot requirement of 200 units. Assume that the futures are trading at their fair value.
- (iv) The number of future contracts the investor should trade if he desires to reduce the beta of his portfolios to 0.6.

No. of days in a year be treated as 365.

Given: $\ln(1.105) = 0.0998$ and $e^{(0.015858)} = 1.01598$

(8 Marks)

- (b) The following information is available with respect of Krishna Ltd.

Year	Krishna Ltd. Average share price	Dividend per Share	Average Market Index	Dividend Yield	Return on Govt. bonds
	Rs.	Rs.			
2012	245	20	2013	4%	7%
2013	253	22	2130	5%	6%
2014	310	25	2350	6%	6%
2015	330	30	2580	7%	6%

Calculate the Beta Value of the Krishna Ltd. at the end of 2015 and State your observation.

(8 Marks)

- (c) Describe the concept of 'Evaluation of Technical Analysis'. **(4 Marks)**
4. (a) Orange purchased 200 units of Oxygen Mutual Fund at Rs. 45 per unit on 31st December, 2009. In 2010, he received Rs. 1.00 as dividend per unit and a capital gains distribution of Rs. 2 per unit.
- Required:
- (i) Calculate the return for the period of one year assuming that the NAV as on 31st December 2010 was Rs. 48 per unit.
- (ii) Calculate the return for the period of one year assuming that the NAV as on 31st December 2010 was Rs. 48 per unit and all dividends and capital gains distributions have been reinvested at an average price of Rs. 46.00 per unit. Ignore taxation. **(8 Marks)**
- (b) On April 3, 2016, a Bank quotes the following:
- | | | |
|------------------------------|-------------|-------------|
| Spot exchange Rate (US \$ 1) | INR 66.2525 | INR 67.5945 |
| 2 months' swap points | 70 | 90 |
| 3 months' swap points | 160 | 186 |
- In a spot transaction, delivery is made after two days.
- Assume spot date as April 5, 2016.
- Assume 1 swap point = 0.0001,
- Calculate:
- (i) swap points for 2 months and 15 days. (For June 20, 2016),
- (ii) foreign exchange rate for June 20, 2016, and
- (iii) the annual rate of premium/discount of US\$ on INR, on an average rate. **(8 Marks)**
- (c) Explain the pricing of the securitized Instruments.

OR

- Describe the concept of 'Stripped Securities'. **(4 Marks)**
5. (a) You have following quotes from Bank A and Bank B:

	Bank A	Bank B
SPOT	USD/CHF 1.4650/55	USD/CHF 1.4653/60
3 months	5/10	
6 months	10/15	
SPOT	GBP/USD 1.7645/60	GBP/USD 1.7640/50
3 months	25/20	
6 months	35/25	

Calculate:

- (i) How much minimum CHF amount you have to pay for 1 Million GBP spot?
- (ii) Considering the quotes from Bank A only, for GBP/CHF what are the Implied Swap points for Spot over 3 months? **(8 Marks)**
- (b) Delta Ltd.'s current financial year's income statement reports its net income as Rs. 15,00,000. Delta's marginal tax rate is 40% and its interest expense for the year was Rs. 15,00,000. The company has Rs. 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) Calculate the operating income or EBIT earned by Delta Ltd. in the current year.

- (ii) Calculate the 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 calculated in (ii), Evaluate how much can Delta pay in dividend per share before the value of the company would start to decrease? If Delta does not pay any dividends, Evaluate what would you expect to happen to the value of the company? **(8 Marks)**
- (c) State the Benefits available to Micro, Small or Medium enterprises. **(4 Marks)**
6. (a) The Nishan Ltd. has 35,000 shares of equity stock outstanding with a book value of Rs.20 per share. It owes debt Rs. 15,00,000 at an interest rate of 12%. Selected financial results are as follows.

<u>Income and Cash Flow</u>		<u>Capital</u>	
EBIT	Rs. 80,000	Debt	Rs. 1,500,000
Interest	<u>1,80,000</u>	Equity	<u>7,00,000</u>
EBT	(Rs. 1,00,000)		Rs. 2,200,000
Tax	<u>0</u>		
EAT	(Rs. 1,00,000)		
Depreciation	Rs. 50,000		
Principal repayment	<u>(Rs. 75,000)</u>		
Cash Flow	<u>(Rs. 1,25,000)</u>		

Evaluate and Restructure the financial line items shown assuming a composition in which creditors agree to convert two thirds of their debt into equity at book value. Assume Nishan will pay tax at a rate of 15% on income after the restructuring, and that principal repayments are reduced proportionately with debt. Demonstrate as to who will control the company and by how big a margin after the restructuring? **(8 Marks)**

- (b) Mr. Abhishek is interested in investing Rs. 2,00,000 for which he is considering following three alternatives:
- (i) Invest Rs. 2,00,000 in Mutual Fund X (MFX)
- (ii) Invest Rs. 2,00,000 in Mutual Fund Y (MFY)
- (iii) Invest Rs. 1,20,000 in Mutual Fund X (MFX) and Rs. 80,000 in Mutual Fund Y (MFY)

Average annual return earned by MFX and MFY is 15% and 14% respectively. Risk free rate of return is 10% and market rate of return is 12%.

Covariance of returns of MFX, MFY and market portfolio Mix are as follow:

	MFX	MFY	Mix
MFX	4.800	4.300	3.370
MFY	4.300	4.250	2.800
Mix	3.370	2.800	3.100

You are required to calculate:

- (i) variance of return from MFX, MFY and market return,
- (ii) portfolio return, beta, portfolio variance and portfolio standard deviation,
- (iii) expected return, systematic risk and unsystematic risk; and
- (iv) Sharpe ratio, Treynor ratio and Alpha of MFX, MFY and Portfolio Mix. **(12 Marks)**