Test Series: April, 2019

## **MOCK TEST PAPER - 2**

## FINAL (NEW) COURSE: GROUP - I

## PAPER - 2: STRATEGIC FINANCIAL MANAGEMENT (NEW COURSE)

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) Details about portfolio of shares of an investor is as below:

Shares	No. of shares (lakh)	Price per share	Beta
A Ltd.	3.00	Rs. 500	1.40
B Ltd.	4.00	Rs. 750	1.20
C Ltd.	2.00	Rs. 250	1.60

The investor thinks that the risk of portfolio is very high and wants to reduce the portfolio beta to 0.91. He is considering two below mentioned alternative strategies:

- (1) Dispose off a part of his existing portfolio to acquire risk free securities, or
- (2) Take appropriate position on Nifty Futures which are currently traded at Rs. 8125 and each Nifty points is worth Rs.200.

You are required to calculate:

- (i) portfolio beta,
- (ii) the value of risk free securities to be acquired,
- (iii) the number of shares of each company to be disposed off,
- (iv) the number of Nifty contracts to be bought/sold; and
- (v) the value of portfolio beta for 2% rise in Nifty.

(10 Marks)

(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 of 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 sale of shares are estimated to be 5% of the market price. He expects a minimum return of 12% per annum.

Recommend whether Mr. A should buy the shares? If so, what maximum price should he pay for each share? Assume no tax on dividend income and capital gain. (6 Marks)

- (c) Discuss on Balancing Financial Goals vis-a-vis Sustainable Growth. (4 Marks)
- 2. (a) Ram buys 10,000 shares of X Ltd. at a price of Rs. 22 per share whose beta value is 1.5 and sells 5,000 shares of A Ltd. at a price of Rs. 40 per share having a beta value of 2. He obtains a complete hedge by Nifty futures at Rs. 1,000 each. He closes out his position at the closing price of the next day when the share of X Ltd. dropped by 2%, share of A Ltd. appreciated by 3% and Nifty futures dropped by 1.5%.

Calculate the overall profit/loss to Ram?

(7 Marks)

(b) The following data is available for a bond:

Face Value Rs. 1,000
Coupon Rate 11%
Years to Maturity 6
Redemption Value Rs. 1,000
Yield to Maturity 15%

(Round-off your answers to 3 decimals)

Calculate the following in respect of the bond:

- (i) Current Market Price.
- (ii) Duration of the Bond.
- (iii) Volatility of the Bond.
- (iv) Expected market price if increase in required yield is by 100 basis points.
- (v) Expected market price if decrease in required yield is by 75 basis points. (8 Marks)
- (c) Discuss the various techniques used in economic analysis.

(5 Marks)

3. (a) Given below is information of market rates of Returns and Data from two Companies A and B:

	Year 2015	Year 2016	Year 2017
Market (%)	12.0	11.0	9.0
Company A (%)	13.0	11.5	9.8
Company B (%)	11.0	10.5	9.5

Calculate the beta coefficients of the Shares of Company A and Company B.

(8 Marks)

(b) ABC Co. is considering a new sales strategy that will be valid for the next 4 years. They want to know the value of the new strategy. Following information relating to the year which has just ended, is available:

Income Statement	Rs.
Sales	20,000
Gross margin (20%)	4,000
Administration, Selling & distribution expense (10%)	2,000
PBT	2,000
Tax (30%)	600
PAT	1,400
Balance Sheet Information	
Fixed Assets	8,000
Current Assets	4,000
Equity	12,000

If it adopts the new strategy, sales will grow at the rate of 20% per year for three years. The gross margin ratio, Assets turnover ratio, the Capital structure and the income tax rate will remain unchanged.

Depreciation would be at 10% of net fixed assets at the beginning of the year.

The Company's target rate of return is 15%.

Calculate the incremental value due to adoption of the strategy.

(8 Marks)

(c) Explain about Direct Plan in Mutual Fund.

(4 Marks)

4. (a) On 1st April, an open ended scheme of mutual fund had 300 lakh units outstanding with Net Assets Value (NAV) of Rs. 18.75. At the end of April, it issued 6 lakh units at opening NAV plus 2% load, adjusted for dividend equalization. At the end of May, 3 Lakh units were repurchased at opening NAV less 2% exit load adjusted for dividend equalization. At the end of June, 70% of its available income was distributed.

In respect of April-June quarter, the following additional information is available:

	Rs. in lakh
Portfolio value appreciation	425.47
Income of April	22.950
Income for May	34.425
Income for June	45.450

You are required to calculate:

- (i) Income available for distribution;
- (ii) Issue price at the end of April;
- (iii) repurchase price at the end of May, and
- (iv) net asset value (NAV) as on 30<sup>th</sup> June.

(8 Marks)

(b) If the present interest rate for 6 months borrowings in India is 9% per annum and the corresponding rate in USA is 2% per annum, and the US\$ is selling in India at Rs. 64.50/\$.

Then Recommend:

- (i) Will US \$ be at a premium or at a discount in the Indian forward market?
- (ii) The expected 6 month forward rate for US\$ in India.
- (iii) The rate of forward premium/discount.

(6 Marks)

(c) Explain briefly the various types of securitized instruments.

 $\mathsf{OR}$ 

Discuss briefly the steps in securitization mechanism.

(6 Marks)

5. (a) 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:

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

Recommend which of the alternatives is preferable by the company?

(8 Marks)

(b) With relaxation of norms in India for investment in international market upto \$ 2,50,000, Mr. X to hedge himself against the risk of declining Indian economy and weakening of Indian Rupee during last few years, decided to diversify in the International Market.

Accordingly, Mr. X invested a sum of Rs. 1.58 crore on 1.1.20x1 in Standard & Poor Index. On 1.1.20x2 Mr. X sold his investment. The other relevant data is given below:

	1.1.20x1	1.1.20x2
Index of Stock Market in India	7395	?
Standard & Poor Index	2028	1919
Exchange Rate (Rs./\$)	62.00/62.25	67.25/67.50

You are required to Calculate:

- (i) The return for a US investor.
- (ii) Holding Period Return to Mr. X.
- (iii) The value of Index of Stock Market in India as on 1.1.20x2 at which Mr. X would be indifferent between investment in Standard & Poor Index and India Stock Market. (7 Marks)
- (c) Discuss Bootstrapping as a mode of financing for startups.

(5 Marks)

 (a) A hypothetical company ABC Ltd. issued a 10% Debenture (Face Value of Rs. 1000) of the duration of 10 years, currently trading at Rs. 850 per debenture. The bond is convertible into 50 equity shares being currently quoted at Rs. 17 per share.

If yield on equivalent comparable bond is 11.80%, then calculate the spread of yield of the above bond from this comparable bond.

The relevant present value table is as follows.

Present Values	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	t <sub>4</sub>	<b>t</b> <sub>5</sub>	<b>t</b> <sub>6</sub>	t <sub>7</sub>	t <sub>8</sub>	t <sub>9</sub>	<b>t</b> <sub>10</sub>
PVIF <sub>0.11, t</sub>	0.901	0.812	0.731	0.659	0.593	0.535	0.482	0.434	0.391	0.352
PVIF <sub>0.13, t</sub>	0.885	0.783	0.693	0.613	0.543	0.480	0.425	0.376	0.333	0.295

(7 Marks)

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

Name of Co.	No. of shares	Cost (Rs.)	
M Ltd.	1,000 (Rs. 100 each)	2,00,000	
N Ltd.	500 (Rs. 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 Rs. 220 and Rs. 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. (8 Marks)
- (c) What is Reverse Stock Split up and why companies resort it. (5 Marks)