Test Series: April 2022

## **MOCK TEST PAPER 2**

## FINAL 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) 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		<b>Currency Futur</b>	es US\$/INR
Spot	0.016667	Contract size: ₹	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	₹ 17,500		6.5%
3-Months	₹ 22,500		7%

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

**RECOMMEND** 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

(6 Marks)

(b) The following is the data related to 9% Fully convertible (into Equity Shares) debentures issued by Delta Ltd. at ₹ 1000.

Market Price of 9% Debenture	₹ 1,000
Conversion Ratio (No. of shares)	25
Straight Value of 9% Debentures	₹ 800
Market price of equity share on the date of conversion	₹ 30
Expected Dividend per share	₹1

**ANALYSE** the value of Debenture both from cost and payback period angle for an investor who is considering to adopt the route of conversion to acquire the shares of the company.

(10 Marks)

(c) **EXPLAIN** the main risk that can be faced by an overseas investor.

(4 Marks)

2. (a) The following information is given for 3 companies that are identical except for their capital structure:

	Orange	Grape	Apple
Total invested capital	1,00,000	1,00,000	1,00,000
Debt/assets ratio	0.8	0.5	0.2
Shares outstanding	6,100	8,300	10,000
Pre tax cost of debt	16%	13%	15%
Cost of equity	26%	22%	20%
Operating Income (EBIT)	25,000	25,000	25,000

The tax rate is uniform 35% in all cases.

EVALUATE which company can be considered for best investment based on

- (i) EVA
- (ii) Market Price of the share, if the industry PE ratio is 11x.

(10 Marks)

(b) Sensex futures are traded at a multiple of 50. Consider the following quotations of Sensex futures in the 10 trading days during February, 2009:

<u>Day</u>	High	Low	Closing
4-2-09	3306.4	3290.00	3296.50
5-2-09	3298.00	3262.50	3294.40
6-2-09	3256.20	3227.00	3230.40
7-2-09	3233.00	3201.50	3212.30
10-2-09	3281.50	3256.00	3267.50
11-2-09	3283.50	3260.00	3263.80
12-2-09	3315.00	3286.30	3292.00
14-2-09	3315.00	3257.10	3309.30
17-2-09	3278.00	3249.50	3257.80
18-2-09	3118.00	3091.40	3102.60

Abshishek bought one sensex futures contract on February, 04. The average daily absolute change in the value of contract is ₹ 10,000 and standard deviation of these changes is ₹ 2,000. The maintenance margin is 75% of initial margin.

**DETERMINE** the daily balances in the margin account and payment of margin calls, if any.

(6 Marks)

(c) **EXPLAIN** the advantages of bringing Venture Capital in the company.

(4 Marks)

3. (a) The following data are available for a bond:

Face Value ₹ 10,000 to be redeemed at par on maturity

Coupon rate 8.5%
Years to Maturity 5 years
Yield to Maturity (YTM) 10%

**EVALUATE** the change in the expected market price of the Bond, if there is a decrease in the YTM by 200 basis points based on

- (i) By Macaulay's Duration after making Convexity Adjustment.
- (ii) By Intrinsic Value Method.

#### Given

Years	1	2	3	4	5
PVIF (10%, n)	0.909	0.826	0.751	0.683	0.621
PVIF (8%, n)	0.926	0.857	0.794	0.735	0.681

(8 Marks)

(b) Following information pertains to a regular income scheme:

Particulars	₹ Crores
Listed shares at Cost (ex-dividend)	20
Cash in hand	1.23
Bonds and debentures at cost	4.3
Of these, bonds not listed and quoted	1
Other fixed interest securities at cost	4.5
Dividend accrued	0.8
Amount payable on shares	6.32
Expenditure accrued	0.75
Number of units (₹ 10 face value)	20 lacs
Current realizable value of fixed income securities of face value of ₹ 100	106.5
The listed shares were purchased when Index was	1,000
Present index is	2,300
Value of listed bonds and debentures at NAV date	8

There has been a diminution of 20% in unlisted bonds and debentures. Other fixed interest securities are at cost.

**CALCUALTE** the NAV of on per unit basis.

(8 Marks)

(c) **EXPLAIN** what makes an organization financially sustainable.

(4 Marks)

4. (a) DEF Ltd. has imported goods to the extent of US\$ 1 crore. The payment terms are 60 days interest-free credit. For additional credit of 30 days, interest at the rate of 7.75% p.a. will be charged.

The banker of DEF Ltd. has offered a 30 days loan at the rate of 9.5% p.a. Their quote for the foreign exchange is as follows:

Spot rate INR/US\$	62.50
60 days forward rate INR/US\$	63.15
90 days forward rate INR/US\$	63.45

ADVISE which one of the following options would be better?

- (i) Pay the supplier on 60th day and avail bank loan for 30 days.
- (ii) Avail the supplier's offer of 90 days credit.

(8 Marks)

- (b) Mr. Nirmal Kumar has categorized all the available stock in the market into the following types:
  - (i) Small cap growth stocks
  - (ii) Small cap value stocks
  - (iii) Large cap growth stocks
  - (iv) Large cap value stocks

Mr. Nirmal Kumar also estimated the weights of the above categories of stocks in the market index. Further, the sensitivity of returns on these categories of stocks to the three important factor are estimated to be:

Category of Stocks	Weight in the Market Index	Factor I (Beta)	Factor II (Book Price)	Factor III (Inflation)
Small cap growth	25%	0.80	1.39	1.35
Small cap value	10%	0.90	0.75	1.25
Large cap growth	50%	1.165	2.75	8.65
Large cap value	15%	0.85	2.05	6.75
Risk Premium		6.85%	-3.5%	0.65%

The rate of return on treasury bonds is 4.5%

#### Required:

- (i) **CALCULATE** the expected return on the market index using Arbitrage Pricing Theory.
- (ii) **CALCULATE** the expected return on the market index using Capital Asset Pricing Model (CAPM).
- (iii) ADVISE the composition of a portfolio if Mr. Nirmal Kumar wants to construct a portfolio constituting only the 'small cap value' and 'large cap growth' stocks and if the target beta for the desired portfolio is 1.
  (8 Marks)
- (c) **EXPLAIN** briefly the term Pitch Presentation.

(4 Marks)

5. (a) 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

**ANALYSE** the two investments from Risk-Return Trade off viewpoint for X Co. Ltd. (8 Marks)

(b) M/s. Raghu Ltd. is interested in expanding its operation and planning to install manufacturing plant at US. It requires 8.82 million USD (net of issue expenses/ floatation cost) to fund the proposed project. GDRs are proposed to be issued to finance this project. The estimated floatation cost of GDRs is 2%.

#### Additional information:

- (1) Expected market price of share at the time of issue of GDR is ₹ 360 (Face Value ₹ 100)
- (2) Each GDR will represent two underlying Shares.
- (3) The issue shall be priced at 10% discount to the market price.
- (4) Expected exchange rate is INR/USD 72.
- (5) Dividend is expected to be paid at the rate of 20% with growth rate of 12%.

## Required:

- (i) **CALCULATE** the number of GDRs to be issued.
- (ii) **ADVISE** company for making GDR issue if the company receives an offer from a US Bank willing to provide an equivalent loan with an interest rate of 12%? (8 Marks)
- (c) "Securitisation is the process of repackaging or rebundling of illiquid assets into marketable securities". **EXPLAIN**.

#### OR

"Netting helps in minimizing the total value of intercompany fund flows". **EXPLAIN.** (4 Marks)

6. (a) During the audit of the Weak Bank (W), RBI has suggested that the Bank should either merge with another bank or may close down. Strong Bank (S) has submitted a proposal of merger of Weak Bank with itself. The relevant information and Balance Sheets of both the companies are as under:

Particulars	Weak Bank (W)	Strong Bank (S)	Assigned Weights (%)
Gross NPA (%)	40	5	30
Capital Adequacy Ratio (CAR)	5	16	28
Total Capital/ Risk Weight Asset			
Market price per Share (MPS)	12	96	32
Book value			10
Trading on Stock Exchange	Irregular	Frequent	

## **Balance Sheet**

## (₹ in Lakhs)

Particulars	Weak Bank (W)	Strong Bank (S)
Paid up Share Capital (₹ 10 per share)	150	500
Reserves & Surplus	80	5,500
Deposits	4,000	44,000
Other Liabilities	<u>890</u>	<u>2,500</u>
Total Liabilities	<u>5,120</u>	<u>52,500</u>
Cash in Hand & with RBI	400	2,500
Balance with Other Banks	-	2,000
Investments	1,100	19,000
Advances	3,500	27,000
Other Assets	70	2,000
Preliminary Expenses	<u>50</u>	
Total Assets	<u>5,120</u>	<u>52,500</u>

# Required:

- (i) **PREPARE** the Balance Sheet after merger if Swap ratio based on the above weights is agreed upon.
- (ii) ANALYZE the proposed merger from CAR and Gross NPA angle. (10 Marks)
- (b) Mr. X established the following strategy on the Delta Corporation's stock :
  - (1) Purchased one 3-month call option with a premium of ₹ 30 and an exercise price of ₹ 550.
  - (2) Purchased one 3-month put option with a premium of ₹ 5 and an exercise price of ₹ 450.

Delta Corporation's stock is currently selling at ₹ 500.

**CALCULATE** profit or loss, if the price of Delta Corporation's stock:

- (i) remains at ₹ 500 after 3 months.
- (ii) falls at ₹ 350 after 3 months.
- (iii) rises to ₹ 600.

Assume the option size is 100 shares of Delta Corporation.

(6 Marks)

(c) **EXPLAIN** how to measure divergence or deviation of return of a Mutual Fund Scheme that replicates any benchmark Index. (4 Marks)