MOCK TEST PAPER 1

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) 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. Further their quote for the foreign exchange is as follows:

Spot rate INR/US$	₹ 75.50
60 days forward rate INR/US$	₹ 76.15
90 days forward rate INR/US$	₹ 76.45

ADVICE which one of the following options would be better for DEF Ltd.

(i) Pay the supplier on 60th day and avail bank loan for 30 days.

(ii) Avail the supplier's offer of 90 days credit.

Note: Consider 360 days a year and calculation to be in crore rounding off upto 4 decimal point for INR and 5 decimal points for USD. **(8 Marks)**

(b) Mr. X wants to buy shares of A Ltd. (having a Beta of 2) at current market price of ₹ 500 each having face value of ₹ 100. He is expecting a bonus at the ratio of 1: 4 during the fifth year. Annual expected dividend is 20% and the same rate is expected to be maintained throughout the holding period. He intends to sell the shares at the end of 7th year and expect that the market price shall be doubled during this holding period. Incidental expenses for purchase of shares are estimated to be 5% of the market price. The risk-free rate of return and market rate of return are 5% and 7.50% respectively.

ADVISE Mr. X should buy this share or not. If so, then recommend the maximum price should he pay for each share.

Note: Assume no tax on dividend income and capital gain. **(8 Marks)**

(c) **EXPLAIN** the main financial risk can be viewed from different perspective. **(4 Marks)**

2. (a) Eon Ltd. reported a profit of ₹ 120 lakhs after 20% tax for the financial year 2019-20. An analysis of the accounts revealed that the income included extraordinary items of ₹ 5 lakhs and an extraordinary loss of ₹ 15 lakhs. The existing operations, except for the extraordinary items, are expected to continue in the future. In addition, the results of the launch of a new product are expected to be as follows:

	₹ In lakhs
Sales	100
Material costs	10
Labour costs	20
Fixed costs	20

You are required to:

(i) **CALCULATE** the value of the business, given that the capitalization rate is 10%.

(ii) **DETERMINE** the market price per equity share, with Eon Ltd.'s share capital being comprised of 1,00,000 13% preference shares of ₹ 100 each and 50,00,000 equity shares of ₹ 10 each and the P/E ratio being 10 times. **(8 Marks)**

(b) (i) The current market price of an equity share of Eagle Ltd is ₹ 950. Within a period of 3 months, the maximum and minimum price of it is expected to be ₹ 1000 and ₹ 900 respectively. If the risk free rate of interest be 8% p.a.

COMPUTE the value of a 3 months Call option under the "Risk Neutral" method at the strike rate of ₹ 980.

Given $e^{0.02} = 1.0202$ **(4 Marks)**

(ii) The share of X Ltd. is currently selling for ₹ 500. Risk free interest rate is 0.6% per month. A three-month futures contract is selling for ₹ 511.

DEVELOP an arbitrage strategy and show what your riskless profit will be 3 months hence assuming that X Ltd. will not pay any dividend in the next three months. **(4 Marks)**

(c) **EXPLAIN** "Boot Strapping" as modes of financing for startups. **(4 Marks)**

OR

EXPLAIN various Asset Allocation Strategies. **(4 Marks)**

3. (a) Rohan Ltd. has surplus cash of ₹ 150 lakhs and wants to distribute 35% of it to the shareholders. The company decides to buy back shares. The Finance Manager of the company estimates that its share price after re-purchase is likely to be 15% above the buyback price-if the buyback route is taken. The number of shares outstanding at present is 10 lakhs and the current EPS is ₹ 3.

DETERMINE:

(i) The price at which the shares can be re-purchased, if the market capitalization of the company should be ₹ 320 lakhs after buyback,

(ii) The number of shares that can be re-purchased, and

(iii) The impact of share re-purchase on the EPS, assuming that net income is the same.

(8 Marks)

(b) Z has Mutual Fund having 500 units has shown its NAV of ₹ 9.45 and ₹ 10.25 at the beginning and at the end of the year respectively. The Mutual Fund has given two options:

(i) Pay ₹ 0.85 per unit as dividend and ₹ 0.70 per unit as a capital gain, or

(ii) These distributions are to be reinvested at an average NAV of ₹ 9.55 per unit.

ADVICE which option is preferable and what difference it would make in terms of return available. **(8 Marks)**

(c) **EXPLAIN** balancing Financial Goals vis-à-vis Sustainable Growth. **(4 Marks)**

4. (a) An American firm is under obligation to pay interests of Can$ 10,10,000 and Can$ 7,05,000 on 31st July and 30th September respectively. The Firm is risk averse and its policy is to hedge the risks involved in all foreign currency transactions. The Finance Manager of the firm is thinking of hedging the risk considering two methods i.e. fixed forward or option contracts.

It is now June 30. Following quotations regarding rates of exchange, US$ per Can$, from the firm's bank were obtained:

Spot	1 Month Forward	3 Months Forward
0.9284-0.9288	0.9301	0.9356

Price for a Can$ /US$ option on a U.S. stock exchange (cents per Can$, payable on purchase of the option, contract size Can$ 50000) are as follows:

Strike Price	**Calls**		**Puts**	
(US$/Can$)	July	Sept.	July	Sept.
0.93	1.56	2.56	0.88	1.75
0.94	1.02	NA	NA	NA
0.95	0.65	1.64	1.92	2.34

According to the suggestion of finance manager if options are to be used, one month option should be bought at a strike price of 94 cents and three month option at a strike price of 95 cents and for the remainder uncovered by the options the firm would bear the risk itself. For this, it would use forward rate as the best estimate of spot. Transaction costs are ignored.

RECOMMEND, which of the above two methods would be appropriate for the American firm to hedge its foreign exchange risk on the two interest payments. **(8 Marks)**

(b) The following are the data on five mutual funds:

Fund	**Return**	**Standard Deviation**	**Beta**
A	18	5	1.25
B	12	7	0.75
C	15	10	1.40
D	14	9	0.98
E	19	6	1.50

COMPUTE Reward to Volatility Ratio and rank these portfolios using:

- Sharpe method and
- Treynor's method

Assume the risk free rate is 9%. **(8 Marks)**

(c) **EXPLAIN** briefly Securitization instruments. **(4 Marks)**

5. (a) The total market value of the equity share of A.B.C. Company is ₹ 80,00,000 and the total value of the debt is ₹ 20,00,000. The treasurer estimate that the beta of the stock is currently 1.5 and that the expected risk premium on the market is 8 per cent. The treasury bill rate is 6 per cent.

Required:

(i) **CALCULATE** the beta of the Company's existing portfolio of assets?

(ii) **ESTIMATE** the Company's Cost of capital and the discount rate for an expansion of the company's present business. **(8 Marks)**

(b) Derivative Bank entered into a plain vanilla swap through on OIS (Overnight Index Swap) on a principal of ₹ 10 crores and agreed to receive MIBOR overnight floating rate for a fixed payment on the principal. The swap was entered into on Monday, 2nd August, 2010 and was to commence on 3rd August, 2010 and run for a period of 7 days.

Respective MIBOR rates for Tuesday to Monday were:

8.15%, 8.12%, 7.95%, 7.75%, 8.15%, 7.98%

CALCULATE Fixed rate and interest under both legs if Derivative Bank received ₹ 423 net on settlement.

Notes:

(i) Sunday is Holiday. Consider 365 days a year.

(ii) Work in rounded rupees and avoid decimal working. **(8 Marks)**

(c) "Securitisation is the process of repackaging or rebundling of illiquid assets into marketable securities". **EXPLAIN**. **(4 Marks)**

6. (a) The equity shares of XYZ Ltd. are currently being traded at ₹ 30 per share in the market. XYZ Ltd. has total 10,00,000 equity shares outstanding in number; and promoters' equity holding in the company is 50%.

PQR Ltd. wishes to acquire XYZ Ltd. because of likely synergies. The estimated present value of these synergies is ₹ 100,00,000.

Further PQR feels that management of XYZ Ltd. has been over paid. With better motivation, lower salaries and fewer perks for the top management, will lead to savings of ₹ 5,00,000 p.a. Top management with their families are promoters of XYZ Ltd. Present value of these savings would add ₹ 32,00,000 in value to the acquisition.

Following additional information is available regarding PQR Ltd.:

Earnings per share	: ₹ 5
Total number of equity shares outstanding	: 20,00,000
Market price of equity share	: ₹ 50

(i) **CALCULATE** the maximum price per equity share which PQR Ltd. can offer to pay for XYZ Ltd.?

(ii) **CALCULATE** the minimum price per equity share at which the management of XYZ Ltd. will be willing to offer their controlling interest? **(8 Marks)**

(b) (i) The following data relate to X Ltd.'s share price:

Current price per share	₹ 2000
3 months future's price/share	₹ 2250

Assuming it is possible to borrow money in the market for transactions in securities at 6% per annum, you are required to:

(1) **CALCULATE** the theoretical minimum price of a 6-months forward purchase; and

(2) **EXPLAIN** arbitrate opportunity. **(4 Marks)**

(ii)

BSE	10000
Value of portfolio	₹ 12,00,000
Risk free interest rate	10% p.a.
Dividend yield on Index	5% p.a.
Beta of portfolio	1.70

We assume that a future contract on the BSE index with six months maturity is used to hedge the value of portfolio over next five months. One future contract is for delivery of 50 times the index.

Based on the above information **CALCULATE:**

(1) Price of future contract.

(2) The gain on short futures position if index turns out to be 8,500 in three months.

(4 Marks)

(c) **EXPLAIN** necessary conditions of Commodity Derivatives. **(4 Marks)**