Test Series: March 2022

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

 (a) An American firm is under obligation to pay interests of Can\$ 1010000 and Can\$ 705000 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		Put	ts
(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.

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.

Note: Ignore transaction costs.

(10 Marks)

(b) SAM Ltd. has just paid a dividend of ₹ 2 per share and it is expected to grow @ 6% p.a. After paying dividend, the Board declared to take up a project by retaining the next three annual dividends. It is expected that this project is of same risk as the existing projects. The results of this project will start coming from the 4th year onward from now. The dividends will then be ₹ 2.50 per share and will grow @ 7% p.a.

An investor has 1,000 shares in SAM Ltd. and wants a receipt of at least ₹ 2,000 p.a. from this investment.

ANALYSE:

- (i) Whether the market value of the share is affected by the decision of the Board or not.
- (ii) How the investor can maintain his target receipt from the investment for first 3 years and improved income thereafter, given that the cost of capital of the firm is 8%. (6 Marks)
- (c) **EXPLAIN** the features of Value at Risk (VaR).

(4 Marks)

2. (a) Following information are available in respect of XYZ Ltd. which is expected to grow at a higher rate for 4 years after which growth rate will stabilize at a lower level:

Base year information:

 Revenue
 - ₹ 2,000 crores

 EBIT
 - ₹ 300 crores

 Capital expenditure
 - ₹ 280 crores

 Depreciation
 - ₹ 200 crores

Information for high growth and stable growth period are as follows:

	High Growth	Stable Growth
Growth in Revenue & EBIT	20%	10%
Growth in capital expenditure and depreciation	20%	Capital expenditure are offset by depreciation
Risk free rate	10%	9%
Equity beta	1.15	1
Market risk premium	6%	5%
Pre tax cost of debt	13%	12.86%
Debt equity ratio	1:1	2:3

For all time, working capital is 25% of revenue and corporate tax rate is 30%.

EVALUATE the value of the firm.

(10 Marks)

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

Shares	No. of shares (lakh)	Price per share	Beta
A Ltd.	3.00	₹ 500	1.40
B Ltd.	4.00	₹ 750	1.20
C Ltd.	2.00	₹ 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 to take appropriate position on Nifty Futures which are currently traded at 8125 and each Nifty points is worth ₹ 200.

DETERMINE:

- (i) the number of Nifty contracts to be bought/sold; and
- (ii) the value of portfolio beta for 2% rise in Nifty.

(6 Marks)

(c) **EXPLAIN** the conditions that need to be met for considering an entity to be called as a Startup.

(4 Marks)

3. (a) Mr. A will need ₹ 1,00,000 after two years for which he wants to make one time necessary investment now. He has a choice of two types of bonds. Their details are as below:

		Bond X	Bond Y
Face value		₹ 1,000	₹ 1,000
Coupon		7% payable annually	8% payable annually
Years to maturity		1	1 4
Current price	J	₹ 972.73	, ₹ 936.52
Current yield	U	10%	10%

ADVICE Mr. A whether he should invest all his money in one type of bond or he should buy both the bonds and, if so, in which quantity? (8 Marks)

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

Company	No. of Shares	1 st February 2012 Market price per share ₹	2 nd February 2012 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

Additional information:

- (1) Total No. of Units 6,00,000.
- (2) One investor Mr. A, submits a cheque of ₹ 30,00,000 to the Mutual Fund on 1st February 2012 and the Fund manager of this fund 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?

CALCULATE the Net Assets Value (NAV) per unit of the Fund on 1st February and 2nd February 2012. (8 Marks)

- (c) Often, a conflict can arise if growth objectives are not consistent with the value of the organization's sustainable growth. **EXPLAIN**. (4 Marks)
- 4. (a) Your banker who is also a dealer in foreign exchange have the following position in Swiss Francs on 31st October, 2009:

	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

ADVISE the steps should be taken, if bank is 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) Mr. A is interested to invest ₹ 1,00,000 in the securities market. He selected two securities B and D for this purpose. The risk return profile of these securities are as follows:

Security	Risk (σ)	Expected Return (ER)
В	10%	12%
D	18%	20%

Co-efficient of correlation between B and D is 0.15.

CALCULATE the portfolio return of the following portfolios of B and D to be considered by A for his investment.

- (i) 100 percent investment in B only;
- (ii) 50 percent of the fund in B and the rest 50 percent in D;

- (iii) 75 percent of the fund in B and the rest 25 percent in D; and
- (iv) 100 percent investment in D only.

Also ADVISE that which portfolio is best for him from risk as well as return point of view?

(8 Marks)

(c) "Angel Investors provide more favourable terms than other lenders". **EXPLAIN.**

(4 Marks)

5. (a) A has portfolio having following features:

Security	β	Random Error $\sigma_{e_{i}}$	Weight
L	1.60	7	0.25
M	1.15	11	0.30
N	1.40	3	0.25
K	1.00	9	0.20

ANALYSE the risk of the portfolio if the standard deviation of the market index (σ_m) is 18%.

(8 Marks)

(b) A textile manufacturer has taken floating interest rate loan of ₹ 40,00,000 on 1st April, 2012. The rate of interest at the inception of loan is 8.5% p.a. interest is to be paid every year on 31st March, and the duration of loan is four years. In the month of October 2012, the Central bank of the country releases following projections about the interest rates likely to prevail in future.

Dates	Interest Rate
31st March, 2013	8.75%
31st March, 2014	10.00%
31st March, 2015	10.50%
31st March, 2016	7.75%.

- (i) **ADVISE** how borrower can hedge the risk arising out of expected rise in the rate of interest when he is interested in pegging his interest cost at 8.50% p.a. and if option on Interest Rate is available at 0.75% p.a.
- (ii) Assume that the premium negotiated by both the parties at the above-mentioned rate which is to be paid on upfront basis and the actual rate of interest on the respective due dates happens to be as follows:

Dates	Interest Rate
31st March, 2013	10.20%
31st March, 2014	11.50%
31st March, 2015	9.25%
31st March, 2016	8.25%.

EVALUATE how the settlement will be executed on the respective interest due dates. (8 Marks)

(c) "Besides the primary participants other parties are also involved in the process of Securitisation". **EXPLAIN**.

OR _

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

6. (a) The CEO of a company thinks that shareholders always look for EPS. Therefore, he considers maximization of EPS as his company's objective. His company's current Net Profits are ₹ 80.00 lakhs and P/E multiple is 10.5. He wants to buy another firm which has current income of ₹ 15.75 lakhs & P/E multiple of 10. The current market price of both the acquirer and the target company are ₹ 42 and ₹ 105 respectively.

ADVISE:

- (i) The maximum exchange ratio which the CEO should offer so that he could keep EPS at the current level.
- (ii) Cash that CEO should offer to buy out the Target Company by paying cash so that he could maintain its current EPS. The CEO can borrow funds at 15%.

Assume tax rate of 30%. (8 Marks)

(b) You as an investor had purchased a 4 month call option on the equity shares of X Ltd. of ₹ 10, of which the current market price is ₹ 132 and the exercise price ₹ 150. You expect the price to range between ₹ 120 to ₹ 190. The expected share price of X Ltd. and related probability is given below:

Expected Price (₹)	120	140	160	180	190
Probability	0.05	0.20	0.50	0.10	0.15

COMPUTE:

- (i) Expected Share price at the end of 4 months.
- (ii) Value of Call Option at the end of 4 months, if the exercise price prevails.
- (iii) In case the option is held to its maturity, what will be the expected value of the call option?

(8 Marks)

(c) "Commodity swaps are characterized by some peculiarities". **EXPLAIN.** (4 Marks)