Test Series: October 2021

MOCK TEST PAPER 1

FINAL (OLD) COURSE: GROUP – I

PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT

*Question No. **1** is compulsory. Attempt any **five** questions from the remaining **six** questions.*

Working notes should form part of the answer.

Time Allowed – 3 Hours **Maximum Marks – 100**

1. (a) Two companies ABC Ltd. and XYZ Ltd. approach the DEF Bank for FRA (Forward Rate Agreement). Both companies want to borrow a sum of ₹ 100 crores after 2 years for a period of 1 year. Bank has calculated Yield Curve of both companies as follows:

Year	XYZ Ltd.	ABC Ltd.
1	3.86	4.12
2	4.20	5.48
3	4.48	5.78

Required:

(i) Identify at least one reason for difference in the Yield Curve for the companies.

(ii) Calculate the rate of interest DEF Bank would quote under 2V3 FRA, using the company's yield information as quoted above.

(iii) Suppose bank offers Interest Rate Guarantee for a premium of 0.1% of the amount of loan, calculate the interest payable by XYZ Ltd. if interest rate in 2 years turns out to be

(1) 4.50%

(2) 5.50% **(5 Marks)**

(b) CMT Pension Fund has a portfolio of shares of diversified companies valued at ₹ 800 crore enters into a swap arrangement with Boom Bank on the terms that it will get 1.15% quarterly on notional principal of ₹ 800 crore in exchange of return on portfolio which is exactly tracking the Sensex which is presently 43,200.

You are required to determine the net payment to be received/ paid if Sensex turns out to be 43,720, 43,560, 44,160 and 43,920 at the end of each quarter.

Note: Make calculations in ₹ Crore and round off calculations upto 4 decimal points. **(5 Marks)**

(c) Shanti exported 200 pieces of a designer jewellery to USA at $ 200 each. To manufacture and design this jewellery she imported raw material from Japan of the cost of JP¥ 6000 for each piece.

The labour cost and variable overhead incurred in producing each piece of jewellery are ₹ 1,300 and ₹ 650 respectively.

Suppose Spot Rates are:

₹/ US$	₹ 65.00 – ₹ 66.00
JP¥/ US$	JP¥ 115 – JP¥ 120

Shanti is expecting that by the time the export remittance is received and payment of import is made the expected Spot Rates are likely to be as follows:

₹/ US$ ₹ 68.90 – ₹ 69.25

JP¥/ US$ JP¥ 105 – JP¥ 112

You are required to calculate the resultant transaction exposure. **(5 Marks)**

(d) Rahim Enterprises is a manufacturer and exporter of woolen garments to European countries. Their business is expanding day by day and in the previous financial year the company has registered a 25% growth in export business. The company is in the process of considering a new investment project. It is an all equity financed company with 10,00,000 equity shares of face value of ₹ 50 per share. The current issue price of this share is ₹ 125 ex-divided. Annual earning are ₹ 25 per share and in the absence of new investments will remain constant in perpetuity. All earnings are distributed at present. A new investment is available which will cost ₹ 1,75,00,000 in one year's time and will produce annual cash inflows thereafter of ₹ 50,00,000. Analyse the effect of the new project on dividend payments and the share price. **(5 Marks)**

2. (a) Intel Ltd., promoted by a Trans National Company, is listed on the stock exchange holding 80%.

The value of the floating stock is ₹ 45 crores. The Market Price per Share (MPS) is ₹ 150.

The capitalisation rate is 20%.

The promoters holding is to be restricted to 75% as per the norms of listing requirement. The Board of Directors have decided to fall in line to restrict the Promoters' holding to 75% by issuing Bonus Shares to minority shareholders while maintaining the same Price Earnings Ratio (P/E).

You are required to calculate:

(i) Bonus Ratio;

(ii) MPS after issue of Bonus Shares; and

(iii) Free float Market capitalisation after issue of Bonus Shares. **(8 Marks)**

(b) An investor is considering purchasing the equity shares of LX Ltd., whose current market price (CMP) is 150. The company is proposing a dividend of ₹ 6 for the next year. LX is expected to grow @ 18% per annum for the next four years. The growth will decline linearly to 14% per annum after first four years. Thereafter, it will stabilize at 14% per annum infinitely. The required rate of return is 18% per annum.

You are required to determine:

(i) The intrinsic value of one share

(ii) Whether it is worth to purchase the share at this price

t	1	2	3	4	5	6	7	8
PVIF (18, t)	0.847	0.718	0.609	0.516	0.437	0.370	0.314	0.266

(8 Marks)

3. (a) M is interested to construct a Portfolio of Securities A and B. He has collected the following information:

	A	**B**
Expected Return (ER)	19%	23%
Risk (σ)	14%	18%

M has 4 Portfolio options of A and B as follows:

(i) 50% of funds in each A and B

(ii) 75% of funds in A and 25% in B

(iii) 25% of funds in A and 75% in B

(iv) 60% of funds in A and 40% in B

Co-efficient of correlation (r) between A and B is 0.16. You are required to calculate:

(i) Expected Return under different Portfolio Options.

(ii) Risk Factor associated with these Portfolio Options.

(iii) Which Portfolio is best from the point of view of Risk?

(iv) Which Portfolio is best from the point of view of Return? **(10 Marks)**

(b) Fair finance, a leasing company, has been approached by a prospective customer intending to acquire a machine whose Cash Down price is ₹ 3 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3 : 2 : 1.

Depreciation can be assumed to be on straight line basis and Fair Finance's marginal tax rate is 35%. The target rate of return for Fair Finance on the transaction is 10%.

Required:

Calculate the lease rents to be quoted for the lease for three years. **(6 Marks)**

4. (a) The total market value of the equity share of O.R.E. Company is ₹ 60,00,000 and the total value of the debt is ₹ 40,00,000. The treasurer estimate that the beta of the stock is currently 1.5 and that the expected market return is 16 per cent. The treasury bill rate is 8 per cent.

Required:

(i) What is 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 if same is to be financed by equity only. **(6 Marks)**

(b) Z has to remit USD $1,00,000 for her daughter's education on 4th April 2021. Accordingly, she has booked a forward contract with his bank on 4th January 2021 @ ₹ 73.8775. The Bank has covered its position in the market @ ₹ 73.7575.

The exchange rates for USD $ in the interbank market on 4th, 7th and 14th April 2021 were:

	4th April ₹	7th April ₹	14th April ₹
Spot USD 1=	73.2775/73.2975	73.1575/73.1975	73.1375/73.1775
Spot/March	73.3975/73.4275	73.2775/73.3275	73.2575/73.3075
April	73.5275/73.5675	73.4075/73.4650	73.3875/73.4475
May	73.7775/73.8250	73.6575/73.7275	73.6375/73.7050
June	74.0700/74.1325	73.9575/74.0675	73.9500/74.0525

Exchange margin of 0.10 percent and interest outlay of funds @ 12 percent are applicable. The remitter, due to rescheduling of the semester, has requested on 14th April 2021 for extension of contract with due date on 14th June 2021.

Calculate:

(i) Cancellation Rate;

(ii) Amount Payable on $ 100,000;

(iii) Swap loss;

(iv) Interest on outlay of funds, if any;

(v) New Contract Rate; and

(vi) Total Cost

Note: Rates must be rounded to 4 decimal places in multiples of 0.0025 and assume 365 days in a year. **(10 Marks)**

5. (a) XY Ltd., a Cement manufacturing Company has hired you as a financial consultant of the company. The Cement Industry has been very stable for some time and the cement companies SK Ltd. & AS Ltd. are similar in size and have similar product market mix characteristic. Use comparable method to value the equity of XY Ltd. In performing analysis, use the following ratios:

(i) Market to book value

(ii) Market to replacement cost

(iii) Market to sales

(iv) Market to Net Income

The following data are available for your analysis:

(Amount in ₹)

	SK Ltd.	AS Ltd.	XY Ltd.
Market Value	450	400	
Book Value	400	300	250
Replacement Cost	600	550	500
Sales	550	450	500
Net Income	18	16	14

(8 Marks)

(b) Ms. Sunidhi is working with an MNC at Mumbai. She is well versant with the portfolio management techniques and wants to test one of the techniques on an equity fund she has constructed and compare the gains and losses from the technique with those from a passive buy and hold strategy. The fund consists of equities only and the ending NAVs of the fund he constructed for the last 8 months are given below:

Month Ending	NAV (₹/unit)	Month Ending	NAV (₹/unit)
December 2018	40.00	April 2019	38.00
January 2019	25.00	May 2019	37.00
February 2019	36.00	June 2019	42.00
March 2019	32.00	July 2019	43.00

Assume Sunidhi has an amount of ₹ 20 lakhs for investment and she has invested equally in the equity fund and a conservative portfolio (of bonds) in the beginning of December 2018 and the total portfolio was being rebalanced each time the NAV of the fund increased or decreased by 15%.

You are required to determine the value of the portfolio for each level of NAV following the Constant Ratio Plan.

Note: Rounded off number of units upto 2 decimal points only. **(8 Marks)**

6. (a) PQ Ltd., is planning to acquire and absorb the running business of LM Ltd. The valuation is to be based on the recommendation of merchant bankers and the consideration is to be discharged in the form of equity shares to be issued by PQ Ltd. As on 31.3.2021, the paid up capital of PQ Ltd. consists of 80 lakhs shares of ₹ 10 each. The highest and the lowest market quotation during the last 6 months were ₹ 855 and ₹ 645. For the purpose of the exchange, the price per share is to be reckoned as the average of the highest and lowest market price during the last 6 months ended on 31.3.21.

LM Ltd.'s Balance Sheet as at 31.3.2021 is summarised below:

	₹ lakhs
Sources	
Share Capital	
30 lakhs equity shares of ₹10 each fully paid	300
15 lakhs equity shares of ₹10 each, ₹ 5 paid	75
Loans	150
Total	525
Uses	
Fixed Assets (Net)	225
Net Current Assets	300
	525

An independent firm of merchant bankers engaged for the negotiation, have produced the following estimates of cash flows from the business of LM Ltd.:

Year ended	By way of	₹ lakhs
31.3.22	after tax earnings for equity	157.50
31.3.23	do	180
31.3.24	Do	187.50
31.3.25	Do	180
31.3.26	Do	150
	Terminal Value estimate	300

It is the recommendation of the merchant banker that the business of LM Ltd. may be valued on the basis of the average of (1) Aggregate of discounted cash flows at 8% and (2) Net assets value. You are required to:

(i) Calculate the total value of the business of LM Ltd.

(ii) The number of shares to be issued by PQ Ltd.; and

(iii) The basis of allocation of the shares among the shareholders of LM Ltd.

Use following Present value factors at 8% for years

Year	1	2	3	4	5
PVF	0.926	0.857	0.794	0.735	0.681

Note: Make calculation upto 3 decimal points. **(10 Marks)**

(b) IM is an American firm having its subsidiary in Japan and **JI** is a Japanese firm having its subsidiary in USA: They face the following interest rates

	IM	**JI**
USD Floating rate	LIBOR+0.5%	LIBOR+2.5%
JPY Fixed rate	4%	4.25%

IM wishes to borrow USD at floating rate and JI in JPY at fixed rate. The amount required by both the companies is same at the current Exchange Rate. A financial institution requires 75 basis points as commission for arranging Swap. The companies agree to share the benefit/ loss equally.

You are required to find out

(i) Whether a beneficial swap can be arranged?

(ii) What rate of interest for both IM and JI? **(6 Marks)**

7. Write short notes on any **four** of following:

(a) Key decisions falling within the scope of Financial Strategy **(4 Marks)**

(b) Buy-outs in context of Mergers and Acquisitions **(4 Marks)**

(c) Steps involved in Simulation Analysis **(4 Marks)**

(d) Greeks in context of options **(4 Marks)**

(e) Limitations of Credit Rating **(4 Marks)**