



FINAL – May 2019

Strategic Financial Management Prelims (Test Code – F N J 5 1 0 5)

Roll No.-

Total No. of Question – 7

Time Allowed – 3 Hours

Total No. of Printed Pages – 4

Total Marks –100

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi medium, his answers in Hindi will not be valued.

Question No. 1 is compulsory.

Attempt any FIVE questions from the remaining SIX questions.

Wherever necessary suitable assumptions may be made and disclosed by way of a note.

Working Notes should form part of the answer.

Q. 1. Answer the Following:

(a) Mahesh Ltd has just paid out `5 as Dividend to its Shareholders. The past dividend trend of the Company indicates that the dividend outgo increases by 10% p.a. The Company foresees this growth rate for the next 2 years, after which the dividend outgo will increase by 12% p.a. for 3 years and thereafter, 12.50% for 2 years. After that point in time it is expected that annual increase in dividend will be fixed at 11% p.a.

If the expected rate of return is 17.50% p.a, ascertain the Theoretical Market Price of the Share, assuming dividend outgo is the sole determinant of the Market Value.

(6 Marks)

(b) A Company is long on 10 MT of Copper at `474 per kg (Spot) and intends to remain so for the ensuing quarter. The Standard Deviation of changes of its Spot and Future Prices are 4% and 6% respectively, having correlation co-efficient of 0.75.

What is its Hedge Ratio? What is the amount of the Copper Future it should short to achieve a Perfect Hedge?

(4 Marks)

(c) Maharashtra Road Corporation is planning to issue a Bond Series on the following terms — (a) Face Value-`100 (b) Term of Maturity 10 Years

Yearly Coupon Rate

Years	1-4	5-8	9-10
Return in %	9%	10%	14%

The Current Market Rate on similar Debentures is 15% p.a. The Corporation proposes to price the issue in such a manner that it can yield 16% Compounded Rate of Return to the Investors. The Corporation also proposes to redeem the Debentures at 5% premium on maturity. Determine the Issue Price of the Debentures.

(d) The October Pepper future traded at 17.50, the October 18.00 call at 0.45 and the October 18.00 put at 0.58. Both are options on the October future. Find out whether any arbitrage opportunity exists.

(2×5= 20 Marks)

Q. 2. Answer the Following:

(a) Based on the following information, determine the NAV of a regular income scheme on per unit basis - (` Crores)

Listed Shares at Cost (ex-dividend) (`)	20.00	Expenditure Accrued (`)	0.75
Cash in Hand (`)	1.23	Number of units (`10 Face Value)	20 Lakhs
Bonds and Debentures at Cost (`)	4.30	Current Realizable Value of Fixed Income Securities of Face Value	106.50

		of 100 (₹)	
Of these, Bonds not listed and quoted (₹)	1.00	The Listed Shares were purchased when Index was	1,000
Other Fixed Interest Securities at Cost (₹)	4.50	Present Index is	2,300
Dividend Accrued (₹)	0.80	Value of Listed Bonds and Debentures at NAV date (₹)	8.00
Amount Payable on Shares (₹)	6.32		

There has been a diminution of 20% in Unlisted Bonds and Debentures. Other Fixed Interest Securities are at cost.

(10 Marks)

- (b) You sold Hong Kong Dollar 1,00,00,000 value spot to your customer at ₹ 5.70 and covered yourself in London Market on the same day, when the Exchange Rates were – US \$ 1 = HK \$ 7.5880 – 7.5920

Local Inter-Bank Market Rates for US \$ were – Spot US \$ = ₹42.70 – 42.85

Calculate Cover Rate and ascertain the Profit or Loss in the transaction. Ignore Brokerage.

(6 Marks)

Q. 3. Answer the Following:

- (a) A Company is considering the replacement of its existing machine with a new one. The Written Down Value of the Existing Machine is ₹50,000 and its Cash Salvage Value is ₹20,000. The removal of this Machine would cost ₹5,000 by way of Labour Charges, etc.

The Purchase Price of the New Machine is ₹20 Lakhs and its Expected Life is 10 years. The Company follows straight-line method of depreciation without considering Scrap Value. The other expenses associated with the New Machine are -

1. Carriage Inward and Installation Charges ₹15,000
2. Cost of training workers to handle the New Machine ₹5,000
3. Additional Working Capital ₹10,000 (which is assumed to be received back by Sale of Scraps in last year), and
4. Fees already paid to a Consultant for his advice to buy the New Machine ₹10,000.

The Annual Savings (before tax) from the New Machine would amount to ₹2,00,000. Income Tax Rate is 50%. The Company's required Rate of Return is 10%. Evaluate the proposal.

(10 Marks)

- (b) DELTA 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 DELTA 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

Which one of the following options would be better?

1. Pay the Supplier on 60th day and avail Bank Loan for 30 days
2. Avail the Supplier's offer of 90 days credit.

(6 Marks)

Q. 4. Answer the Following:

- (a) Reliable Industries Ltd (RIL) is considering a takeover of Sunflower Industries Ltd. (SIL). The particulars of the two Companies are given below —

	RIL	SIL
Earning After Tax (EAT)	₹ 20,00,000	₹ 10,00,000
Equity Shares Outstanding	10,00,000	10,00,000
Earnings Per Share (EPS)	₹ 2	₹ 1
PE Ratio (Times)	10	5

Required —

1. What is the Market Value of each Company before merger?

2. Assume that the Management of RIL estimates that the Shareholders of SIL will accept an offer of one share of RIL of four shares of SIL. If there are no synergic effects, what is the Market Value of the Post-Merger RIL? What is the New Price per Share? Are the Shareholders of RIL better or worse off than they were before the merger?
3. Due to synergic effects, the Management of RIL estimates that the earnings will increase by 20%. What is the new Post-Merger EPS and Price per Share? Will the Shareholders be better off or worse off than before the merger?

(12 Marks)

- (b)** M/s Parker & Company is contemplating to borrow an amount of `60 Crores for a period of 3 months in the coming 6 month's time from now. The current rate of Interest is 9% p.a. but it may go up in 6 months' time. The Company wants to hedge itself against the likely increase in Interest Rate. The Company' Bankers quoted an FRA (Forward Rate Agreement) at 9.30% p.a.

What will be the effect of FRA and actual rate of Interest Cost to the Company, if the actual rate of Interest after 6 months happens to be (i) 9.60% p.a. and (ii) 8.80% p.a.?

(4 Marks)

Q. 5. Answer the Following:

- (a)** A Money Market Instrument with face value of `100 and Discount Yield of 6% will mature in 45 days. Taking 1 year = 360 days, calculate - (a) Current Price of the Instrument, (b) Bond Equivalent Yield, and (c) Effective Annual Return.

(6 Marks)

- (b)** The following are the Returns of Share S and the Market (M) for the last 6 years—

Years	Return S (%)	Return M (%)	Years	Return S (%)	Return M (%)	Years	Return S (%)	Return M (%)
1	18	15	3	20	16	5	5	4
2	9	7	4	-10	-13	6	12	7

1. Calculate the covariance and correlation co-efficient of Returns.
2. Determine the Beta co-efficient for S.
3. What is S's Total Risk?
4. How much is Systematic Risk?

(10 Marks)

Q. 6. Answer the Following:

- (a)** The Price of Infosys Stock of a Face Value of `10 on 31st December was `350 and the Futures Price on the Same Stock on the same date i.e. 31stDecember for March (next year) was `370. Other features of the Contract are as -
- Time to expiration 3 months (0.25 year)
 - Annual Dividend on the Stock of 30% payable before 31stMarch.
 - Borrowing Rate is 20% p.a.

Based on the above information, calculate Future Price for Infosys stock on 31stDecember. Also explain whether any arbitrage opportunity exists.

$$e^{0.2 \times \frac{3}{12}} = 1.0513$$

(6 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 to 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)

- (c)** Shares of Pranav Ltd are being quoted at `500. 3-Months Futures Contract Rate is `520 per Share for a lot size of 500 shares. If Pranav Ltd is not expected to distribute any Dividend in the interim, what is the recommended course of action for a trader in shares (Risk Free Rate being 9%)?

If the 3-Months Futures Contract Rate is `500, what should be the action?

$$e^{0.09 \times \frac{3}{12}} = 1.02276$$

(4 Marks)

Q. 7. Answer the Following: (Attempt Any Four)

- (a)** What are the differences between Bills Discounting and Factoring?
- (b)** What are the major contents of a Project Report?
- (c)** List the arguments criticizing Efficient Market Theory.
- (d)** Explain different between Sharpe Ratio and Treynor Ratio.
- (e)** What are the advantages and disadvantages of Dividend Discount Model (DDM) or Dividend Valuation Model (DVM)?

(4 × 4 = 16 Marks)

*Suggested answers of this paper will be available on our website www.jkshahclasses.com