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Question Paper		
Strategic Financial Management	Duration: 180	
Details: Full Test	Marks: 100	

#### Instructions:

- All the questions are compulsory
- Properly mention test number and page number on your answer sheet, Try to upload sheets in arranged manner.
- In case of multiple choice questions, mention option number only Working notes are compulsory wherever required in support of your solution
- Do not copy any solution from any material. Attempt as much as you know to fairly judge your performance.
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### Question No. 1 is compulsory.

# Candidates are also required to answer any four questions from the remaining five questions

## Working notes should from part of the respective answer

## **Q-1 (a)** You are a Derivative expert.

## Details of your Purchase:

- 4 month call option on the equity shares of X Ltd. of ₹ 10
- Current market price is ₹ 132
- Exercise price ₹150.
- You expect the price to range between ₹120 to ₹190.

The expected share price of X Ltd. and related probability			
Expected	Probability %		
120	5%		
140 Achieving Exc	cellence Together 20%		
160	50%		
180	10%		
190	15%		
	100%		

#### Compute the followings:

- 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 options is held to its maturity, what will be the expected value of the call options?

(8 marks)

- **(b)** K Ltd. currently operates from 4 different buildings and wants to consolidate its operations into one building which is expected to cost Rs 90 crores. The Board of K Ltd. had approved the above plan and to fund the above cost, agreed to avail an External Commercial Borrowing (ECB) of GBP 10 m from G Bank Ltd. on the following conditions:
  - The Loan will be availed on 1st April, 2019 with interest payable on half yearly rest.
  - Average Loan Maturity life will be 3.4 years with an overall tenure of 5 years.
  - Upfront Fee of 1.20%.
  - Interest Cost is GBP 6 months LIBOR + Margin of 2.50%.
  - The 6 month LIBOR is expected to be 1.05%.

K Ltd. also entered into a GBP-INR hedge at 1 GBP = INR 90 to cover the exposure on account of the above ECB Loan and the cost of the hedge is coming to 4.00% p.a.

As a Finance Manager, given the above information and taking the 1 GBP = INR 90:

- i. Calculate the overall cost both in percentage and rupee terms on an annual basis.
- **ii.** What is the cost of hedging in rupee terms?
- iii. If K Ltd. wants to pursue an aggressive approach, what would be the net gain/loss for K Ltd. if the INR depreciates/appreciates against GBP by 10% at the end of the 5years assuming that the loan is repaid in GBP at the end of 5 years?

Ignore time value and taxes and calculate to two decimals.

(8 marks)

(c) Briefly explain Counter Party Risk and the various techniques to manage this risk			
	(4 marks)		
Q-2 (a) You are an expert of Foreign exchange market. Compute to	the Profit/ Loss the		
company will make if it hedges its foreign exchange risk:			
i. If the exchange rate on September 30,2008 is ₹ 42 per US	\$		
ii. If the exchange rate on September 30, 2008 is ₹ 38 per US	5\$		
A company is considering hedging its foreign exchange risk. It has made	le a purchase on 1 <sup>st</sup> ,		
January, 2008 for which it has to make a payment of :			
US \$ 50,000 on September 30, 2008.	43		
The present exchange rate is 1 US \$ = ₹ 40.	3		
THE SHOW	7		
It can purchase forward 1 US \$ at ₹ 39.			
The company will have to make a upfront premium of 2% of the forwar	- 		
company will have to make a upfront premium of 2% of the forward am	ount purchased.		
The cost of funds to the company is 10% per annum and the rate of c	orporate tax is 50%.		
Ignore taxation.  Achieving Excellence Together			
	(6 marks)		
(b) (i) You are a CA in RBei and you have issued Bond 5 Years and now	You want to call the		
bond. Details Given below.			
Calling Bond Amount = ₹ 3 crores			
Time= 30 years			

FV= ₹ 1000

Bond issued 5 years ago with a coupon of 14%	
Call price	₹ 1,140
Initially collected proceeds of crores	₹ 2.91
Discount	₹ 30 per bond
Initial floating cost was	₹ 3,60,000.00

The company intends to sell ₹ 3 crores of 12 percent coupon rate, 25 years bonds to raise funds for retiring the old bonds. It proposes to sell the new bonds at their per value of ₹ 1000. The estimated floatation cost is ₹ 4,00,000. The company is paying 40% tax and its after tax cost of debt is 8 per cent. As the new bonds must first be sold and their proceeds, then used to retire old bonds, the company expects a two months period of overlapping interest during which interest must be paid on both the old and new bonds. What is the feasibility of refunding bonds?

**(b) (ii)** Mr. KK purchased a 3-month call option for 100 shares in PQR Ltd. at a premium of Rs 40 per share, with an exercise price of Rs 560. He also purchased a 3-month put option for 100 shares of the same company at a premium of Rs 10 per share with an exercise price of Rs 460. The market price of the share on the date of Mr. KK's purchase of options, is Rs 500. Compute the profit or loss that Mr. KK would make assuming that the market price falls to Rs 360 at the end of 3 months.

(6 + 4 marks)

(c) Explain the various indicators that can be used to assess the performance of an economy.

(4 marks)

**Q-3 (a)** You have to invest in RBei LTD and for that you need to do its pricing. You will be given following Details:

- Reported earnings per share of 4.5 in 2005 with beta of 2
- Paid dividends per share 1.65
- Earnings are expected to grow 50% a year from 2005 to 2010
- After 2010, the earnings growth rate is expected to drop to a stable 8% and the payout ratio is expected to increase to 85% of earnings with beta of 1.50
- The market risk premium is 6%. The treasury bond rate is 5.75%

#### Calculate the following:

- i. What is the expected price of the stock at the end of 2010?
- ii. What is the value of the stock using the two stage dividend discount model?

(8 marks)

#### (b) Your objective is to maximize EPS.

Existing Company			
Net Profit  Achieving Excellence To	80,00,000		
P/E	10.5		
Current MRP	42		
New Firm U want to buy			
Net Profit	15,75,000		
P/E	10		
Current MRP	105		

What is the maximum exchange ratio which you should offer to keep EPS at current level. If you borrow money at 15% and buy target company by paying cash. How much should you offer to maintain EPS. Tax=30%

(8 marks)

**(c)** What are the reasons for stock index futures becoming more popular financial derivatives over stock futures segment in India?

(4 marks)

**Q-4 (a)** You are a business Analyst and in your office there is surplus funds to the extent of \$ USD 5,00,000/- for a period of 3 months.

The following rates of interest are available at the three centres for investment of domestic funds there at for a period of 3 months.

London		5% p.a.
New York		8% p.a.
Frankfurt	Achieving Exce	llence Together 3% p.a.

The cost of the funds to the bank is 4% p.a. it proposes to invest these funds in London, New York or Frankfurt and obtain the best yield without any exchange risk to the bank.

The market rates in London for US dollars and EURO are as under:

	London on New York	London on Frankfurt
Spot	1.5350 / 90	1.8260 / 90

1 month	15/18	60/55
2 month	30/35	95/90
3 month	80/85	145/140

At which centre will be investment be made & what will be the net gain (to the nearest pound) to the bank on the invested funds?

(8 marks)

**(b)** An established company is going to be demerged in two separate entities. The valuation of the company is done by a well-known analyst. He has estimated a value of Rs 5,000 lakhs, based on the expected free cash flow for next year of Rs 200 lakhs and an expected growth rate of 5%.

While going through the valuation procedure, it was found that the analyst has made the mistake of using the book values of debt and equity in his calculation.

While you do not know the book value weights he used, you have been provided with the following information:

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- i) The market value of equity is 4 times the book value of equity, while the market value of debt is equal to the book value of debt,
- ii) Company has a cost of equity of 12%,
- iii) After tax cost of debt is 6%.

You are required to advise the correct value of the company.

(8 marks)

(c) During a year the price of British Gilts (face value £100) rose from £105 to £110, while Paying a coupon of £8. At the same time the exchange rate moved from \$/£ of 1.80 to 1.70. What is the total return to an investor in USA who invested in this security?

(4 marks)

**Q-5 (a)** You are a portfolio manager and your client has two portfolios Alpha and Beta known to be on minimum variance set for a population of three securities Ril, Infy and TCS having below mentioned investment:

Shares	Portfolio Alpha	Portfolio Beta
RIL	30%	20%
Infy	40%	50%
TCS	30%	30%
	100%	100%

It is supposed that there are no restrictions on short sales.

- (i) What would be the weight for each stock for a portfolio constructed by investing 5,000 in portfolio Alpha and ₹3,000 in portfolio Beta?
- (ii) Suppose the investor invests 5000 out of 10000 in security RIL, how he will allocate the balances between Infy and TCS to ensure that his portfolio is on minimum variance set?

(8 marks)

(b) The 3 months forward rate us presently quoted as 3.3 yen per rupee. You are required to calculate the expected loss and to show how it can be hedged by a forward contract. It is anticipated that the exchange rate will decline by 10% over the 3 months period and in order to protect the yen payments, the importer proposes to take appropriate action in the foreign exchange market.

You are a CA of a company operating in Japan has today effected sales to an Indian Company, the payment being due 3 months from the date of invoice.

The invoice amount is 108 lakh yen.

At todays spot rate, it is equivalent to ₹ 30 lakh.

(6 marks)

- (c) Kotak Exa Life fund raised ₹150 lakhs on April 1
  - Issued of 15 lakh units at ₹ 10 per unit.
  - The fund invested in several capital market instruments to build a portfolio of ₹ 140 lakhs.
  - Initial expense amounted to ₹8 lakhs.
  - During the month of April, the fund sold certain securities costing ₹44.75 lakhs for ₹
    47 lakhs.
  - Purchased certain other securities for ₹ 41.6 lakhs.
  - The fund management expenses for the month amounted to ₹6 lakhs of which ₹50,000 was in arrears.
  - The market value of the portfolio on 30<sup>th</sup> April was ₹ 147.85 lakhs.
  - The fund earned dividends amounting to Rs 1.5 lakhs and it distributed 80% of the realized earnings.
  - An investors subscribed to 1000 units on April 1 and disposed it off at closing NAV on 30<sup>th</sup> April.

Determine his annual rate of earning.

**Q-6 (a)** Mr. Kapoor owns a portfolio with the following characteristics:

	Security X	Security Y	Risk Free Security
Factor 1 sensitivity	0.75	1.50	0
Factor 2 sensitivity	0.60	1.10	0
Expected Return	15%	20%	10%

It is assumed that security returns are generated by a two factor model.

- i. If Mr. Kapoor has Rs 1,00,000 to invest and sells short Rs 50,000 of security Y and purchases Rs1,50,000 of security X, what is the sensitivity of Mr. Kapoor's portfolio to the two factors?
- ii. If Mr. Kapoor borrows Rs 1,00,000 at the risk free rate and invests the amount he borrows along with the original amount of Rs 1,00,000 in security X and Y in the same proportion as described in part (i), what is the sensitivity of the portfolio to the two factors?
- iii. What is the expected return premium of factor 2?

(8 marks)

**(b)** As per the SEBI guidelines promoters have to restrict their holding to 75% to avoid delisting from the stock exchange. Board of directors has decided not to delist the share but to comply with the SEBI guidelines by issuing Bonus shares to minority shareholders while maintaining the same P/E ratio.

RBei Group is working in educational industry globally and mentoring students for CFA and FRM is promoted by a Multinational group "ABC" is listed on stock exchange holding 84% i.e. 63 lakhs shares. Profit after Tax is ₹4.80 crores Free Float Market Capitalization is ₹19.20 crores

#### Calculate

- i. P/E Ratio
- ii. Bonus Ratio
- iii. Market price of share before and after the issue of bonus shares
- iv. Free Float Market capitalization of the company after the bonus shares.

(8 marks)

**(c)** Compare and contrast start-ups and entrepreneurship. Describe the priorities and challenges which start-ups in India are facing.

(4 marks)

