

TOPICS: FULL STRATEGIC FINANCIAL MANAGEMENT

QUESTION 1 IS COMPULSORY. ATTEMPT ANY FOUR OUT OF FIVE QUESTIONS.

QUESTION 1(A)

(8 MARKS)

Sensex futures are traded at a multiple of 50. Consider the following quotations of Sensex futures in the 10 trading days during February, 2009:

Day	High	Low	Closing
4-2-09	3306.4	3290.00	3296.50
5-2-09	3298.00	3262.50	3294.40
6-2-09	3256.20	3227.00	3230.40
7-2-09	3233.00	3201.50	3212.30
10-2-09	3281.50	3256.00	3267.50
11-2-09	3283.50	3260.00	3263.80
12-2-09	3315.00	3286.30	3292.00
14-2-09	3315.00	3257.10	3309.30
17-2-09	3278.00	3249.50	3257.80
18-2-09	3118.00	3091.40	3102.60

Abhishek bought one sensex futures contract on February, 04. The average daily absolute change in the value of contract is Rs. 10,000 and standard deviation of these changes is Rs. 2,000. The maintenance margin is 75% of initial margin.

You are required to determine the daily balances in the margin account and payment on margin calls, if any.

QUESTION 1(B)

(8 MARKS)

Mr. John established the following spread on the TTK Ltd.'s stock:

1. Purchased one 3-month put option with a premium of Rs. 15 and an exercise price of Rs. 900.
2. Purchased one 3-month call option with a premium of Rs. 90 and an exercise price of Rs. 1100.

TTK Ltd.'s stock is currently selling) at Rs. 1000.

Calculate gain or loss, if the price of stock of TTK Ltd. –

- (i) Remains at Rs. 1000 after 3 months.
- (ii) Falls to Rs. 700 after 3 months.
- (iii) Raises to Rs. 1200 after 3 months.

Assume the size of option is 200 shares of TTK Ltd.

QUESTION 1(C)

(4 MARKS)

State the important features of National Pension Scheme (NPS).

QUESTION 2(A)**(8 MARKS)**

ABB Ltd. has a surplus cash balance of Rs. 180 lakhs and wants to distribute 50% of it to the equity shareholders. The company decides to buyback equity shares. The company estimates that its equity share price after re-purchase is likely to be 15% above the buyback price. if the buyback route is taken.

Other information is as under:

1. Number of equity shares outstanding at present (Face value Rs. 10 each) is Rs. 20lakhs.
2. The current EPS is Rs.5.

You are required to calculate the following:

- I. The price at which the equity shares can be re-purchased, if market capitalization of the company should be Rs. 400 lakhs after buy back.
- II. Number of equity shares that can be re-purchased.
- III. The impact of equity shares re-purchase on the EPS, assuming that the net income remains unchanged.

QUESTION 2(B)**(8 MARKS)**

ABC Ltd. is considering a project in US, which will involve an initial investment of US \$ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is Rs. 48 per US \$. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project is as follows:

Year	Cash inflow
1	US \$ 20,00,000
2	US \$ 25,00,000
3	US \$ 30,00,000
4	US \$ 40,00,000
5	US \$ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

QUESTION 2(C)**(4 MARKS)**

List the main applications of Value At Risk (VAR).

QUESTION 3(A)**(8 MARKS)**

Following are the details of a portfolio consisting of 3 shares:

Shares	Portfolio Weight	Beta	Expected Return (%)	Total Variance
X Ltd.	0.3	0.50	15	0.020
Y Ltd.	0.5	0.60	16	0.010
Z Ltd.	0.2	1.20	20	0.120

Standard Deviation of Market Portfolio Return =12% .

You are required to calculate the following:

- (i) The Portfolio Beta.
- (ii) Residual Variance of each of the three shares.
- (iii) Portfolio Variance using Sharpe Index Model.

QUESTION 3(B)**(8 MARKS)**

A hypothetical company ABC Ltd. issued a 10% Debenture (Face Value of Rs. 1000) of the duration of 10 years is currently trading at Rs. 850 per debenture. The bond is convertible into 50 equity shares being currently quoted at Rs. 17 per share.

If yield on equivalent comparable bond is 11.80%, then calculate the spread of yield of the above bond from this comparable bond.

The relevant present value table is as follows.

Present Values	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10
PVIF _{0.11, t}	0.901	0.812	0.731	0.659	0.593	0.535	0.482	0.434	0.391	0.352
PVIF _{0.13 t}	0.885	0.783	0.693	0.613	0.543	0.480	0.425	0.376	0.333	0.295

QUESTION 3(C)**(4 MARKS)**

Briefly discuss the concept of Purchasing Power Parity.

QUESTION 4(A)**(8 MARKS)**

A valuation done of an established company by a well-known analyst has estimated a value of Rs. 500 lakhs, based on the expected free cash flow for next year of Rs. 20 lakhs and an expected growth rate of 5%.

While going through the valuation procedure, you 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:

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

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

QUESTION 4(B)**(8 MARKS)**

Sun Limited, an Indian company will need \$ 5,00,000 in 90 days. In this connection, following information is given below:

Spot Rate - \$1 = Rs. 71

90 days forward rate of \$1 as of today = Rs. 73

Interest Rates are as follows:

Particulars	US	India
90 days Deposit Rate	2.50%	4.00%
90 days Borrowing Rate	4.00%	6.00%

A call option on \$ that expires in 90 days has an exercise price of Rs. 74 and a premium of Re. 0.10. Sun Limited has forecasted the spot rates for 90 days as below:

Future Rate	Probability
Rs. 72.50	25%
Rs. 73.00	50%
Rs. 74.50	25%

Which of the following strategies would be the most preferable to Sun Limited:

- (i) A Forward Contract;
- (ii) A Money Market hedge;
- (iii) An Option Contract;
- (iv) No Hedging.

Show your calculations in each case.

QUESTION 4(C)

(4 MARKS)

Explain briefly the sources for funding a Start-up.

QUESTION 5(A)

(8 MARKS)

On 1st January 2019 Global Ltd., an exporter entered into a forward contract with BBC Bank to sell US\$ 2,00,000 on 31st March 2019 at Rs. 71.50/\$. However, due to the request of the importer, Global Ltd. received the amount on 28 February 2019. Global Ltd. requested the Bank to take delivery of the remittance on 2nd March 2019. The Inter- banking rates on 28th February were as follows:

Spot Rate	Rs. 71.20/71.25
One month premium	5/10

If Bank agrees to take early delivery then what will be the net inflow to Global Ltd. assuming that the prevailing prime lending rate is 15%. Assume 365 days in a year.

QUESTION 5(B)

(8 MARKS)

On 1st April 2009 Fair Return Mutual Fund has the following assets and prices at 4.00 p.m.

Shares	No. of Shares	Market Price Per Share (Rs.)
A Ltd.	10000	19.70
B Ltd.	50000	482.60
C Ltd.	10000	264.40
D Ltd.	100000	674.90
E Ltd.	30000	25.90
No. of units of funds		8, 00,000

Please calculate:

- (a) NAV of the Fund on 1st April 2009.
- (b) Assuming that on 1st April 2009, Mr. X, a HNI, send a cheque of Rs. 50,00,000 to the Fund and Fund Manager immediately purchases 18000 shares of C Ltd. and balance is held in bank. Then what will be position of fund.
- (c) Now suppose on 2 April 2009 at 4.00 p.m. the market price of shares is as follows:

Shares	Rs.
A Ltd.	20.30
B Ltd.	513.70
C Ltd.	290.80
D Ltd.	671.90
E Ltd.	44.20

Then what will be new NAV?

QUESTION 5(C)**(4 MARKS)**

Explain briefly the parameters to identify the currency risk.

QUESTION 6(A)**(8 MARKS)**

A Mutual Fund Company introduces two schemes - Dividend Plan and Bonus Plan. The face value of the Unit is Rs.10 on 1-4-2014. Mr. R invested Rs. 5 lakh in Dividend Plan and Rs. 10 lakh in Bonus Plan. The NAV of Dividend Plan is Rs. 46 and NAV of Bonus Plan is Rs. 42. Both the plans matured on 31-03-2019. The particulars of Dividend and Bonus declared over the period are as follows:

Date	Dividend %	Bonus Ratio	NAV of Dividend Plan	NAV of Bonus Plan
			(Rs.)	(Rs.)
31-12-2014	12%	-	47.0	42.0
30-09-2015	-	1 : 4	48.0	43.0
31-03-2016	15%	-	49.5	41.5
30-09-2017	-	1 : 6	50.0	44.0
31-03-2018	10%	-	48.0	43.5
31-03-2019	-	-	49.0	44.0

You are required to calculate the effective yield per annum in respect of the above two plans.

QUESTION 6(B)**(8 MARKS)**

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:

- Calculate the overall cost both in percentage and rupee terms on an annual basis.
- What is the cost of hedging in rupee terms?
- 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 5 years assuming that the loan is repaid in GBP at the end of 5 years?

Ignore time value and taxes and calculate to two decimals.

QUESTION 6(C)**(4 MARKS)**

Explain the benefits of Securitization from the point of view of originator.

QUESTION 6(C)**(4 MARKS)**

Briefly explain the steps involved in Mechanism of Securitization.