Paper 14: Advance Financial Management

Answer Question No.1 which is compulsory

Total Allowed: 3hours **Full Marks: 100**

1.

(a) State the objective and functions of State Co-operative Bank. **[3]**

(b) What makes Commodity Trading attractive? **[3]**

(c) An extract from exchange rate list of a Mumbai based bank is given below :

₹/$: 62.30: 64.25

(i) How many $ will it cost for a foreign tourist visiting India to purchase ₹9,345 worth of painting?

(ii) How much will Mr. Nitesh in Mumbai have to spend in rupees, to purchase a Sony Camcorder worth $ 325? **[5]**

(d) If the risk free rate of interest (R_f) is 10%, and expected return on market portfolio (R_m) is 15%, ascertain expected return of the portfolio if portfolio betas are — (i) 0.10 and (ii) 0.30. **[4]**

(e) What are the differences between Factoring and Securitisation? **[5]**

Section A

(Answer any two of the following)

2.

(a) Explain the responsibilities of the NBFCs accepting public deposits with regard to submission of returns and other information to RBI.

(b) Explain the function of Forward market commission of India. **[6+6]**

3.

(a) Explain the silent features and advantages of commercial paper.

(b) Ram invested in a Mutual Fund when the Net Asset Value was ₹12.65. 60 Days later the Asset Value per unit of the fund was ₹12.25. In the meantime, Ram had received a cash dividend of ₹0.50 and a Capital Gain distribution of ₹0.30. Compute the monthly return. **[7+5]**

4.

(a) Today is 24th March. A refinery needs 1,050 barrels of crude oil in the month of September. The current price of crude oil is ₹3,000 per barrel. September futures contract at Multi Commodity Exchange (MCX) is trading at ₹3,200. The firm expects the price to go up further and beyond ₹3,200 in September. It has the option of buying the stock now. Alternatively it can hedge through futures contract.

I. If the cost of capital, insurance, and storage is 15% per annum, examine if it is beneficial for the firm to buy now?

II. Instead, if the upper limit to buying price is ₹3,200 what strategy can the firm adopt?

III. If the firm decides to hedge through futures, find out the effective price it would pay for crude oil if at the time of lifting the hedge (I) the spot and futures price are ₹2,900 and ₹2,910 respectively, (II) the spot and futures price are ₹3,300 and ₹3,315 respectively.

(b) What are the differences between Capital Market and Money Market? **[7+5]**

Section – B
(Answer any one of the following)

5.

(a) Explain the advantages & disadvantages of Book Building process.

(b) Ranbir has ₹60 Lakhs in hand. He is contemplating investment in the shares of Super Star Accessories Ltd (SSA) which is being traded at ₹ 200 per share.

Ranbir expects a dividend declaration of ₹37 per share 3 months hence and a market price of ₹185 per share at the end of the year, at which Ranbir plans to sell of all his holdings.

If the discount rate is 12% p.a., what will be the course of action if Ranbir discounts his cash flows under continuous compounding approach and monthly discounting approach?

(c) A sold in June Nifty futures contract for ₹3,60,000 on June 15, For this he had paid an initial margin of ₹34,000 to his broker. Each Nifty futures contract is for the delivery of 200 Nifties. On June 25, the index was closed on 1850. How much profit / loss A has made?

(d) Your Company has to make a US $ 1 Million payment in three month's time. The dollars are available now. You decide to invest them for three months and you are given the following information.

- The US deposit rate is 8% p.a.
- The sterling deposit rate is 10% p.a.
- The spot exchange rate is $ 1.80 / pound.
- The three month forward rate is $ 1.78/ pound.

I. Where should your company invest for better results?

II. Assuming that the interest rates and the spot exchange rate remain as above, what forward rate would yield an equilibrium situation?

III. Assuming that the US interest rate and the spot and forward rates remain as in the original question, where would you invest if the sterling deposit rate were 14% per annum?

IV. With the originally stated spot and forward rates and the same dollar deposit rate, what is the equilibrium sterling deposit rate? **[5+5+5+5]**

6.

(a) What are currency futures? List the steps involved in the technique of hedging through futures.

(b) Following information relates to Upkar Ltd, which manufactures some parts of an electronics device which are exported to USA, Japan and Europe on 90 days credit terms.

Cost and Sales information —

Particulars	Japan	USA	Europe
Variable Cost per Unit	₹ 225	₹ 395	₹ 510
Export sale price per Unit	Yen 650	US$10.23	Euro 11.99
Receipts from sale due in 90 Days	Yen 78,00,000	US S 1,02,300	Euro 95,920

Foreign exchange rate information

Particulars	Yen/₹	US$/₹	Euro/₹
Spot Market	2.417-2.437	0.0214-0.0217	0.0177- 0.0180
3-Months Forward	2.397-2.427	0.0213 - 0.0216	0.0176 - 0.0178
3 months spot	2.423-2.459	0.02144 - 0.02156	0.0177- 0.0179

Advice Upkar Ltd by calculating average contribution to sales ratio whether it should hedge it's foreign currency risk or not.

(c) Given the following information—

BSE Index	50,000
Value of Portfolio	₹1,01,00,000
Risk Free Interest Rate	9% p.a.
Dividend Yield on Index	6% p.a.
Beta of Portfolio	2.0

We assume that a futures contract on the BSE index with 4 months maturity is used to hedge the value of portfolio over next 3 months. One future contract is for delivery of times the index. Based on the information, Calculate — (i) Price of future contract, (ii) The gain on short futures position if index turns out to be 45,000 in 3 months. **[5+10+5]**

Section C

(Answer any one of the following)

7.

(a) An investor has two portfolios known to be on minimum variance set for a population of three securities R, S and T below mentioned weights —

	W_R	W_S	W_T
Portfolio X	0.30	0.40	0.30
Portfolio Y	0.20	0.50	0.30

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 ₹6,000 in Portfolio X and ₹4,000 in Portfolio Y?

II. Suppose the investor invests ₹5,000 out ₹10,000 in Security R. How he will allocate the balance between security S and T to ensure that his portfolio is on minimum variance set?

(b) The risk free return is 8 per cent and the return on market portfolio is 14 per cent. If the last dividend on Share 'A' was ₹2.00 and assuming that its dividend and earnings are expected to grow at the constant rate of 5 per cent. The beta of share 'A' is 2.50. Compute the intrinsic value of share A. **[8+8]**

8.

(a) A Company has a choice of investments between several different Equity Oriented Funds. The Company has an amount of ₹1 Crore to invest. The details of the mutual funds are as follows -

Mutual Funds	M	N	O	P	Q
Beta	1.7	1.0	0.9	2.1	0.7

Required:

I. If the Company invests 20% of its investments in the first two mutual funds, and an equal amount in the mutual funds O, P and Q what is beta of the portfolio?

II. If the company invests 15% of its investments in O, 15% in M, 10% in Q and the balance in equal amount in the other two mutual funds, what is the beta of the portfolio?

III. If the expected return of the market portfolio is 14% at a beta factor of 1.0, what will be the portfolios' expected return in both the situations given above?

(b)

I. Calculate the market sensitivity index, and the expected return on the Portfolio from the following data;

Standard deviation of an asset	4.5%

Market standard deviation	4.0%
Risk - free rate of return	15.0%
Expected return on market Portfolio	17.0%
Correlation coefficient of Portfolio with market	0.89

II. What will be the expected return on the Portfolio? If Portfolio beta is 0.5 and the risk free return is 10%. **[8+8]**

Section D

(Answer any one of the following)

9.

(a) A firm has an investment proposal, requiring an outlay of ₹ 80,000. The investment proposal is expected to have two years economic life with no salvage value. In year 1, there is a 0.4 probability that cash inflow after tax will be ₹ 50,000 and 0.6 probability that cash inflow after tax will be ₹ 60,000. The probability assigned to cash inflow after tax for the year 2 are as follows:

The cash inflow year 1	₹ 50,000		₹ 60,000	
The cash inflow year 2	Probability		Probability	
	₹ 24,000	0.2	₹ 40,000	0.4
	₹ 32,000	0.3	₹ 50,000	0.5
	₹ 44,000	0.5	₹ 60,000	0.1

The firm uses a 8% discount rate for this type of investment.

Required:

I. Construct a decision tree for the proposed investment project and calculate the expected net present value (NPV).

II. What net present value will the project yield, if worst outcome is realized? What is the probability of occurrence of this NPV?

III. What will be the best outcome and the probability of that occurrence?

IV. Will the project be accepted?

(Note: 8% discount factor 1 year 0.9259; 2 year 0.8573)

(b) A limited company operates a lodging house with a restaurant, shops and recreational facilities attached. Its manager has entrusted you with the planning of the coming year's operations, more particularly on the level of profits the company was likely to earn. The lodging house has 100 double-bed rooms, which are likely to be rented at ₹ 150 per day. The manager expects an occupancy ratio of 70% for a period of 250 days during the tourist season. It is also anticipated that both the beds in a room will be occupied during the period. Each person staying in the lodging house is expected to spend, on the basis

of past statistics, ₹ 30 per day in the shops attached to the lodge and ₹ 60 per day in the restaurant. The recreational facilities are not charged to the customer.

Some other relevant data available to you is as under:

I. Variable cost to volume ratio:

	Shops	Restaurant
Cost of goods sold	40%	30%
Supplies	5%	15%
Others	5%	10%

II. For the lodging house, the variable costs are ₹ 25 per day per occupied room for cleaning, laundry etc.

III. Annual fixed costs for the entire complex are ₹ 19,50,000.

From the above, you are required to prepare:

A. an income statement for the coming year; and

B. B. an analysis to indicate whether the manager's suggestion of reducing the room rent to ₹120 per day to enhance the occupancy ratio to 80% should be accepted.

[10+10]

10.

(a) Write down the steps in financial planning process? Define cross border leasing. Mention the objectives of cross border leasing.

(b) The R & G Co. has following capital structure at 31st March 2013, which is considered to be optimum -

Particulars	Amount in ₹
13% Debentures	3,60,000
11% Preference share Capital	1,20,000
Equity Share Capital (2,00,000 Shares)	19,20,000

The Company's Share has a current Market Price of ₹27.75 per Share. The expected Dividend per Share in the next year is 50 percent of the 2008 EPS. The EPS of last 10 years is as follows. The past trends are expected to continue -

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
EPS(₹)	1.00	1.120	1.254	1.405	1.574	1.762	1.974	2.211	2.476	2.773

The company can Issue 14 percent New Debenture. The Company's Debenture is currently selling at ₹98. The New Preference Issue can be sold at a net price of ₹9.80,

paying a dividend of ₹1.20 per share. The Company's marginal tax rate is 50%.

I. Calculate the After Tax Cost (i) of new Debt and new Preference Share Capital, (ii) of ordinary Equity, assuming new Equity comes from Retained Earnings.

II. Calculate the Marginal Cost of Capital.

III. How much can be spent for Capital Investment before new ordinary share must be sold? Assuming that retained earnings available for next year's Investment are 50% of 2004 earnings.

IV. What will be Marginal Cost of Capital(cost of fund raised in excess of the amount calculated in part (3) if the Company can sell new ordinary shares to net ₹20 per share? The cost of Debt and of Preference Capital is constant. **[10+10]**