Paper 14: Advance Financial Management

**Total Allowed: 3hours** 

Full Marks: 100

Answer Question No.1 which is compulsory

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Full Marks: 100

1.

- a) Explain the term 'inter corporate Deposits' & 'Public Deposits'.
- b) In the inter-bank market, the DM is quoting ₹21.50. If the bank changes 0.125s% commission for TT selling and 0.15% for TT buying, what rate should it quote?
- c) The exchange rate for Mexican peso was 0.1086 in December 2012 and 0.0913 in November 2012, against dollar. Which currency has depreciated and by how much?
- d) A stock costing ₹120pays no dividends. The possible prices that the Stock might sell for at the end of the year with the respective probabilities are given below. Compute the Expected Return and its standard Deviation.

Price	115	120	125	130	135	140
Probability	0.1	0.1	0.2	0.3	0.2	0.1

e) Company Bedi is forced to choose between two machines A and B. The machines are designed differently, but have identical capacity and do exactly the same job. Machine A costs ₹1, 50,000 and will last for 3 years. It costs ₹40,000 per year to run. Machine B is an 'economy' model costing only ₹1, 00,000, but will last only for 2 years, and costs ₹60,000 per year to run. These are real cash flows. The costs are forecasted in rupees of constant purchasing power. Ignore tax. Opportunity cost of capital is 10 per cent. Which machine Company X should buy?

# [(3+3) +2+3+4+5]

# Section A

# (Answer any two of the following)

2.

- a) Briefly explain the salient feature of non-recourse project financing.
- b) An investor purchased 300 units of a Mutual Fund at ₹12.25 per unit on 31<sup>st</sup> December, 2010. As on 31<sup>st</sup> December, 2011 he has received ₹1.25 as dividend and ₹1.00 as capital gains distribution per unit. Required:
  - i) The return on the investment if the NAV as on 31<sup>st</sup> December, 2011 is ₹13.00.
  - ii) The return on the investment as on 31<sup>st</sup> December,2011 if all dividends and capital gains distributions are reinvested into additional units of the fund at ₹12.50 per unit.

## [6+6=12]

3.

a) A Mutual Fund Co. has the following assets under it on the close of business as on:

-		0		
	Company	No. of Shares	1 <sup>st</sup> February 2012	2 <sup>nd</sup> February 2012
			Market price per	Market Price per
			share ₹	share ₹

# P14\_Practice Test Paper\_Syl12\_Dec13\_Set 3

L Ltd	20,000	20.00	20.50
M Ltd	30,000	312.40	360.00
N Ltd	20,000	361.20	383.10
P Ltd	60,000	505.10	503.90

Total No. of Units 6, 00,000

- i) Calculate Net Assets Value (NAV) of the Fund.
- ii) Following information is given: Assuming one Mr. A, submits a cheque of ₹30, 00,000 to the Mutual Fund and the Fund manager of this company purchases 8,000 shares of M Ltd; and the balance amount is held in Bank. In such a case, what would be the position of the Fund?
- iii) Find new NAV of the fund as on 2<sup>nd</sup> February 2012.
- **b)** An aggressive mutual fund promises an expected return of 18 per cent with a possible volatility (standard deviation) of 20%. On the other hand, a conservative mutual fund promises an expected return of 17 per cent and volatility of 19%.
  - i) Which fund would you like to invest in?
  - ii) Would you like to invest in both if you have money?
  - iii) Assuming you can borrow money from your provident fund at an opportunity cost of 10%, which fund you would invest your money in?
    - iv) Would you consider both funds if you could lend or borrow money at 10%?

[8+4=12]

- 4. Write short notes three of the following
  - i) Multi-Commodity Exchange of India Limited (MCX)
  - ii) Project financing versus Capital Financing
  - iii) Repo and Reverse Repo
  - iv) Liquidity Adjustment Facility (LAF)

[3×4=12]

#### Section – B (Answer any one of the following)

5.

a) A USA based company is planning to set up a software development unit in India. Software development at the India unit will be bought back by the US parent at a transfer price of US \$ 10 million. The unit will remain in existence in India for one year; the software is expected to get developed within this time frame.

The US based company will be subject to corporate tax of 30per cent and a withholding tax of 10% in India and will not be eligible for tax credit in the US. The software developed will be sold in the US market for US \$ 12.0 million. Other estimates are as follows:

Rent for fully furnished unit with necessary hard ware in India	₹15,00,000
Man power cost (80 software professional will be working for 10 hours each day)	₹400 per man hour
Administrative and other costs	₹12,00,000

Advise the US Company on financial viability of the project. The rupee-dollar rate rate is  $\neq 48/$ .

- **b)** 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?
- c) Describe the role of hedging as foreign exchange risk management.

[10+5+5=20]

- **a)** Make a critical assessment of WTO's contributions to world trade.
- **b)** An Indian exporting firm, Rohit and Bros., would be covering itself against a likely depreciation of pound sterling. The following data is given:

Receivables of Rohit and Bros	£ 5, 00,000
Spot rate	₹56.00/£
Payment date	3 months
3 months interest rate	India: 12% per annum
	UK : 5% per annum

c) Write the limitation of credit rating.

[5+10+5=20]

#### Section C

#### (Answer any one of the following)

7.

6.

**a)** Mr. Tamarind intends to invest in equity shares of a company the value of which depends upon various parameters as mentioned below:

Factor	Beta	Expected value in $\%$	Actual value in %
GNP	1.20	7.70	7.70
Inflation	1.75	5.50	7.00
Interest rate	1.30	7.75	9.00
Stock market index	1.70	10.00	12.00
Industrial production	1.00	7.00	7.50

If the risk free rate of interest be 9.25%, how much is the return of the share under Arbitrage Pricing Theory?

**b)** The stock research division of MMG Investment Ltd. Has developed ex-ante probability distribution for the likely economic scenarios over the next one-year and estimates the corresponding one period rates of return on stock A, Stock B and Market index as follows:

Economic Scenario	Probability	One period rate of return (%		ırn (%)
		Stock A	Stock B	Market

# P14\_Practice Test Paper\_Syl12\_Dec13\_Set 3

Recession	0.15	-15	-3	-10
Low growth	0.25	10	7	13
Medium growth	0.45	25	15	18
High growth	0.15	40	25	32

The expected risk-free real rate of return and the premium for inflation are 3% and 6.5% per annum respectively.

You, as an ANALYST of MMG investment service Ltd. Are required to:

i) calculate the following for Stock A and B:

- a. expected return
- b. Covariance of returns with the market returns.
- c. Beta (a)
- ii) Recommend for fresh investment in any of these two stocks.

------ show all the necessary calculations.

## [4+12=16]

8. You are running a portfolio management business and have assembled the following portfolio for client A.

Scrip	Value	Beta
Infosys	₹5 lakhs	1.21
Hind. Lever	₹8 lakhs	0.97
Hind. Lever	₹5 lakhs	1.09
Reliance	₹5 lakhs	1.09
Tata Motors	₹2 lakhs	1.32

Your client insists that the portfolio should comprise the above 4 scrips alone and that each scrip should be at least 10% of the total portfolio value. You project the Sensex which is currently 4200 to move to 4500 by the end of 3 months and to 4800 by the end of 6months.

- I. What will be the value of your portfolio at the end of 3 months and 6 months?
- II. What is the portfolio beta currently?
- III. What could you do to improve the portfolio performance given your view on the market?
- IV. If you do take such action, what will the portfolio value be after 3 months and after 6 months?
- V. What will be the portfolio beta in such a case?
- VI. At the end of 6 months, you believe that the bull market would have had its run and that the Sensex will now start moving down to around 4600 levels at the end of 9 months from now. How will you again restructure the portfolio at the end of 6 months from now?

## [2+2+4+2+2+4=16]

## Section D

## (Answer any one of the following)

**9.** Following are the estimates of the net cash flows and probability of a new project of M/s X Ltd.:

Particulars	Year	P = 0.3	P = 0.5	P = 0.2
Initial investment	0	4,00,000	4,00,000	4,00,000
Estimated net after tax cash inflows per				
year	1 to 5	1,00,000	1,10,000	1,20,000
Estimated salvage value (after tax)	5	20,000	50,000	60,000

Required rate of return from the project is 10%. Find:

- i) The expected NPV of the project.
- ii) The best case and the worst case NPVs.
- iii) The probability of occurrence of the worst case if the cash flows are: (a) perfectly dependent overtime, (b) independent overtime.
- iv) Standard deviation and coefficient of variation assuming that there are only three streams of cash flows, which are represented by each column of the table with the given probabilities.
- v) Coefficient of variation of X Ltd. on its average project which is in the range of 0.95 to 1.0. If the coefficient of variation of the project is found to be less riskier than average, 100 basis points are deducted from the Company's cost of capital

Should the project be accepted by X Ltd.?

[20]

## 10.

a) Sanshali textile has annual sales of ₹200 crores. About 80% of its sales is on gredit, and the average collection period is 90 days. The company's debts, as the past trend reveals, are around 0.9% of credit sales. The company's annual cost of administering credit sales is ₹75 lakhs. It is possible to save ₹55 lakhs, out of the bad debts and sales administering costs, if the company avails of full-factor service from a factoring company. The company has approached a factoring company and got the following terms:

Advance payment	: 80%
Discount Rate	: 14% p.a.
Commission for service	: 1.0% (to be paid upfront)

- i) What will be the effective cost of factoring on an annual basis (assume 360 day in a year)?
- ii) Sanshali textile can borrow the advance payment offered by the factoring company from a bank at 14% p.a. Should the company avail of the factoring service? Give reasons.
- **b)** Briefly explain forfeiting as means of financing export receivables.
- c) Explain the term Cross Border Leasing.

[8+8+4=20]