PAPER-14: Advanced Financial Management

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

This paper contains 5 questions. All questions are compulsory, subject to instruction provided against each question. All workings must form part of your answer.

Assumptions, if any, must be clearly indicated.

Question No. 1. (Answer **all** questions. Each question carries **2 marks**)

(a) Ashrin Ltd. has an EPS of ₹ 3 last year and it paid out 60% of its earnings as dividends that year. This growth rate in earnings and dividends in the long term is expected to be 6%. If the required rate of return on equity for Ashrin Ltd. is 14%. What would be its P/E ratio? **[2]**

(b) Define Non-financial Intermediaries? **[2]**

(c) The Beta co-efficient of equity stock of TECHBOARD LTD. is 1.6. The risk-free of return is 12% and the required rate of return is 18% on the market portfolio. If the dividend expected during the coming year is ₹2.50 and the growth rate of dividend and earnings is 8%, at what price the stock of Techboard Ltd. can be sold (based on the CAPM) ? **[2]**

(d) The current spot rate for the US$ is ₹ 50. The expected inflation rate is 6 per cent in India and 2.5 per cent in the US. What will be the expected spot rate of the US$ a year hence? **[2]**

(e) PNB Ltd. placed ₹52 Crores in overnight call with a foreign bank for a day in overnight call. The call ruled at 5.65% p.a. What is the amount it would receive from the foreign bank the next day? **[2]**

(f) The rates available in the Kolkata market are:

₹/$ Spot	46.75/78
£/$	0.5285/86

If an Indian Importer requires pounds, calculate the rate quoted to him. **[2]**

(g) What do you mean by viability gap funding? **[2]**

(h) Angel Ltd., an export customer who relied on the interbank rate of ₹/$ 46.50/10 requested his banker to purchase a bill for USD 80,000. What is the rate to be quoted to Angel Ltd. if the banker wants a margin of 0.08%? **[2]**

(i) TWO FIRMS Preeti Ltd and Mahati Ltd. are similar in all respects expect that Mahati Ltd. uses ₹ 10,00,000 debt in its capital structure. If the corporate tax rate for these firms is 40%. Calculate the value of Mahati Ltd. exceeds that of Preeti Ltd. **[2]**

(j) The stock of Anusa Ltd. has a beta of 0.95 and an expected return of 13.60 per cent. The market portfolio has an expected return of 14.00 per cent. Based on CAPM what would be the risk premium for Anusa Ltd.'s stock? **[2]**

Question No. 2. (Answer **any three** questions. Each question carries **8 marks**)

2.(a) (i) Are Secured debentures treated as Public Deposit? If not who regulates them? **[2]**

2.(a) (ii) What are the benefits of future trading? **[3]**

2.(a) (iii) Suppose a company issues a Commercial Paper as per the following details:

Date of Issue	17th January 2014
Date of Maturity	17th April 2014
No. of Days	90 days
Face Value	₹ 1000
Issue Price	₹ 985
Credit rating exp.	0.5% of the size of issue
IPA charges	0.35%
Stamp Duty	0.5%

What is the cost of the commercial paper? What is the yield to investor? **[2+1]**

2.(b) (i) State five important regulations prescribed by SEBI for the investments that can be made by a Mutual Fund. **[5]**

2.(b) (ii) The unit price of TSS Scheme of a mutual fund is ₹ 10. The public offer price (POP) of the unit is ₹ 10.204 and the redemption price is ₹ 9.80. Calculate: (1) Front-end Load, and (2) Back-end Load. **[$1^1/_2$+$1^1/_2$]**

2.(c) (i) Satendra invested ₹50000 in debt-oriented fund when the NAV was ₹16.10, and sold the units allotted when the NAV was ₹ 17.10 after one year. Assume that there existed an entry load of 2% and no exit load. He received ₹ 2 per unit as dividend which is taxable at 30% during the year. Ignore capital gains tax. What is the after tax rupee return from this investment? **[5]**

2.(c) (ii) NBFC are not being compulsorily registered with RBI. - Justify. **[3]**

2.(d) (i) Mr. S Ghosh had purchased 1000 units of a scheme of Birla MF at the rate of ₹60 per unit. He held the units for 2 years and got a dividend of 15% and 20% in the first year, and second year respectively on the face value of ₹10 per unit. At the end of the second year, the units are sold at the rate of ₹75 per unit. Determine the effective rate of return per year which Mr. Ghosh has earned on this MF scheme. **[5]**

2.(d) (ii) NBFCs lend and make investments and hence their activities are akin to that of banks. – State the differences. **[3]**

Question No. 3. (Answer **any two** questions. Each question carries **10 marks**)

3. (a) Company PQR and DEF have been offered the following rate per annum on a $ 200 million five year loan:

Company	Fixed Rate	Floating Rate
PQR	12.0	LIBOR+0.1%
DEF	13.4	LIBOR + 0.6%

Company PQR requires a floating - rate loan; Company DEF requires a fixed rate loan. Design a swap that will net a bank acting as intermediary at 0.5 percent per annum and be equally attractive to both the companies. **[10]**

3.(b) (i) ADS 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 ₹48 per US $.The risk free rate in US is 8% and the same in India is 12%. Cash inflows from the project are as follows-

Years	1	2	3	4	5
Cash Inflow(US $)	20,00,000	25,00,000	30,00,000	40,00,000	50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%. **[8]**

3.(b)(ii) How credit rating provides guidance to investors/creditors in determining a credit risk associated with a debt instrument? **[2]**

3.(c) (i) The following quotes are available.

Spot ($/Euro)	0.8385/0.8391
3-m swap points	20/30
Spot ($/Pound)	1.4548/1.4554
3-m swap points	35/25

Find the 3-m (€/£) outright forward rates. **[5]**

3.(c) (ii) What is a swap? Explain its necessity. Also state financial benefits created by swap transactions. **[2+2+1]**

Question No. 4. (Answer **any two** questions. Each question carries **8 marks**)

4.(a)(i) Explain the financial meaning of investment? **[4]**

4.(a)(ii) An investor is holding 1,000 shares of Dream Land Company. Presently the dividend being paid by the company is ₹2 per share and the share is being sold at ₹25 per share in the market.

However several factors are likely to change during the course of the year as indicated below —

	Risk Free Rate	Market Risk Premium	Beta Value	Expected Growth Rate
Existing	12%	6%	1.6	5%
Revised	10%	4%	1.45	9%

In view of the above factors whether the investor should buy, hold or sell the shares? Why? **[4]**

4 (b). Shah Ltd., has been specially formed to undertake two investment opportunities. The risk and return characteristics of the two projects are shown below:

Project	Expected Return	Risk
P	15%	3%
Q	22%	7%

Shah Ltd. plans to invest 80% of its available funds in project P and 20% in Q. The directors believe that the correlation co-efficient between the returns of the projects is +1.0.

Required—

(1) Calculate the returns from the proposed portfolio of Projects P and Q.

(2) Calculate the risk of the portfolio;

(3) Suppose the correlation coefficient between P and Q was -1. How should the company invest its funds in order to obtain zero risk portfolio. **[2+3+3]**

4.(c) (i) What are the techniques used in Industry Analysis? **[2]**

4.(c) (ii) There are two portfolios L and M. known to be on the minimum various set for a population of three securities A, B and C. The weights for each of the portfolios are given below:

	WA	WB	WC
Portfolio L	0.18	0.63	0.19
Portfolio M	0.24	0.60	0.16

Ascertain the stock weights for a portfolio made up with investment of ₹ 3,000 in L and ₹ 2,000 in M. **[4]**

4.(c) (iii) 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. **[2]**

Question No. 5. (Answer **any two** questions. Each question carries **10 marks**)

5. (a) (i). Company Z is forced to choose between two machines A and B. The two machines are designed differently, but have identical capacity and do exactly the same job.Machine A costs ₹150000 and will last for 3 years. It costd ₹40000 per year to run. Machine B is an economy model costing only ₹100000 but will last only for 2 years and costs ₹60000 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%. Which machine Company Z should buy? **[6]**

5 (a)(ii) Write a note on financial forecasting. **[4]**

5. (b) A company wish to acquire an asset costing ₹1,00,000. The company has an offer from a bank to lend @ 18%. The principal amount is repayable in 5 years end installments. A leasing Company has also submitted a proposal to the Company to acquire the asset on lease at yearly rentals of ₹ 280 per ₹ 1,000 of the assets value for 5 years payable at year end. The rate of depreciation of the asset allowable for tax purposes is 20% on W.D.V with no extra shift allowance. The salvage value of the asset at the end of 5 years period is estimated to be ₹1,000. Whether the Company should accept the proposal of Bank or leasing company, if the effective tax rate of the company is 50%? The Company discounts all its cash flows at 18%. **[10]**

5 (c). Khan 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:

(1) An income statement for the coming year; and

(2) 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. **[5+5]**