FINAL EXAMINATION

December 2014

F–P12(AFM)

Syllabus 2008

Financial Management & International Finance

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

Please (i) *Answer all parts of a question at one place.*

(ii) *Open a new page for answer to a new question.*

(iii) *Tick the question number answered on the front sheet of the answer-book.*

All workings must form part of your answer.

Assumptions, if any, must be clearly stated.

Answer question No. 1 *from Part A which is compulsory and* any five *questions from Part B.*

PART A (25 Marks)

1. (a) In each of the cases given below, one out of four answers is correct. Indicate the correct answer (= 1 mark) and give workings/reasons briefly in support of your answer (= 1 mark): 2×8=16

(i) MN Ltd. has earning before interest and taxes of ₹ 36 crores. The company has 7% debentures of ₹ 72 crores. Cost of equity is 12·5%. Ignore taxes. What is the overall cost of Capital?

(A) 11·26%

(B) 11·20%

(C) 11·50%

(D) 11·28%

(ii) R Ltd. earns ₹ 8 per share, has capitalisation rate of 10% and has a return on investment at the rate of 18%. According to Walter's Model, what should be the price per share at 28% dividend pay out ratio?

(A) ₹ 120

(B) ₹ 125

(C) ₹ 126·08

(D) ₹ 125·08

(iii) MAYANK Ltd. employs 12% as nominal required rate of return to evaluate its new investment projects. In the recent meeting of the Board of Directors, it has been decided to protect the interest of shareholders against purchasing power loss due to inflation. The expected inflation rate in the economy is 5%. What is the real discount rate?

(A) 6·67%

(B) 6%

(C) 5%

(D) 6·5

(iv) What is the opportunity cost of not taking a discount, when the credit terms are 1/15 net 30? Assume 1 year = 365 days.

(A) 29·58%

(B) 24·58%

(C) 24·65%

(D) 29·68%

(v) An Indian Company is planning to invest in the US. The rates of inflation are 8% in India and 3% in USA. If the spot rate is currently ₹ 60·50/$, what spot rate can you expect after 5 years, assuming the inflation rates will remain the same over 5 years?

(A) ₹ 76·68

(B) ₹ 75·90

(C) ₹ 74·00

(D) ₹ 76·10

(vi) Operating Leverage 2, Combined Leverage 5, Profit/volume ratio 40%, Tax rate 40%, Earnings after tax ₹ 7·20 lakhs. Calculate the percentage drop in Sales to make the EPS zero.

(A) 10%

(B) 15%

(C) 20%

(D) 12%

(vii) From the following quotes of a bank, determine the rate at which Yen can be purchased with Rupees.

₹/£ Sterling	75·31 – 33
£ Sterling/Dollar ($)	1·563 – 65
Dollar ($)/Yen (¥)	1·048/52 [per 100 Yen)

(A) ₹ 124·02

(B) ₹ 142·02

(C) ₹ 412·02

(D) ₹ 214·02

(viii) Spot (Euro/Pound) = 1·6543/1.6557

Spot (Pound/NZ $) = 0·2786/0.2800

What is the % Spread on the Euro/Pound rate?

(A) 0·085%

(B) 0·805%

(C) 0·508%

(D) 0·058%

(b) State if each of the following sentences are T (= true) or F (= false): 1×9=9

(i) The 'sale and lease back' is usually preferred by firms having fixed assets but shortage of funds.

(ii) WTO, governed by a ministerial conference, meets every three years.

(iii) The sensitivity analysis deals with the consideration of sensitivity of the NPV in relation to different variables contributing to the NPV.

(iv) PPP theory takes into account only the movement of goods and services and not that of capital.

(v) A call option is said to be 'in-the-money' if the stock price is more than the strike price.

(vi) Working capital leverage measures the responsiveness of ROCE for changes in current assets.

(vii) The maturity date of Commercial Paper (CP) should not exceed the date beyond the date upto which credit rating is valid.

(viii) In the case of independent projects, if the NPV of the project is zero, IRR is equal to cost of Capital.

(ix) Cash Value Added (CVA) is a measurement that finds the excess of Operating Cash Flow over the capital employed.

PART B (75 Marks for *any five* questions.)

2. (a) The turnover of X Ltd. is ₹ 72 lakhs of which 80% is on credit. Debtors are allowed one month to clear off the dues. A factor is willing to advance 90% of the bills raised on credit for a fee of 2% a month plus a commission of 4% on the total amount of debts. X Ltd. as a result of this arrangement is likely to save ₹ 25,920 annually in management costs and avoid bad debts at 1% on the credit sales.

A Nationalised Bank has come forward to make an advance equal to 90% of the debts at an interest rate of 18% p.a. However, its processing fee will be at 2% on the debts.

Would you accept factoring or the offer from the bank? 10

(b) Explain the steps involved in 'Decision Tree Approach' in investment decision. 5

3. (a) As the manager of a financial services company, you have received a proposal seeking a term loan of ₹ 300 lakhs, from a firm planning an investment in fixed assets of ₹ 500 lakhs in a new project. The loan is indicated to be repayable in three annual instalments commencing from the end of the 2nd year. The following information concerning the project is available:

	Year 1	Year 2	Year 3	Year 4
Gross Profit (Before depreciation)	75	100	150	150
Depreciation	50	45	40	35
Interest on:				
Term Loan	25	45	30	15
Working Capital borrowing	10	15	20	20
Provision for Tax	—	10	30	—

Assuming other techno-economic criteria to be satisfactory, you are required to:

(i) Compute any three ratios which, in your opinion, would guide the financing decision; and

(ii) Interpret briefly such ratios and give your views on the proposal.

(*Note:* Risk free rate on interest is 10% and Average Market Risk Premium 8%.)

(3+2+2) + (1+2)=10

(b) What do you understand by a Stable Dividend Policy? Why should it be followed? 2+3=5

4. (a) A manufacturing company is planning to install either of the following two machines which are mutually exclusive. The details of their purchase price and operating costs are as given below:

	Machine I ₹	Machine II ₹
Purchase price including cost of installation	1,00,000	80,000
Operating costs: Yearwise:		
1	20,000	25,000
2	20,000	25,000
3	20,000	25,000
4	25,000	36,000
5	25,000	36,000
6	25,000	36,000
7	30,000	—
8	30,000	—
9	30,000	—
10	30,000	—

The salvage value of the Machine I is expected to be ₹15,000 at the end of its life of 10 years, while for Machine II it is ₹10,000 at the end of the 6th year.

The cost of capital is 15%.

You can assume that technically both the Machines are equally useful.

You are required to answer the following:

(i) What is the present value of costs for Machine I?

(ii) What is the present value of costs for Machine II?

(iii) What is the annual capital charge for Machine I?

(iv) What is the annual capital charge for Machine II?

(v) Which of the Machines is cheaper?

[Given:

Year	Rate	PVFA	PVF
3	15%	2.283	0.658
4	15%	2.855	0.572
6	15%	3.784	0.432
10	15%	5.019	0.247]

3+2+2+2+1=10

(b) Describe profitability and maneuverability as the important characteristics of financial planning. 2+3=5

5. (a) A company's capital structure consists of the following:

Equity shares of ₹ 100 each	:	₹ 20,00,000
Retained earnings	:	₹ 10,00,000
9% Preference shares	:	₹ 12,00,000
7% Debentures	:	₹ 8,00,000
Total		₹ 50,00,000

The company earns 12% on its capital. The income tax rate is 40%. The company requires a sum of ₹ 25 lakhs to finance its expansion programme for which following alternatives are available to it:

(i) Issue of 20,000 Equity shares at a premium of ₹ 25 per share;

(ii) Issue of 10% Preference shares;

(iii) Issue of 8% Debentures;

It is estimated that the P/E ratios in the cases of Equity, Preference and Debentures financing would be 21.4, 17 and 15.7 respectively.

Required: Which of the three financing alternatives would you recommend and why? 5

(b) MP Ltd. is considering to change its credit terms and provides you the following information:

Particulars	Present policy	Proposed policy
Credit terms	Net 30	$\frac{1}{10}$, Net 30
Sales (₹)	14,40,000	Increase in Sales by ₹ 40,000
Average collection period	30 days	Decline in period by $\frac{1}{3}$rd
Bad debts	2%	2%

It is expected that 50% of the customers will take discount and pay on the 10th day. The variable cost ratio is 70%. And the opportunity cost of investment in receivable is 10% (pre-tax). The tax rate is 50%.

Should the company change its credit terms? [Assume 360 days in a year]. 5

(c) What is the need for a range of performance measures? Explain. 5

6. (a) You are given the following information by your banker:

Spot	₹/$	:	60.50/61.00
	₹/£	:	96.15/98.30
6 month forward	₹/$	:	62.00/63.10
	₹/£	:	98.20/100.15
6 month $ interest rates		:	5.90/6.10 [per annum]

Required: Compute 6 month £ interest rates to prevent arbitrage. 10

(b) Explain the basic differences between Commercial Calculation and Social Cost Benefit Analysis (SCBA). 5

7. (a) An Indian customer who has imported equipment from Germany has approached its bank for booking a forward DM Contract. The delivery is expected at the end of the six month from now. The following rates are being quote.

DM/$ Spot	:	1.584/1.585
3 month forward	:	0.030/0.029
6 month forward	:	0.059/0.058
₹/$ Spot	:	35.60/35.70
3 month forward	:	0.15/0.25
6 month forward	:	0.20/0.30

What rate will be the bank quote if it needs a margin of 0.5%? 5

(b) YANKEE LTD., an Indian company has an export exposure of 20 million Yen(¥) value at June-end. The Yen (¥) is not directly quoted against the Rupee. The current Spot rates are:

US $/IND ₹	:	51.79
US $/¥	:	139.75

It is estimated that the Yen (¥) will depreciate against the Dollar ($) to 144 and the Rupee will depreciate against the Dollar ($) to ₹ 53.

Forward rates for June are:

US $/¥	:	147.35
US $/IND ₹	:	54.89

Required:

(i) Calculate the expected loss if hedging is not done;

(ii) How will the position change with the company taking forward cover?

(iii) If the Spot rates on 30th June were eventually US $/¥ = 147.85 and US $/IND ₹ = 52.78, is the decision to take forward cover justified? 5

(c) Enumerate the motives for World trade and Foreign investments. 5

8. Write short notes on (*any three*): 5×3=15

(a) Considerations while distributing the earnings.

(b) TRIPS.

(c) Impact of GDRs on Indian capital market.

(d) Currency Swaps and their variants.