FINAL EXAMINATION

June 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 bits 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.

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) X Ltd. issued ₹ 100, 12% Debentures 5 years ago. Interest rates have risen since then, so that debentures of the company are now selling at 15% yield basis. What is the current expected market price of the debentures?

(A) ₹ 75

(B) ₹ 80

(C) ₹ 90

(D) ₹ 85

(ii) Given:

	Last year	Current year
Sales unit	2,000	2,800
Selling price per unit	₹ 10	₹ 10
EPS	₹ 9.60	₹ 38.40

What is the Degree of Combined Leverage?

(A) 6·5

(B) 5·6

(C) 7·5

(D) 5·7

(iii) MI Ltd. has annual sales of ₹ 365 lakhs. The company has investment opportunities in the money market to earn a return of 15% per annum. If the company could reduce its float by 3 days, what would be the increase in company's total return? (Assume 1 year = 365 days)

(A) ₹ 45,000

(B) ₹ 40,000

(C) ₹ 54,000

(D) ₹ 46,000

Please Turn Over

(iv) In the inter-bank market, the DM is quoting ₹ 21·50. If the bank charges 0·125% commission for TT selling, what is the TT selling rate?
(A) ₹ 21·47/DM
(B) ₹ 21·53/DM
(C) ₹ 22·78/DM
(D) ₹ 23·45/DM

(v) The required rate of return on equity is 24% and cost of debt is 12%. The company has a capital structure mix of 80% of equity and 20% debt. What is the overall rate of return, the company should earn? Assume no tax.
(A) 21·6%
(B) 14·4%
(C) 18·6%
(D) 17·22%

(vi) Consider the following quotes:
Spot (Euro/Pound) = 1·6543/1·6557
Spot (Pound/NZ's) = 0·2786/0·2800
Calculate the % spread on the Euro/Pound Rate.
(A) 0·0805%
(B) 0·0080%
(C) 0·8501%
(D) 0·0850%

(vii) Initial Investment ₹ 20 lakh. Expected annual cash flows ₹ 6 lakh for 10 years. Cost of capital @ 15%. What is the Profitability Index? The cumulative discounting factor @ 15% for 10 years = 5·019.
(A) 1·51
(B) 1·15
(C) 5·15
(D) 0·151

(viii) The following details relate to an investment proposal of XYZ Ltd.
Investment outlay— ₹ 100 lakhs
Lease Rentals are payable at ₹ 180 per ₹ 1000
Term of lease—8 years
Cost of capital—12%
What is the present value of lease rentals, if lease rentals are payable at the end of the year? [Given PV factors at 12% for years (1-8) is 4·9676.
(A) ₹ 98,14,680
(B) ₹ 89,41,680
(C) ₹ 94,18,860
(D) ₹ 96,84,190

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

(i) Fixed capital is a financial lubricant which keeps business operation going.

(ii) Forward Exchange Rate contract is for the purchase or sale of a specified quantity of a specified currency price as agreed today.

(iii) Stochastic (irregular) Model is developed to avoid the problems associated with the EOQ model.

(iv) TRIPS sets down minimum standards for many forms of Intellectual Property (IP) regulations.

(v) Risk Adjusted Discount Rate (RADR) = Risk Free Return X Premium for facing the risk.

(vi) Buyout refers to the transfer of management control by creating a separate business by separate business by separating it from their existing owners.

(vii) Feasibility study is included in implementation phase of project development cycle.

(viii) Price of contract changes every day in Futures.

(ix) Interest Rate Guarantees (IRG) is an option contract.

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

2. (a) XYZ Ltd. sells its products on a gross profit of 20% of sales. The following information is extracted from its annual accounts for the year ending 31st March, 2014.

	₹
Sales (at 3 months credit)	40,00,000
Raw materials	12,00,000
Wages (15 days in arrears)	9,60,000
Manufacturing expenses and general expenses (One month in arrears)	12,00,000
Administration expenses (one month in arrears)	4,80,000
Sales promotion expenses (payable half yearly in advance)	2,00,000

The company enjoys one month credit from the suppliers and maintains 2 months stock of raw materials and $1\frac{1}{2}$ months stock of finished goods. Cash balance is maintained at ₹ 1,00,000 as a precautionary balance. Assuming a 10% margin, find out the working capital requirement of XYZ Ltd. 10

(b) The beta co-efficient of a security 'X' is 1·4. The risk free rate of return is 10% and the required rate of return is 14% on the market portfolio. If the dividend expected during the coming year is ₹ 3.50 per share and the growth rate of dividend and earning is 8%, at what price should the security 'X' be sold, based on the CAPM? 5

3. (a) The credit terms of a firm currently is Net 30. It is considering to change it to Net 60. This will have the effect of increasing the firm's sales. As the firm will not relax credit standard, the bad debts losses are expected to remain at the same percentage, i.e., 3 per cent of sales. Incremental production, selling and collection costs are 80 per cent of sales and expected to remain constant over the range of anticipated sales increase. The relevant opportunity cost of receivables is 15 per cent. Current annual credit sales are ₹ 600 crore and current level of receivables is ₹ 60 crore. If the credit terms are changed, the current sales are expected to change to ₹ 720 crore and the firm's receivables level will also increase. The firm's financial manager estimates that the new credit terms, will cause the firm's collection period to increase by 30 days.

Required:

(i) Determine the present collection period and the collection period after the proposed change in credit terms.

(ii) What level of receivables is implied by the new collection period?

(iii) Determine the increased investment in receivables, if the new credit terms are adopted.

(iv) Are the new credit terms desirable? (Assume 360 days in a year) 2+1+2+5=10

(b) Explain the steps to be adopted in Money market hedge. 5

4. (a) Relax Ltd. is a manufacturer of high quality product. The management of company is considering computerising the company's ordering, inventory and billing procedures.

The Management estimates that the annual savings from computerising include a reduction of 10 clerical employees with annual salaries of ₹ 60,000 each, ₹ 32,000 from reduced production delays caused by raw material inventory problems, ₹ 48,000 from lost sales due to inventory stock-outs and ₹ 12,000 associated with timely billing procedures.

The purchase price of the computer system is ₹ 8,00,000 and installation costs are ₹ 2,00,000. These outlays will be capitalized (depreciated) on a straight line basis to a zero book salvage value, which is also its market value at the end of five years. The operation of the new system requires two computer specialists with annual salaries of ₹ 1,60,000 per person and annual maintenance cash costs of ₹ 48,000. The company's tax rate is 40% and its required rate of return for this project is 10%. Present value of annuity of ₹ 1 at 10% rate of discount for 5 years is 3.791 and at the end of 5 years is 0.621.

You are required to:

(i) Calculate the project's initial net cash outlay.

(ii) Calculate the project's operating cash flows over its 5 years life.

(iii) Calculate the project's pay back period.

(iv) Evaluate the project using NPV method. 2+3+2+3=10

(b) Describe the marketable securities, which are available in India to invest surplus cash. 5

5. (a) PCT Ltd. is in the process of raising ₹ 15 lakhs as additional capital. For this purpose, two mutually exclusive alternative financial plans have been identified. The current level of EBIT is ₹ 51 lakhs which is likely to remain unchanged. The relevant information is as under:

Present capital structure	: 9,00,000 Equity shares of ₹ 10 each and 10% Bonds of ₹ 60 lakh
Current EBIT	: ₹ 51,00,000
Current EPS	: ₹ 2.50
Current market price	: ₹ 50 per share
Tax Rate	: 50%
Financial Plan I	: 60,000 Equity shares @ ₹ 25 per share
Financial Plan II	: 12% Debentures of ₹ 15,00,000

Required:

(i) Calculate the indifference level of EBIT between the two plans.

(ii) Calculate the financial BEP under both the plans.

(iii) Which alternative financial plan is better? 4+4+2=10

(b) Explain the features of Venture Capital. 5

6. (a) An Indian customer who has imported equipment from Germany has approached a bank for booking a forward Euro contract. The delivery is expected in six months from now. The following rates are quoted:

($/Euro) spot	0.8453/0.8457
6-m swap	15/20
₹/$ spot	46.47/46.57
6-m swap	20/30

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

(b) As a dealer in the bank, you observed the following quotes in the market.

₹/$	42.18/42.60
₹/£	68.59/69.96
₹/€	46.25/47.17

Compute the cross rates for $/£ and $/€. 5

(c) Why Purchasing Power Parity (PPP) theory does not always work in practice? Explain. 5

7. (a) Y Ltd., an Indian company has an export exposure of 6 million (60 lakhs) Yen value at the end of March, 2014. Yen is not directly quoted against Rupee. The current spot rates are:

USD/INR = 61.75

USD/JPY = 185.25

It is estimated that Yen will depreciate against Doller to 210 and Rupee to depreciate against Doller to 65.

Forward rates for March 2014:

USD/YEN = 195.45

and USD/INR = 62.35

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

(ii) How the position will change with company taking forward cover? 4+3=7

(b) An importer has to make payment of 1 Million Thai baht to its trading partner in Bangkok. The currency quotes available are:

For Doller in India : ₹ 58.0843/58.0996

For Doller in Thailand: Thai Baht 52.9400/52.9600

What is the amount of bill payable in terms of Indian Rupee? 3

(c) Narrate the assumptions of the Black-scholes Option Pricing Model. 5

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

(a) Social Cost Benefit Analysis (SCBA)

(b) TRIMS

(C) Covered Interest Arbitrage

(d) Leveraged Lease