FINAL EXAMINATION

June 2013

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):

(i) What is the opportunity cost of not taking a discount, when the credit terms are 2/20 net 45?
Assume 1 year = 360 days
(A) 24·9%
(B) 29·4%
(C) 22·9%
(D) 29·2%

(ii) E Limited has earnings before interest and taxes (EBIT) of ₹ 10 million. The company has outstanding debt of ₹ 20 million at a cost of 7%. Cost of equity is 12·5%. Ignore taxes. What is the overall cost of capital?
(A) 11·26%
(B) 11·62%
(C) 16·12%
(D) 12·61%

(iii) S Limited earns ₹ 6 per share, has capitalisation rate of 10% and has a return on investment at the rate of 20%. According to Walter's model, what should be the price per share at 30% dividend payout ratio?
(A) ₹ 120
(B) ₹ 102
(C) ₹ 112
(D) ₹ 106

(iv) On January 1, 2012, X Limited's begining inventory was ₹ 4,00,000. During 2012, Ltd. purchased ₹ 19,00,000 of additional inventory. On December 31, 2012, X Ltd.'s ending inventory was ₹ 5,00,000. What is X Ltd.'s operating cycle in 2012, if it is assumed that the average collection period is 42 days? (1 year = 365 days).
(A) 123·3 days
(B) 132·3 days
(C) 126·3 days
(D) 133·3 days

Please Turn Over

(v) From the following, what is the amount of sales of A Ltd.? Financial Leverage — 3 : 1; Interest—₹ 200; Operating Leverage — 4 : 1; Variable Cost as a % of sales — 66.67%.
(A) ₹ 3,600
(B) ₹ 6,300
(C) ₹ 6,030
(D) ₹ 3,060

(vi) The dollar is currently trading at ₹ 40. If rupee depreciates by 10%, what will be the spot rate?
(A) ₹ 0·0525
(B) ₹ 0·0552
(C) ₹ 0·0225
(D) ₹ 0·0522

(vii) If the following rates are prevailing: Euro/$: 1·1916/1·1925 and $/£ : 1·42/1·47 what will be the cross rate between Euro/Pound?
(A) 1.6921/1·7530
(B) 1.7530/1.6921
(C) 1.6921/1·1925
(D) 1.7530/1·1916 2×7=14

(b) State if each of the following sentences is T (= true) or F (= false):
(i) Basic lease period refers to the period during which the lease is irrevocable.
(ii) LIBOR for treasury bill rate is the example of basis swaps.
(iii) Provision for taxation is an external source of financing.
(iv) TRIPS are the international agreement on intellectual property rights.
(v) The ROE of an unlevered firm is higher than the ROE of a levered firm, when the ROI is lower than the cost of debt.
(vi) If IRR is less than the firm's cost of capital, the project should be rejected.
(vii) There is no need for calculating separate cost for retained earnings, when cost of equity capital is calculated on the basis of the market value of equity shares.
(viii) In CAPM, systematic risk is the risk that can not be eliminated by diversification, it being common to all firms.
(ix) Interest rate swap is an exchange of interest payments between two parties. 1×9=9

(c) Match the descriptions to the 'Four kinds of Float' with reference to management of cash:
Descriptions:
(i) The time when a cheque is being processed by post office, Messanger service or other means of delivery.
(ii) The time required to sort, record and deposit the cheque after it has been received by the company.
(iii) The time from the deposit of cheque to the crediting of funds in the seller's account.
(iv) The time between the sale and the mailing of the invoice.

Four kinds of Float—Management of cash:
(A) Billing Float
(B) Banking processing Float
(C) Cheque processing Float
(D) Mailing Float

Note: Your answer may be of the form:
Description No. ——————— Capital letter of the alternative indicating kind of float. ½×4=2

PART B (75 Marks for any five questions)

2. (a) AMRITAM Ltd. has a total sales of ₹ 3·2 crores and its average collection period is 90 days. The past experience indicates that bad debts losses are 1·5% on sales. The expenditure incurred by the firm in administering its receivable collection efforts is ₹ 5,00,000. A factor is prepared to buy the firm's receivables by charging 2% commission. The factor will pay advance on receivables to the firm at an interest rate of 18% per annum after withholding 10% as reserve. Assume 360 days in a year. Calculate the effective cost of factoring to the firm. 10

(b) State the main features of venture capital. 5

3. (a) VEDAVYAS Ltd. is considering two mutually exclusive projects M and project N. The Finance Director thinks that the project with the higher NPV should be chosen, whereas the Managing Director thinks that the one with the higher IRR should be undertaken, especially as both projects have the same initial outlay and length of life. The company anticipates a cost of capital of 10% and the net after-tax cash flow of the projects are as follows:

Year	0	1	2	3	4	5
Cash flows (₹)						
Project M	(4,00,000)	70,000	1,60,000	1,80,000	1,50,000	40,000
Project N	(4,00,000)	4,36,000	20,000	20,000	8,000	6,000

You are required to:

(i) Calculate the NPV and IRR of each project.

(ii) State with reasons, which project you would recommend.

(iii) Explain the inconsistency in the ranking of the two projects.

Present value Table is given:

Year	0	1	2	3	4	5
PVIF at 10%	1·000	0·909	0·826	0·751	0·683	0·621
PVIF at 20%	1·000	0·833	0·694	0·579	0·482	0·402

(3+4)+2+1=10

(b) As an executive of a lending institution, what factors should you critically evaluate with respect to a large industrial project, from the perspectives of environmental and economic viability? 5

4. (a) M/s Circuit Manufacturing Corporation (CMC) furnishes the following information:

Total Sales : 1,45,000 units

Selling price per unit : ₹ 23

Fixed Cost : ₹ 2,80,000

Variable Cost : ₹ 17 per unit

Debt : ₹ 10,00,000 @ 11% interest rate

Equity : ₹ 20,00,000

Face Value of each share : ₹ 10

Tax rate applicable : 45%

You are required to work out the following:

(i) By what amount the firm's sales have to come down, so that the Earnings Before Taxes is equal to zero?

(ii) If Earnings Before Interest & Taxes (EBIT) double, what is the new level of Earning Before Taxes (EBT)?

(iii) What will be the degree of operating, financial and combined leverage?

(iv) If the asset turnover of the industry is 0·75, does the firm have a high or low degree of asset turnover?

3+2+3+2=10

(b) What are the basic financial decisions? How do they involve risk-return trade off? 5

5. (a) Determine the working capital requirements on cash cost basis from the following particulars:

Annual Budget for	Amount (₹ in lakh)
Raw Materials	720
Supplies and Components	240
Manpower Expenses	480
Factory Expenses (including depreciation ₹ 10 lakhs)	130
Administration Expenses	180
Sales	2380

You are given the following additional information:

(i) Stock-levels planned : Raw materials—30 days; supplies and components—90 days.

(ii) 50 per cent of the sales are for cash; for the remaining, 20 days credit is normal.

(iii) Finished goods are held in stock for a period of 7 days before they are released for sale and are valued at factory cost.

(iv) Goods remain in process for 5 days. Materials & components are supplied in the beginning and expenses are incurred evenly.

(v) The company enjoys 30 days credit facilities on 20 per cent of the purchases.

(vi) Cash and Bank balances had been planned to be kept at the rate of half month's budgeted expenses [Assume 360 days in a year]. 10

(b) Discuss the important factors that affect the dividend policy of a firm. 5

6. (a) 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

(b) Compute a call option price by applying the Black-Scholes Option Pricing model on the following values:

Strike price	=	₹ 45
Time remaining to expiration	=	183 days
Current stock price	=	₹ 47
Expected price volatility	=	standard deviation of the stock's return = 0·25
Risk free rate	=	10%

Given : N(0·6172) = 0·7315 and N(0·4404) = 0·6702. 5

(c) What is swaps? Explain its necessity. Also state financial benefits created by swap transactions. 5

7. (a) Considering the following quotes.

Spot (Euro/Pound) = 1·6543/1·6557

Spot (Pound/NZ$) = 0·2786/0·2800

(i) Calculate the % spread on the Euro/Pound Rate

(ii) Calculate the % spread on the Pound/NZ$ Rate

(iii) The maximum possible % spread on the cross rate between the Euro and the NZ$. 1+1+3=5

(b) A company operating in JAPAN has today effected sales to an Indian company, the payment being due 3 months from the date of invoice. The invoice amount is 108 lakhs yen (¥). At today's spot rate, it is equivalent to ₹ 30 lakhs. It is anticipated that the exchange rate will decline by 10% over the 3 months period and in order to protect the yen (¥) payments, the importer proposes to take appropriate action in the foreign exchange market. The 3 months forward rate is presently quoted as 3·3 yen per rupee. You are required to calculate the expected loss and to show how it can be hedged by a forward contract. 5

(c) Explain the major functions and features of WTO and GATT. 5

8. Write short notes on (*any three*):

(a) Foreign Currency Convertible Bonds (FCCBs);

(b) Money Market Hedge;

(c) Trading Blocks;

(d) Factors which discourage FDIs in India. 5×3=15