

FINAL EXAMINATION

June 2015

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) Return on Equity (ROE) is computed as

- (A) $(\text{NP Ratio} \times \text{Assets Turnover Ratio}) + \text{Equity Multiplier}$
- (B) $(\text{NP Ratio} \times \text{Assets Turnover Ratio}) \times \text{Equity Multiplier}$
- (C) $(\text{NP Ratio} \times \text{Equity Multiplier}) \div \text{Assets Turnover Ratio}$
- (D) $(\text{NP Ratio} + \text{Assets Turnover Ratio}) \div \text{Equity Multiplier}$

(ii) The ratio of Current Assets (₹ 9,00,000) to Current liabilities (₹ 6,00,000) is 1.5 : 1. The accountant of this firm is interested in maintaining a current ratio of 2 : 1 by paying some part of current liabilities. Hence, the amount of current liabilities which must be paid for this purpose is

- (A) ₹ 3,00,000
- (B) ₹ 2,00,000
- (C) ₹ 6,00,000
- (D) ₹ 4,00,000

(iii) Annual usage of a firm is 7,30,000 units and 3 to 5 days are taken in receiving delivery of inventory after placing an order. Calculate Re-order Level, if the reasonable expected stock out is 500 units per day. (Assume 1 year = 365 days)

- (A) 10,000 units
- (B) 8,000 units
- (C) 80,000 units
- (D) 1,00,000 units

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- (iv) EXCEL Ltd. projects that cash outlays of ₹ 37,50,000 will occur uniformly throughout the coming year. Excel plans to meet its cash requirements by periodically selling marketable securities from its portfolio. The firm's marketable securities are invested to earn 12% and the cost per transaction of converting securities to cash is ₹ 40.

According to Baumol, what is the optimal transaction size of marketable securities to cash?

- (A) ₹ 25,000
- (B) ₹ 30,000
- (C) ₹ 50,000
- (D) ₹ 35,000

- (v) Presently, the company's share price is ₹ 120. After 6 months, the price will be either ₹ 150 with a probability of 0.8 or ₹ 110 with a probability of 0.2. A European call option exists with an exercise price of ₹ 130. What will be the expected value of call option at maturity date?

- (A) ₹ 20
- (B) ₹ 16
- (C) ₹ 18
- (D) ₹ 10

- (vi) Consider the following quotes:

Spot (Euro/Pound) = 1.3904—1.3908

Spot (Pound/NZ \$) = 0.5020—0.5040

What will be the possible % spread on the cross rate between Euro and NZ \$?

- (A) 0.40
- (B) 0.39
- (C) 0.41
- (D) 0.43

- (vii) A project had an equity beta of 1.4 and was going to be financed by a combination of 25% Debt and 75% Equity (Assume Debt Beta as zero).

Hence, the required rate of return of the project is

- (A) 16.72%
- (B) 18.30%
- (C) 17.45
- (D) 12.00

(Assume $R_f = 12\%$ and $R_m = 18\%$).

- (viii) Given for a project:

Annual Cash inflow ₹ 80,000

Useful life 4 years

Pay-Back period 2.855 years

What is the cost of the project?

- (A) ₹ 2,28,500
- (B) ₹ 2,28,400
- (C) ₹ 2,28,600
- (D) ₹ 2,28,700

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

1×9=9

- (i) A firm adopts financial contingency planning in situations of prosperity.
- (ii) Cost of Retained Earnings
= (Cost of Equity) × (1 – Rate of Tax) × (1 – Cost of purchasing new securities or brokerage cost)
- (iii) Securitisation is the conversion of non-tradable assets into marketable securities.
- (iv) Under favourable conditions, Financial Leverage decreases EPS.
- (v) Sensitivity analysis refers to studying the relationship between risks and return.
- (vi) Preferred stock, a hybrid corporate security, pays a variable dividend depending on the corporation's earnings.
- (vii) External Commercial Borrowing (ECB) is the amount borrowed by the Government through designated agents from All India Financial Institutions (AIFIs).
- (viii) European Option can be exercised any time during option period.
- (ix) FPA policy is a minimum liability insurance and gives only a partial cover for losses.

PART B (75 Marks)

Answer any five questions.

2. (a) RAVINDRA Ltd. has the following Capital Structure as per its Balance Sheet as at 31st March, 2015.

	₹ in lakhs
Equity Share Capital (fully paid shares of ₹ 10 each)	4.00
18% Preference Share Capital (fully paid shares of ₹ 100 each)	3.00
Retained Earnings	1.00
12.5% Debentures (fully paid debentures of ₹ 100 each)	8.00
12% Term Loan	4.00
Total	20.00

Additional information:

- (i) The Current market price of the Company's share is ₹ 64.25. The prevailing default-risk free interest rate on 10 - year GOI Treasury Bonds is 5.5%. The average market risk premium is 8%. The beta of the company is 1.1875.
- (ii) The preference shares of the Company which are redeemable after 10 years are currently selling at ₹ 90 per preference share.
- (iii) The Debentures of the Company which are redeemable after 5 years are currently quoted at ₹ 95 per debenture.
- (iv) The Corporate tax rate is 30%.
Calculate Weighted Average Cost of Capital (WACC), using
 - (a) Book Value Weights and
 - (b) Market Value Weights.

8+2=10

(b) Describe Commercial Paper as a source of financing.

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3. (a) ABS RELAXON LTD. provides a simplified Income Statement as given below:

Income Statement of ABS RELAXON LTD. for the year ended 31.3.2015.

	₹	₹
Sales		10,50,000
Less:		
Variable Cost	7,67,000	
Fixed Cost	<u>75,000</u>	<u>8,42,000</u>
EBIT		2,08,000
Less: Interest		<u>1,10,000</u>
EBT		98,000
Less: Taxes @ 30%		<u>29,400</u>
Net Income		<u>68,600</u>

Calculate:

- (i) Operating Leverage
- (ii) Financial Leverage and
- (iii) Combined Leverage

Interpret company's Combined Leverage.

$$(1+1+1)+2=5$$

- (b) The Balance Sheets of OMEGA LTD. as on 31st March, 2014 and 2015 are given below:

	31.03.2014	31.03.2015		31.03.2014	31.03.2015
<i>Liabilities</i>	₹	₹	<i>Assets</i>	₹	₹
Share Capital	1,50,000	2,50,000	<i>Fixed Assets:</i>		
Equity			Goodwill	60,000	47,000
8% Redeemable Preference	1,50,000	1,00,000	Land & Buildings	1,00,000	75,000
<i>Reserves & Surplus:</i>			Plant & Machinery	90,000	1,91,000
General Reserve	20,000	30,000	Trade Investment	10,000	35,000
Capital Reserve	—	25,000	(in shares)		
Profit & Loss Account	18,000	27,000			
<i>Current Liabilities and Provisions:</i>			<i>Current Assets, Loans and Advances:</i>		
Sundry Creditors	26,000	53,000	Stock	85,000	78,000
Bills Payable	18,000	12,000	Sundry Debtors	60,000	90,000
Prov. for Taxation	28,000	32,000	Bills Receivable	15,000	18,000
Proposed Dividend	27,000	33,000	Cash at Bank	10,000	26,000
Dividend Payable	—	4,000	Cash in hand	<u>7,000</u>	<u>6,000</u>
	<u>4,37,000</u>	<u>5,66,000</u>		<u>4,37,000</u>	<u>5,66,000</u>

Additional particulars are given below:

- (i) In 2014-15, ₹ 18,000 depreciation has been written off Plant & Machinery and no depreciation has been charged on Land and Buildings.
- (ii) A piece of Land has been sold out and the balance has been revalued, profit on such sale and revaluation being transferred to Capital Reserve. There is no other entry in Capital Reserve Account.
- (iii) A plant was sold for ₹ 12,000 (WDV being ₹ 15,000).
- (iv) Dividend received amounted to ₹ 2,100 which included pre-acquisition dividend of ₹ 600.
- (v) An interim dividend of ₹ 10,000 has been paid in the year 2014-15.

Prepare Cash Flow Statement.

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4. (a) Modern Enterprises Ltd. wants to replace its old machine with a new automatic machine. Two models AMM_1 and AMM_2 are available at the same cost of ₹ 8,00,000 each.

Salvage value of old machine is ₹ 1,60,000. The utilities of the existing machine can be used, if the company purchases AMM_1 . Additional cost of utilities to be purchased in that case is ₹ 1,60,000.

If the company purchases AMM_2 , then all the existing utilities will have to be replaced with new utilities costing ₹ 3,20,000. The salvage value of the old utilities will be ₹ 32,000.

The Earnings after taxation are expected to be:

Year	Cash Inflow		PV factor at 15%
	AMM_1	AMM_2	
	₹	₹	
1	1,60,000	3,20,000	0.87
2	2,40,000	3,36,000	0.76
3	2,88,000	2,88,000	0.66
4	3,20,000	2,72,000	0.57
5	2,72,000	64,000	0.50
Salvage value at end of Fifth Year	80,000	96,000	

The target return on Capital is 15%.

Required: Calculate for each model of Automatic Machine—

- (i) Net Present Value,
- (ii) Discounted Pay-back Period, and
- (iii) Profitability Index.

Advise which of the Automatic Machines should be selected.

3+4+2+1=10

- (b) A manager is trying to decide which of three mutually exclusive projects to undertake. Each of the projects could lead to varying net profits which are classified as outcomes I, II and III. The manager has constructed the following pay-off table or matrix (a conditional profit table).

Please Turn Over

Outcome-wise Net profits for projects A, B and C are as follows:

Project	I	II	III
A	50,000	65,000	80,000
B	70,000	60,000	75,000
C	90,000	80,000	55,000
Probability	0.2	0.6	0.2

Which project should be undertaken?

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5. (a) JAYASHREE TEXTILES MFG. CO. LTD. is considering one of two mutually exclusive proposals, Project X and Project Y, which require cash outlays of ₹ 8,50,000 and ₹ 8,25,000 respectively.

The Certainty Equivalent (CE) approach is used in incorporating risk in Capital budgeting decisions.

The current yield on Government bonds is 6%, which is used as the risk-free rate.

The expected Net Cash Flows and their uncertain factors are as follows:

Year-end	Project X		Project Y	
	Cash Flow ₹	Uncertain factor	Cash Flow ₹	Uncertain factor
1	4,50,000	0.2	4,50,000	0.1
2	5,00,000	0.3	4,50,000	0.2
3	5,00,000	0.5	5,00,000	0.3

Present Value factors of ₹ 1 discounted at 6% at the end of the year 1, 2 and 3 are 0.943, 0.890 and 0.840 respectively.

Required:

- Which project should be accepted? Give all workings neatly and clearly.
 - If Risk-Adjusted Discount Rate (RADR) method is used, which project should be appraised with a higher rate and why?
 - Why do we discount the Cash flow using risk-free rate? 7+2+1=10
- (b) "Efficient cash management will aim at maximising Cash inflows and slowing cash outflows." Discuss. 5
6. (a) What are Forward transactions? How can they be used to hedge? 3+2=5
- (b) An Indian importer has to settle a bill for \$ 5,00,000. The exporter has given the Indian company two options:
- Pay immediately without any interest charge;
 - Pay after 3 months, with interest at 6% per annum.

The importer's Bank charges 16% per annum on overdrafts.

The exchange rates are as follows:

Spot (₹/\$)	:	62.60/62.65
3 months (₹/\$)	:	63.30/63.40

What should the Company do? Give reasons.

4+4+2=10

7. (a) GTN TEXTILE Co. exports Cotton garments to the U.S. For the year ended 2014-15, it has exported 1,20,000 pieces of garments at an average price of \$ 20 per piece. Average cost of producing each piece is ₹ 550 for GTN. The elasticity of demand for the company's product in the U.S. market is 1.5.

Prevailing Rupee-Dollar exchange rate during the last year was ₹ 62.00. In the current year Rupee-Dollar exchange rate is expected to depreciate to ₹ 63.00.

You are required to calculate:

- (i) The change in profit due to the transaction exposure.
- (ii) The change in profit due to economic exposure if the company passes the benefit of depreciation on to the buyer. 5+5=10

- (b) Assume that you are the calling bank. The following rates per \$ is quoted against S.Fr.

Day	Quotes
1	1.6962/1.6978
2	1.6990/1.7005
3	1.7027/1.7042

- (i) On which day, is it cheaper to buy US \$ with respect to S.Fr.?
- (ii) How many US \$ do you need to buy 1000 S.Fr. on Day 1?
- (iii) What is the Spread on Day 2?
- (iv) If you exchanged \$ 2,500 for S.Fr. 4256.75, on which day did you exchange? 1+1.5+1+1.5=5

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

- (a) Benefits of Euro issues to the Investors
- (b) Money Market Hedge
- (C) Trading blocks
- (d) Project Feasibility Report.