

**MASTER OF BUSINESS ADMINISTRATION  
FINANCIAL MARKETS  
(MBAFM)**

**Term-End Examination**

**December, 2012**

**MCT-078 : FINANCIAL MODELLING**

*Time : 3 hours*

*Maximum Marks : 100*

**SECTION - A**

**(All questions are compulsory)**

1. The following are the two proposals with cost of capital being 6.00%. Please calculate using IRR, NPV and Discounted Pay Back period whether we should accept System A or System B with reasons : 30

**Cash Flow - System A**

Year	Cash Flow Rs.
0	-6,00,000
1	+75,000
2	+1,00,000
3	+1,50,000
4	+2,00,000
5	+2,10,000
6	+1,50,000
<b>Total</b>	<b>2,85,000</b>

**Cash Flow - System B**

<b>Year</b>	<b>Cash Flow</b>
	Rs.
0	- 6,00,000
1	+ 25,000
2	+ 75,000
3	+ 85,000
4	+ 1,00,000
5	+ 1,50,000
6	+ 4,50,000
<b>Total</b>	<b>2,85,000</b>

2. Please calculate cost of capital for Infosys assuming : 15

R<sub>f</sub> is 8%, risk premium is 7% and beta is 0.8. The total equity is 800 Million. Company has taken long term debt of 400 Million with a cost of 12% per annum. Also the company has taken short term debt of 200 Million with a cost of 14% per annum. The preference share pays a fix dividend of 15% per annum and preference share taken is 200 Million. Assume a tax rate of 30%.

3. Please calculate unlevered beta for the following three companies : 10

Company	Levered Beta	Debt/Equity	Tax Rate
NHN	1.42	1.4%	27%
Rambler	1.13	0.0%	24%
Tencent	1.36	0.2%	33%

4. Prepare a loan repayment schedule for your financial model with following data : 15

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<b>Loan</b>	34000000
Rate of interest	10.00%
Repayment	48 months

Please prepare a schedule from April 12 to March 2016, assuming first repayment at the beginning of the loan.

## SECTION - B

(Attempt any three)

5. Attempt *any three* : 3x10=30
- (a) Please define levered beta and unlevered beta with a small numerical example (please take dummy figures).
  - (b) Define terminal value.
  - (c) What terminal growth you would take for Infosys, along with the probable reasons for the same terminal growth rate ?
  - (d) Define Buy in analysis.
  - (e) Parameters to consider before selecting comparable companies.
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