MTP Final Syllabus 2008 Jun2014 Set 2

Paper-12: FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE

Time Allowed: 3 Hours Full Marks: 100

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

Working notes should form a part of the answer

"Wherever necessary, suitable assumptions should be made and indicated in answers by the candidates"

PART A (25 Marks)

1. (a) (i) High proportion of gearing will increase:

 $[10 \times 2 = 20]$

- (a) Financial risk
- (b) Business risk
- (c) Cost of funds
- (d) Shareholders equity
- (ii) The financial data furnished for A Ltd. for the year ended 31st March, 2013, as follows:

Operating leverage = 3 : 1; Financial leverage = 2 : 1; Interest charges p.a. is ₹ 12 lakhs, Corporate tax rate is 40%. The variable cost as % of sales is 60%. The EBIT of the company is:

- (a) ₹ 24 lakhs
- (b) ₹ 22. Lakhs
- (c) ₹ 32 lakhs
- (d) ₹ 18 lakhs
- (iii) Modern Ltd.'s share beta factor is 1.40. The risk free rate of interest of government securities is 9%. The expected rate of return on the company equity shares is 16%. The cost of equity capital based on CAPM is:
 - (a) 9%
 - (b) 16%
 - (c) 18.8%
 - (d) 15.8%
- (iv) If EBIT is less than financial break-even point then:
 - (a) EPS will be positive
 - (b) EPS will be negative
 - (c) there will be no impact on EPS
 - (d) Cost of debt raises
- (v) BKC Ltd. has profits before interest and taxes of ₹ 3,00,000. The applicable tax rate is 40%. Its required rate of return on equity in the absence of borrowing is 18%. In the absence of personal taxes, the value of the company in an MM world with no leverage is:
 - (a) ₹ 10,00,000
 - (b) ₹ 11,60,000
 - (c) ₹ 12,60,000
 - (d) ₹ 14,00,000
- (vi) The dividend decisions are concerned with:
 - (a) determination of quantum of profits to be distributed to the owners
 - (b) the frequency of such payments
 - (c) the amounts to be retained by the firm
 - (d) all of the above
- (vii) A financial lease is preferred in the situation:
 - (a) when the long-term stability of asset is uncertain

- (b) When the lessee want to own the asset but does not have enough funds to invest
- (c) when the asset is subject to rapid obsolescence
- (d) none of the above
- (viii) About 50 items are required every day for a machine. A fixed cost of ₹ 50 per order is incurred for placing an order. The inventory carrying cost per item amounts to ₹ 0.02 per day. The lead period is 32 days. Compute reorder level.
 - (a) 1,200 items
 - (b) 1,400 items
 - (c) 1,600 items
 - (d) 1,800 items
- (ix) The stock of Pioneer company sells for ₹ 120. The present value of exercise price and the value of a call option are ₹ 108.70 and ₹ 19.80 respectively. Hence the value of the put option is:
 - (a) ₹ 8.50
 - (b) ₹ 9.00
 - (c) ₹ 11.00
 - (d) ₹ 8.25
- (x) Currency swap is a method of:
 - (a) speculating the foreign exchange
 - (b) hedging against foreign exchange risk
 - (c) making money by banks
 - (d) exchanging one currency for another
- (b) State if each of the following sentences is T (=true) or F (= false):

 $[5 \times 1=5]$

- (i) Corporate tax rate does not affect cost of debt.
- (ii) IRR and NPV always give the same profitability ranking.
- (iii) If Profitability Index is 1, cash inflow and cash outflow would be equal.
- (iv) An investor expecting a fall in interest rates buys a floor and also a cap.
- (v) Commercial paper introduced by RBI in early 1990, is 'a secured promissory note' tied to any specific transaction.

PART B (75 MARKS)

2. A company proposes to introduce a new product. The market study information suggests that the company can set a price of ₹36 or ₹38 or ₹40 per unit. The company intends to hire a machinery to manufacture the product at ₹ 400000 per annum but if the annual production exceeds 60,000 units additional cost of ₹1,60,000 per annum will be incurred on the hire of machinery. The variable cost is ₹10 or ₹12 per unit produced. The following estimate of sales at each possible selling price has been prepared:

Selling Price	₹36		₹	38	₹40		
	Units	Probability	Units	Probability	Units	Probability	
Pessimistic	70,000	0.3	60,000	0.1	30,000	0.4	
Most Likely	80,000	0.5	70,000	0.7	60,000	0.5	
Optimistic	90,000	0.2	90,000	0.2	70,000	0.1	

The probability of unit costs is 0.6 for variable cost of ₹ 10 per unit and 0.4 for variable costs of ₹12 per unit. The company has committed an advertisement expenditure of ₹80,000 per annum.

You are required to analyze and advise which selling price will be appropriate from the point of view of maximization of profits. [15]

- 3. (a) The earnings per share of a company is ₹ 10 and the rate of capitalisation applicable to it is 10 per cent. The company has three options of paying dividend i.e. (i) 50%, (ii) 75% and (iii) 100%. Calculate the market price of the share as per Walter's model if it can earn a return of (a) 15, (b) 10 and (c) 5 per cent on its retained earnings. [3+3+3]
 - (b) Enumerate the main features of Venture Capital.

[6]

4. (a) The data relating to two companies are as given below:

	Company A	Company B
Equity Capital	₹6,00,000	₹3,50,000
12% Debentures	₹4,00,000	₹6,50,000
Output (units) per annum	60,000	15,000
Selling price/unit	₹30	₹250
Fixed Costs per annum	₹7,00,000	₹14,00,000
Variable Cost per unit	₹10	₹75

You are required to calculate the Operating leverage, financial leverage and combined leverage of two companies. [3+3]

(b) Sun Ltd. discounts its cash flows at 16% and is in the tax bracket of 35%. For the acquisition of a machinery worth ₹10,00,000, it has two options - either to acquire the asset by taking a bank loan @ 15% p.a. repayable in 5 yearly installments of ₹2,00.000 each plus interest or to lease the asset at yearly rentals of ₹3,34,000 for five (5) years. In both the cases, the installment is payable at the end of the year. Depreciation is to be applied at the rate of 15% using 'written down value' (WDV) method. You are required to advise which of the financing options is to be exercised and why.

Year	1	2	3	4	5
P.V factor @16%	0.862	0.743	0.641	0.552	0.476

[9]

5. JKL Ltd. has the following book-value capital structure as on March 31, 2003.

	₹
Equity share capital (2,00,000 shares)	40,00,000
11.5% preference shares	10,00,000
10% debentures	30,00,000
	80,00,000

The equity share of the company sells for ₹20. It is expected that the company will pay next year a dividend of ₹ 2 per equity share, which is expected to grow at 5% p.a. forever. Assume a 35% corporate tax rate.

Required:

- (i) Compute weighted average cost of capital (WACC) of the company based on the existing capital structure.
- (ii) Compute the new WACC, if the company raises an additional ₹20 lakhs debt by issuing 12% debentures. This would result in increasing the expected equity dividend to ₹2.40 and leave the growth rate unchanged, but the price of equity share will fall to ₹16 per share.
- (iii) Comment on the use of weights in the computation of weighted average cost of capital.

[15]

- 6. (a) How is Economic Value Added (EVA) different from Market Value Added (MVA)? [5]
 - (b) The management of MNP Company Ltd. is planning to expand its business and consults you to prepare an estimated working capital statement. The records of the company reveal the following annual information:

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	₹
Sales – Domestic at one month's credit	24,00,000
Export at three month's credit (sales price 10% below domestic price)	10,80,000
Materials used (suppliers extend two months credit)	9,00,000
Lag in payment of wages - 1/2 month	7,20,000
Lag in payment of manufacturing expenses (cash) – 1 month	10,80,000
Lag in payment of Adm. Expenses – 1 month	2,40,000
Sales promotion expenses payable quarterly in advance	1,50,000
Income tax payable in four installments of which one falls in the new	2,25,000
financial year	

Rate of gross profit is 20%.

Ignore work-in-progress and depreciation.

The company keeps one month's stock of raw materials and finished goods (each) and believes in keeping $\stackrel{?}{_{\sim}} 2,50,000$ available to it including the overdraft limit of $\stackrel{?}{_{\sim}} 75,000$ not yet utilized by the company.

The management is also of the opinion to make 12% margin for contingencies on computed figure.

You are required to prepare the estimated working capital statement for the next year.

[10]

7. (a) The spot rate is \$ 1.65 / £. The expected inflation rates in UK and USA for the next three years are given below:

Year	UK Inflation (%)	US Inflation (%)
1	3.0	2.0
2	3.5	2.5
3	3.0	2.0

Calculate the expected \$/£ spot after three years.

[4]

(b) On November 17, Mr. X bought one future contract for CAD 1,00,000 each, at a rate of USD/CAD 0.8657. A 5% initial margin was deposited and no maintenance margin is available. The subsequent settlement prices are shown in the table below.

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November	18	19	20	21	24	25	26	27
Futures Rate	0.84	0.83	0.84	0.86	0.87	0.88	0.89	0.90

- (i) What are the daily cash flows from marking to market?
- (ii) What is the total cash flow from marking to market?

[1+4]

(c) A company in UK sends 2000 pieces to its subsidiary in US, each piece worth £ 5000. The payment in £ would have to be made by the subsidiary at the end of 3 months. The finance manager of the subsidiary wishes to have protection against the uncertainty. It is given that:

Spot £ 1 = \$1.8306; 90 days forward £ 1= \$1.8350.

90 days \$ interest = 5.25%, 90 days £ 1interest=4.75%

Call option on £ with a strike of 1.8347 is available with a premium of 1.5324%. The expected spot rate at expiry would be 1.8405. What are the options available to the financial manager, including remaining un-hedged.

[6]

8. (a) Write short note on GATT.

[5]

- (b) State the two components of value of currency option. Show a relationship between volatility of currency and option value. [5]
- (c) How does "Risk Adjusted Discount Rate" differ from "Certainty Equivalent Approach" As techniques of risk analysis in capital budgeting? [5]