THE INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF BANGLADESH
CMA JUNE, 2018 EXAMINATION
STRATEGIC LEVEL
SUBJECT: F3. FINANCIAL STRATEGY

Time: Three hours Full Marks: 100

- All questions are to be attempted.
- Show computations, where necessary.
- Answer must be brief, relevant, neat and clean.
- Start answering each question from a fresh sheet.

Q. No. 1

(a) What are the major decisions taken by the financial manager? What are the factors you should consider in making each decision?

(b) G is a listed multinational group. The parent company is located in the USA. G manufactures spectacles and contact lenses. Designs and technical specifications are constantly changing and G needs to invest heavily in research and development in order to remain competitive.

G has 31 December as its financial year end. Financial data for the last 3 years is given below:

	2015	2016	2017
Year to 31 December:	USD million	USD million	USD million
Dividend	120	160	170
Profit/(loss) after tax	300	300	(100)
Depreciation included in profit/(loss)	100	100	120
On-going capital expenditure	160	700	300
Data as at 31 December:			
Long term borrowings	2,000 million	1,820 million	2,090 million
Share price	USD 4.00	USD 3.50	USD 3.00

Additional information:

- On 1 January 2015, G had 600 million USD 1 shares in issue.
- On 1 January 2016, there was a “1 for 3” rights issue at an issue price of USD 3.20 per share.

There were no other changes to share capital in the 3 year period shown above.

- Assume that depreciation is the only non-cash item included in profit/(loss) after tax above. Over two-thirds of the shares are held by large financial institutions such as pension funds, insurance companies and investment vehicles. The remaining shares are held by directors of the company and private individuals.

Required:

(a) Analyse G’s dividend policy in the years 2015, 2016 and 2017 based on the data provided. Support your answer with calculations of:
  (i) Dividend cover based on profit/(loss) after tax.
  (ii) Dividend per share.
  (iii) Free cash flow generated in the year (before dividend payments).

(b) Advise G on the benefits and drawbacks of the current dividend policy and possible alternative policies.

[Marks: (5+7+8) = 20]

Q. No. 2

(a) What are the sources of long term and short term financing? Explain with example.

(b) Manfred Manufacturing is involved in the production of machine parts. The company uses 600,000 pounds of steel annually. The current purchasing cost for steel is $3.20 per pound. The carrying cost for inventory is 10 percent of the purchase price. The cost of ordering steel is $800 per order. The company has decided to maintain a safety stock of 15,000 pounds. The delivery time per order is 6 days. The company works 365 days a year.

  (i) Determine the optimal EOQ.

  (ii) How many orders will be placed annually?

  (iii) What is the average inventory?

Q. No. 2 (cont'd…)

(iv) What is the inventory order point? (That is, at what level of inventory should a new order be placed?)

(v) What is the company's total inventory costs for the year?

(c) Classify the following events as mostly systematic or mostly unsystematic with explanation:

(i) Short term interest rates increase unexpectedly

(ii) The interest rate a company pays on its short term debt borrowing is increased by its bank

(iii) A manufacturer loses a multimillion dollar product liability suit.

(iv) A Supreme Court decision substantially broadens producer liability for injuries suffered by product users.

[Marks: (5+7+8) = 20]

Q. No. 3

Lancaster Engineering (LE) following the capital structure, which it considers to be optimal;

Debt	25%
Preferred Stock	15%
Common equity	60%

LE's expected net income this year is Tk.34285.72; its established dividend payout ratio is 30%; its marginal tax rate is 40 % and investors expect earnings and dividends to grow at a constant rate of 9 percent in the future. LE paid dividend of tk. 3.6 per share last year and its stock currently sells at a price of tk. 60 per share.

LE can obtain new capital in the following ways:

Common: New common stock has a flotation cost of 10% for up to 12,000 of new stock and 20% for all common stock over 12,000.

Preferred: New preferred stock with a dividend of tk. 11 can be sold to the public at a price of tk. 100 per share. However, flotation costs of tk. 5 per share will be incurred for up to tk. 7,500 of preferred stock, and floatation costs will rise to tk. 10 per share or 10 %, on all preferred stock over tk. 7,500.

Debt: Debt upto 5,000 can be sold at an interest rate of 12%; debt in the range of 5001 to 10,000 must carry an interest rate of 14 % and all debt over 10,000 will have an interest rate of 16 %.

Required:

(i) Find the break points in the MCC schedule.

(ii) Determine the cost of each capital structure component.

(iii) Calculate the weighted average cost of capital in the interval between each break in the MCC schedule.

(b) Suppose that a company's expected dividend now is tk. 3.48 per share. Its dividends are expected to grow at 15 % for six years and then at a rate of 8 % indefinitely. The required rate of return is 12%. What is the price of the share today?

(c) A 10 year bond of tk. 1,000 has an annual rate of interest of 12 %. The interest is paid half yearly. If the required rate of return is 16%, what is the value of the bond? What is the value of the bond if interest is paid annually?

[Marks: (10+5+5) = 20]

Q. No. 4

(a) GG is a manufacturing company based in Europe with the euro (EUR) as its functional currency. It has a year end of 30 June. GG is considering the best way to finance the replacement of a particular high-specification piece of equipment that has become too costly to maintain. The replacement equipment is estimated to have a useful life of 6 years with no residual value after that time. GG depreciates its non-current assets on a straight line basis over their estimated useful lives.

Two alternative financing schemes being evaluated are:

- Scheme A: Buy the equipment outright, funded by a bank loan.
- Scheme B: Enter into a six year finance lease.

Scheme A: Buy outright, funded by a bank loan

GG could purchase the equipment outright at a cost of EUR 6.0 million on 1 July 2014. GG can normally borrow at an annual interest rate of 7% a year.

Scheme B: Six year finance lease

The equipment would be delivered on 1 July 2014 and GG would pay 6 annual payments of EUR 1.34 million under a finance lease. Lease rentals would be payable on 30 June each year, with the first payment on 30 June 2015. The lease has an implied interest rate of 9.0%. GG would have the option of extending the lease beyond the initial 6 year term at a peppercorn rent.

Tax regime

GG pays corporate income tax at a rate of 30%. Tax is paid or recovered a year in arrears. If purchased outright the equipment would be eligible for 100% tax depreciation allowances in the financial year in which it was acquired. GG has adopted international financial reporting standards and the tax treatment of the finance lease follows the accounting treatment for finance leases detailed in IFRS 16: Leases. That is, tax relief is given for depreciation and implied interest. Assume that GG has sufficient taxable profits to be able to benefit from any tax savings arising.

Required: Calculate the net present value (NPV) of the incremental financial benefit or cost of Scheme A in comparison with Scheme B. Use GG's cost of debt as the discount rate.

(b) Indicate whether you think the following claims regarding takeovers are true or false. In each case, provide a brief explanation for your answer.

(i) By merging competitors, takeovers have created monopolies that will raise product prices, reduce production, and harm consumers.

(ii) Managers' act in their own interests at times and in reality may not be answerable to shareholders. Takeovers may reflect runaway management.

(iii) In an efficient market, takeovers would not occur because market prices would reflect the true value of corporations. Thus, bidding firms would not be justified in paying premiums above market prices for target firms.

(iv) Traders and institutional investors, having extremely short time horizons, are influenced by their perceptions of what other market traders will be thinking of stock prospects and do not value takeovers based on fundamental factors. Thus, they will sell shares in target firms despite the true value of the firms.

(v) Mergers are a way of avoiding taxes because they allow the acquiring firm to write up the value of the assets of the acquired firm.

(vi) Acquisitions analysis frequently focuses on the total value of the firms involved. An acquisition, however, will usually affect relative values of stocks and bonds, as well as their total value.

[Marks: (12+8) = 20]

Q. No. 5

BB is a listed company located in Country B. BB is a retail clothing business which operates a large number of branded retail stores throughout Country B. Its functional currency is the B$. BB currently has five distinct brands, each owned and managed by a separate business unit. Each business unit runs its own chain of retail stores. BB is seeking to sell QQ, one of these business units.

QQ owns a fashion brand that is aimed at the younger end of the fashion market. It was only formed three years ago. The management team of QQ is young and dynamic like the brand and has become frustrated by the constraints imposed on it by BB in managing the brand and developing the business. The management team believes that there is huge potential for developing the brand beyond simply fashion to include home furnishings labeled with a common brand name aimed at both individuals and families with young children.

The management team of QQ has decided to purchase the business from BB under a Management Buy Out (MBO). BB has accepted this proposal as QQ has not proved to be a good 'fit' with the rest of the business and has agreed a selling price of B$ 450 million. It is anticipated that the effective date of the disposal would be 1 July 2014.

The MBO team has been in initial discussions with a venture capitalist and a bank which are interested in helping to finance the acquisition. The proposed financing arrangement is as follows:

	Amount invested B$ million	Form of investment
MBO team – equity finance	45.0	B$ 1 "A" equity shares, full voting rights
Venture capitalist – equity finance	180.0	B$ 1 "B" equity shares, limited voting rights
Venture capitalist – debt finance	112.5	Unsecured loan at 11% interest a year, repayable 30 June 2018
Bank loan	112.5	Secured loan at 7% interest a year, repayable 30 June 2025

The venture capitalist expects a return on the equity portion of its investment of at least 25% a year on a compound basis over the first 4 years of the MBO. The venture capitalist also expects QQ to be listed using an Initial Public Offering (IPO) after 4 years to provide an exit route at that time.

Additional data for QQ following an MBO:

- Profit before interest and tax is forecast to be B$ 72 million in the first year of the MBO and grow by 12% a year in each of the subsequent three years.
- Corporate income tax is payable at a rate of 30% in the year in which it arises.
- No dividends would be paid in the first four years of the MBO.

Under the planned IPO on 30 June 2018, the "A" and "B" shares would be converted into new ordinary shares and these shares would be offered for sale to the public. The "A" and "B" shares would be converted into new shares at the same ratio; that is, the "A" and "B" shares would have the same value at the time of the IPO.

Based on a review of the P/E ratios of companies operating in a similar market sector, the MBO team anticipate that QQ would achieve an IPO share price equivalent to a P/E ratio in the range 8.5 to 12.0.

Required:

(a) Discuss the factors that are likely to affect the success of the MBO.

(b) Calculate:

  (i) The minimum total equity value of QQ on 30 June 2018 required in order to satisfy the venture capitalist's expected return.

  (ii) The best estimate of the total equity value of QQ on 30 June 2018 based on forecast earnings for the year ended 30 June 2018 using P/E ratios of 8.5 and 12.0.

(c) Evaluate the proposed financing arrangement from the viewpoint of the venture capitalist. Your answer should include reference to your results in part (b).

[Marks: (6+7+7) = 20]

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