CMA JUNE, 2020 EXAMINATION
STRATEGIC LEVEL
SUBJECT: F3. FINANCIAL STRATEGY

Time Allocated: Three hours | Total Marks: 100

Instructions to Candidates

There are three sections (that is A, B & C) in this paper. You are required to answer ALL questions.
Answers should be properly structured, relevant and computations need to be shown wherever necessary.
You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or sub-questions).
ALL answers must be written in the answer book. Answers written on the question paper will not be submitted for marking.
Start answering each question from a fresh sheet. Your answers should be clearly numbered with the sub-question number then ruled off, so that the markers know which sub-question you are answering.

Section	No of questions in the Section	No of sub-questions in the Section	Marks allocation
A	01	08	20%
B	01	05	40%
C	02	02	40%

TURN OVER

SECTION A – 20 MARKS
This section consists of 1 question and 8 sub-questions.
You are advised to spend no longer than 36 minutes on this section. Section will carry 20 marks and one sub-question will carry 2.5 marks each.

Question 01

(a) What is cost of money? What are the fundamental factors that affect the cost of money?
(2 ½ Marks)

(b) What are the uses of Free Cash Flow (FCF)?
(2 ½ Marks)

(c) What is the Efficient Markets Hypothesis (EMH)? Name three alternative forms of the EMH.
(2 ½ Marks)

(d) What four mistakes that managers should avoid when estimating the WACC?
(2 ½ Marks)

(e) QQ Limited capital structure and details are as follows: Debt 40%, Equity 60%. Interest rate of debt 9%, Tax rate 32%, Weighted Average Cost of Capital 10%. What is the cost of equity capital?
(2 ½ Marks)

(f) What is "Modified Internal Rate of Return(MIRR)" and explain how it can resolve problems of IRR?
(2 ½ Marks)

(g) Company X has a Beta of 1.3 and Company Y has a Beta of 1.2. Government bonds are currently trading at 5%. The average market risk premium is 6%. Calculate the Cost of Equity using CAPM for each company.
(2 ½ Marks)

(h) A company plans to invests $100 to yield $59.17 at the end of year one and $59.17 at the end of year two.
* What is the Internal Rate of Return for this Project?
* Should the Project be accepted if the company's cost of capital is (i) 12%; (ii) 14%; (iii) 10%.

(2 ½ Marks)

END OF SECTION A

SECTION B Starts on page 3

SECTION B– 40 MARKS

This section consists of 1 question and 5 sub-questions.

You are advised to spend no longer than 14.4 minutes on each sub-question in this section. Section will carry 40 marks and one sub-question will carry 8 marks each.

Question 02

(a) Last year NWPGCL had Tk.5 million in operating income (EBIT). The company had a net depreciation expense of Tk.1 million and an interest expense of Tk.1 million; its corporate tax rate was 40%. The company has Tk.14 million in operating current assets and Tk.4 million in operating current liabilities; it has Tk.15 million in net plant and equipment. It estimates that it has an after-tax cost of capital of 10%. Assume that NWPGCL's only noncash item was depreciation.

(i) Calculate net operating working capital and total net operating capital for the current year.

(ii) If total net operating capital in the previous year was Tk.24 million, what was the company's free cash flow (FCF) for the year?

[Marks: 8]

(b) Banglalion Communications Inc. (BCI) has the following capital structure, which it considers to be optimal: debt = 25%, preferred stock = 15%, and common stock = 60%. BCI's tax rate is 40%, and investors expect earnings and dividends to grow at a constant rate of 6% in the future. BCI paid a dividend of Tk.3.70 per share last year (D_0), and its stock currently sells at a price of Tk.60 per share. Ten-year Treasury bonds yield 6%, the market risk premium is 5%, and BCI's beta is 1.3. The following terms would apply to new security offerings.

Preferred: New preferred could be sold to the public at a price of Tk.100 per share, with a dividend of Tk.9. Flotation costs of Tk.5 per share would be incurred.

Debt: Debt could be sold at an interest rate of 9%.

Common: New common equity will be raised only by retaining earnings.

Required:

Find the component costs of debt, preferred stock, and common stock and calculate the WACC.

[Marks: 8]

(c) SQ Limited, a UK construction company, is planning to acquire new earthmoving equipment at a cost of £10 million, and is considering the following alternative sources of finance:

(i) A bank loan for the full cost of the equipment, repayable over four years in equal annual instalments incorporating interest at a rate of 5% per annum, the first instalment to be paid one year from the date of taking out the loan.

(ii) A finance lease with a monthly lease rental of £223,000. The first rental is payable in advance, followed by further monthly rental payments for the next four years.

The equipment would have no residual value at the end of the period of four years.

The Company Secretary has a friend visiting from overseas, who has advised that it would be preferable to lease the equipment rather than buy it. The friend's argument is that leasing would avoid SQ's own capital being locked up, since it would be the lessor who would buy and own the equipment. SQ Limited is highly geared, and the friend has also suggested that leasing the equipment instead of borrowing to buy it would make SQ Limited's balance sheet look better.

SECTION B Continues on page 4

Required:

(1) Calculate the annual instalment that would be payable under the bank loan. Also calculate how much would represent the principal repayment, and how much would represent interest charges, in each of the four years and in total.

(2) What is the before-tax rate of return to the lessor implied by the terms of the proposed lease agreement, and how does it compare with the rate of interest on the bank loan?

[Marks: 8]

(d) Distinguish the following with reference to foreign exchange market:

(i) Fixed exchange rate and flexible exchange rate.

(ii) Leading and lagging

(iii) Forward exchange contract and future contract.

[Marks: 8]

(e) (i) Buying a call option is risky because the holder commits to purchase a share at a later date. Discuss.

(ii) Blue Ltd. has an EPS of Tk. 2, Expected DP ratio of 75%, ROE of 12% & equity capitalization rate of 10%.

(a) Find out the growth rate, share value & PE ratio.

(b) If the company follows a retention ratio of 40%, what would be expected dividend, growth rate, share value & price-earnings ratio.

[Marks: 8]

END OF SECTION B

SECTION C Starts on the page 5

Section C- 40 Marks

This section consists of 2 questions.

You are advised to spend no longer than 36 minutes on each question in this section. Section will carry 40 marks and allocation of marks for each sub-question is indicated next to the sub-question.

Question 03

Hasan's Home Repair Company (HHRC), a regional hardware chain that specializes in "do it yourself" materials and equipment rentals, is cash rich because of several consecutive good years. One of the alternative uses for the excess funds is an acquisition. SD Barmon, HHRC's treasurer and your boss, has been asked to place a value on a potential target, Lions Lighting (LL), a chain that operates in several adjacent divisions, and he has enlisted your help.

The table below indicates Barmon's estimates of LL's earnings potential if it came under HHRC's management (in millions of taka). The interest expense listed here includes the interest(1) on LL's existing debt, which is Tk.55 million at a rate of 9%, and (2) on new debt expected to be issued over time to help finance expansion within the new "L division," the code name given to the target firm. If acquired, LL will face a 40% tax rate.

Security analysts estimate LL's beta to be 1.3. The acquisition would not change Lyons's capital structure, which is 20% debt. Barmon realizes that Lyons Lighting's business plan also requires certain levels of operating capital and that the annual investment could be significant. The required levels of total net operating capital are listed in the table.

Barmon estimates the risk-free rate to be 7% and the market risk premium to be 4%. He also estimates that free cash flows after 2019 will grow at a constant rate of 6%. Following are projections for sales and other items.

	2014	2015	2016	2017	2018	2019
Net Sales		Tk.60.00	Tk.90.00	Tk.112.50	Tk.127.50	Tk.139.70
COGS (60%)		36.00	54.00	67.50	76.50	83.80
Selling/Admin Expense		4.50	6.00	7.50	9.00	11.00
Interest Expense		5.00	6.50	6.50	7.00	8.16
Total Net Operating Capital	Tk.150	150	157.50	163.50	168.00	173.00

HHRC's management is new to the merger game, so Barmon has been asked to answer some basic questions about mergers as well as to perform the merger analysis. To structure the task, Barmon has developed the following questions, which you must answer and then defend to HHRC's board.

(a) What are the reasons that justify the merger? Which of them fit the situation at hand? Explain.

(b) Briefly describe the differences between a hostile merger and a friendly merger.

(c) Use the data developed in the table to construct the L division's free cash flows for 2015 through 2019. Why are we identifying interest expense separately when it is not normally included in calculating free cash flows or in a capital budgeting cash flow analysis?

(d) Conceptually, what is the appropriate discount rate to apply to the cash flows developed in part c? What is your actual estimate of this discount rate?

SECTION C Continues on page 6

(e) What is the estimated horizon, or continuing, value of the acquisition; that is, what is the estimated value of the L division's cash flows beyond 2019? What is LL's value to HHRC's shareholders? Suppose another firm were evaluating LL as an acquisition candidate. Would it obtain the same value? Explain.

(f) Assume that LL has 20 million shares outstanding. These shares are traded relatively infrequently, but the last trade (made several weeks ago) was at a price of $11 per share. Should HHRC's make an offer for Lyons Lighting? If so, how much should it offer per share?

(g) What merger-related activities are undertaken by investment bankers?

[Marks: (1.5+1+4+4+5+3+1.5) = 20]

Question 04

The balance sheet of Fresh Ltd for the year just ended is summarized below:

(£ millions)

ASSETS	
Cash & Bank Balances	380
Other Current Assets	1,340
Total Current Assets	1,720
Fixed & Non-Current Assets	1,960
Total Assets	**3,680**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	1,290
Unsecured 6% bonds	70
Total Liabilities	1,360
Equity	
- Ordinary Shares (50 pence par value)	800
- Retained Earnings	1,520
Total Equity	2,320
Total Liabilities & Equity	**3,680**

The company, which has been earning good profits, has been paying a dividend of 20 pence per share on its ordinary share capital in each of the last few years. The same rate of dividend has already been announced for the year just ended. The company's ordinary shares are now trading at a market price of 650 pence.

At a meeting of Fresh Ltd board, the company's Chairman suggests that, in addition to the normal dividend of 20 pence per share, the shareholders should be rewarded with an additional one-off special dividend exactly equal to the normal dividend.

The Chief Financial Officer (CFO) suggests that, instead of a special dividend, the company should make a 1 for 4 bonus issue. The CFO says that maintaining the same dividend rate on the increased share capital would provide better long-term rewards for the shareholders and would have a more favorable impact on the share price.

The Company Secretary argues that the issue of additional shares would depress the EPS and have an adverse effect on the share price. In the Company Secretary's view, the company should repurchase 3% of the shares at a premium of 10% to the market price. The Company Secretary says that the receipt of a substantial premium over the market price of their shares, and the increased EPS resulting from reduction in the overall number of shares, would create the best value for shareholders.

SECTION C Continues on page 7

A Non-Executive Director points out that the firm's major shareholders are sophisticated investors like investment trusts and given investor rationality in an efficient market, none of the three proposals would make any difference to shareholder value.

Required:

(a) With reference to the Non-Executive Director's remark, evaluate the theoretical impact of each of three proposals - i.e. the special dividend, the bonus issue and the share repurchase - on the wealth of a shareholder in Fresh Ltd currently owning 1,000 shares. Provide appropriate calculations, and comment on your results.

(b) Discuss the suggestions and the views expressed by the Chairman, the CFO and the Company Secretary, and comment on the ways in which each of their suggested measures may, in practice, create additional value for shareholders.

[Marks: (10+10) = 20]

END OF THE EXAM PAPER