CMA JANUARY 2022 EXAMINATION
ADVANCED LEVEL I
CORPORATE FINANCIAL STRATEGY & FINANCIAL MARKET

Course Code	: EF343	Total Marks	: 100
Reading Time	: 15 minutes	Writing Time	: 180 minutes

Instructions to Candidates

- You **MUST NOT** write anything during the reading time.
- There are 5 (five) questions.
- You should attempt ALL questions.
- Answers should be properly structured and relevant.
- Show all relevant computation.
- Carefully read ALL the requirements and sub-questions before attempting a specific question.
- ALL answers must be written in the answer book.
- **AVOID WRITING/MARKING** on the question paper at any time which may cause disciplinary action.
- Start answering each question from a fresh sheet.
- Answers should be clearly numbered with the sub-question number.

Allowable Materials

- Writing Stationaries
- Non-programmable Calculator

Assessment Structure

		Sub-question	*Marks*	*Expected Time Required*
Question 1	Essay/Computational/Case	5	20	35 minutes
Question 2	Essay/Computational/Case	3	20	35 minutes
Question 3	Essay/Computational/Case	4	20	35 minutes
Question 4	Essay/Computational/Case	3	20	35 minutes
Question 5	Essay/Computational/Case	-	20	35 minutes
	Revision			5 minutes
	Total		100	180 minutes

RESTRICTED USE
This paper MUST NOT BE REMOVED from the examination venue

Do not turn the page until instructed

QUESTION 1 [5x4 = 20 MARKS]

(a) You are the Chief Financial Officer (CFO) of Brothers Limited. Your company needs Tk. 20 million to expand production. What procedures would you follow if you decide to raise this money by issuing new shares through IPO?

(b) Distinguish between monetary policy and fiscal policy. Discuss the role of monetary and fiscal policies in achieving macroeconomic policy targets of a government.

(c) What is fintech? Explain how fintech is shaping the financial strategies of an organization.

(d) Write down the functions of BFIU, AML and CFT.

(e) Write short note on:

- (i) Sukuk Bond
- (ii) Mutual Funds.

QUESTION 2 [4+6+(5x2) = 20 MARKS]

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

(b) XYZ Inc., a producer of turbine generators, is in this situation: EBIT = Taka 4 million; tax rate = T = 35%; debt outstanding = D = Taka 2 million; r_d = 10%; r_s = 15%; shares of stock outstanding = N0 = 600,000; and book value per share = Taka 10. Because XYZ's product market is stable and the company expects no growth, all earnings are paid out as dividends. The debt consists of perpetual bonds.

Required

- (i) XYZ can increase its debt by Taka 8 million, to a total of Taka 10 million, using the new debt to buy back and retire some of its shares at the current price. Its interest rate on debt will be 12 percent (it will have to call and refund the old debt), and its cost of equity will rise from 15 to 17 percent. EBIT will remain constant. Should XYZ change its capital structure?
- (ii) If XYZ did not have to refund the Taka 2 million of old debt, how would this affect things? Assume that the new and the still outstanding debt are equally risky, with r_d = 12%, but that the coupon rate on the old debt is 10 percent.

(c) ABC reported earnings available to common stock of $4,200,000 last year. From those earnings, the company paid a dividend of $1.26 on each of its 1,000,000 common shares outstanding. The capital structure of the company includes 40% debt, 10% preferred stock, and 50% common stock. It is taxed at a rate of 40%.

- (i) If the market price of the common stock is $40 and dividends are expected to grow at a rate of 6% per year for the foreseeable future, what is the company's *cost of retained earnings* financing?
- (ii) If underpricing and flotation costs on new shares of common stock amount to $7.00 per share, what is the company's *cost of new common stock* financing?
- (iii) The company can issue $2.00 dividend preferred stock for a market price of $25.00 per share. Flotation costs would amount to $3.00 per share. What is the *cost of preferred stock* financing?
- (iv) The company can issue $1,000-par-value, 10% coupon, 5-year bonds that can be sold for $1,200 each. Flotation costs would amount to $25.00 per bond. Use the estimation formula to figure the approximate *cost of debt* financing.
- (v) What is the *WACC?*

QUESTION 3 **[6 + 4 + 4 + 6 = 20 MARKS]**

(a) Suppose you own stock in a company. The current price per share is Tk. 25. Another company has just announced that it wants to buy your company and will pay Tk. 35 per share to acquire all the outstanding shares. Your company's management immediately begins fighting off this hostile bid. Is management acting in the shareholders' best interests? Why or Why not?

(b) In contrast to the CAPM, the APT does not indicate which factors are expected to determine the risk premium of an asset. How can you determine which factors should be included? For example, one risk factor suggested is the company size. Why might this be an important risk factor in an APT model?

(c) Suppose stock returns can be explained by the following three factor model:

$R_i = R_F + \beta_1 F_1 + \beta_2 F_2 – \beta_3 F_3$

Where, R_F represents risk-free rate, βs represent factor betas, and Fs represent factor premium.

Assume there is no firm-specific risk. The information for each stock is presented here:

	β_1	β_2	β_3
Stock A	1.55	0.80	0.05
Stock B	0.81	1.25	-0.20
Stock C	0.73	-0.14	1.24

The risk premiums for the factors are 6.1 percent, 5.3 percent, and 5.7 percent, respectively. If you create a portfolio with 20 percent invested in Stock A, 20 percent invested in Stock B, and the remainder in Stock C, what is the expression for the return on your portfolio? If the risk-free rate is 3.2 percent, what is the expected return on your portfolio?

(d) A stock has a beta of 1.13 and an expected return of 12.1 percent. A risk-free asset currently earns 5 percent.

(i) What is the expected return on a portfolio that is equally invested in the two assets?

(ii) If a portfolio of the two assets has a beta of .50, what are the portfolio weights?

(iii) If a portfolio of the two assets has an expected return of 10 percent, what is its beta?

(iv) If a portfolio of the two assets has a beta of 2.26, what are the portfolio weights? How do you interpret the weights for the two assets in this case? Explain.

QUESTION 4 **[5+5+10 = 20 Marks]**

(a) Discuss the characteristics and activities of CDBL and CCBL?

(b) What are the existing rules of loan classification and rescheduling as per Bangladesh Bank? Explain.

(c) Carol Krebs is considering buying 100 shares of Sooner Products, Inc., at $62 per share. Because she has read that the firm will probably soon receive certain large orders from abroad, she expects the price of Sooner to increase to $70 per share. As an alternative, Carol is considering purchase of a call option for 100 shares of Sooner at a strike price of $60. The 90-day option will cost $600. Ignore any brokerage fees or dividends.

(i) What will Carol's profit be on the stock transaction if its price does rise to $70 and she sells?

(ii) How much will Carol earn on the option transaction if the underlying stock price rises to $70?

(iii) How high must the stock price rise for Carol to break even on the option transaction?

(iv) Compare, contrast, and discuss the relative profit and risk associated with the stock and the option transactions.

QUESTION 5 **[10 +10 = 20 MARKS]**

Country Y

Country Y is a large industrialized country with strong motor vehicle and construction industries. The glass industry supplies glass to these industries as well as to specialist users of glass such as contact lens manufacturers. There are five major glass manufacturing entities, each with market coverage in Country Y of between 5% and 40%.

Entity Q

Entity Q is a quoted entity and a major player in the glass industry. It has a market share in Country Y of approximately 35%. It is an old, well-established entity with a number of factories used to manufacture glass both locally and abroad. It has a stable, but unexciting, growth rate of 3% per annum and is facing increasing competition from new glass manufacturing entities setting up in its key markets. However, Q's high earnings levels of earlier years have resulted in relatively low levels of debt.

The head office building of Q is in the far north of Country Y in a remote geographical area. It is a considerable distance from the capital city and major centers of population in the south of the country. The building is much larger than the entity requires and several floors are unoccupied. The management team of Q is highly experienced; the majority of the senior managers have worked for Q for the whole of their working lives.

The computer systems of Q were written especially for the entity, but are in need of replacement in favor of something more flexible and adaptable to changing circumstances.

Entity Z

Entity Z, with a market share in Country Y of 10%, is a comparatively new and small, but fast-growing unquoted family-owned entity. It specializes in certain niche markets for high security and extra heat resistant glass. The patents for this specialist glass were developed by the founder owner who now acts as Managing Director. The development of the business has largely been funded by high levels of borrowings at rates of interest well above standard market rates. In addition, the directors have often been required to provide personal guarantees against personal assets.

The management team of Z works in the capital city of Country Y, which is in the more prosperous southern part of the country. Z has a manufacturing base on the outskirts of the capital city.

The management team of Z is enthusiastic to grow the business, but is continually frustrated by a lack of financial and human resources and marketing network that would enable Z to expand into international markets. Also, on a personal level, many of the senior managers own a substantial number of shares in Z and are keen to realize some of their capital gains and become financially more secure.

The computer systems of Z consist of a basic accounting package and an internal network of PCs. Spreadsheet packages are widely used for budgeting and other financial reporting.

Takeover bid

The directors of Q have approached the directors of Z with a view to making a takeover bid for Z. A condition of the bid would be the retention of the current management team of Z, who have vital knowledge of the specialist manufacturing techniques required to manufacture the product range of Z. The directors of Z have been initially quite positive about the bid.

Both parties are concerned that the deal may be referred to Country Y's Competition Directorate, which regulates the country's competition policy, for approval and that conditions may be imposed that could make the takeover less attractive.

Required:

(i) Advise the directors of Q and Z on the potential problems of merging the management structure and systems of the two entities and how these could be minimized.

(ii) Discuss whether the choice of capital structure for the new combined entity is likely to affect the overall value of the entity. Include references to Modigliani and Miller's (MM's) theory of capital structure in your answer.

END OF QUESTION