

BUSINESS STRATEGY & TECHNOLOGY

March-April 2025

Time allowed- 3:30 hours

Total marks- 100

[N.B. - The figures in the margin indicate full marks. Questions must be answered in English. Examiner will take account of the quality of language and of the manner in which the answers are presented. Different parts, if any, of the same question must be answered in one place in order of sequence.]

Marks

1. Quality Electrical Appliances Ltd.(QEA) is a company listed in Dhaka Stock Exchange as well as international stock exchanges. It manufactures electrical kitchen appliances and sells in the low to medium price sector in the market.

Company profile:

QEA manufactures three different types of electrical appliances cookers, washing machine, and fridge. The company currently has four manufacturing sites Dhaka, Malaysia, Singapore and India. Each of the factories currently manufactures all three products and in general, sells them in the region/country of the world in which that factory is located.

While sells are internationally diversified, market research has shown that different geographical regions require different designs and features. As a result, each factory has developed each of the products separately with different features and capabilities which are appropriate to the market in its own geographical region.

Cost competitiveness and cost reduction:

Each of the factories is a separate profit centre. Profitability has declined in all of the four factories in recent years and thus profitability of the company as a whole has fallen steeply. The central board has attempted to improve matters by reviewing costs, engaging in internal benchmarking exercises and applying series of cost reduction programs. Each of the cost reduction programs tended to focus on one factory at a time and extended over a periods upto one year. At the Board Meeting to discuss the latest cost review exercise the finance director summarized the results.

It is clear that some of our factories can produce at a lower cost than others, but the result are not consistent. Take, for example, the Malaysian factory. It produces fridges and cookers cheaper than any of our other factories, but it is the highest cost producer of washing machines. What is more, when there is a major change in the exchange rate, the whole cost comparison exercise changes.

Another concern is that we have repeatedly engaged the cost reduction programs by selective redundancies, shifting production, changing reporting structures, reducing capacity and outsourcing, to name but a few. Despite all this, there has been no permanent cost reduction of any significance.

Also there has recently been an unexpected major new entrant into the industry from South East Asia, which has low costs and low prices. If we are to compete with we have to reduce costs must more significantly than we have able to do in the past.

Global Production

In response to the concerns of the finance director a proposal was put forward to globalise production. The key features of the proposal are as follows:

- Each of the three products would be made in only one basic design, and all of the world production of each product would be made at a single factory.
- As a result, only three factories would be needed in future, one factory would therefore close.
- Each factory would be a cost centre and marketing would be centralized functionally worldwide. It would therefore be outside the responsibility of the factory managers in future.
- The change would be pushed through urgently with the aim of completion of the change program within six months.
- It is intended that larger scale specialist production would significantly reduce production cost, but the situation would be reviewed in two years time given the uncertainties involved in such a major change.

Requirements:

- a) Compare the type of change program engaged in by QEA in the previous cost reduction exercise with the current proposal to globalize production. 6
- b) Examine how the globalization change program is likely to impact upon key stakeholders. Assess the implications for QEA in communicating the nature of the changes in each case. 7
- c) Give examples of barriers to change that may arise and which may cause resistance to the implementation of the globalization change program in QEA 6

2. Super Sports Ltd (SSL) is a manufacturer of sports equipment in Bangladesh based in Savar Area, Dhaka. It was established in 1988 by two ex-cricket players, Mr. Jamshed and Mr. Akram, who are two owners and directors of the company.

Company profile:

Compared to its rivals, SSL is a small company with revenue of only 1500 million BDT per year. The company currently produces two types of product: sports rackets and sports shoes.

It manufactures specialist rackets for squash, tennis and badminton, using the latest technology, making them suitable for professional and advanced players. The rackets sell for approximately ten times the average price of rackets available in the high street. SSL has a 6% share of this specialist market, but only a very small share of the rackets market overall. Despite small increases in industry sale, SSL's revenue has been static for some times, due to significant competition from larger rivals. These rivals dominate the specialist racket market, with the market leader having a 24% of the worldwide industry sales of USD1000 million.

SSL also manufactures sports shoes for the mass market. The company's sales of these shoes, however, been declining for some years, largely due to severe competition from much larger international manufacturers. There has also been a decline in industry sales in recent years. Sports shoes are nevertheless is still seen as fashion and the large companies support their product with significant advertising.

A new product

A friend of SSL directors, Mr. James who is a retired research scientist, is employed by SSL last year, develops a new rubber product, Katex, which is incorporated into the redesigned spots shoes. Early tests of the Katex shoes proved extremely successful, demonstrating enhanced comfort, durability, and performance. The product was patented by SSL but sales has not yet commenced. However, a major marketing boost was given to the product recently when a proto-type shoe was used by athlete to achieve a world record time in running 400 meters.

Mr, Jamshed was extremely enthusiastic; "this product could sweep the market". Within a few years Katex could form the basis of almost every sport shoe in the world. Meanwhile I would suggest selling it at a premium price to skim the market, then gradually lower the price a little while still staying at the top end of the mass market. I therefore suggest, we make the development of the Katex shoe our prime focus.

Mr. Akram was more cautious; "Even if this product is successful, we do not have the financial and physical resources to manufacture, promote, and distribute this product in any major way. It could be successful nationally or even internationally, but we are a small company. Moreover, it is at a very early stage, it might not be successful and we should not neglect our existing business that easily.

Mr. Akram continued, I have however, recently been approached by a number of sports equipment manufacturer, both large and small. They are very interested in exploring the possibility of developing of Katex shoe and other Katex products either with us or on our behalf. They appear to be offering not only production facilities but also a distribution network, which in some cases expand to international sales. I think benefit from their involvement but we need to be careful about the precise terms of any arrangement.

Requirements:

- a) Identify and explain the strategic position of each of the product within the Boston Consulting Group matrix (BCG). Assess the implications of this positioning with in the BCG Matrix in determining the extent to which SSL should invest in each of its products, 8

- b) As an external consultant, write a memorandum to the directors of SSL outlining the merits and demerits of each of the following joint development strategies in respect of Katex shoes: 8
- i) Licensing;
 - ii) Franchising;
 - iii) a joint venture; and
 - iv) a merger

3. a) Sattar Industries Ltd. is a listed manufacturer whose principal product is 'Comodo'. Comodo is widely used in the building trade, particularly in residential properties. The company has several manufacturing plants in the country. Comodo manufacture is a highly capital intensive activity. The company's other products, which account for only a small part of turnover are also supplied to the building trade.

Recently, demand for Comodo has been very buoyant and the directors have decided to open a new manufacturing plant in Abuja to supply the local market and save on transport costs. A net present value assessment of the projected plant shows a substantial positive outcome. The cost of establishing this plant will be significant for the company, representing about 15% of its current stock market value.

The company is financed by a combination of equity and loan stock. Since the company's funds are all tied up in operations, establishing the new plant will require that the company raises additional finance. The directors generally have open minds on the source or sources of finance.

You are the company's finance director and have had some conversations with your colleagues, when the following points were made:

Director A

"This is not a good time to be issuing equity. I have a small share portfolio of my own and I plot the monthly prices of each share on graphs. I have done this for some years now and I can tell you that the patterns clearly show that we are heading for a major downturn in share prices. If we went for equity finance, by the time that we could get it organised, the bear market would be with us and we would need to issue a large number of shares to raise the necessary cash."

Director B

"We must pay attention to financial gearing. If we get that wrong, the stock market will probably savage our share price. By the way, are we going to make the financing decision without outside advice and how are we going to handle the practicalities? If not, who is going to do it for us?"

Director C

"People only seem to be interested in equities these days and all the evidence show that average returns are higher than you get from lending. We'll struggle to raise loan finance."

Director D

"Everyone seems to be talking about external finance, but I'm not so sure that it's necessary. We make good profits and have done so for some time. Can't we use some of the retained profits for this?"

Requirement:

Draft notes for the directors to address the whole question of the financing decision using the points raised by the directors. The notes should include explanations for any technical terms to aid the directors understanding 8

- b) i) Why rushing to diversify isn't necessarily a good strategy? 3
- ii) What is the risks of concentrating on a single business? 2
- iii) What are the factors that signal time to diversify? 3

4. Crystal Homes is a construction and developer company, having considerable knowledge and experience in the region around Dhaka where the shortage of housing is centered. The company builds flats and apartments those caters for the mid to lower end of the market, with prices normally below BDT 50.00 Lakh, on relatively small and individual site which tend to be too large for the resources of the local builders but too small for the high volume national housing builders. Any mass release of land for development in the north east of the Dhaka city due to government initiatives is likely to center in one area. The development of any such land would take many years given delays within the planning process.

The company worth BDT 150 million has looked like a takeover target for a while but unfortunately, the company's reputation for internal control has been damaged somewhat by a qualified audit last year over issues of compliance with financial standards and an unfortunate internal incident which concerned an employee expressing concern about the compliance with an international standard of fire safety. He raised this with his manager but he failed to obtain a response, he decided to report the lack of compliance to the press.

This significantly embarrassed the company and led to a substantial deterioration in their reputation, especially as there have been more press releases about the company's failure to adhere to the high welfare, health and safety, financial, marketing and ethical standards that founder practiced when he started Crystal Homes

Requirements:

- a) Outline the implications of poor ethical standards and damaged reputation on the relationship between the affected stakeholder groups and Crystal Homes. 5
 - b) What are the main issues concerned with corporate responsibility and why might Crystal Homes choose to act, or at least claim to act, in socially responsive way? 5
 - c) Explain with reference to Crystal Homes as appropriate, the ethical responsibilities of an accountant both as an employee and as a professional, 4
5. This conversation that ran between a father and his son was about their tank then on lease to the Fisheries Department. The tank popularly known as 'Suborna Dighi' is located at Subornachar under Noakhali District, Bangladesh, it occupies a large tract of land measuring about 18.5 acres with a water area of-about 15 acres. This tank was bought by Anwar Mirza at a price of Taka 4,000,000 from a commercial bank in 1990. The previous owner, a Hindu Zamindar, could not pay his debts against which the tank was mortgaged to the Bank. The Bank, therefore, put the tank into an auction. Anwar Mirza lived in the same locality where the tank was located. At that time, he was perhaps the only affluent man who could be the highest bidder of the auction.

The new owner, however, could not utilize his investment profitably. There were jungles around the tank, it was believed to be an abode of evil spirits. None dared to approach the tank to make use of its resources. The owner was busy with its trading in his ships at the town. He preferred waiting for the increase in its capital value to making profit out of regular use of the tank. In 2000, the owner being unable to use the tank leased it out to the Fisheries Department for ten years at a- very nominal return. The Fisheries Department removed the rubbishes from the tank. They also re-excavated it at their own cost.

After the lease period is over in 2007 Anwar Mirza's fifth son Alamin Mirza widely known as Mirza, a commerce graduate, wanted to launch a fishing project on the tank. He did not want to get the lease renewed. He disregarded all the prevailing myths about the tank. Considering the son's initiative and strong determination his father agreed to provide the required fund to start the project. Meanwhile Anwar Mirza died. This, however, could not stop his son from the venture. As Mirza inherited enough money and properties from his father, he did not ran short of funds. He excavated and reconstructed the tank at a cost of Tk.7,000,000 and began systematic pisciculture in the tank in early 2009. In the fish-breeding season Mirza collects natural-bred young fishes and fries obtained from the breeding site of Meghna, a tributary of the Bay of Bengal. The young fishes consist of traditional as well non-traditional varieties.

Mirza puts them in his tank at suitable times. If necessary, fish feeds are also given. Mirza insists on the growth of planktons, the natural organisms of fish feeds in his tank. In the natural process fishes grow in size in a year or two, when they are caught for sale. Now Mirza earns a net income of Tk. 2,000,000 p.a. from the project. He divides his operations in three phases: (a) Catching of fishes (small varieties only) by net, (b) Arranging angling competition (once a year) and (c) selling of Friday (angling) passes. The income statement of his project for 2024 appears in the below table. It is clear from the statement that most of his revenues come from angling competition. This even provides ample opportunities for anglers to catch fishes from a 'resourceful tank as well as to win prizes, which are given to the winners receiving first twenty places. Mirza gives very lucrative prizes to the winners. The prizes took about sixty per cent of his sale value of tickets. This incentive, thinks, had a favorable effect on his sales. Mirza did not discontinue his education. He took master's degree in finance from a private university. The University education gave him a broad theoretical framework to handle the affairs of his project. He took advisory services of and attended workshops arranged by the Fisheries Department.

The workshops on 'Hatchery Management' and 'Integrated and Mixed Fish Farming' were very helpful to expand his knowledge on technical aspects of pisciculture. He reads articles published in newspapers. He also attends the T.V. program 'Mati o Manush' (The Soil and Man) regularly.

The motives, apart from earning a good living, which prompted Mirza to go for this kind of project, are:

- i) Optimal utilization of agricultural resources.
- ii) Helping the Govt meet protein food deficiency, and
- iii) Creating interest in pisciculture among the people.

Mirza realizes, pisciculture is a very profitable business. He thinks that the business has no inherent risk. He is not, however, sure of flood. The flood water may cause damage to his fish stock and the banks of his tank. Marketing poses no problem at all. The local fishermen and dealers buy the entire catches from the tank site. The anglers take away their catches at the cost of the tickets/passes bought by them. Mirza himself manages the affairs of the project. The number of staff is only three, including once night guard. Of course, the supply of appropriate fish feeds often causes headache to Mirza. Mirza saved a good deal of money out of the profits of the project. Now he wants to invest further. He has a plan to expand his project to an integrated farm by combining the poultry, duck-cum-fish farming and horticulture in the four banks of the tank. For this, he intends to pay a visit to the similar other farms of the country and use the services of a horticulturist. He is confident that his proposed investment will bear fruit.

Suborno Dighi Project
Income Statement for the Year 2024

Expenditure	Amount Tk	Income	Amount Tk
1. Purchases:		1. Sales of Fishes:	
Young fishes and fries	700,000	4 catches p. a. @ Tk 20, 000 per	80,000
Fish deeds	20,000	catch	
2. Security & Supervision	464,000	2. Proceeds from angling	2,850,000
3. Electricity	60,000	competition: 475 tickets @	
4. Angling competition expenses:		Tk 6,000 per ticket	1,120,000
Prizes to winner	600,000	3. Sale of Friday Passes; 1,400 Tk,	
Entertainments to		800 per pass	
participants	50,000		
Advertisement	6,000		
5. Depreciation and Amortization	150,000		
6. Net Income	2,000,000		
	4,050,000		4,050,000

Requirements:

- a) Evaluate the marketing strategy of Mirza. 3
 - b) What Mirza could do differently to make this business even bigger and more successful? 4
 - c) What relevant data will you require for preparing a feasibility study of Mirza's new investment Plan? 5
 - d) While reviewing the story of Mirza, do you see any weakness in Mirza's strategy? 5
6. Total International Ltd. (Total Ltd.) is a listed company which operates in the pharmaceutical sector, manufacturing a broad range of drugs under licence in two other countries, Kenya and Vietnam. In recent years the company has grown organically but a proposal has now been put forward by the company's investment bank that the company might consider the acquisition of Lily Archade Ltd. (Lily Archade), as a route to both further expansion and diversification of the company's activities.

Lily Archade is involved in a different area of the pharmaceutical sector from Total Ltd. as it is primarily a research driven company involved in the development of new drugs arising from the latest academic research, often working with research departments of universities to turn research into commercial reality.

The two companies have been trading for over 15 years and have shown strong levels of profitability in most recent years. Total Ltd. is financed wholly by equity.

Whereas Total Ltd. is fully listed on the main market, Lily Archade is listed on the alternative investment market. However, both companies' shares are thinly traded. It is generally believed that the

current book value of equity of Lily Archade represents 75% of its true market value, but it is felt that Total Ltd.'s shares are not quoted accurately by the market.

The following information is taken from the financial statements of both companies at the start of the current year.

	Total Ltd. TK.000	Lily Archade TK.000
Assets less current liabilities	22,000	21,000
Capital employed:		
Equity	22,000	6,000
5-year floating rate loan at yield rate plus 3%	-	15,000
Total capital employed	22,000	21,000

In the year just ended, Total Ltd. recorded operating profit of Tk.3.625m. From the statement of cash flow, you extracted the following additional information:

Depreciation Charge	Tk. 2,500
Profit on disposal of non-current assets	Tk. 700
Issue of additional shares	Tk. 2,000
Net reduction in working capital	Tk. 1,450
Purchase of non-current assets	Tk. 4,150

The assets of both companies are stated at fair value. There is an agreement that the floating rate loan to Lily Archade can be transferred to the combined business on the same terms.

The current yield rate is 5% and the current equity risk premium is 6%. It can be assumed that the risk free rate of return is equivalent to the yield rate. Total Ltd.'s asset beta has been estimated to be 1.26.

Total Ltd. wants to use the Black-Scholes Option Pricing (BSOP) model to assess the value of the combined business and the maximum premium payable to Lily Archade's shareholders. Total Ltd. has conducted a review of the volatility of the operating profit of both companies since both were formed and has estimated that the volatility of the combined business assets, if the acquisition were to go ahead, would be 35%. The exercise price should be calculated as the present value of a discount (zero coupon) bond with an identical yield and term to maturity of the current bond.

Both companies pay tax at 20%. Assume a growth rate of 3.9% of the company's FCFE.

Requirements:

- Prepare calculations to show the current free cash flows to equity (FCFE) of Total Ltd. 5
- Using FCFE model, estimate the current market value of equity for Total Ltd., explaining any assumptions made. 5
- Explain the circumstances in which the Black-Scholes Option Pricing (BSOP) model could be used to assess the value of a company, including the data required for the variables used in the model. 3
- Using the BSOP method, estimate the maximum price and premium Total Ltd. may pay for Lily Archade. 3
- Discuss the appropriateness of the method used in (d) above, by considering whether the BSOP model can provide a meaningful value for a company. 2

---The End---