

## BUSINESS STRATEGY AND TECHNOLOGY

Nov-Dec 2024

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. a) i) Which is more important in explaining the success and failure of companies: strategies or luck? 4
- ii) The product that launched Microsoft into its leadership position in the software industry was MS-DOS, the operating system for IBM and IBM-compatible PCs. The original DOS program, however, was developed not by Microsoft but by Seattle Computer, where it was known as Q-DOS (which stood for “quick and dirty operating systems”). When IBM was looking for an operating system to run its original PC, it talked to a number of software companies, about developing such a system. Seattle Computer was not one of those companies, Bill Gates knew that Seattle Computer had developed a disk operating system and took action; he borrowed \$50,000 from his father, a senior partner in a prominent Seattle law firm, then went to see the CEO of Seattle Computer and offered to purchase the rights to the company’s Q-DOS system. He did not, of course, reveal that IBM was looking for a disk operating system. Seattle Computer, short of cash, quickly agreed. Gates then renamed the system MS-DOS, upgraded it, and licensed it to IBM. The rest, as they say, is history.
- Requirement:**
- So, was Gates lucky or it’s his strategy that worked perfect? 4
- b) i) What makes a strategy a winner? 2
- ii) Is the collective strength of five competitive forces conducive to good profitability? 5

2. Modern Shoes Ltd. (MSL) has manufactured quality shoes for ladies and gentleman for the last 30 years, and the MSL label has become a valued brand. The shoes are hand-made by craftsman and sell at the top end of the market, retailing at about Tk 200 per pair. The company’s shareholders are all members of the Zaman family.

The shoes are made at a single factory near Dhaka and are distributed via a small select group of up market retailers that MSL Ltd. monitors closely. These are located all over Bangladesh but over 60% of the sales are in the Dhaka metropolitan area.

The company’s sales have been as follows:

Year	Pairs of shoes (000)
2021	150
2022	135
2023	125
2024 (projected)	120

Shoes are sold to retailers at an average price of Tk 150 per pair and the variable manufacturing cost is Tk 80 per pair. Annual fixed cost is Tk. 9 million. These amounts have been constant for some time.

The company has made reasonable profits in recent years. This has, however, been an increase in the popularity of designer Italian shoes, also priced at around Tk 200 per pair, particularly amongst fashion conscious young customers. This has meant a significant fall in MSL’s sales and as a result, the company has started to make losses.

A further loss of sales to Italian designer shoe companies not expected, as the majority of the remaining customers are older and prefer a more traditional shoe.

The board of directors met to consider various strategic options, and the views of the directors were as follows:

### Managing Director

I have been approached by the F & F, the large, mid market department store chain. They are asking us to put a proposal together to supply them with up to 200,000 pairs of shoes a year. My initial estimate is that we will sell to them a Tk.45 per pair and they will sell to customer at Tk 60 per pair.

The shoes would carry the F&F brand name rather than our own, but clearly F&F wants it made known that they are using suppliers of our quality. It would be a lower quality than our own brand, but nevertheless this is a major opportunity to expand sales and diversify our customer base into the mid-market range with further sales contracts, this contract will only for two years at first, but it could well turn into the cash cow that saves the business in the long term.

**Production director:**

I have some concern with the F&F contract. First, we have no experience in mid-market range and we are trying to compete with other manufacturers which have significant production and marketing experience in this area. Second, our existing organizational structure and culture would need to change and we will need both a major investment in new machinery and a continuous production process to mass-produce shoes for F&F.

**Finance director:**

Look, the new contract makes a profit, so it must be a right strategy. I estimate that the variable cost of manufacture will be about Tk 30 per pair of shoes. Additional annual fixed cost will be Tk. 2 million, mainly depreciation charge over seven to ten years on the initial investment. We can raise debt to finance the outlay.

**Marketing director:**

I agree with the production director. F&F does not really want our shoes, it wants our brand. But why should our customers pay TK 200 for a pair of our shoes when they can get a similar pair for Tk 60. This could damage our reputation and our existing customer base irreparably. I suggest that we focus on our existing market where we have experience and examine our cost structure and pricing policy. I have estimated that if we increase our price to retailers to Tk 165, our annual demand will only fall 120,000 to 110400.

I have also found an alternative supplier of leather. This would reduce variable manufacturing cost by Tk.5 per pair of shoes. It is not quite as good quality but we must cut cost.

**Requirements:**

- a) Calculate the price elasticity of demand for MSL' s existing market, using the information provided by the marketing director. 4
- b) Without further calculations, comment on the meaning of this price elasticity and its implications for MSL's pricing policy, noting and further factors affecting pricing that would need to be considered. 4
- c) Consider the both proposals (potential contract with F&F and the marketing director's proposal) under each of the following headings: 12
  - i) Profitability of the proposal (showing supporting calculation),
  - ii) competitive positioning,
  - iii) Marketing mix, and
  - iv) Risk.

- 3. Safwan, President of Safwan Enterprises, recently attended a seminar introducing the advantages of flexible manufacturing systems utilizing robots. On returning to the plant site, he immediately called his production management team together to present statistics obtained from the seminar. One statistic impressed Safwan – every time labor costs increase Tk 1 an hour, more robots become economical. Also, in industries that are heavily unionized and hourly wage rates are very high, robots are especially appealing. Safwan Enterprises operates in this type of environment. Safwan is convinced that robots are the answer to rising costs in the factory and that this equipment will help return the company to a more profitable financial picture.

Safwan asked the managers to devote all their attention in the next few days to determining where robots would be appropriate in their areas of responsibility.

A week later, Safwan called a meeting asking the top managers to summarize their findings. One of the production managers suggested installing robots in settings where dust and fumes endangered workers. However, the application she was considering did not show the initial direct labor savings that Safwan desired.

Another production manager had contacted equipment dealers with the objective of purchasing automated equipment designed to improve the quality of Product AR, which has a bad reputation for

breaking and failing to meet other claims made by Safwan Enterprises. The financial information obtained showed that instead of achieving a cost savings, costs would actually increase due to the large initial outlay for the robot.

At that point, Safwan threw up his hands and said, “Wow, I have been deceived by the seminar – robots are just fancy, costly equipment that cannot be cost-justified.”

**Requirement:**

- a) Discuss how an overemphasis on short-term profitability from a robot can jeopardize the success of a robotics project from the beginning. 7
  - b) Explain how an overemphasis on short-term profitability can cause managers to overlook workers’ interests. 5
4. a) In air transportation industry, strong cyclical phenomena have been noticed, and the pattern seems to get stronger with time. Different situations may prevail in different markets (Europe, USA, Asia), but since the industry tends towards globalization, and competition becomes worldwide, what affects one market affects others in several ways. It does not seem, therefore, an oversimplification to speak about global cycles in air transportation. The growing interaction of markets may also account, at least partly, for the amplification of cycles that seem to appear.

The airline industry as a whole is loss making. Even successful airlines struggle to get an operating profit around 10%.

Using the following models identify contributory factor to the low rates of profit in Airline industry

**Requirements:**

- i) Discuss Industry life cycle of airline industry. 5
  - ii) Discuss Porter’s five forces model for competition in the airline industry. 5
  - iii) Identify potential strategies to restore profitability in the airline industry in the light of your analysis. 5
- b) Youngone PLC manufactures car seats for children. Youngone’s home country is Zoland and has extensive legislation on car safety for many years and child seats are compulsory. The company was formed 10 years ago by an entrepreneur who had previously worked as a technical consultant for an industrial foam company. Despite strong competition, Youngone PLC has succeeded by careful marketing.

The car seats come in a range of sizes and there are a variety of options from full integrated seat for very young babies to booster seats for older children. The company’s main customer is an accessory manufacturer with a major presence in Youngone PLC home market. It buys car seats from Youngone and sells them under its own brand as “safety approved”. It advertises the car seats in necessary broacher and on its website. The company’s second major customer is a large super store in the home country which specializes in children’s clothing and accessories such as prams and push chairs. The remaining sales are to a varied mix of large and small independent car accessory retailers.

The car seats have historically all been produced on a single site in the north of home country. The Managing Director uses his connections to source the foam padding from several suppliers with a commitment to achieving the lowest price but complying with the safety standards and expectation. Zoland has sophisticated economy with efficient capital markets. JIT logistics are common in all forms of manufacturing.

The company is considering possible methods of expansion and is currently considering exports to neighboring countries.

**Requirements:**

- i) Explain how Zoland could give Youngone PLC a competitive advantages when it starts its export operation? 4
- ii) The Managing Director of Youngone PLC is constantly trying to improve the productivity and quality of his manufacturing operations and is considering a program of benchmarking. Explain why a benchmarking programme would help Youngone PLC and suggest how it might be carried out. 4

5. PRAN Ltd is a Bangladesh based company, specializing in the production of 100% real fruit smoothies (a drink made from a blend of whole crushed fruit and fruit juice). The business is run from the ‘Wholesome House’ headquarters in Khulna, where a state of the art production facility is sited and where nearly all of the employees are located.

#### ***Company history and funding***

The business incorporated and started trading on 1 January 2021, with the entire shareholding being held equally by the two founders. SJ and JS, who are also the only directors. Initial finance was provided as follows:

- SJ and JS had both made a large bonus in their previous employment and invested Tk 50,000 each as equity.
- Bank finance was obtained in the form of a Tk 250,000 10-year loan carrying interest at 8% per annum, secured by personal guarantees on the directors’ houses and a Tk 100mn overdraft facility.
- In 2022, SJ introduced a further Tk 100,000 as a longer loan – money that had recently been inherited. It was agreed that interest would be payable at 4% per annum.

#### ***The product***

The majority of fruit drinks in the industry are produced from concentrated juice and most use preservatives. This makes the production process faster, the drinks cheaper and because they last longer, facilitates distribution.

PRAN’s range of fruit smoothies consist of 100% pure fruit with no preservatives or additives. They buy fruit direct from the growers, squeeze it, bottle it and sell it. As a result, they have a relatively expensive product with a short shelf-life, although they use high tech containers to ensure the product lasts as long as possible. As PRAN’s products are not subject to ultra high (UHT) temperature processing, all the production equipment has to be completely sterilized and the juice has to be kept chilled at every stage of the process.

PRAN’s fruit suppliers are located all over the world. All batches of fruit undergo strict testing to ensure that only the highest quality ingredients are used by PRAN.

PRAN tries to foster an entrepreneurial environment and welcomes new ideas and suggestions from staff and customers. All new recipes are tested on family and friends and members of the public passing by PRAN house.

Now all new ideas are implemented. PRAN’s mission statement is ‘to make juices that are healthy and that people will enjoy drinking. They will be produced in as socially and environmentally friendly way as possible’.

So, as well as public approval, all new products have to fulfill the following criteria:

- Great tasting
- Simple
- 100% pure ingredients
- Healthy

To maintain their creative image, PRAN have introduced the concept of ‘seasonal blends’, each only available for three months. This allows them to appear innovative without having to sustain lots of new lines.

#### ***Pricing and packaging***

PRAN smoothies are currently available in two sizes: individual 250ml bottles and one-liter take-home cartons. The initial target market was busy young professionals, working long hours and wanting a convenient healthy drink option. The 250ml bottles retail between Tk 1.75 and Tk 2.00 and the take-home cartons between Tk 3.30 and Tk 3.50. Take-home cartons are available only in supermarkets.

The average price per drink charged by PRAN to retailers in 2023 was Tk 1.15 (250ml) and Tk 2.00 (one liter).

The retail value of the Bangladesh smoothie market now stands at around Tk 46mn. Supermarket won brand smoothies account for 29% of this value and PRAN’s nearest competitor, Frooty Drinks’ account for 27%. Frooty have a less exciting range of flavors than PRAN and the retail price of their drinks is around 40p cheaper per 250ml bottle because they use partly concentrated juice.

PRAN does not currently produce drinks to be sold under own-brand tables for the supermarkets. These are made by Frooty Drinks and a number of other smaller products.

### **Market information**

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024 forecast</u>
Retail Value of smoothie market Tkmn	23.75	32.4	46.1	69.7
PRAN market share	4.20%	10.70%	24.50%	38.20%
Average sales volume per week				
250ml bottles	10,000	35,000	80,000	185,000
1 litre cartons	-	-	20,000	50,000
Annual revenue (Tk'000)				
250ml bottles	624	2,184	4,784	11,063
1 litre cartons	-	-	2,080	5,200

### **Distribution**

At the end of their first year, they signed a deal with a young and growing coffee bar business, which agreed to stock PRAN drinks in their shops. Since then, PRAN have experienced rapid growth and supply to the major supermarkets now accounts for over 60% of revenue. Their drinks are also stocked across Bangladesh in some of the well-known chains of sandwich shops, coffee bars and restaurants. SJ and JS have not forgotten their initial customers however and they are always careful to keep their small independent shops happy.

As the business grew, PRAN were unable to distribute the product themselves and at the end of 2022 they signed a contract with an independent Bangladesh distributor, City Solutions (CS), who specialize in cold food and drink logistics. Once the drinks leave the PRAN factory in Khulna, they are transported by CS direct to the distribution center of the supermarkets and larger chains, or to specialist wholesalers who supply the smaller delicatessens and independent sandwich shops.

### **Human resources strategy**

PRAN's attitude towards its staff is simple: 'We want PRAN to be a fun place to work. All our employees are treated like one of the family and teamwork is one of our key values'.

To ensure their team is happy and motivated, PRAN spends a lot of money on staff welfare and training.

### **Support for charity and the environment**

From the outset, PRAN has tried to run its business in an ethical way.

PRAN cartons and bottles are 40% recycled plastic, which is currently the most technology will allow, but they would prefer more. They encourage recycling with messages on their cartons and recycling information on their website.

The company aims to minimize any negative impact on the environment. The company car is electric, and they use a 100% renewable energy supplier.

PRAN gives away drinks to the homeless and sponsors holiday programs for disadvantaged children in Bangladesh. In addition, they donate a proportion of profits (Currently 10%) to various projects in the part of the country where they source their ingredients.

### **Strategic plans**

The directors share the same personal objectives. Their primary aim is to continue working for themselves, doing something that they enjoy and believe in, which provides them with a comfortable living. They are in the business for the long term and currently have no plans for an exit route. Now they have had a taste of success, SJ is keen to open a chain of PRAN juice bars similar to the current coffee shops opening up in Bangladesh high streets. JS is more conservative. She favours gradual growth, and has suggested that the company:

- Target other consumers in Bangladesh by introducing a wider range of drinks e.g. organic PRAN drinks, health drinks with added vitamins and minerals and smoothie for kids.

- Expand their sales into Southeast Asia. Research suggests the smoothie market there is currently about 4 years behind Bangladesh and is not yet served by any major brands.

Both continue to share the same vision though:

‘We don’t want to be like the big companies. Whatever we do, we must stay true to our brand and continue to operate as an informal, open and ethical company.’

**Appendix 1: Extracts of financial information**

	<b>2021</b>	<b>2022</b>	<b>2023</b>
	<b>Tk</b>	<b>Tk</b>	<b>Tk</b>
Sales	624,000	2,184,000	6,864,000
Variable costs	(580,320)	(1,834,560)	5,491,200
Fixed costs	(22,900)	(317,700)	(816,800)
Profit pre-tax and pre-donations	(179,220)	31,740	556,000
Bank balance	(94,358)	(94,561)	(4,116)
Net assets	(79,220)	(50,904)	396,296

**Requirements:**

- a) Provide an analysis of the smoothie industry in which PRAN operates, under each of the following from Porter’s Five Forces model.
  - Power of buyers
  - Power of suppliers
  - Competitive rivalry

Explain clearly the implications for PRAN’s current position and future strategy. 7
- b) Examine the influence that PRAN’s ethical stance has on its mission and objectives and evaluate the impact this has had on its competitive position and performance. 7
- c) Explain the issues that are likely to arise for the company as a result of the rapid expansion that is forecast for future growth. 7
- d) Write a report that critically evaluates the suitability, acceptability and feasibility of each of the three strategic plans put forward by JS and SJ (i.e. juice bars, wider product range, European sales). 9

---The End---