Paper 17: Strategic Performance Management

Full Marks: 100 Time : 3 hours

Section A

[Question No.1 is compulsory and any 4 from the rest]

1. There were a large number of computer-education companies in South Africa in 1970s. These were concentrated in big cities, having population of 1,00,000 or more, as there was a Prevalent belief that a computer-education company can succeed only in big cities.

Future information (FI), a firm in computer-education business, was started by Peter Rice in Johannesburg in 1978. Peter Rice did not agree with the rest of the entrepreneurs in the industry about the location of the service centres. He decided to go to the smaller towns. According to Rice any town having at least one high school could house a successful computer-education centre. In 1983, 20 centres of FI were opened in small towns. These were like 'local' monopolies because the towns were not big enough to accommodate another centre.

In 1970s and early 1980s, there was a boom in computer-education business, but by the late1980s, a downturn stated in this business and many big firms went bankrupt. On the other hand, FI kept on going from strength to strength all this while – by 1990 its centers went up from 20 to 60. Now, it dawned on other firms that FI was following a pragmatic (through unconventional) approach. Rivals, therefore also to contemplate about following FI expansion strategy, as there was still a largely number of small towns left uncovered by any computer-education centre. FI realized that if this happens, they would be left behind. So the situation was like a pre-emptive game. Where every firm would like to enter each town first. FI calculated the payoff such game as follows:

Particulars	Enters	Does not enter	
F ₁ Enters	-50, -50	100, 0	
Does not enter	0,100	0,0	

Required:

- (a) What are the limitations of Game Theory?
- (b) Describe about the Mixed Strategy, optimal Strategy, Two person zero sum Game.
- (c) Write down the impact, if other companies enter into the business. [3x5=15]
- 2. (a) "Competitive intelligence is a process of gathering data, creating information and making decisions. Management accountants are trained to gather data, assimilate data into information and make decisions based upon information, frequently with their management counterparts." Justify the statements.
 - (b) What is Process Analysis? Describe the objectives of Process Analysis.
 - (c) Describe the limitations of Value Chain Analysis.

[5+5+5]

3. (a)Snow White Ltd has two departments - Cloth and Readymade Clothes. Ready Made Clothes are made by the Firm itself out of cloth supplied by the Cloth Department at its usual selling price. From the following figures, prepare Departmental Trading and Profit and Loss Accounts for the year ended 31st March:

Particulars	Cloth Department	Readymade Centre	
Opening Stock as on 1st April	3,00,000	50,000	

Purchases	20,00,000	15,000
Sales	22,00,000	4,50,000
Transfer to Cloths Department	3,00,000	1
Expenses – Manufacturing	-	60,000
Selling	20,000	6,000
Closing Stock as on 31st March	2,00,000	00,000

The Stock in the Readymade Clothes Department may be considered as consisting of 75% Cloth and 25% other expenses. The Cloth Department earned Gross Profit at the rate of 15% during the year.

General Expenses of the business as a whole came to ₹ 1,10,000.

- (b) Explain the role of the Management Accountant in Value Chain Analysis. [10+5]
- 4. (a) Explain the meaning of Target Costing.
- (b) "Cost Estimation, Permissible Cost Ranges, Capital Budgeting, Cost Principle Explanation, Review of cost reduction Targets and Final Review and Feedback" etc. these are the role of Cost Accountant in a Target Costing Environment. Explain the role of cost accountant of that environment.
- (c) Describe about the Reverse Engineering.

[5+5+5]

5(a) The Oil India Corporation is considering whether to go for an offshore oil drilling contract to be awarded in Bombay High. If they bid, value would be Rs. 600 million with a 65% chance of gaining the contract. They may set up a new drilling operation or move already existing operation, which has proved successful, to the new site. The probability of success and expected returns are as follows:

Outcome	New Drilling Operation		Existing Operation	
	Probability	Expected Revenue (₹ in million)	Probability	Expected Revenue (₹ in million)
Success	0.75	800	0.85	700
Failure	0.25	200	0.15	350

If the Corporation do not bid or lose the contract, they can use the Rs. 600 million to modernize their operation. This would result in a return of either 5% or 8% on the sum invested with probabilities 0.45 and 0.55.

(Assume that all costs and revenue have been discounted to present value)

- (i). Construct a decision tree for the problem showing clearly the course of action.
- (ii). By applying an appropriate decision criterion recommended whether or not the Oil India Corporation should bid the contract.
- (b) The total revenue from sale of 'x' units is given by the equation $R = 100x 2x^2$, calculate the point price elasticity of demand, when marginal revenue is 20. [10+5]

Section B [Question No.6 is compulsory and any 1 from the rest]

6. The Dabbawalas-Feeding Mumbai

Hungry kya? What would you like: pizza from the local Domino's (30 minute delivery) or a fresh, hot meal from home? Most managers don't have a choice. It's either a packed lunch or junk food from a fast food outlet.

Unless you live in Mumbai, that is, where a small army of 'dabbawalas' picks up 175,000 lunches from homes and delivers them to harried students, managers and workers on every working day. At your desk, 12.30 pm on the dot. Served hot, of course. And now you can order even through the Internet.

The Mumbai Tiffin Box Suppliers Association (MTBSA) is a streamlined 120 year old organization with 4,500 semi literate members providing a quality door-to-door service to a large and loyal customer base.

How has IVITBSA managed to survive through these tumultuous years? The answer lies in twin process that combines competitive collaboration between team members with a high level of technical efficiency in logistics management. It works like this.

After the customer leaves for work, her lunch is packed into tiffin provided by the **dabbawala**. A color-coded notation on the handle identifies its owner and destination. Once the *dabbawala* has picked up the tiffin, he moves fast using a combination of bicycles, trains and his two feet.

A BBC crew filming dabbawalas in action was amazed at their speed. "Following our dabbawala wasn't easy, our film crew quickly lost him in the congestion of the train station. At Victoria Terminus we found other fast moving dabbawalas, but not our subject. and at Mr Bhapat's ayurvedic pharmacy, the lunch had arrived long before the film crew," the documentary noted wryly. So, how do they work so efficiently?

TEAM WORK AND TIMING

The entire system depends on team work and meticulous timing. Tiffins are collected from homes between 7.00 am and 9.00 am, and taken to the nearest railway station. At various intermediary stations, they are hauled onto platforms and sorted out for area wise distribution, so that a single tiffin could change hands three to four times in the course of its daily journey.

At Mumbai's downtown stations, the last link in the chain, a final relay of *Dabbawalas* fan out to the tiffin's destined bellies. Lunch hour over, the whole process moves into reverse and the tiffins return to suburban homes by 6.00 p.m.

To better understand the complex sorting process let's take an example. At Vile Parle Station, there are four groups of *dabbawalas*, each has twenty members and each member services 40 customers. That makes 3,200 tiffins in all. These 3,200 tiffins have to be collected by 9.00 am, reached the station and sorted according to their destinations by 10.00 am when the 'Dabbawala Special' train arrives.

The railway provides sorting areas on platforms as well as special compartments on trains travelling south between 10.00 a.m and 11.30 a.m.

During the journey, these 80 dabbawalas regroup according to the number of tiffins to be delivered in a particular area, and not according to the groups they actually belong to. If 150 tiffins are to be delivered in the Grant Road Station area, then four people are assigned to that station, keeping in mind one person can carry no more than 35-40 tiffins.

During the earlier sorting process, each *dabbawala* would have concentrated on locating only those 40 tiffins under his charge, wherever they come from, and this specialization makes the entire system efficient and error-free.

Typically it takes about ten to fifteen minutes to search, assemble and arrange 40 tiffins onto a crate, and by 12.30 p.m they are delivered to offices.

In a way, MTBSA's system is like the Internet. The Internet relies on a concept called packet switching. In packet switched networks, voice or data files are sliced into tiny sachets, each with its own coded address which directs its routing.

These packets are then ferried in bursts, independent of other packets and possibly taking different routes, across the country or the world, and re-assembled at their destination.

Packet switching maximizes network density, but there is a downside: your packets intermingle with other packets and if the network is overburdened, packets can collide with others, even get misdirected or lost in cyberspace, and almost certainly not arrive on time.

ELEGANT LOGISTICS

In the dabbawalas' elegant logistics system, using 25 kms of public transport, 10 km of footwork and involving multiple transfer points, mistakes rarely happen. According to a Forbes 1998 article, one mistake for every eight million deliveries is the norm. How do they achieve at virtual six sigma quality with zero documentation? For one, the system limits the routing and sorting to a few central points. Secondly, a simple color code determines not only packet routing but packet prioritizing as lunches transfer from train to bicycle to foot.

COMPETITIVE COLLABORATION

MTBSA is a remarkably flat organization with just three tiers: the governing council (president, vice president, general secretary, treasurer and nine directors), the *mukadams* and the Dabbawalas. Its first office was at Grant Road. Today it has offices near most railway stations.

Nobody is an employer and none are employees. Each *dabbawala* considers himself a shareholder and entrepreneur.

Surprisingly, MTBSA is a fairly recent entity: the service is believed to have started in the 1880s but officially registered itself only in 1968. Growth in membership is organic and dependent on market conditions. This decentralized organization assumed its current form in 1970, the most recent date of restructuring. *Dabbawalas* are divided into sub-groups of 15 to 25, each supervised by four *mukadams*. Experienced old timers, the *mukadams*, are familiar with the colors and codlings used in the complex logistics process. Their key responsibility is sorting tiffins but they play a critical role in resolving disputes; maintaining records of receipts and payments; acquiring new customers; and training junior dabbawalas on handling new Customers on their first day.

Each group is financially independent but coordinates with others for deliveries: the service could not exist otherwise. The process is competitive at the customers' end and united at the delivery end. The *mukadams* are also responsible for day-to-day functioning. And, more important, there is no organizational structure, managerial layers or explicit control mechanisms. The rationale behind the business model is to push internal competitiveness, which means that the four Vile Parle groups vie with each other to acquire new customers?

EARNINGS

Logistics is the new mantra for building competitive advantage, the world over. Mumbai's dabbawalas developed their home grown version long before the term was coined.

Their attitude of competitive collaboration is equally unusual, particularly in India. The operation process is competitive at the customers' end but united at the delivery end, ensuring their survival since a century and more. Is their business model worth replicating in the digital age is the big question.

Required:

- (a) Explain the objectives of the Six Sigma.
- (b) Discuss the strategies used by the organization to achieve the goals of the organization.
- (c) What do you understand by Competitive Collaboration?

[3x5=15]

7. Describe about the Elman and Jordon Artificial Neural Networks.

[5]

8. Discuss the importance of Decision Support Systems for gaining the Competitive Advantage. [5]

Section C [Any 1 from the rest]

- 9. (a) Discuss about Enterprise Risk Management and need for implementation of ERM.
 - (b) Distinguish between Basel I and Basel II.
 - (c) Describe the Transition Risk in the context of Corporate Risk.

[(5+5)+5+5]

- 10. (a) Describe the Argenti Model in the context of Predict Corporate Failure.
 - (b)"Just as diseases are identified by certain symptoms; industrial sickness can be identified by the following symptoms. These symptoms act as leading indicators of sickness, and if immediate remedial actions are not taken, the sickness will grow to the extent that the organization will find its natural death." Justify the statements.
 - (c) "The causes of sickness can be categorized into two viz., internal causes and external causes. Internal causes are those that are internal to the organization over which the management of the organization has control." Explain the Statement and explaining the Point Project formulation, Project Implementation, production.

[5+5+10]