Section A

this ONE question is compulsory and must be attempted

Question 1:

Lopten Industries is one of the largest, listed consumer durables manufacturers in the world, making washing machines, tumble dryers and dishwashers. It has recently expanded into Beeland which is a developing country where incomes have risen to the point where demand is increasing for Lopten's goods among growing middle-class population

Lopten believes in the economies of scale of large manufacturing sites with dispersed selling branches in the markets in which it operates. Therefore it has entered the Beeland market by setting up a local sales force and supporting them with a national marketing campaign. The company is currently selling only two products in Beeland (both are types of washing machines):

- I. A basic product (called Cheerful) with functions which are comparable with the existing local competitors' product.
- II. A premium product (called Posh) which has functions and features similar to Lopten's products in other developed countries

Both products are manufactured and imported from its regional manufacturing hub, which is in the neighboring country of Kayland.

The competitive environment in Beeland is changing rapidly. The washing machine market used to be dominated by two large local manufacturers who make simple, cheap and reliable machines. There are two other major international manufacturers apart from Lopten. One of these has already opened a factory in Beeland and is producing machines similar to Cheerful to compete directly with existing local producers. The government of Beeland has supported this new entrant with grants, as it keen to encourage inward investment by foreign companies and the resulting expertise and employment which they provide. The other international competitor is now considering entering the Beeland market with more highly specified machines similar to Lopten's Posh brand.

Lopten's stated mission is to be the 'most successful manufacturer of its type of products in the world. The board has set the following critical success factors (CSFs) for Lopten's Beeland operations:

- 1. To obtain a dominant market presence
- 2. To maximize profits within acceptable risk
- 3. To maintain the brand image of Lopten for above average quality products

The board is considering using the following key performance indicators (KPIs) for each product total profit, average sales price per unit, market share, margin of safety, return of capital employed (ROCE), total quality costs and consumer award won. (**Note.** Margin of safety has been defined as {actual sales – breakeven sales units}/actual sales units.)

The board has asked you as a consultant to assess its current performance measurement systems. They want a report which calculates the various indicators suggested above and then assess how the key performance indicators address issues in the external environment. The report should assess the balance between planning and controlling represented by the KPIs as they want to ensure these match what they should be doing at the strategic level in Lopten. Also, it should evaluate how the KPIs fit with the CSFs which have been selected. The data given in the appendix 1 has been collected for your use.

Finally, the board is considering two new marketing strategies going forward: Plan A is to continue operations as at present allowing for 4% growth pa in volumes of both Cheerful and Posh.

Plan B is to dramatically reduce the marketing spend on Cheerful and to reallocate resources to focus the marketing on Posh. This is expected to lead to an anticipated growth in volume of 15% p.a. for Posh and flat sales for Cheerful.

The target operating profit for the Beeland operation in two years' time is set at \$135m and the board wants an evaluation of these strategies in meeting that target.

<u>Appendix 1</u>
Beeland operation's information for the most recent financial year

| | Cheerful | Posh | total |
|--------------------------------------|-------------|-------------|-------|
| Variable costs | \$ per unit | \$ per unit | |
| Materials | 90 | 120 | |
| Labour | 60 | 80 | |
| Overheads | 40 | 50 | |
| Distribution costs | 45 | 45 | |
| Quality costs | 20 | 30 | |
| Fixed costs | \$m | \$m | \$m |
| Administration costs | 18 | 18 | 36 |
| Distribution costs | 16 | 16 | 32 |
| Quality costs | 6 | 6 | 12 |
| Marketing costs | 80 | 80 | 160 |
| Other data | \$m | \$m | \$m |
| Revenue | 448 | 308 | 756 |
| Capital employed | 326 | 250 | 576 |
| | Units | Units | Units |
| Total market size (millions) | 9.33 | 1.33 | 10.66 |
| Beeland operation's sales (millions) | 1.12 | 0.44 | 1.56 |

Notes

- 1. Cheerful has won one best buy award from the Beeland Consumer Association.
- 2. Posh has won four best buy awards from the Beeland Consumer Association.
- 3. The allocations of fixed costs are based on a recent activity-based costing exercise and are consider to be valid

Required

Write a report to the board of Lopten which:

- i. calculates the key performance indicators (KPIs) suggested by the board for the assessment of performance of the Beeland operations (12 marks)
- ii. Uses PEST analysis to identify issues in the company's external environment and then evaluates the effectiveness of the suggested KPIs in addressing these issues.

(12 marks)

iii. Takes each critical success factor (CSF) in turn and evaluates how the suggested KPIs fit to the CSFs given.

(11 marks)

iv. Assesses the extent to which the suggested KPIs would be suitable for use in planning rather than controlling.

(6

marks)

v. Evaluates whether the two proposed marketing strategies result in Beeland hitting its operating profit target in two years' time.

(9

marks)

(Total: 50

marks)

<u>Section B – TWO questions ONLY to be attempted</u>

Question 2:

FRANCHISING FOR YOU LTD

Franchising for You Ltd (F4U) markets a range of franchises which it makes available to its customers, the franchisees. F4U supplies the franchisee with information of the mode of operation, detailed operation schedules and back-up advice (by telephone, internet) and undertakes national advertising. Each franchisee must arrange for its own premises, equipment and undertake local marketing.

F4U is considering the introduction of a Dance and Drama franchise which would have an expected life of six years. From this project, the only income F4U will receive from franchisees comes from the initial franchise fee.

The following estimates have been made relating to the cash outflows and inflows for F4U in order that F4U can evaluate the financial viability of the Dance and Drama franchise proposal:

- 1. Initial investment of \$6m. This will include a substantial element relating to the 'intellectual capital' requirement of the proposal.
- 2. Development/improvement costs of \$1m per year at the end of each of years two and three.
- 3. 300 franchises will be sold each year at a fee of \$20,000 per franchisee.
- 4. Variable costs, payable in full on the issue of each franchise, are estimated at \$6,000 per franchise.
- 5. Directly attributable fixed costs of \$0.6m per year in each of years one to six. No further fixed costs will be payable by F4U after this period.
- Corporation tax at the rate of 30%, payable in the year in which cash flow occurs. Tax allowances are not available on the initial investment or development/improvement costs payable by F4U.
- 7. All cash flows are stated in current prices and with the exception of the initial investment will occur at the end of each year.
- 8. The money cost of capital is 15.44%. Annual inflation during the period is estimated at 4%.

Required:

a) Calculate the net present value (NPV) of the Dance and Drama franchise proposal and recommend whether it should be undertaken by F4U.

(6

b) Discuss the elements to be considered as 'intellectual capital' and issues associated with its valuation for inclusion in the initial investment of \$6m.

(6

marks)

c) Discuss ways in which reliance solely on financial performance measures can detract from the effectiveness of the performance management system within an organisation.

(6 marks)

F4U has identified key variables as follows:

1- The number of franchises taken up each year. It is estimated that a flexible pricing policy will result in the following outcomes:

| Fee per franchise | Number of franchises |
|-------------------|----------------------|
| | sold each year |
| | |

| \$ | |
|--------|-----|
| 22,000 | 270 |
| 20,000 | 300 |
| 18,000 | 355 |

²⁻ The variable cost per franchise may be \$7,000, \$6,000 or \$5,000.

The NINE possible outcomes of a spreadsheet model used in calculating the NPV and incorporating the variables 1 and 2 above, have been identified as follows:

Payoff Matrix: NPV values Fee per franchise (\$000)

| | | 18 | 20 | | 22 |
|---------------|-------|-----------|-----------|-----------|----|
| Variable cost | 5,000 | 4,348,226 | 4,007,630 | 4,274,183 | |
| Per franchise | 6,000 | 3,296,822 | 3,119,120 | 3,474,524 | |
| (\$000) | 7,000 | 2,245,419 | 2,230,610 | 2,674,865 | |

Required:

- (d) State the franchise fee pricing strategy (\$ per franchise) which will result from the operation of each of the following decision rules:
 - (i) Maximax
 - (ii) Maximin
 - (iii) Minimax regret.

Your answer should explain the basis of operation of each of the three decision rules.

(7 marks) (Total: 25

marks)

Question 3:

FORION ELECTRONICS

Forion Electronics (Forion) manufactures a range of electronic goods. Its business has grown rapidly over the last ten years and is now complex and international. Forion manufactures over 100 different products, selling into 25 different countries. There is a supplier base of over 200 companies from which Forion sources. As the business has become more complex, the board has found it difficult to pull together all the information that they require in order to make decisions.

The current information systems are developed in-house and are based in the functional departments (such as purchasing, manufacturing, warehousing and delivery, selling and marketing). The organisation uses the financial system as a means of bringing together information for an overview of corporate performance.

There have been a number of examples of problems encountered with information in Forion:

- There are inefficiencies arising from ordering the wrong amount of subcomponents.
- There are often stock-outs or obsolescence of unsold goods in the warehouses, although the marketing department prepares good sales forecasts; and
- Sometimes, there are insufficient delivery vehicles available to meet customer deadlines.

The board of Forion believes the problems arise from poor information sharing within the company. They are considering the purchase of an enterprise resource planning system (ERPS) to be the single information system for the whole organisation. Also, Forion is planning to launch a smartphone. However, in order to make it competitive they need to have high-visibility, durable screens. As the cost of screen development is considerable, it has been decided to form a strategic alliance with a well-known screen manufacturer to provide this key component for the new smartphone. Bon Accord Screens

(BAS) has been chosen as the strategic ally, as they have a strong reputation for their quality of manufacturing and new product development. BAS has been trying to break into the smartphone market for several years.

The alliance agreement has stipulated three critical areas of performance for BAS' supply to Forion:

- 1) Quality of manufacturing, measured by fault rates of screens supplied being within agreed tolerances (so that they fit Forion's phone-bodies).
- 2) Time of delivery, measured by the number of times a shipment is more than one day overdue.
- 3) The ability to provide technical upgrades to the screens as the market demands.
- 4) The service level agreement (SLA) will be based on these three points and there will be financial penalties built into the agreement if BAS fails to meet these.

Required:

(a) Discuss the integration of information systems in an ERPS and how the ERPS may impact on performance management issues at Forion.

(10 marks)

(b) Evaluate, from Forion's viewpoint, the usefulness of the three critical areas in the alliance agreement for measuring the performance of BAS.

(8 marks)

(c) Evaluate the relative reliability of financial and non-financial data from internal and external sources in the context of the alliance between Forion and BAS.

(7 marks) (Total: 25 marks)

Question 4:

TENCH CARS

Tench Cars (Tench) is large national car manufacturing business. It is based in Essland, a country that has recently turned from state communism to democratic capitalism. The car industry had been heavily supported and controlled by the bureaucracy of the old regime.

The government had stipulated production and employment targets for the business but had ignored profit as a performance measure. Tench is now run by a new generation of capitalist business people intent on rejuvenating the company's fortunes. The company has a strong position within Essland, which has a population of 200 million and forms the majority of Tench's market. However, the company has also traditionally achieved a good market share in six neighboring countries due to historic links and shared culture between them and Essland. All of these markets are experiencing growing car ownership as political and market reforms lead to greater wealth in a large proportion of the population. Additionally, the new government in Essland is deregulating markets and opening the country to imports of foreign vehicles.

Tench's management recognises that it needs to make fundamental changes to its production approach in order to combat increased competition from foreign manufacturers. Tench's cars are now being seen as ugly, pollutive and with poor safety features in comparison to the foreign competition. Management plans to address this by improving the quality of its cars through the use of quality management techniques. It plans to improve financial performance through the use of Kaizen costing and just-in-time purchasing and production. Tench's existing performance reporting system uses standard costing and budgetary variance analysis in order to monitor and control production activities.

The Chief Financial Officer (CFO) of Tench has commented that he is confused by the terminology associated with quality management and needs a clearer understanding of the different costs associated with quality management. The CFO also wants to know the impact of including quality costs and using the Kaizen costing approach on the traditional standard costing approach at Tench.

Required:

Write to the CFO to:

(a) Discuss the impact of collection and use of quality costs on the current costing systems at Tench.

(6 marks)

(b) Discuss and evaluate the impact of the Kaizen costing approach on the costing systems and employee management at Tench.

(8

marks)

(c) Briefly evaluate the effect of moving to just-in-time purchasing and production, noting the impact on performance measures at Tench.

(6

marks)

(d) Briefly discuss any problems that the existing performance reporting system may cause for Tench.

(5 marks)

(Total: 25

marks)

"End of paper,"