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Serial No.....

Society of Certified Management Accountants of Sri Lanka

Professional- I Stage Pilot paper

Instructions to Candidates.

1. Time allowed is **three (3) hours**.
2. Answer **Question- 1 in Section A** and **any 2 questions in Section B**.
3. The answers should be given in the **English Language**.

<i>Subject</i>	<i>Subject Code</i>
Information Technology Management	(ITM)

Section A

Answer this question

Question 1 (70 Marks)

This question is based on the scenario and data described below:-

Company background

Lanka Martz Ltd (LML) manufactures motor vehicles, with annual sales of Rs. 2,250 million this represents about 5,000 cars sold per annum. Five years ago in July 2002, LML formed a strategic planning unit to review the market for motor vehicles. The unit was to report to the board on a regular basis concerning potential changes to the market, and make recommendations concerning the future production of motor vehicles within the company.

Recent report from the unit identified a growing customer preference for motor vehicles that are highly tailored to customers' individual requirements. Customers are starting to express preferences, for not only the colour of the vehicle being purchased, but also more fundamental features such as the size of doors and the ability to add, on demand, extras such as air conditioning.

The unit has recommended that Lanka Martz Ltd should establish a new production line that can produce motor vehicles to individual customer orders. In the past, catering to customer requirements to this extent has been possible only in expensive, non-automated factories.

If the unit's proposal is accepted, the new production line will provide a similar product, but at a reduced cost because of increased use of industrial robots. The customer will, in effect, be able to design the motor vehicle that they require, using a computer terminal in the car showroom, and then have this built by the new production line.

It is recognized that many customers in the showroom will not be computer-literate. While customers might therefore expect that the designing of their own car will be fun, it is also likely that they will require some guidance from the system to explain how it should be used.

New production line

On July 13, 2006, the board agreed in principle to the proposal to establish a new production line, although more information was requested.

Three separate requests for information were sent on behalf of the board to different sections of the company: to the chief executive officer, the production manager and the operational manager.

Extracts from the responses to these requests are shown below:-




Internal Memorandum

Private and Confidential



From: Chief executive of Lanka Martz Ltd
To: The board of Lanka Martz Ltd
Date: 13 July 2006

Proposal to build new production line

The proposal to build a new production line will involve the following:

-  Increase in factory space. This will cost between Rs. 20 million and Rs. 25 million.
-  Use of CAD/CAM production processes.
-  The assumption is that the market will expand by 20 per cent per annum over the next five years.

Board authority will be required for

-  The total cost of new proposal including factory, investment in automation and additional annual costs of employees, and
-  The design and build of CAD/CAM system including customer interfaces at car showrooms.

The Critical Success Factor for the investment will be the raw material cost per tonne of steel used in the production process.

Internal Memorandum

Private and Confidential

From: Production manager
To: Chief executive of Lanka Martz Ltd
Date: 19 July 2006

Proposal to build new production line

Information requested in your memo of 13- July-2006:

Budget for production line-assumption 1,500 units produced per annum:

	<u>Rs.'000</u>
Materials	251,326.94
Labour	232,223.90
Automation expenditure	219,294.96
Sales forecast (at average selling price)	480,008.08

Additional staff required 673

Detailed budgets are on the enclosed disk because it would take too long to print out all the information.

The budgets should be reviewed to ensure that a complete picture of the proposal is obtained.

The program used is the new spreadsheet purchased by the department last month.

Internal Memorandum

Private and Confidential

From: Operational manager's assistant: Personnel and Requisitioning Dept
 To: Chief executive of Lanka Martz Ltd
 Date: 15 July 2006

Proposal to build new production line

Information requested by your memo of 13 July. Unfortunately, the operations manager is on long-term sick leave. I have therefore produced this information to show my best guess of the future figures. A more detailed report will be available when the manager returns.

Personnel

Additional staff can be hired at Rs. 1,325 per week. The labour market is generally buoyant at present and it is unlikely that more than 200 workers can be found in the local area. Increasing wages to Rs. 1,450 per week should provide up to 300 workers. A recruitment company can help find the required staff at a fee of 15 per cent of wages, although there is a 20 per cent chance that 35 per cent of these workers will still need Rs. 1,365 per week. This means that 20 per cent of them will leave in the first six months with a probability of 0.1. Absenteeism rates are currently at industry standard of five days per annum. In fact, we are doing about the same here compared with other similar industries.

Materials

The average material costs are:

	Rs.
Body	6,252.89
Car interior	1,983.32
Engine and accessories	2,339.16
'Extras' requested by customer	1,328.24

Each car produced could vary by a further Rs. 1,387 from the above, depending on the complexity of the specification received from the customer.

Factory cost

The factory cost will be in the region of Rs. 20 million to Rs. 25 million.

You are required to;

- (a)
- (i) Explain briefly the characteristics of information that will be used at each of the strategic, tactical and operational levels of management in Lanka Martz Ltd. **(10 Marks)**
- (ii) Critically assess the information provided in the three reports. Your answer should show whether this information meets the required characteristic for information at that management level. **(20 Marks)**
- (b) Appraise the importance of information technology in Lanka Martz Ltd's new system. In particular, suggest which parts of the new system could not work without the use of information technology. **(12 Marks)**
- (c) Explain the responsibilities for, and actions that should be taken in respect of, data security for each of the strategic, tactical and operational levels of management in Lanka Martz Ltd. You may refer to the most likely and proposed data protection legislation when answering this question. **(13 Marks)**
- (d) Explain the different hardware and software elements of the human-computer interface that will be used in the showroom where the customers design their own cars. Show how these elements can be made to help the customer make a complete and accurate input into the computer system **(15 marks)**

(Total 70 marks)

End of Section A

Section B

Answer any TWO questions

Question No. 2 (15 Marks)

MDL USI Limited is a company with an established base of IT applications. The finance department has a fully computerised accounting system. The marketing department has a customer-modeling package and the production department does not see the need for technology.

The Finance Director is in charge of IT and he is proposing an increase in IT expenditure by about twelve percent to upgrade systems in the relevant departments, based on last year.

You are required to;

Comment on any weaknesses in the IT provision at MDL USI, and any improvements you might make. **(Total 15 marks)**

Question No. 3 (15 Marks)

OE QUET Ltd., is an industrial company serving international markets from factories in Sri Lanka, India, Singapore, and Malaysia. The company is a recognised leader in the manufacture of garments. Turnover shown in the last published accounts was Rs. 450m, of which Rs. 150m was contributed by the companies in Sri Lanka.

All the overseas subsidiaries are wholly owned and operate principally in their own country. There is little transfer of goods across national boundaries. The group is managed from a small Colombo head quarters and a great deal of autonomy has been given to the operating units. As a result each subsidiary has evolved its own information systems strategy.

In recent months the Fort head quarters has begun to press for a more centralised management structure. They argue it will enable more efficient use of resources and so cut costs. The Finance Director has asked you to investigate the options and report to him.

You are required to;

Prepare your **report**, including the references to key literature you feel appropriate, for the Finance Director setting out the advantages and disadvantages of centralising the IT structure and any non-IT factors that might affect your final recommendation **(Total 15 Marks)**

Question No. 4 (15 Marks)

Major organisations use **formal strategies** to identify development priorities for information systems (IS).

You are required to;

Discuss the reason for this!

(Total 15 Marks)

Question No. 5 (15 Marks)

There are many types of threat to an Organisation which relate to Information Technology such as physical damage to hardware or computer media, damage to data or programs, damage to humans, operational problems and industrial espionage / fraud.

You are required to;

Identify basic causes of these problems and list measures that Organisations should take to protect themselves whenever they build Information Systems. **(Total 15 Marks)**

End of section B

End of question paper
