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Serial No.....

Institute of Certified Management Accountants of Sri Lanka
Operational Level
November 2012 Examination

Examination Date : 11th November 2012 **Number of Pages :** 05
Examination Time: 1.30 p.m. – 4.30 p.m. **Number of Questions:** 07

Instructions to Candidates

1. Time allowed is **three (3) hours**.
2. Total: **100 Marks**.
3. Answer **all** questions in Part I and **four (4)** questions from Part II selecting **two (2)** questions from each of the Sections **A** and **B**.
4. Section **A**: Operations Management and Section **B**: Information Systems Management.
5. The answers should be in **English Language**.

<u>Subject</u>	<u>Subject Code</u>
Operations and Information Systems Management	(OIM / OL 3 - 203)

PART I

Question No. 01 (20 Marks)

Answer all parts of the Question No.1. Select the most correct answer to each part of the question. Write the number of the part of the question and the selected answer by stating the relevant English letter, in your answer booklet. **E.g. (1) (relevant English letter), (2) (relevant English letter) etc...**

- (1) Which one of the following is considered as operations strategies?
 - (a) Quality, cost, speed, dependability and flexibility.
 - (b) Quality, sustainability, speed & flexibility, dependability.
 - (c) Speed, Dependability, flexibility, control, accuracy.
 - (d) Cost, speed, profitability, flexibility, quality.
- (2) Which one of the following techniques does not evaluate location alternatives?
 - (a) Factor Rating Method.
 - (b) Break-even Analysis.
 - (c) Transportation Model.
 - (d) Value Analysis.
- (3) Litigation cost resulting from product liability and customer injury is considered as a / (an)
 - (a) External Failure Cost.
 - (b) Internal Failure Cost.
 - (c) Prevention Cost.
 - (d) Appraisal Cost.
- (4) The specific concerns of total quality management (TQM) include a number of aspects. Which is **NOT** normally associated with TQM?
 - (a) Meeting the needs and expectations of customers.
 - (b) Primarily a “worker” rather than a management activity.
 - (c) Inclusion of every person in the organization.
 - (d) Covering all parts of the organization.

- (5) As production systems move from projects to batch production to mass production to continuous production
- (a) processes become more flexible.
 - (b) customer involvement with the process increases.
 - (c) products become more standardized.
 - (d) demand volumes decrease.
- (6) Which of the following statement best described a “Virtual Company”?
- (a) Company that used information technology to link people, assets and ideas.
 - (b) A Company that integrate sales & finance areas to achieve competitive advantage.
 - (c) A Company which attempts to mitigate risks faced by IT environments while improving sales potential.
 - (d) A Company that improves e-commerce payment system to achieve customer confidence.
- (7) Supply chain management is cross functional _____ system that integrates and automates the network of business processes and relationship between a Company and its stakeholder.
- (a) Activities.
 - (b) Inter-enterprise.
 - (c) Core activities.
 - (d) Enterprise Resources.
- (8) Why SWOT analysis is carried out by an Organization?
- (a) It is used to evaluate the impact that each possible strategic opportunities can have on a Company and use of IT.
 - (b) It is focused on detecting competitive activities and to avoid non-value adding activities.
 - (c) SWOT is essential tax developing new IT System tax diagnose of key issues.
 - (d) None of the above.
- (9) Business end users and IS specialists may use a system approach to help them develop information system solutions to meet business opportunities.
- Above process can be designed as _____.
- (a) System Development Life Cycle.
 - (b) Photo typing.
 - (c) Change Management.
 - (d) Project Management.
- (10) Which one of the following does not recognize as a vital role of information system which can perform for a success of an enterprise?
- (a) Support business enterprise.
 - (b) Support decision making.
 - (c) Help to achieve competitive advantage.
 - (d) Facilitate to process a large volume of data.

(10 × 2 Marks = Total 20 Marks)

End of Part I

PART II

Section A: Operations Management

Answer any two (2) questions

Question No. 02 (20 Marks)

ABC is a group of company which assembles automobiles by purchasing required parts either from external market or producing subsidiary companies within the group. The company's policy is to make or buy decisions is made considering several factors.

You are required to:

- (a) Explain five factors which can be considered as make or buy decisions. **(10 Marks)**
 - (b) Indicate what type of process technology deals with following production process.
 - (i) A hotel contract which is involved in construction of 500 rooms' capacity hotel and a large sum of money is spent; three year life span is taken for completion of the work. **(02 Marks)**
 - (ii) A food processing system for which specialized equipment and technology is used and produces a narrow range of standardized products. **(02 Marks)**
 - (iii) A crude oil refining process which has endless process and produces highly standardized petroleum products such as Diesel, Petrol etc... **(02 Marks)**
 - (c) Briefly explain two direct responsibilities of an operations manager. **(04 Marks)**
- (Total 20 Marks)**

Question No. 03 (20 Marks)

A pharmaceutical company located in Biyagama export processing zone has experienced in recent past product quality issues which have greater impact on reputation of range of products being produced.

You are required to:

- (a) Explain briefly **three** statistical methods for quality control & improvement. **(06 Marks)**
 - (b) The five S model can bring improvement in quality of products and services. Briefly explain them (five S model) stating how it leads to improvement of quality of products. **(10 Marks)**
 - (c) Cost of quality assurance can be divided into two categories namely prevention cost and appraisal cost. Briefly explain them giving two appropriate examples. **(04 Marks)**
- (Total 20 Marks)**

Question No. 04 (20 Marks)

You are a management Accountant Mega Change (Pvt) Company PLC which imports electronic items and makes sales in domestic market. Managing Director has recent Management meeting indicated that future budgetary information to be based on forecasting techniques so that reliance can be place on them.

- (a) Sales demand for electronics items during last six months of the year ended 2012 is as follows.

<u>Month</u>	<u>Demand in Units (000)</u>
January	100
February	200
March	350
April	240
May	300
June	400

You are required to prepare:

- (i) Sales forecast for the month of April, May, June and July using a 3 period moving average. (03 Marks)
- (ii) Using above data develop 3 period weighted moving average forecast with weights of 0.2, 0.3 and 0.5 for month of July. (03 Marks)
- (b) Briefly explain what you mean by Supply Chain Management in relation to manufacturing Company. (04 Marks)
- (c) Companies which are involved in supply chain decision must make decisions individually and collectively regarding their actions in major **5 areas**. Name such areas and briefly explain them. (10 Marks)

(Total 20 Marks)

End of Section A

Section B: Information Systems Management

Answer any two (2) questions

Question No. 05 (20 Marks)

Lanka Petroleum PLC engages in importing, storage and distribution of petroleum products in Sri Lanka. It has two terminals and 10 Island wide Bulk Depots for distribution of Petroleum Supplies. There is no any integrated IT infrastructure for sales and distribution, Material management, Finance and Human Resource Management. Currently required management information can not be obtained as and when it is required. Management has decided to invest Rs.100 million on Enterprise Resource Planning (ERP).

You are required to:

- (a) Briefly explain what ERP is. (05 Marks)
- (b) Explain five benefits of ERP System that can be achieved by Lanka Petroleum PLC. (10 Marks)
- (c) Some of employees of above Company have shown their resistance to New ERP System to overcome this situation, management decided to implement change management. Explain briefly what change management with examples of organizational change is. (05 Marks)

(Total 20 Marks)

Question No. 06 (20 Marks)

CIC Lanka PLC has invested Rs.1,500 million in modernization of new Plant Manufacturing System which has enabled to produce internationally accepted product ranges. However Managing Director is of the view that information system should be developed to ensure company products, consumer services and capability to supply of different product ranges any customer in the world.

Company has decided to develop e-business planning process for improvement of Company's customer value and business value goals.

You are required to:

- (a) Briefly explain four major components of Information Technology architecture of the Company. (08 Marks)
- (b) External consultant recruited for development of new IT Infrastructure has suggested that Company should develop a variety of strategic users of internet and other connected technologies for basic processes of the business.
- You are required to identify support activities and primary activities of value chain model and briefly explain them in relation to the business. (10 Marks)
- (c) Discuss briefly ethics and social responsibility in relation to environment and natural resources. (02 Marks)
- (Total 20 Marks)**

Question No. 07 (20 Marks)

Globe Hospital was set up 20 years ago to provide health care facilities and medical diagnosis for local patients. Now it has expanded up to 500 room capacity hospital well equipped with the state of the art operating theatre and laboratory facilities. However there is substantial delay in providing management information for Senior Management to make timely decisions for viable business judgments.

You are required to explain:

- (a) What do you mean by Management Information System? (04 Marks)
- (b) Describe briefly four major reporting alternatives provided by Management Information System (MIS) Internet technology and e-business applications can be used strategically for competitive advantage. (08 Marks)
- (c) Explain clearly how encryption of data and fire walls act as defensive measures in e-commerce environment. (08 Marks)

(Total 20 Marks)

End of Section B

End of Part II

End of Question Paper