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Serial No.....

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

Examination Date : 13th May 2012 **Number of Pages :** 06
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 the **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 processing / s does not fall under information processing?
 - (a) Passenger transport service.
 - (b) An Audit Firm.
 - (c) A Technical Library.
 - (d) A telecommunication compass.

- (2) Select the most suitable word to fill the blank given below.
 An Operational Manager is required to take _____ decisions & operational decisions.
 - (a) Strategic.
 - (b) Periodic.
 - (c) Tactical.
 - (d) Ad hoc.

- (3) Which one of the following provides most appropriate characteristics of competitive priorities in an information system of a commercial entity, in order of their importance?
 - (a) Flexibility, accuracy, cost, speed, quality.
 - (b) Dependability, cost, flexibility, suitability, speed.
 - (c) Quality, cost, speed, dependability.
 - (d) Speed, flexibility, quality, affordability, cost.

- (4) What would be the best suitable technology for producing chemical and petroleum products using crude oil?
- Continuous production technology.
 - Mass production technology.
 - Job shop technology.
 - None of the above.
- (5) Which of the following does not belong to operational decision?
- Periodic decisions.
 - Improvement decisions.
 - Decisions relating to designing of a product.
 - Planning and controlling decisions.
- (6) Which one of the following does not measure performance of the business process re-engineering (BPR) concept?
- Quality.
 - Service.
 - Growth rate.
 - Speed.
- (7) An information system often involves with sophisticated statistical analyses and application of complex mathematical theories is called;
- Decision Support System (DSS).
 - Management Information System (MIS).
 - Expert System (ES).
 - None of the above.
- (8) Which one of the following statements is incorrect in relation to Enterprise Resource Planning (ERP) system?
- ERP system is integrated with a relational data base system.
 - It could include Finance, Human Resource and Material Management aspects of a business.
 - It is multi-model application software which supports Product Planning & Customer Relationship Management.
 - It does not provide any linkage with other information systems (modules).
- (9) Why Change Management is vital for development of information system of an organization?
- Change Management Process aims at empowering employees to accept and embrace changes in current business environment to a desired situation.
 - It concentrates only identification of information requirements of different functions of an enterprise.
 - Change Management is an approach for training staff at low cost.
 - None of the above.
- (10) Select the most suitable word to fill the blank.
 is a major alternative methodology considered in the traditional information system development cycle.
- Prototyping.
 - System Development life cycle.
 - Business process outsourcing.
 - Enterprise Resource Planning.

(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)

Sri Lanka Paint Company commenced its operations as Board of Investment (B.O.I.) Company fifteen years ago. Company had invested US \$ 100 million for Plant & Machinery and Factory infrastructure. 80% of Company's products are exported and the balance is allowed for local sales. Company has experienced customer complaints both local and overseas with regard to quality of its paints used for construction Industry.

Managing Director has called upon a meeting where he stated that the company needs to introduce Total Quality Management (TQM) and make it a reality. Suppose you are a Management Accountant of the Sri Lanka Paint Company.

You are required to:

- (a) Prepare a briefing report to Managing Director of the Company describing six main principles of TQM that can be implemented at Sri Lanka Paint Company. **(12 Marks)**
- (b) Explain briefly two major types of cost that have to be faced by the Company, in implementing a complete quality assurance programme. **(04 Marks)**
- (c) Indicate in point form the external failure and internal failure cost elements in relation to the products traded by the Company. **(04 Marks)**

(Total 20 Marks)

Question No. 03 (20 Marks)

Mega Electric PLC. Company incorporated under Board of Investment (B.O.I.) Law is considering a suitable location for setting up its Factory & Office complex. BOI has granted 10 year tax holiday, duty exemption on raw material imports, and further tax exemptions on setting up factory out of the Western Province. The Company has identified five critical factors as important and relative weightage given on them in the following manner.

<u>Factor</u>	<u>Relative Weightage</u>
Labour cost	.25
Tax concession	.30
Infrastructure Facilities	.18
Climate	.15
Raw Material	<u>.12</u>
	<u><u>1.00</u></u>

There are three alternative locations; namely P, Q and R available and the company wants to evaluate each location and to determine the best possible location. For this purpose, each location has been assessed in the context of above mentioned factors in isolation and the following scores have been allocated without considering their relative importancy. The score has been given out of 15.

Proposed Location	Score on Factors				
	Labour Cost	Tax Concession	Infrastructure Facilities	Climate	Raw Material
P	9	12	7	8	6
Q	3	8	4	9	8
R	13	7	6	7	4

You are required to:

- Determine the most appropriate location for the purpose of establishing the factory & office complex of the company. **(09 Marks)**
 - The Company is considering to implement just in time (JIT) production system using minimum inventories. State briefly four benefits derived from the adaptation of the JIT concept and put it into practice. **(08 Marks)**
 - Name three data capture and data communication technologies that could be made available to the Company in order to support supply Chain Management. **(03 Marks)**
- (Total 20 Marks)**

Question No. 04 (20 Marks)

Mr. Silva has been appointed as Operation Manager in a large Garment Company where five hundred employees work at different Departments. Heavily cost adding activities have already been out-sourced to ensure that the company can concentrate on effective and efficient value chain management process. Managing Director of the Company at a recent meeting with Corporate Managers stated that Operation Manager's responsibilities are of critical importance for survival of the firm.

You are required to:

- Briefly explain four responsibilities of Operation Manager in the context of the Garment Industry. **(08 Marks)**
 - Identify transforming resources, transformed resources and type of transformation processes in the Garment Industry. **(08 Marks)**
 - In your view, what type of layout could be used for this Industry? Briefly explain giving reasons. **(04 Marks)**
- (Total 20 Marks)**
End of Section A

Section B: Information Systems Management

Answer any two (2) questions

Question No. 05 (20 Marks)

Health Care Company commenced its business by providing outdoor and indoor treatments for Patients, a channelling Centre for specialist Doctors, Laboratory Services and a Pharmacy. Above 200 employees are currently employed at various grades. The owner has appointed a small team of Management Executives for running the company. Currently computers are used for invoice generation, channelling of doctors and day to day letter typing purposes and for internet & E-mail. Many Management information required for timely decision making are not received at the right time thus company cannot make effective and efficient decisions. Similar new companies have started operations and it has directly resulted in declining the profit of Health Care Company during recent past.

You are required to:

- (a) Indicate three ways that how the role of an Information System can support to make the Health Care Company operations more sufficient. **(06 Marks)**
 - (b) Health Care Company has decided to implement in-house developed IT System for efficient operations. Identify major components of such an Information System. **(10 Marks)**
 - (c) Briefly indicate two types of information resources that can be used in this business. **(04 Marks)**
- (Total 20 Marks)**

Question No. 06 (20 Marks)

Last Chance PLC is a Company engaged in importation and retailing of all types of electronic goods used for industries and domestic usage. Currently company does not have a specific business application to identify, attract and satisfy profitable customers by maintaining effective relationship with them to achieve high profitability and competitive advantages.

You are required to:

- (a) Explain clearly what do you mean by “competitive advantage” and in what manner Customer Relationship Management (CRM) concept can be applied in the above situation. **(06 Marks)**
 - (b) Briefly explain four benefits / aims of CRM that could be achieved by adopting CRM in the above situations. **(08 Marks)**
 - (c) Explain how information technology can be made use to create personalized services loyalty in customers, giving four examples. **(06 Marks)**
- (Total 20 Marks)**

Question No. 07 (20 Marks)

Lanka Tyre Manufacturing Company has 10 rubber manufacturing locations where various types of rubber mixed products are manufactured & released for exports and local sales. Each manufacturing plant has its own small IT system which has been developed to generate information relating production cost and inventory levels.

Company is considering to replace existing IT systems with an advanced IT system to derive more benefits which would enhance profitability of the Company.

You are required to:

- (a) List out how the system Development Life Cycle (SDLC) Methodology can be made use in this situation, showing SDLC by using a chart. **(10 Marks)**
- (b) Lanka Tyre Manufacturing Company wants to build up security management tools to minimize errors and frauds in its information system. Indicate 03 such techniques with brief explanations. **(06 Marks)**
- (c) Explain in simple terms that what do you mean by “Computer Ethics”. **(04 Marks)**

(Total 20 Marks)

End of Section B

End of Part II

End of Question Paper
