University of Ruhuna - Faculty of Technology
Bachelor of Information & Communication Technology Degree
Level 1 (Semester 2) Examination
April 2019

Course Unit: ICT1242, Management Information Systems

Time Allowed: 02 hours

Answer all **four (04)** questions

This question paper contains **four (04) pages** including this instruction page

IMPORTANT INSTRUCTIONS:

1. The medium of this examination is **English**.

2. This is a **Closed Book** examination.

3. This Examination consists of **four (04)** questions that are given equal marks.

4. You must **answer all four (04) questions** in this examination.

Question 01

A book shop sells printed books and all the activities of the shop are carried out by manually. The manager of the shop expected to computerize the activities. Some of the revenue details of the shop are given in the table below. Use these details where necessary to answer the questions in part a, b and c.

Year	Revenue
2014	Rs. 50 000.00
2015	Rs. 75 000.00
2016	Rs. 90 000.00
2017	Rs. 120 000.00
2018	Rs. 200 000.00

(a) **(i)** By referring above given scenario briefly describe **"Data"** and **"Information"**.

     (ii) List and briefly describe three (03) basic activities of an "Information System".
collect, store, distribute

(b) In modern businesses, Business firms invest heavily in information systems to achieve six (06) strategic business objectives.

     (i) List down the six (06) strategic business objectives.

     (ii) By selecting one (01) business objective you write in part (b). (i), explain how it can be achieved using Information Systems with respect to the book shop.

(c) **(i)** Briefly describe what is a **"Transaction Processing System"** using a possible example in the book shop.

     (ii) Explain how IT enhances efficiency of existing business process of book shop.

     (iii) Identify and explain a new way of doing the business at book shop which can transform the business, if the activities are automated.

Question 02

(a) **(i)** List down two (02) advantages and two (02) disadvantages of **"Enterprise Resource Planning (ERP) Systems"**.

(ii) List down four (04) applications of social business.

(b) **(i)** Explain the **"Push-based"** and **"Pull-based"** Supply Chain models using suitable diagrams.

(ii) Assume that you are a Supply Chain Management advisor for a newly started company which produce smart phones. Explain how you are going to advise them to select a suitable supply chain management model for their production.

(c) **(i)** Name the five (05) forces of **"Porters Five Forces"** model.

(ii) Suppose that you are going to introduce new **"ERP"** solution to the software market. By considering your ERP solution as a *new entrant*, describe what are the *barriers to enter* to the software market using three (03) facts.

Question 03

(a) **(i)** Briefly describe following terms relates to Knowledge Management.
 - Wisdom
 - Explicit Knowledge
 - Tacit Knowledge

(ii) Briefly describe following concepts relates to **"Expert Systems"**
 - Forward Chaining
 - Backward Chaining

(b) **(i)** Define the term **"Collaboration"** with respect to **"Team Working"**.

(ii) Briefly describe **"Why Collaboration and Teamwork are Important"** under the below given two (02) facts.
 - Changing nature of work
 - Changing organization of the firm

(c) Compare **"Digital Markets"** with **"Traditional Markets"**, using at least five (05) factors.

(d) *"Information density enables merchants to engage in price discrimination"*.
Briefly describe **"price discrimination"** by providing a suitable example and *prove that the above statement is correct.*

Question 04

(a) List down five (05) key technology trends that raise ethical issues.

(b) Using a diagram illustrate the concept of **"Force Field Analysis"** in Change Management.

(c) (i) Briefly describe the difference between a **"Virus"** and a **"Worm"** in the context of Malware.

 (ii) Define the term **"Computer Crime"**.

 (iii) Give two (02) examples for each of fact given below in the context of **"Computer Crime"**.
 - Computer may be target of crime
 - Computer may be instrument of crime

(d) (i) List down the four (04) key stages of the decision-making process.

 (ii) Imagine that you are the responsible person for acquisition of an ERP system for your organization. By referring four (04) stages of the decision-making process explain how you are going to select a suitable ERP solution for your company.

Intelligence
Design
Choice
Implement

*** End of Paper ***