The Open University of Sri Lanka
Faculty of Natural Sciences
Bachelor of Software Engineering Degree Programme

Department	**: Computer Science**
Level	**: 3**
Name of the Examination	**: Final Examination**
Course Title and - Code	**: ISU3300/ ISI3376 - Fundamentals of Information Systems**
Academic Year	**: 2021/2022**
Date	**: 20/11/2022**
Time	**: 09.30 a.m-12.30 p.m.**
Duration	**: 3 Hrs.**

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of six **(6)** questions in three **(3)** pages.
3. Answer any **five (4)** questions **only**. All questions carry equal marks.
4. Answer for each question should commence from a new page.
5. Draw fully labelled diagrams where necessary.
6. Involvement in any activity that is considered as an exam offense will lead to punishment.
7. Use blue or black ink to answer the questions.
8. Clearly state your index number in your answer script.

Question No: 01

1.1 What do you mean by an Information System?

(3 Marks)

1.2 Explain the main components of an Information System.

(4 Marks)

1.3 What are the main components of a computer-based Information System?

(6 Marks).

1.4 State three advantages of using a computer-based Information System over manual Information Systems. (3 marks)

1.5 Explain very important three (03) characteristics of information.

(6 Marks)

1.6 What do you mean by data, information, and knowledge?

(3 Marks)

Question No: 02

Most common types of computer-based Information Systems used in organizations are:

- Transaction Processing Systems
- Management Information Systems
- Decision Support Systems

2.1 Write down the purpose of each of the above mentioned Information System within an organization.

(3 Marks)

2.2 State three (03) advantages of having a Knowledge Management System in an organization.

(6 Marks)

"Michael Porter's competitive forces model is largely considered to be the most extensively used model for analyzing competitive advantage"

2.3 What do you mean by "competitive advantage" when you refer to a company?

(2 Mark)

2.4 State the five competitive forces can be identified by using the above-mentioned model.

(5 Marks)

2.5 Briefly discuss three (03) advantages of adopting to an Enterprise Resource Planning (ERP) System rather than connecting the existing Information System.

(3 Marks)

2.6 State three (03) strategies that can be used to achieve competitive advantage for an organization.

(6 Marks)

Question No: 03

3.1 Compare and contrast "e-commerce" and "e-business".

(5Marks)

3.2 Briefly describe each of the following e-commerce transactions, by providing at least two (02) real world examples.

i. B2B
ii. B2C

(8Marks)

3.3 State three (03) reasons why a company may wish to introduce e-commerce.

(6 Marks)

3.4 Distinguish between e-administration, e-citizen and e-society by giving appropriate examples. (6 Marks)

Question No: 04

4.1 What do you mean by "Value Chain"?

(2 Marks)

4.2. Write down five (05) primary activities that are needed to add values and go ahead of the competition in the marketplace.

(5 Marks)

4.3 What do you mean by "Outsourcing"

(2 Marks)

4.4 Discuss two (02) advantages of outsourcing.

(4 Marks)

4.5 Write down four (04) reasons of preparing a Strategic Plan for an organization.

(8 Marks)

4.6 State two (02) responsibilities of Supply Chain Management Staff in a company or an institution.

(4 Marks)

Question No: 05

5.1 What do you mean by "Customer Relationship Management" ?

(1 Marks)

5.2 Discuss four (04) major components of a Customer Relationship Management System.

(8 Marks)

5.3 Discuss four (04) advantages of System Development Life Cycle, in developing a new information system for an organization.

(8 Marks)

5.4 State four (04) main steps of Prototyping as an alternative development approach.

(8 Marks)

Question No:06

6.1 Explain three (03) basic concepts of "ethics" when we are working in the Informatics Society.

(6 Marks)

6.2 State five (05) stage procedure of ethical analysis.

(10 Marks)

6.3 Explain three (03) careers with respect to the primary duties related to the Information Systems domain.

(6 Marks)

6.4 Explain the usage of "cookies" with an example.

(3Marks)

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