THE OPEN UNIVERSITY OF SRI LANKA
B. SC. DEGREE PROGRAMME – LEVEL 03
FINAL EXAMINATION - 2009/2010
CSU 1179: INTRODUCTION TO INFORMATION SYSTEMS

DURATION: TWO HOURS

Date: 06th June, 2010   Time: 1.30 p.m. – 3.30 p.m.

Answer FOUR Questions ONLY.

Q1.

   i. Determine whether the following statements are TRUE or FALSE. In each case justify your answer.

       a. Solar system is a natural system.

       b. Washing machine is a man-made system.

   ii. Can all man-made systems be computerized? Justify your answer.

   iii. What are the differences between *Information* and *Knowledge*?

   iv. It is proposed to automate the function of the controlling fans for OUSL lecture halls. Explain how far you can achieve this automation.

Q2.

   i. Compare and contrast *"Online Systems"* and *"Real Time Systems"*.

   ii. What are the four types of Real Time Systems? Briefly describe them.

   iii. Describe the differences among *Database Systems*, *Expert Systems* and *Knowledge-base Systems*.

   iv. Describe the types of information systems that can be developed to support the three management levels of an organization.

Q3.

   i. Explain why database systems can be considered as an improvement to file processing systems.

   ii. What are the three common problems in classical file systems? Explain them.

   iii. Describe the differences among *Hierarchical*, *Network*, *Relational*, *Object-oriented* and *Multi-media* databases.

   iv. Describe the following terms using suitable examples.

       a. File
       b. Record
       c. Field
       d. Primary key
       e. Query

Q4.

    i. Explain the terms *Knowledge* and *Intelligence* in your own words.

   ii. Write five advantages and five characteristics of Expert systems.

  iii. Explain the anatomy of an Expert system and state the functions of each part.

  iv. Write short notes for the following terms.

         a. Hybrid systems
         b. MYCIN
         c. GT (Generic Tasks)

Q5.

    i. Briefly describe the evolution of the Internet technology.

   ii. Write the tasks which are performed by a Client and a Server.

  iii. Describe the advantages and disadvantages of *File Transfer Protocol (ftp)*.

  iv. Briefly describe the following terms.

         a. IP address
         b. Remote login
         c. Archie
         d. MAN
         e. List Servers

Q6.

    i. What is Agent technology?

   ii. "*HTML can be used to create only static websites*". Express your views on this statement.

  iii. Describe the advantages and disadvantages of *WWW technology*.

  iv. Compare and contrast the following terms.

         a. Yahoo and WAIS
         b. Website and Web application
         c. FTP and telnet
         d. Dial-up connection and Direct connection
         e. HTTP and TCP/IP