THE OPEN UNIVERSITY OF SRI LANKA

B.SC. DEGREE PROGRAMME-2010/2011

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

CSU1179 - INTRODUCTION TO INFORMATION SYSTEMS

OPEN BOOK TEST (OBT) DURATION: 1 ½ HOURS



Date: 18. 03. 2011

Time: 4.00 pm = 5.30 pm

16 AUG 2011

## **Answer ALL Questions**

01.

- i. Explain the following statements.
  - a. All man-made systems cannot be automated.
  - b. All automated systems are not computerized.
  - c. Real world systems can be computerized.
- ii. Describe the difference between Natural systems and Man-made systems.
- iii. Determine whether the following statement is TRUE or FALSE and justify your answer. "A Digestive system is a natural system."
- iv. By using the following table, describe what is Data, Information and knowledge.

Book	Author	No. of copies	Price per book
Gone With the Wind	Margaret Mitchell	5	1500/=
Old Man and the Sea	Ernest Hemingway	10	350/=
Cry, the beloved country	Alan Paton	15	570/=
The Thirty-Nine Steps	John Buchan	4	400/=

## 02.

- i. Discuss the differences between batch processing systems and online systems by using examples.
- ii. Compare the similarities and differences of an Expert system and knowledge base system. Give two (02) examples for each.
- iii. Classify the following two information systems as expert system or database system, giving reasons for each choice.
  - a. Computer fault diagnose system
  - b. Library catalogue system

## 03.

- i. Discuss the concept of database over information processing in files.
- ii." Network databases are much more comprehensive than hierarchical databases." Justify your answer.
- iii. Briefly explain three essential characteristics in a database.