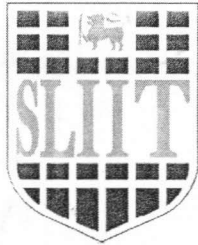


IT No:

00075



**Sri Lanka Institute of
Information Technology**

Bachelor of Science in Information Technology

Mid Term Examination

Year 1, Semester 1, 2013

Wednesday, 20th March 2013

Fundamentals of Information Technology (N100)

Duration: 1 Hour

Time: 1.00 p.m. – 2.00 p.m.

Instructions to Candidates

- This paper contains **3 Questions** on **Four Pages**.
- Answer **ALL** questions **on the Question Paper itself**.
- Point value of each question is given.

Answer ALL questions on the question paper

[30 marks]

Question 01

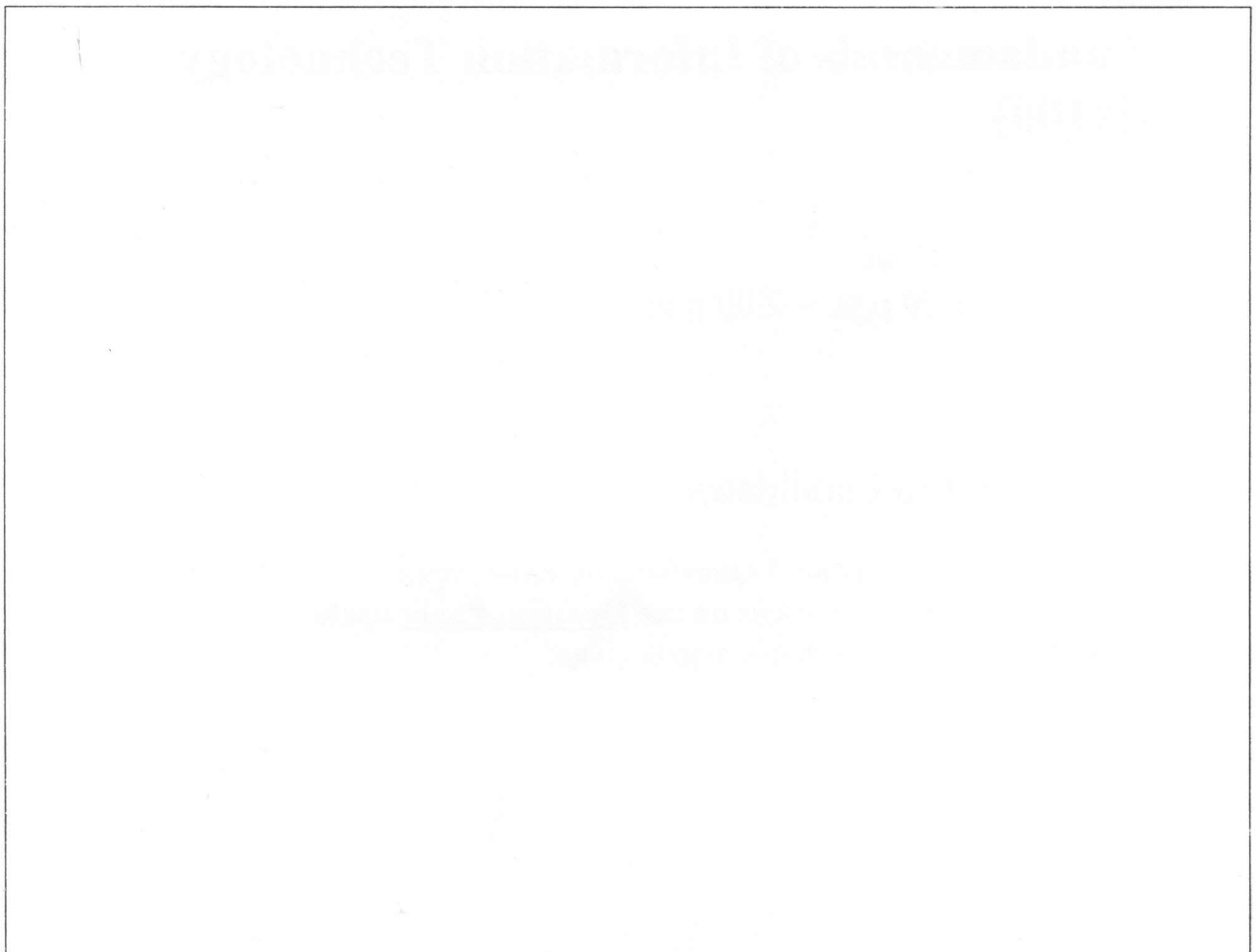
a) State **FOUR** characteristics of the **Von Neumann architecture**?

[4 marks]



b) Draw the **block diagram** of a computer and **state** its main components.

[3 marks]



c) State the difference between **LAN** and **WAN**.

[2 marks]

d) List the **main categories** of **input devices** and give an **example** for each.

[3 marks]

Question 02

a) What is the need for an **Operating System**?

[3 marks]

b) List **ONE** responsibility each for the following IT roles,

- a. Programmer
- b. Systems Analyst
- c. Systems Engineer

[3 marks]

- c) What are the main differences between **Tailor-made packages** and **Off-the shelf packages**? [2 marks]

- d) Name the **FOUR** methods of file organization? [2 marks]

Question 3

Convert the following integers into given number bases.

- a) Conversion from Decimal to **Octal, Hexadecimal**

• 53_{10}

[2 mark]

b) Conversion from Binary to **Decimal, Hexadecimal**

• 1101_2

[2 mark]

c) Conversion from Octal to **Binary, Decimal**

• 657_8

[2 mark]

d) Conversion from Hexadecimal to **Binary, Decimal**

• $8BC_{16}$

[2 mark]

--End of Examination Paper--