



**EASTERN UNIVERSITY, SRI LANKA**  
**FIRST EXAMINATION IN SCIENCE 2002/2003 (Repeat)**  
**FIRST SEMESTER (June/July' 2003)**  
**CC101 Fundamentals of Computer Systems**

**Answer all questions**

**Time allowed: 1 hour**

1.

- (i) Describe the two major components of a computer system
- (ii) Computer hardware is made up of five parts. List and describe them.
- (iii) Describe the two major categories of software.
- (iv) List the levels of Computer languages. What are the primary differences between symbolic and high-level languages?

2.

- (a) Convert the following numbers into its equivalent binary numbers.
  - i.  $22421_{10}$
  - ii.  $47145_8$
  - iii.  $6B3F_{11}$
  - iv.  $ADC_{16}$
- (b) Convert the following binary numbers into its equivalent octal numbers.
  - i. 11001010
  - ii. 11111111
  - iii. 10000101
  - iv. 11110010
- (c) What is **Cache memory** and what is the purpose of it? Illustrate with a diagram.
- (d) Describe the applications of **Internet**.
- (e) Discuss **LAN** topologies