



EASTERN UNIVERSITY, SRI LANKA
EXTERNAL DEGREE IN SCIENCE
FIRST EXAMINATION IN SCIENCE 2002/03
FIRST SEMESTER (June/July, 2004)
EXCC 101 Fundamentals of Computer Systems

Answer all Questions

Time allowed: 01 hour

Q1

- (a) Describe the two major components of a computer system.
- (b) Computer hardware is made up of five parts. List and describe them.
- (c) Describe the two major categories of software.
- (d) What is the purpose of an operating system?
- (e) Identify at least two types of system software that you will use when you write programs.
- (f) List the levels of computer languages.
- (g) What are the primary differences between symbolic and high-level languages?
- (h) Name and explain the usage of different translators in computer environment.

Q2

- (a) State the full name of the following abbreviations and briefly explain each:
 - (i). ENIAC
 - (ii). HTTP
 - (iii). WWW
- (b) What is cache memory and what is the purpose of it? Illustrate with a diagram.
- (c) Discuss LAN topologies.
- (d) What are the features of the Internet?
- (e) Convert the following binary numbers into its equivalent hexadecimal numbers:
 - (a) 101010101011
 - (b) 110001010101
- (f) Convert the following numbers into its equivalent binary numbers:
 - (i). 143_8
 - (ii). 159_{10}
 - (iii). $5BF_{16}$