EASTERN UNIVERSITY, SRI LANKA
FIRST EXAMINATION IN SCIENCE-2001/2002
FIRST SEMESTER (APRIL 2002)

CC101-FUNDAMENTALS OF COMPUTER SYSTEMS

Answer all Questions   **Time: 1 Hour**

Question 01

(a)   Write the short notes on the following topics:
- (i)   Computer Generation.
- (ii)   Data and Information.
- (iii)   CPU
- (iv)   Primary storage.
- (v)   Assembly language.

(b)

- (i)   What does the *Computer Networks* mean?
         Briefly describe LAN & WAN Networks.

- (ii)   What is *protocol* in Computer Networks?

- (iii)   With the help of diagrams, explain Network topologies.

- (iv)   What is *Internet* and briefly describe Internet applications.

Question 02

(a)   Calculate:
- (i)   Binary equivalent of 187_{10}
- (ii)   Binary equivalent of AOF_{16}
- (iii)   Hexa equivalent of 217_{10}
- (iv)   Octal equivalent of 101011_{10}
- (v)   Hexa equivalent of 110101_2
- (vi)   Decimal equivalent of 11110101_2

(b)   Perform the following arithmetic using two's complementation, (using 8 bits pattern)
- (i)   15+11
- (ii)   144-27

(c)   With the help of diagrams, explain the following concepts in a magnetic disk:
       1.Tracks   2.Sectors   3.Clusters   4.Cylinders