EASTERN UNIVERSITY, SRI LANKA

FIRST EXAMINATION IN SCIENCE –2011/2012

FIRST SEMESTER (Jan./Feb., 2014)

CC 101 – FUNDAMENTALS OF COMPUTER SYSTEMS

(THEORY)

(PROPER & REPEAT)

Answer all questions   **Time allowed: 01 Hour**

Q1)

  i.   List five benefits of ICT.

  ii.   Define the following terms:

      a. Data;   b. Information;   c. Processing.

  iii.   Discuss the various computer generations along with the key characteristics of computers of each generation.

  iv.   What do you understand by Embedded Systems? List four examples where embedded systems are used in.

  v.   Briefly describe any four characteristics of a computer.

  vi.   What is meant by Computer Software? Give at least three different types of software and list three examples for each of them.

  vii.   What is meant by Computer Hardware? Give at least three different types of hardware and list three examples for each of them.

  viii.   Write short notes on the following:

      a. BLOGS;   b. Cloud Computing.

Q2)

  i.   Convert the following Decimal numbers into Binary numbers (up to 6 decimal places):

      a. 1059_{10};   b. 0.568_{10}.

  ii.   Convert the following Binary numbers into Hexadecimal numbers:

      a. 100011110111_2;   b. 111011.111011_2.

  iii.   Convert the following Hexadecimal numbers into Octal numbers:

      a. 11110111_{16};   b. $F1C7.10A1_{16}$.

  iv.   What is the main difference between Main Memory and Secondary Memory? List three examples for each of them.

  v.   Define the term Computer Network.

  vi.   Briefly explain the Personal Area Network (PAN). List two advantages and two disadvantages of PAN.

  vii.   Describe the difference between Internet and World Wide Web.

  viii.   Discuss the advantages and disadvantages of e-mail over the traditional postal system.

  ix.   Define the term Computer Virus and briefly explain how to protect a computer from virus?