EASTERN UNIVERSITY, SRI LANKA DEPARTMENT OF MATHEMATICS

EXTERNAL DEGREE EXAMINATION IN SCIENCE –2008/2009

FIRST YEAR FIRST SEMESTER (July, /Aug, 2010)

EXTCC 101 – FUNDAMENTALS OF COMPUTER SYSTEMS

(PROPER & REPEAT)

Answer all questions

Time allowed: 01 hour

01.

vi.

- i. What is computer & Draw the block diagram of a computer.
- ii. Briefly describe the computer generation
- iii, Briefly describe any five characteristics of a computer.
- iv. Draw the "Categories of computers" chart & describe any four categories of computers.
- What are the various devices used to store data in a computer? Give a classification of storage devices.
 - Explain the following terms:
 - a. RAM
 - b. Motherboard;
 - c. CPU;

- i. What you mean by "input devices"? Explain.
- ii. What you mean by "number system" in computing? Explain.
- iii. Convert the following into Binary:
 - a) (56)₁₀

- b) (785.65)₁₀
- c) (458)₁₀

- iv. Convert the following into Octal:
 - a) (1000101010)₂
- b) (1111.000101)₂
- c) (11111111101)₂

- v. Convert the following into Octal.
 - a) (67)₁₀

- b) (985.125)₁₀
- c) $(0.25)_{10}$
- vi. Explain the following network topologies:
 - a) Bus Topology
- b) Star Topology
- c) Ring Topology.
- vii. Write down any five advantages of using network?