



EASTERN UNIVERSITY, SRILANKA

DEPARTMENT OF MATHEMATICS

FIRST EXAMINATION IN SCIENCE –2015/2016

FIRST SEMESTER (Jul. / Aug, 2017)

CC 101 – FUNDAMENTALS OF COMPUTER SYSTEMS

Answer all questions

Time allowed: 01 hour

Q1.

- A. Name the main components of a Central Processing Unit (CPU) and briefly describe their functions. (15 Marks)
- B. List the characteristics of a computer. (10 Marks)
- C. Compare and contrast about the third and fourth generations of computers. (15 Marks)
- D. What are the various devices used to store data in a computer? Give a classification of storage devices. (20 Marks)
- E. Define the term **Software**. The computer software is classified into two broad categories, explain each with suitable examples. (15 Marks)
- F. Write short notes of the following terms:
- a. RAM; (10 Marks)
 - b. ROM; (10 Marks)
 - c. BIOS. (05 Marks)

Q2.

- A. Secondary memory can be classified into three categories. Explain each with suitable examples. (20 Marks)
- B. Explain three categories of the wired transmission media. (15 Marks)
- C. Explain the following terms:
- a. Wide Area Network (WAN);
 - b. Bridge;
 - c. Switch;
 - d. Gateway. (20 Marks)
- D. Convert the following decimal numbers into Binary numbers (Show appropriate steps):
- a. $(999)_{10}$;
 - b. $(077.89)_{10}$;
 - c. $(0.958)_{10}$. (15 Marks)
- E. Convert the following numbers into Octal numbers (Show appropriate steps):
- a. $(858)_{10}$;
 - b. $(936.245)_{10}$;
 - c. $(FFF)_{16}$. (15 Marks)
- F. Convert the following numbers into Hexadecimal numbers (Show appropriate steps):
- a. $(878)_{10}$;
 - b. $(757)_8$;
 - c. $(0.989)_{10}$. (15 Marks)