SOUTH EASTERN UNIVERSITY OF SRI LANKA

FIRST EXAMINATION IN BACHELOR OF INFORMATION AND COMMUNICATION TECHNOLOGY - 2016/2017

SEMESTER - I, SEPTEMBER 2018

CIS11011 - ESSENTIALS OF ICT AND PC APPLICATIONS

Answer all Questions.   **Time: 01 hour**

Question 01:

a) i. Define **Information and Communication Technology (ICT)** using key technologies involved in ICT.

(06 marks)

ii. Differentiate **Discrete** and **Continuous** data types, and provide **two** (02) suitable examples for each.

(06 marks)

iii. State **four** (04) main characteristics of **information**.

(04 marks)

iv. Provide **two** (02) examples for each **natural** system and **artificial** system.

(04 marks)

[Total 20 marks]

b) i. Classify the computers according to the **technology used**.

(06 marks)

ii. What are **high level** and **low level** programming languages? Categorize the **generations** of computer programming languages with respect to **high level and low level programming languages.**

(09 marks)

iii. Differentiate **compiler** and **interpreter** in computer program translation.

(04 marks)

iv. What is meant by an **Operating system**? Write **three** (03) popular operating systems.

(06 marks)

v. Provide **five** (05) **features (characteristics)** of operating system.

(05 marks)

[Total 30 marks]

Question 02:

a) i. What is meant by **resolution** in computer graphics? State **four** (04) applications of **computer graphics**.

(06 marks)

ii. What does it mean by **Communication software**? Give **one** (01) example for **synchronous** and **asynchronous** communication software respectively.

(04 marks)

iii. What is meant by **Bus** in a computer system?

(02 marks)

iv. Briefly explain the following **utilities** of a computer system.

   a. Disk Partition
   b. File system

(08 marks)

[Total 20 marks]

b) i. What are the **three** (03) types of **CPU packaging**?

(03 marks)

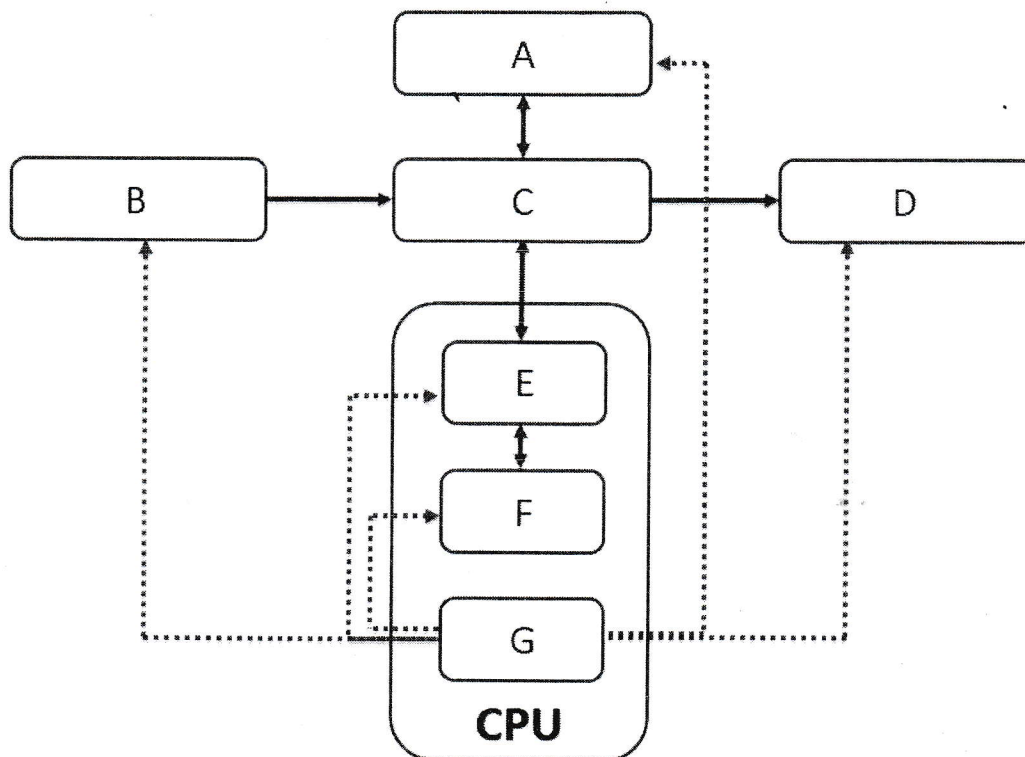ii. Name **four** (04) expansion slots can be found on a motherboard with its full naming format.

(08 marks)

iii. Organize the following steps of **booting process of a computer** in order.

   a. Start operating system

   b. Copy OS files from boot drive to RAM

   c. Read master boot record on Boot drive

   d. Power On Self-Test (POST)

   e. Switch on the system

   f. Read Bootstrap Loader

   g. Power supply to motherboard

   h. BIOS get activated

(08 marks)

iv. Data flow and control instruction flow of a computer system could be shown using an abstract model block diagram given below. Name the **components/ parts of the block diagram of a computer system** labeled by the English letters.

(07 marks)

v. What are the **two** (02) main components of a chipset?

(04 marks)

[Total 30 marks]