SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology
First Year, First Semester Examination – 2018
HNDIT-1102 Computer Hardware

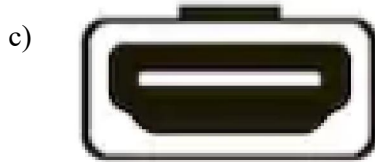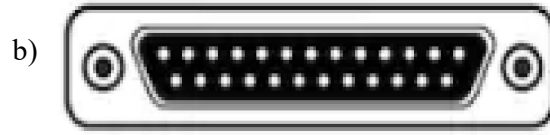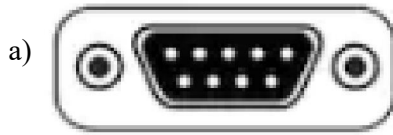|	
Instructions for Candidates:	No. of Questions : 05
Answer Four (04) Questions only	No. of pages : 03
	Time : **02 Hours**

Question 01

1) Give **two (02)** examples for Output Devices used in computers.   (02 Marks)

2) Mention **three (03)** important characteristics of Computers.   (03 Marks)

3) Compare and contrast Primary and Secondary Storage in Computer Systems.   (04 Marks)

4) Identify the following abbreviations.

   a) OCR   d) DVD

   b) CPU   e) VGA

   c) ALU   (05 Marks)

5) Draw the block diagram of computer and show the data and control information flow in the same diagram.   (11 Marks)

Question 02

1) Briefly explain 'Disk Partitioning'.   (03 Marks)

2) Briefly explain the term 'Device Driver''.   (04 Marks)

3) Describe the following two permission levels used in user access Rights in windows operating system.
   a) Full Control   b) Read and Execute   (04 Marks)

4) Describe the function of BIOS Program.   (04 Marks)

5) Mention **four (04)** functions of Device Manager in Windows operating system.   (04 Marks)

6) Explain the purpose of User Account and mention **three (03)** User Account types in
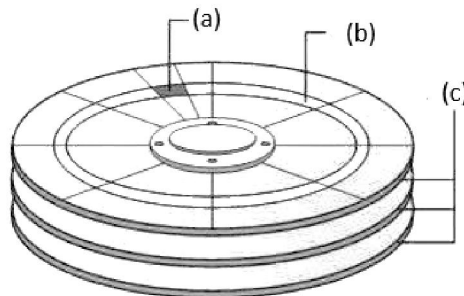
   Windows 7.   (06 Marks)

Question 03

1) What is the purpose of CMOS Battery in a Motherboard? (02 Marks)
2) Identify and write the names of the following Computer Ports (03 Marks)

a)

b)

c)

3) Give **two (02)** Touch Screen mechanisms. (04 Marks)
4) State **two (02)** devices which can be connected to PC motherboard with SATA port.

(04 Marks)

5) Explain **three (03)** Advantages of Laser Printers with compared to Dot Matrix Printers.

(06 Marks)

6) Briefly explain any **three (03)** health and safety precautions that should be taken during the assembly or disassembly of a Computer System. (06 Marks)

Question 04

1) Briefly explain the term 'Virtual Memory'. (02 Marks)

2) Write **one (01)** advantage of FAT 32 with compared to FAT 16 file system. (02 Marks)

3) The following Image shows the internal structure of a typical Hard Disk. (03 Marks)

Identify and write the names of the components marked as (a), (b) and (c).

4) Define the term "Volatile Memory". (04 Marks)

5) Provide **two (02)** examples of Mutable memory. (04 Marks)

6) Mention **two (02)** advantages of taking backups in computer systems. (04 Marks)

7) Compare and contrast LCD Display and CRT Display. (06 Marks)

Question 05

1) Mention **two(02)** advantages of modular design approach in Computer Hardware.(02 Marks)
2) State **three(03)** expansion cards used in computers. (03 Marks)
3) What is a "**Plug and Play device**"? State two plug and play devices. (04 Marks)
4) Mention **four (04)** factors that affect the performance of a Processor. (04 Marks)
5) Briefly explain Multitasking and Multiprocessing. (04 Marks)
6) Describe the purpose of Leap Motion Sensor. (04 Marks)
7) Write the steps to do the following operations in Windows 7 Operating System. (04 Marks)
   a)Create a New Folder in Desktop
   b) Delete a File in Desktop