

SLIATE

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, 2nd Semester Examination - 2016

IT A004 - PC Maintenance (Old)

Instructions for Candidates:

Answer all four (04) questions

All questions carry equal marks

Time : Two (02) hours

No of pages : 06

No of questions : 04

Question 01

Find the most suitable answer for each question

1. One kilobyte equals approximately
 - a. 1,000 bits
 - b. 1,000 bytes
 - c. 1 million bytes
 - d. 1 million bits

2. Post routine is stored in
 - a. RAM
 - b. ROM BIOS
 - c. CMOS
 - d. VIA

3. Cache memory enhances
 - a. Memory capacity
 - b. Secondary storage capacity
 - c. Memory access time
 - d. secondary storage access time

4. Southbridge controls
 - a. Data transfers from CPU to RAM, VGA
 - b. Data transfers from CPU to USB ports
 - c. Data transfers in ALU
 - d. System security

5. Your PC has an IDE hard drive. You are requested to install another IDE hard drive in the PC that has only one IDE adapter. Your first hard drive still be the boot drive. How should the second drive be configured?
- Master
 - Secondary
 - Slave
 - Primary
6. Which of the following devices can be connected using by a ribbon cable?
- Processor
 - CD-ROM drive
 - Cash Memory
 - Sound card
7. An Uninterruptable Power Supply helps you
- Increase the storage capacity of a computer system
 - Increase the current processing speed
 - Provides backup power
 - All of the above
8. Which of process determines the amount of memory present when switch on a PC?
- Scan Disk
 - Power On self Test
 - Restart
 - Power on Start up Process
9. From where a PC load the 1st computer instructions?
- ROM BIOS
 - CPU
 - RAM
 - CONFIG.SYS
10. The storage element for a DDR is the
- Diode
 - Resistors
 - Capacitors
 - Flip-flop
11. Which of the following will result as a computer does not pass POST?
- Anti-virus testing is failed.
 - The printer is unplugged.
 - The keyboard is unplugged.
 - OS is not exist

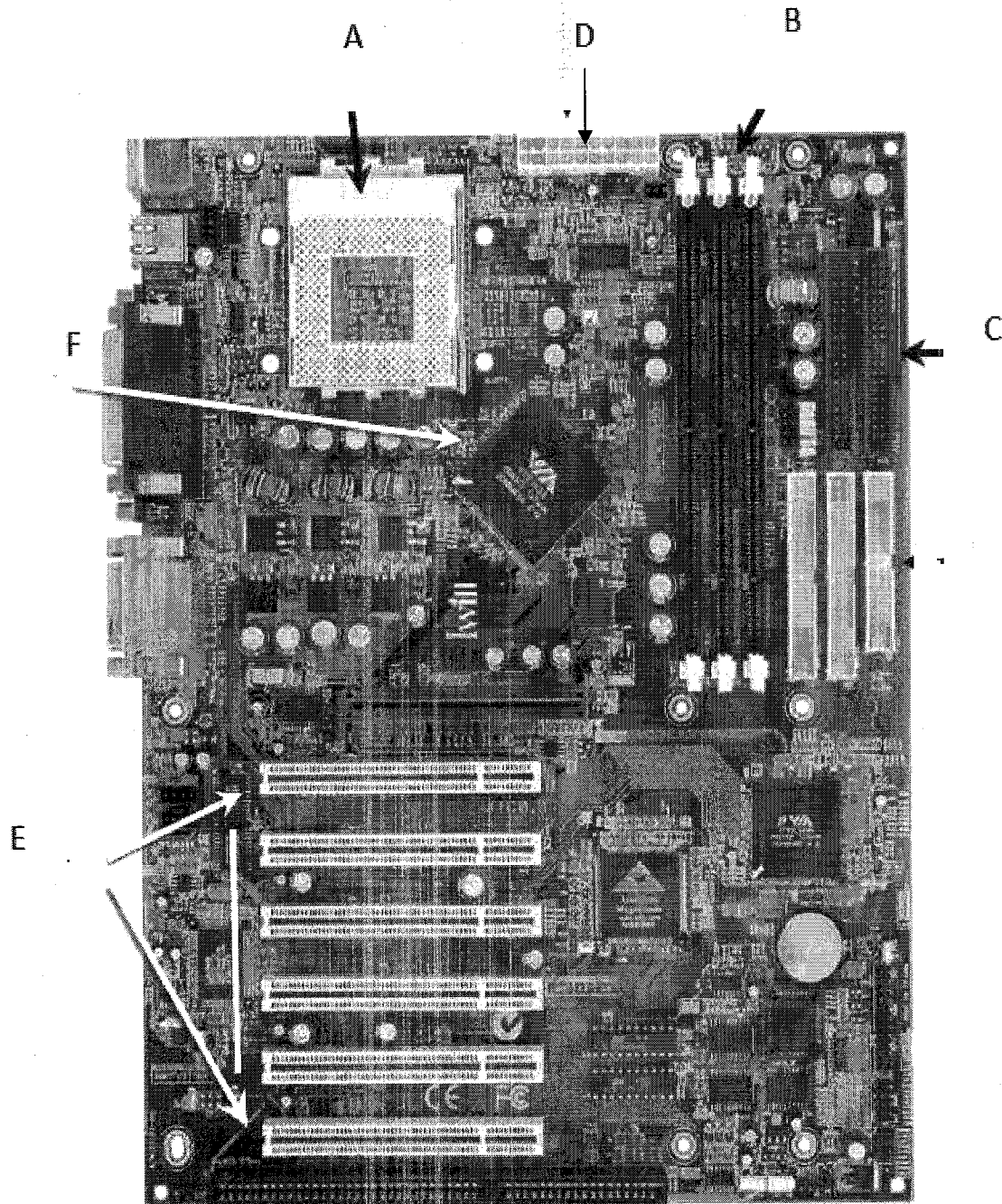
12. If the memory slots have 30 pins then the chip is a
- DIMM
 - SIMM
 - SDRAM
 - All of the above
13. Laser Jet printer speeds are measured in pages per minute (ppm) what do we use to measure dot-matrix printers?
- lines per inch
 - lines per sheet
 - characters per inch
 - characters per second
14. Which device uses a DMA channel?
- Modem
 - Network Card
 - Sound Card
 - None of above
15. Your computer get stuck when you installing a software using a flash drive. Your first action is?
- Reset the computer
 - Remove flash drive
 - Use task manager and try to stop the process
 - Non of above
16. A modem could be attached to which port?
- Parallel port
 - ASYNC port
 - PS2
 - Video port
17. An Operating System is
- MS SQL Server
 - Linux
 - WinZip
 - All of above
18. Which would you do first when troubleshooting a faulty monitor?
- Check its connections to the computer and power source
 - Use a meter to check the CRT and internal circuitry for continuity
 - Power down the monitor, then turn it on again to see if that corrects the problem
 - Power down the computer, then turn it on again to see if that corrects the problem

19. Disk Cleanup performs all of the following EXCEPT:
- Emptying the Recycle bin.
 - Delete g temporary Internet files.
 - Restoring damaged files.
 - Compressing old files.
20. A COM port is a _____ port.
- Parallel port
 - Serial port
 - SCSI
 - USB
21. A system has two IDE hard drives that are each divided into primary and extended partitions, which drive letter is assigned to the primary partition of the second drive?
- C
 - D
 - E
 - A
22. If you upgrade your memory but notice that the RAM count does not reflect the additional memory, what should you do?
- Remove the RAM, clean the slots and try to reinstall it.
 - Return the memory because it's probably bad.
 - Go to Setup and configure the memory to reflect the new amount.
 - Non of above
23. When connecting a ribbon cable to a connector, how do you know which direction to plug it in?
- The red line in the cable goes to the highest pin number
 - The colored line in the cable goes to pin #1
 - It does not matter
 - The blue or red line in the cable goes away from the power connector
24. What is the first step in diagnosing a completely dead computer at the client site that was working the day before..
- Test the power supply
 - Replace the CMOS battery
 - Check the AC outlet
 - Reseat the hard drive controller cable
25. What happens if you mix RAM sticks of different speeds?
- Your computer will work fine as long as it uses dual-channel architecture.
 - Your computer will work fine if all the memory sticks are slower than the speed of the motherboard. Perhaps one memory stick will crash out.
 - Your computer may lock up every few seconds or provide corrupted data.
 - None of above

(Total marks 25)

Question 02

- I) Describe the motherboard (Marks 5)
- II) Identify connectors – A, B, C, D, and F on the following circuit board and name the devices connected to them. (Marks 5)



III) Explain main function of F on the above circuit board. (Marks 5)

IV) List five ports available on a mother board and what are the devices connected to them. (Marks 5)

V) Compare the printers – Dot Matrix, Ink Jet and Laser based on the following factors. (Marks 5)

	Dot Matrix	Ink Jet	Laser
Quality			
Speed			
Price			
Cost of Cartage/Ribbon			

Question 03

Suppose you work as a computer technician. You are requested to prepare a specification to purchase a new computer for the image processing work. .

- I. Prepare suitable hardware specification (10 marks)
- II. Identify OS and application software for the above task (10 marks)
- III. Identify five best practices to maintain proper performances of the computer (05marks)

(Total marks 25)

Question 04

Write short notes on (5) five of following topics.

- I. Scan Disk
- II. NTFS and FAT
- III. Cache Memory
- IV. North Bridge on mother board
- V. AGP slot
- VI. Control Panel
- VII. Task Manager
- VIII. Sleep mode

(Total marks 25)