

BOARD OF TECHNICAL EDUCATION

PORVORIM-GOA
November, 2008 Examinations

Programme: Computer Engineering

Course/Subject: Personal Computer Hardware (4223)

Time Duration: 3 Hrs.

Max. Marks: 75

INSTRUCTIONS: 1.All Questions are compulsory.
2.Figures to the right indicate full marks.
3.Assume suitable additional data if required.

- Q.No.I. Attempt any three: (3x5=15)
- List out important specifications of pentium processor.
 - With a neat diagram, explain the memory map of a typical personal computer system.
 - Explain the need for having different kinds of buses in personal Computer System.
 - What is ROM BIOS ? List out important parameters stored in this ROM
- Q.No.II. Attempt any Two: (2x6=12)
- What are different types of interfaces supported for connecting pointing devices ?
 - Explain the operation of Mouse, with the help of a neat diagram.
 - With neat flowchart, Describe the procedure for troubleshooting the keyboard.
- Q.No.III. Attempt any Two: (2x6=12)
- Explain the important characteristics of the following video standards.
(i) VGA
(ii) SVGA
 - With help of a neat block diagram, Explain the working of a CRT Monitors.
 - Give a list of sub-assemblies of printer mechanism.
- Q.No.IV. Attempt any Two: (2x6=12)
- Describe the steps involved in the installation of new hard disk.
 - Explain the following with reference to the hard disk interface characteristics.
(i) Logical Block Addressing.
(ii) On-board cache
(iii) Maximum error burst/ECC
 - List out the components of a floppy disk drive & Explain briefly
- Q.No.V. Attempt any Two: (2x6=12)
- Explain the data-recording mechanism in the case of CD-RW, with a neat diagram.
 - What is EIDE/Fast-ATA/ATA-2/ATAPI? What advantage do they have ?
- ...2/-

Q.No.V.

c. What are different kinds of connectors provided in the back of sound card & Explain briefly, their applications.

Q.No.VI. Write short notes on any Three: (3x4=12)

- a. Clock doublers.
- b. SCSI
- c. AGP
- d. CD-ROM standards.

xxxxxxxx

BOARD OF TECHNICAL EDUCATION
PORVORIM-GOA
November, 2009 Examinations

Programme: COMPUTER ENGINEERING

Course/Subject: PERSONAL COMPUTER HARDWARE (4223)

Time Duration: 3 Hrs.

Max. Marks: 75

INSTRUCTIONS: 1.All Questions are compulsory.
2.Figures to the right indicate full marks.
3.Assume suitable additional data if required.

Q.No. 1. Answer ANY TEN of the following :- (1.5x10=15)

- a) Explain the significance of PCMCIA.
- b) What are the differences between static and dynamic RAM ?
- c) Which is faster, a Dx-50 or Dx-66 ? Why?
- d) List different varieties of key switches of a keyboard.
- e) Differentiate between interlaced and non interlaced monitors.
- f) What is a LINE PRINTER ?
- g) How do you terminate SCSI bus ?
- h) What are pits and lands in a CD ?
- i) Draw a diagram to show how a 3 $\frac{1}{2}$ " floppy disk is constructed.
- j) What is soft sectoring and hard sectoring in a floppy disk?
- k) What is voice Annotation ?
- l) List the desirable characteristics of a sound card.

Q.No. 2. Answer ANY TWO of the following:- (6x2=12)

- a) With a block diagram explain the super scalar architecture.
- b) What do you mean by conventional memory ? Give the break up of UMA ?
- c) Describe various types of ROM chips.

Q.No. 3. Answer ANY TWO of the following:- (6x2=12)

- a) Explain the different types of interfaces used to connect a mouse to the personal computer.
- b) Explain the keyboard interface.
- c) List out the characteristics of different types of floppy disks and drives.

Q.No. 4. Answer ANY TWO of the following:- (6x2=12)

- a) What do you mean by impact and non impact printers ? Explain the principle of operation of a dot matrix printer.
- b) Using a suitable block diagram, explain the working of the colour graphics adapter.
- c) Explain in brief the various applications of a sound card.

Contd ... 2/-

Q.No. 5. Answer ANY TWO of the followings:- (6x2=12)

- a) Explain the following interfaces for the hard disk:
 - i) IDE ii) SCSI.
- b) Describe the procedure for installing CD-ROM drive in a PC.
- c) Explain the different CD data modes.

Q.No. 6. Write short notes on ANY FOUR of the followings:- (3x4=12)

- a) EDO RAM.
- b) PCI BUS.
- c) Multi-frequency Monitors.
- d) FDD errors.
- e) CDROM Specifications.

\$