

# BOARD OF TECHNICAL EDUCATION

PORVORIM-GOA

May/June, 2009 Examinations

Programme: COMPUTER ENGINEERING

Course/Subject: PERSONAL COMPUTER HARDWARE (4223-S)

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)
- Explain the need for instruction pipeline architecture.
  - List out the backpanel connections in a PC.
  - What is overclocking? Explain the need of overclocking.
  - Give the pin details of the keyboard connector.
  - What do you mean by monitor resolution?
  - Give the classification of printers.
  - Differentiate between IDE and SCSI types of HDD.
  - Give the principle of operation of voice coil actuator mechanism.
  - Why there is a twist in the controller cable for a FDD?
  - List the various HDD components.
  - What is voice Recognition.
  - List the use of audio adapter.
- Q.No.2. Answer any two of the following:- (6X2=12)
- What do you understand by CMOS set up? What information is contained in it?
  - Explain the concept of bus mastering and arbitration.
  - Write a note on SIMM and DIMM.
- Q.No.3. Answer any two of the following:- (6X2=12)
- List the different types of key switches used in PC Keyboards and explain the principle of operation of any two.
  - How will you trouble shoot a mouse.
  - Write a short note on repairing and cleaning FDD.
- Q.No.4. Answer any two of the following:- (6X2=12)
- Explain how would you trouble shoot a video monitor.
  - Explain the principle of working in INKJET printer.
  - Outline the preparation and installation steps for installing a sound card.
- Q.No.5. Answer any two of the following:- (6X2=12)
- Describe the Hard disk Format procedure.
  - Explain how MFM encoding scheme differs from RLL encoding scheme.
  - Give and explain the CD ROM drive specifications.
- Q.No.6. Write short notes on any four of the following:- (3X4=12)
- Inlet Pentium MMX processor.
  - Cache Memory.
  - Laser Printer.
  - ST 506/412 HDD interface.
  - CD data modes.