



Reg. No. :

Name :

**Seventh Semester B.Tech. Degree Examination, May 2013
(2008 Scheme)**

**08.705 (2) : COMPUTER HARDWARE AND INTERFACING (R)
(Elective – II)**

Time : 3 Hours

Max. Marks : 100



PART – A

Answer **all** questions. **Each** question has **4** marks.

1. Explain the features of POST in a PC.
2. Differentiate between SIPP and DIPP.
3. Define IRQ conflict and explain it with an example.
4. Explain the MFM scheme and show how the data bits 0 0 0 1 1 0 1 1 are encoded using MFM.
5. Explain the functioning of CD-RW.
6. Explain the functions of the power supply in a PC.
7. Write a note on AGP.
8. Differentiate between serial and parallel ports.
9. Explain MIDI.
10. Explain the compression techniques in video cards.

(4×10=40 Marks)



PART – B

Answer **any one full** question from **each** Module. **Each** full question has **20** marks.

Module – I

11. Draw the block diagram of a Typical Chip Set and describe the characteristics and functions performed by Southbridge chip. 20
12. Describe :
- i) DDRAM
 - ii) PPRAM
 - iii) SIMM
 - iv) DIMM 20

Module – II

13. a) Describe the architecture and the characteristics of the IDE interface. 10
b) Draw the respective block diagrams and discuss the working of DVD drive and decoder. 10
14. a) Discuss the different mechanisms for processor cooling. 10
b) Describe the various ways of implementing hard drive servo mechanism. 10

Module – III

15. Explain the architecture, signals and limitations of the ISA bus. 20
16. a) Describe the design architecture of universal serial bus and explain the features of USB 2.0 and USB 3.0. 10
b) Draw the block diagram of an Audio Adapter and describe its (the adapter's) architecture. 10

(3x20=60 Marks)