Sixth Semester B.Tech Degree Examination
(2013 Scheme)
13.605 PC Hardware and Interfacing(R)

Time: 3 Hours   **Max.Marks: 100**

PART – A *(Answer all questions)*

1. Can 80286 microprocessor switched from real address mode to protected virtual address mode. Justify your answer.

2. Superscalar execution done on Pentium microprocessor. Brief the sequence of execution

3. Give architectural concept and functions of chipset .

4. How Small Computer System Interface (SCSI)works?Give significance of SCSI Identification Numbers(IDs).

5. Discuss and sketch Standard Parallel Port(SPP) registers.

(5x4=20 Marks)

PART – B

Answer **one full** question from **each** module

Module – I

6. Give block diagram explanation of net burst micro architecture of Pentium 4.   **20**

OR

7. (a) Explain Segmentation and Paging of 80386 microprocessor   **12**

   (b) When **80286** operate in Protected Virtual Address Mode (PVAM)? Explain.

Module – II

8. (a) (i) List out the purpose of an Interrupt Request (IRQ) Line

       (ii) How IRQ controller design differ in original PC and PC /AT   **8**

   (b)Write short notes on

       (i) ROM BIOS (ii)ROM POST (iii)AT and ATX physical form factors   **12**

OR

9. (a) Explain different types of memory chips and its organization .   **10**

(b) Discuss Advanced memory technologies **5**

(c) Differentiate Extended and Expanded memory **5**

Module – III

10. (a) Briefly explain SCSI hardware. **10**

(b)Discuss various components of hard disk drive and their functions **10**

OR

11.(a) Describe ATA standards in detail . **10**

(b) How data are read and written in magnetic storage devices? Explain **10**

Module – IV

12. Illustrate PCI bus with architecture of PC system and explain its features **20**

OR

13. Discuss following

(i) Accelerated Graphics Port (AGP) **10**

(ii) Parallel port data transfer with timing diagram **5**

(iii) Serial port communication and its advantages over parallel port **5**