

COMILLA UNIVERSITY

Department of Computer Science & Engineering

3rd Year 2nd Semester Final Examination-2014

Session: 2011-2012 Course Code: CSE-321

Course Title: Computer Peripherals and Interfacing

11 Marks: 30

Time: 2 Hours

[N.B.- (i) Answer any Two questions from each Part; (ii) Figures in the right margin indicate full marks.]

Computer Peripherals

1. (a) Define computer peripherals? What are some examples of computer peripheral devices? 2
(b) What do you mean by aspect ratio of SVGA with example? 1
(c) Briefly explain Digital Video Interface connection with figure. 2.5
(d) Give the difference between ink-jet and laser printer. 2
2. (a) Draw the block diagram of a typical PCI/ISA bus system showing the major components which can be connected to them. 2
(b) Differentiate between SIMM and DIMM. 2
(c) Describe the use of display RAM and RAMDAC. 1.5
(d) List the key characteristics that used to determine the performance of a microprocessor and how to increase the performance of a μp ? 2
3. (a) What characteristics should a user evaluate before employing a memory device? - 400 Hbytes 1
(b) Consider an 8088 μp which contains Bus Band Width 8bit, Clock Rate 4.77MHz and Clocks / Bus Cycles 4. Calculate Maximum Bus Bandwidth and compare the result with when one wait state was inserted. 4
(c) Write short notes on following topics: 2.5
(i) Bar Code Reader
(ii) MICR
- $B = \frac{1 \times 4.77}{4} = 1.1925 \text{ MB}$

Interfacing

4. (a) Define interfacing. Why is it needed in computer system? 1.5
(b) Define memory interfacing. Describe interfacing 2732 EPROM with 8085 Microprocessor 3.5
(c) What is the difference between peripheral I/O and memory mapped I/O? 2.5
5. (a) Draw the block diagram of 8257 DMA controller. - 417 Mano 3
(b) Describe the I/O port write bus cycle. 2
(c) What are the operating modes of 82C55? Discuss in short. 2
6. (a) What is interrupt? What happened when MP is interrupted? Discuss various types of interrupt. 3
(b) Explain the purpose of a digital-to-analog converter or DAC circuit in your own words. 2
(c) Write the short notes on the following signals:
(i) AEN
(ii) I/O CH CK