Code No. 5438 / N

FACULTY OF INFORMATICS

B.E. 2/4 (I.T.) II – Semester (New) (Main) Examination, June 2016

Subject: Computer Organization & Microprocessors

Time: 3 Hours **Max.Marks: 75**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (25 Marks)

1	Write about Generations of Computers	3
2	Explain function of ALE pin in 8085	3
3	Differentiate between multiprocessors and multicomputer	3
4	Discuss virtual memory	2
5	Write ALP two perform addition of two 16-bit numbers	3
6	Write about modes of transfer in 8251	2
7	Explain memory hierarchy	2
8	Write about different types of busses in computer organization	3
9	Compute the effective memory access time, where cache access time takes 4 ns, while main memory access time is 50 ns with 80% hit ratio.	2
10	Write about DRAM	2

PART – B (5x10 = 50 Marks)

11	a)	Write differences between programmed I/0 and DMA.	5
	b)	Write the procedure to handle interrupts	5
12		Describe the organization of bit cells in memory chip in semiconductor RAM memory.	10
13	a)	Explain about 8259 in detail.	7
	b)	Explain stack concept in 8085.	3
14	a)	Write short notes on A/D and D/A converters.	8
	b)	Explain pipelining process.	2
15		Write in detail about 8255 in I/0 mode.	10
16		Explain internal architecture of 8085 with neat diagram.	10
17	a)	Explain the components of a computer with neat diagram.	5
	b)	Explain cache memory	3
	c)	Discuss about performance metrics of computers.	2

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