Total No. of Questions-8]

Seat	
No.	

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S.E. (Elect/E&TC) (Second Semester) EXAMINATION, 2017 COMPUTER ORGANIZATION

(2012 Pattern)

Time : Two Hours

Maximum Marks : 50

- **N.B.** :- (i) Neat diagrams must be drawn wherever necessary.
 - (*ii*) Figures to the right indicate full marks.
 - (*iii*) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.
 - (iv) Assume suitable data, if necessary.
- (a) Draw the block diagram of basic structure of computer and explain function of each block. [6]
 - (b) Give the IEEE standard for floating point numbers for :
 - (*i*) Single precision number
 - (*ii*) Double precision number [6]

Or

- **2.** (a) Draw and explain single bus organization. [6]
 - (b) Multiply (7) and (3) using Booths algorithm. Register size 5 bits. [6]
- **3.** (a) Compare RISC and CISC processor. [6]
 - (b) Write a short note on PCI BUS. [6]

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Or

4.	<i>(a)</i>	Write control sequence for instruction MOVE (R1), (R2) using
		single bus organization. [6]
	(<i>b</i>)	What is BUS arbitration ? Explain Daisy chain and polling
		method. [6]
5.	(<i>a</i>)	Explain cache memory. Why is it used ? [6]
	(<i>b</i>)	Explain the connection of memory to processor. [7]
		Or
<i>6</i> .	<i>(a)</i>	Explain the memory hierarchy of computer system. [6]
	(<i>b</i>)	Explain the concept of virtual memory ? How virtual memory
		addresses is translated to physical memory address ? [7]
7.	<i>(a)</i>	List out addressing modes of 8086. [6]
	(<i>b</i>)	Explain interrupt structure of 8086. [7]
		Or
8.	<i>(a)</i>	Explain the following addressing modes of 8086 with suitable
		example : [6]
		(i) Direct addressing
		(ii) Register addressing
		(iii) Immediate addressing
	(<i>b</i>)	Draw flag structure of 8086 and explain operation of each
		flag. [7]

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