Total No. of Questions—8]

[Total No. of Printed Pages—3

Seat	
No.	

[4757]-1049

S.E. (Electronics/E&TC) (Second Semester)

EXAMINATION, 2015

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.
- 1. (a) Explain different functional units of Computer Organization. [6]
 - (b) Give the IEEE standard for floating point numbers for:
 - (i) single precision number
 - (ii) double precision number.

2.	(a)	Explain single bus structure and multi bus structure. [6]
	(b)	Represent (-13) multiple in booths record format and bit pair recorded format. [6]
3.	(a)	Write down control sequence for the instruction move (R1), R2.
	(<i>b</i>)	Explain the following standards: [6]
		(i) PCI
		(ii) SCSI
		(iii) USB.
		Or
4.	(a)	Compare horizontal microinstruction and vertical micro-
		instruction. [6]
	(b)	Write a short note on interrupt driven Input/Output. [6]
5.	(a)	Explain cache memory. Why is it used ? [6]
	(<i>b</i>)	Write a note on semiconductor RAM memories. [7]
		Or
6.	(a)	Write a note on a synchronous DRAM. [6]
	(b)	Explain the connection of the memory to the processor. [7]

7. (a) List out addressing modes of 8086. [6]
(b) Explain interrupt structure of 8086. [7]

- 8. (a) Draw Flag Structure of 8086 and explain operation of each flag. [7]
 - (b) Explain Logical to physical addressing of 8086. [6]