Total No. of Questions—**8**] [Total No. of Printed Pages—**2**

Seat No.	

[5559]-184

S.E. (Computer) (I Sem.) EXAMINATION, 2019

COMPUTER ORGANIZATION AND ARCHITECTURE

(2015 PATTERN)

Time : Two Hours **Maximum Marks : 50**

Instructions to the candidates:

1) *Neat diagrams must be drawn wherever necessary.*
2) *Figures to the right side indicate full marks.*
3) *Use of Calculator is allowed.*
4) *Assume Suitable data if necessary*

Q.1	a)	Draw and explain flow chart of non restoring division algorithm	[6]
	b)	Write short note on 1.PROM 2.EPROM	[6]
		OR	
Q.2	a)	Draw and explain hardware implementation of Booth's Algorithm	[6]
	b)	Draw and explain memory hierarchy	[6]
Q.3	a)	Write short note on Infini Band and Infini band Architecture	[6]
	b)	Explain following addressing modes with one example each a. auto increment b. auto decrement c. immediate	[6]
		OR	
Q.4	a)	Draw and explain I/O channels with diagram.	[6]
	b)	What is opcode and operand ? How machine instruction is represented in X86?	[6]

P.T.O.

Q.5	a)	Discuss in detail 1. Instruction level and machine level parallelism 2. Instruction Issue Policy	[6]
	b)	Enlist and explain Use visible registers and control and status registers	[7]
		OR	
Q.6	a)	Draw and explain Instruction cycle state diagram	[7]
	b)	Enlist features of 8086 microprocessor.	[6]
Q.7	a)	Write a Control Sequence for Conditional Branch Instruction?	[7]
	b)	Explain How to Fetching a word from Memory and how to store a Word into Memory ?	[6]
		OR	
Q. 8	a)	Explain in detail State Table Design Method for Hardwired Control?	[7]
	b)	Explain Vertical Microinstruction format	[6]