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　[6]
　　　　　1.PROM
　　　　　2.EPROM

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　[6]
　　　　　a. auto increment
　　　　　b. auto decrement
　　　　　c. immediate

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   [6]
             1.   Instruction level and machine level parallelism
             2.   Instruction Issue Policy.

       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   [6]
             Word into Memory ?
                                        OR
Q. 8   a)   Explain in detail State Table Design Method for Hardwired Control?   [7]

       b)   Explain Vertical Microinstruction format   [6]