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

Seat No.	

[5152]-139

S.E. (E & TC/Electronics) (II Sem.) EXAMINATION, 2017
COMPUTER ORGANIZATION
(2012 COURSE)

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*) What do you understand about pipelining ? Explain with suitable example. [6]

(*b*) Perform the following division using restoring algorithm : [6]
divided=1001 and . divisor=0101

Or

2. (*a*) What is basic performance equation and how is it related to clock rate and compiler design ? [6]

(*b*) Reprint the following numbers into single precision and double precision format : [6]
(*i*) 309.1875
(*ii*) 178.1875.

3. (*a*) Give the difference between hardwired control and micro-programmed control. [6]

P.T.O.

(*b*) What is an interrupt ? What is the response of the CPU after recognition of interrupt ? [6]

Or

4. (*a*) What is multiple bus organization ? [6]

(*b*) Explain exception used for debugging the program. [6]

5. (*a*) Explain cache memory. Why is it used ? [7]

(*b*) Draw 1 bit memory cell and how it works. [6]

Or

6. (*a*) Explain the connection of the memory to the processor. [7]

(*b*) Write a note on semiconductor RAM memories. [6]

7. (*a*) Draw architecture of 8086. [7]

(*b*) Explain pipelining concept for 8086. [6]

Or

8. (*a*) Explain Logical to physical addressing of 8086. [7]

(*b*) Explain Segment Registers of 8086. [6]