

Total No. of Questions : 4]

P5235

SEAT No. :

[Total No. of Pages : 1

[6188]-190

B.E. (E & TC) (Insem)

VLSI DESIGN AND TECHNOLOGY
(2019 Pattern) (Semester - VII) (Theory) (404182)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Attempt Q.1 or Q.2 and Q.3 or Q.4.
- 2) Draw neat diagram's wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) a) Draw and explain design flow of VLSI. **[8]**

b) Write VHDL code for 8:1 mux using structural style of modeling. **[7]**

OR

Q2) a) Explain different modeling styles in VHDL. **[8]**

b) Write VHDL code for 4 - bit ALU to perform different eight operations. **[7]**

Q3) a) Explain and compare moore and mealy machine. **[8]**

b) Write short note on clock skew and clock jitter. **[7]**

OR

Q4) a) Write short note on noise margin. **[5]**

b) Explain signal integrity issues. **[5]**

c) Write short note on power distribution techniques. **[5]**

