

Total No. of Questions : 4]

SEAT No. :

P5235

[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]

