

22151

M. E. 2nd Semester ECE Examination, May-2015

VLSI DESIGN

Paper-MEEC-506

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. (a) Discuss in brief theory of Depletion type MOSFET.
(b) Discuss in brief the fabrication of CMOS using N-well process. 10
2. Explain the following :
(a) Body effect
(b) Channel length modulation
(c) Pass transistor. 20
3. (a) Discuss the MOS transistor circuit model. 10
(b) What is transistor sizing ? Explain with examples. 10
4. (a) Discuss the CMOS design rules and importance of power and delay in the logic design. 10