

[4265] - 661

M.E. (E & TC) (VLSI & Embedded System)

ASIC DESIGN & MODELLING

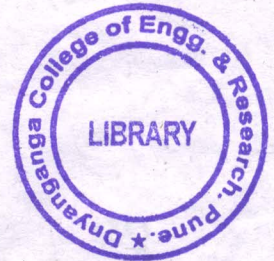
(2008 Course) (Elective - I(a)) (Semester - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answer any three questions from each section.
- 2) Answers to the two sections should be written in separate books.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Figures to the right indicate full marks.
- 5) Assume suitable data, if necessary.



SECTION - I

- Q1) a) Explain the different type of modelling used in VHDL with respect to different constraints. [6]  
 b) Write a VHDL code for four bit Universal shift register. [12]
- Q2) a) Draw and explain the ASIC design flow. [8]  
 b) Explain the block diagram of synthesis in detail and explain the technology library used in synthesis. [8]
- Q3) a) Find the minimal test set for the circuit shown in fig. a. to show the coverage of various stuck at 1 for all possible tests. [8]

