

NOV-DEC
2011

Total No. of Questions—12]

[Total No. of Printed Pages—4+1

[4062]-203

S.E. (Common to IT) (Computer Engineering)

(First Semester) EXAMINATION, 2011

DIGITAL ELECTRONICS AND LOGIC DESIGN

(2008 PATTERN)

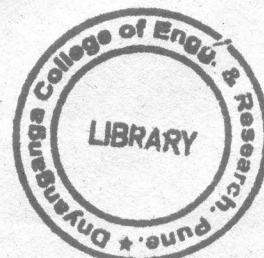
Time : Three Hours

Maximum Marks : 100

- N.B. :-** (i) Answers to the two Sections should be written in separate answer-books.
- (ii) In Section I Attempt : Q. No. 1 or Q. No. 2, Q. No. 3 or Q. No. 4, Q. No. 5 or Q. No. 6.
In Section II Attempt : Q. No. 7 or Q. No. 8, Q. No. 9 or Q. No. 10, Q. No. 11 or Q. No. 12.
- (iii) Neat diagrams must be drawn wherever necessary.
- (iv) Figures to the right indicate full marks.
- (v) Assume suitable data, if necessary.

SECTION I

1. (a) Do the required conversions for the following numbers : [6]
- (i) $(BF8)_{16} = (\quad)_{10}$
- (ii) $(1000)_{10} = (\quad)_8$
- (iii) $(377)_8 = (\quad)_{16}$
- (b) What are different ways of representing signed binary numbers ? Explain with examples. [6]
- (c) Solve the following equation using K map minimization technique. Draw the diagram for the output : [6]
- $$Z = f(A, B, C, D) = \pi M(0, 1, 6, 7, 8, 9).$$



P.T.O.

