

Total No. of Questions : 12]

NOV - Dec - 2012

SEAT No. :

P1195

[Total No. of Pages : 4

[4264] - 692

B.E. (Computer Engineering)
PRINCIPLES OF COMPILER DESIGN
(2008 Pattern) (Semester - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

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

SECTION - I

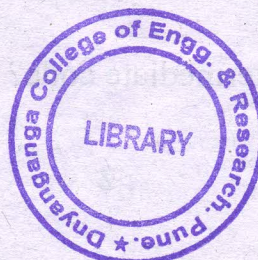
- Q1) a) What is role of Lexical Analyzer in compiler design? Why Lexical Analyzer and Parser are two separate phases? Why they are combined in a single pass? [6]
- b) Show that following grammar is LR(1) but not LALR. [8]
- $S \rightarrow Aa \mid bAc \mid Bc \mid bBa$
- $A \rightarrow d$
- $B \rightarrow d$
- c) Compare and contrast Recursive Descent parser and Predictive parser. [4]

OR

- Q2) a) Explain the working of Operator Precedence parser with an example. [6]
- b) Explain : Error detection and recovery in YACC. [4]
- c) Explain role of Regular Expression and DFA in Lexical Analyzer. [8]

Write LEX specification for following :

To count positive and negative numbers from a text file, and display them.



P.T.O.

