Total No. of Questions : 12]

SEAT No. :

P1454

[Total No. of Pages : 4

May - June 2012

[4164] - 696

B.E. (Computer)

PRINCIPLES OF COMPILER DESIGN

(2008 Pattern) (Sem. - 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) *Figures to the right indicate full marks.*
5) *Assume suitable data, if necessary.*

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SECTION - I

Q1) a) Define passes and phases of compiler. Explain different phases of compiler in detail. **[10]**

b) Differentiate between top down parser and bottom up parser. **[8]**

OR

Q2) a) Discuss the term 'ambiguity of grammar'. Consider following example grammar. $S \rightarrow S+S \mid S*S \mid a \mid b$

Determine weather the grammar is ambigious? If yes, show resultant parse trees for one example string. **[10]**

b) How lexical analysis detect the errors? Explain with suitable example. **[8]**

Q3) a) What is mean by 'syntax directed definitions'? Give syntax directed definition for any example arithmetic expression? **[8]**

b) Differentiate between L-attributed definitions and S-attributed definitions. **[8]**

OR

Q4) Write short notes on **[16]**

a) Semantic Analyser.

b) Syntax trees.

c) Translation Schemes.

d) Type system and Type expressions.

P.T.O.