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BO—09—2016

FACULTY OF COMPUTER STUDIES
B.C.A. (Fifth Semester) EXAMINATION
OCTOBER/NOVEMBER, 2016
(Revised Course)
COMPUTER APPLICATION

Paper S5.2

(Principles of Compiler Designing)

(Saturday, 19-11-2016)

Time : 10.00 a.m. to 1.00 p.m.

Time— Three Hours

Maximum Marks—80

N.B. :— (i) Question No. 1 is compulsory.

(ii) Figures to the right indicate full marks.

(iii) Assume suitable data, if necessary.

1. Attempt the following : 20
 - (a) Discuss the structure of compiler.
 - (b) What is symbolic table ?
 - (c) Explain data element.
 - (d) Discuss in brief token.
2.
 - (a) What is various types of intermediate code representation. 8
 - (b) Distinguish between compiler and interpreter. 7

Or

 - (c) Explain various data structure. 8
 - (d) Discuss in detail regular expression. 7
3.
 - (a) Explain the code optimization in detail. 8
 - (b) What is bottom up parsing ? Discuss it. 7

Or

 - (c) Discuss shift reduce parsing. 8
 - (d) Explain an automatic parser generation work in detail. 7

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4. (a) Discuss operator precedence parser. 8
- (b) List the properties of LR parser. 7
- Or*
- (c) What is derivation and parse tree ? 8
- (d) What are capabilities of context free grammars ? 7
5. Write short notes on (any *three*) : 15
 - (a) Optimization
 - (b) Assembler
 - (c) Top-down parsing
 - (d) Code generation
 - (e) Assignment.

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