C14–IT–**503**

4646

BOARD DIPLOMA EXAMINATION, (C–14)
MARCH/APRIL—2017
DIT—FIFTH SEMESTER EXAMINATION

PRINCIPLES OF PROGRAMMING LANGUAGES

Time : 3 hours]　　　　　　　　　　　　[*Total Marks* : 80

PART—A　　　　　　　　3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. List various programming domains.

2. What constitutes a programming environment?

3. What is the primary use of attribute grammars?

4. Describe the basic concept of denotational semantics.

5. What are the advantages of user defied data types?

6. Differentiate between static scope and dynamic scope.

7. What is a Compound Assignment Operator? Give an example.

8. List any three iterative statements.

9. List any three design issues for subprograms.

10. Differentiate between formal and actual parameters.

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PART—B   10×5=50

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Instructions : (1) Answer *any* **five** questions.

            (2) Each question carries **ten** marks.

            (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain, in detail, about various language implementation methods.

12. *(a)* Distinguish between language generators and language recognizers.   5

     (b) What is parse tree? Draw the parse tree for the statement *A B* (*A C*).   5

13. Explain the Extended Backus-Naur Form (EBNF) method of describing syntax.

14. Explain character string data types with examples.

15. Explain relational and Boolean operators and expressions with suitable examples.

16. Discuss iterative statements of various languages with examples.

17. Compare various parameter passing methods.

18. Explain in detail about generic subprograms.

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