

(4)

7. Differentiate between user defined functions and Library functions in Fortran. Explain any five intrinsic mathematical functions used in FORTRAN programming. 7½

Unit-IV

8. (a) Discuss the purpose and working of- 5
(i) Common statement
(ii) EQUIVALENCE statement
Give examples-
(b) Differentiate between Actual and Dummy arguments. 2½
9. (a) What are subscripted variables? Write the utility of Dimension statement. 5
(b) Write a short note on Implied do loops. 2½

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Roll. No. _____

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B.Sc. (Part-I) Examination, 2015

(Old Syllabus)

COMPUTER SCIENCE

Second paper

(Computer Programming Fundamentals & Fortran 77/90)

Time Allowed : Three Hours] [Maximum Marks : 50

Note : Answer Question No.1, which is compulsory and one question from each Units I to IV i.e. Five questions in all.

1. (a) Explain various logical operators used in Fortran. 2×10=20
(b) What are Pseudo codes?
(c) Explain the working of Do Loop by giving example.
(d) Differentiate between top-down approach and bottom-up approach of programming.

(2)

- (e) Elaborate how various data types are declared in a Fortran program.
- (f) Differentiate between subroutine and sub-program.
- (g) What is the difference between cohesion and coupling?
- (h) What do you mean by Assignment Statement?
- (i) Elaborate the working of Nested Do Loops.
- (j) Discuss the working of Elseif statement.

Unit-I

- 2. (a) Draw a flowchart for finding the roots of a quadratic equation. Also explain the types of roots by representing in flowchart. 3½
- (b) What is flowchart? How it is different from algorithm? Explain various symbols used for making flowchart. 4

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(3)

- 3. (a) By giving examples explain various steps of program planning methodology. 4½
- (b) Write an algorithm for finding the greatest of three numbers. 3

Unit-II

- 4. (a) With the help of proper syntax and example, explain the format directed READ statement. Compare it with List directed statement. 5
- (b) Write a Fortran program to find the factorial of a given number. 2½
- 5. (a) Discuss various branching constructs used in FORTRAN programming by giving examples. 5
- (b) Write a short note on computed Go To statement 2½

Unit-III

- 6. (a) By giving examples compare and contrast Arithmetic IF statement and Logical IF statements. 5
- (b) Explain various operators used in FORTRAN. 2½

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P.T.O.