

**Subject : Computer Algorithm & Problem Solving**

Day : Monday  
Date : 13/06/2016



Time : 02.00 PM TO 05.00 PM  
Max Marks : 80 Total Pages : 1

**N. B. :**

- 1) Attempt **ANY FIVE** questions from Section – I and **ANY TWO** from Section – II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in the **SAME** answer book.

**SECTION - I**

- Q. 1** Define algorithm. Explain characteristics of an algorithm. (10)
- Q. 2** What is flowchart? Explain the advantages and disadvantages of flowchart. (10)
- Q. 3** Write an algorithm and draw flowchart to find the sum of first 100 odd numbers. (10)
- Q. 4** What are loops? Explain while loop and do-while loop with example. (10)
- Q. 5** Define array. Explain various operations that can be performed on an array. (10)
- Q. 6** What is a decision table? Explain the structure of decision table. (10)
- Q. 7** Write short notes on the following: (10)
- a) Operators
  - b) Subroutine

**SECTION - II**

- Q. 8** Write an algorithm and draw flowchart to sort the elements of an array in ascending order. (15)
- Q. 9** Write an algorithm and draw flowchart to calculate net salary of an employee where basic salary is inputted by the user (Calculate DA = 20 % of basic salary, HRA = 15 % of basic salary, PF = 10 % of basic salary) (15)
- Q.10** Write an algorithm to print multiplication tables from 1 to 5. Also draw flowchart for the same. (15)

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