S.D.E.

B.C.A. SEM - I (CBCS - 2018 Course) : SUMMER - 2019

SUBJECT: Algorithm & Program Design

Day: Friday Time 02.00 PM TO 05.00 PM Date: 03/05/2019 Max. Marks: 70 S-2019-4943 N.B. 1) Attempt any **FOUR** questions from Section –I 2) Attempt any TWO questions from Section - II Figures to the right indicate FULL marks. 3) Answers should be written in **SAME** answer book. 4) **SECTION-I** Q.1 What is an algorithm? Differentiate between procedure and algorithm. (10)What is flow-chart? Explain different symbols used in flow-chart. Q.2 (10)(10)Q.3 Write an algorithm to swap two numbers. Q.4 What is procedure oriented programming? Explain the benefits of procedure (10) oriented programming. Write an algorithm to find prime numbers up to 100. **Q.5** (10)Q.6 Write a short Note on any Two of the following: (10)a) Control structure b) Pseudo-code c) Tracing of algorithm d) Bubble Sort **SECTION-II** What is an array? Write an algorithm for linear search. (15)**Q.7** Write an algorithm for following: (15)Q.8 a) Average of n numbers. b) Find maximum in a given list. Sort following list using selection sort: (15)Q.9 11, 2, 19, 4, 5, 6, 88, 71 Also write an algorithm for selection sort.