(SDE)

B.C.A. Sem-I (CBCS -2018 course): WINTER – 2018

SUBJECT : Algorithm & Program Design

Day: Thursday
Date : 29/11/2018

W-2018-4496

Time : 02.00 PM TO 05.00 PM
Max. Marks : 70

N.B.

1) Attempt any **FOUR** questions from Section –I
2) Attempt any **TWO** questions from Section - II
3) Figures to the right indicate **FULL** marks.
4) Solve both sections in **SEPARATE** answer sheet

SECTION-I

Q.1 What is pseudo-code? Explain different characteristics of pseudo-code. **(10)**

Q.2 Explain various control structures used in procedure oriented programming. **(10)**

Q.3 What is flowchart? Draw a flowchart for finding product of two numbers. **(10)**

Q.4 What is Fibonacci sequence? Write an algorithm to find Fibonacci sequence up to N. **(10)**

Q.5 What is an array? Explain advantages of array in programming. **(10)**

Q.6 Write a short Note on any Two of the following : **(10)**

a) Swapping
b) Structured programming
c) Linear search
d) Tracing of algorithm

SECTION-II

Q.7 Write an algorithm to compute n^{th} root of a number. **(15)**

Q.8 Explain the problem of search and merge with the help of a suitable example. **(15)**

Q.9 What is sorting? Explain different types of sorting algorithms. **(15)**

* * * * * *