YENISI - I : WINTER - 2016

Subject : Elementary Algorithmics

Day : Monday
Date : 05/12/2016

S.D.E. 33514

Time : 10.00 A.M. TO 1.00 P.M.
Max Marks : 80 Total Pages : 1

N.B.:

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

SECTION –I

Q.1 Explain rules to draw flow chart. **(10)**

Q.2 Write an algorithm to find factorial of given integer. **(10)**

Q.3 Discuss the relationship among recursive and iterative algorithms with appropriate example. **(10)**

Q.4 Define array. Write an algorithm for partitioning an array. **(10)**

Q.5 Explain different iterative controls available in procedure oriented programming. **(10)**

Q.6 Discuss different performance measures of program. **(10)**

Q.7 Write short notes on Any **TWO**: **(10)**

a) Characteristics of algorithm
b) Memory allocation for 2-D array
c) Algorithm verification.

SECTION-II

Q.8 Given a list of n integers. Write an algorithm and flowchart to search a given number in a list. Trace the same to search 75 in the following list.
25, 38, 75, 98, 120, 135, 142, 160. **(15)**

Q.9 Write an algorithm to accept n integers and do following operations. **(15)**

- Find sum of integers
- find largest and smallest integer among a list
- Count even and odd numbers

Q.10 Write an algorithm to sort given list of integers in ascending order using selection sort. **(15)**

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