SARDAR PATEL UNIVERSITY
POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (PGDCA)
SEMESTER- I EXAMINATION, 1ˢᵗ APRIL 2016
PGDCA - 102 (C AND DATA STRUCTURE)

Time: 2:30 pm to 5:30pm   **Marks: 70**

Q.1   Select the Appropriate Answer of the following questions: [8]
  1.   What symbol is used to represent output in a flowchart?
       A. Square   B. Parallelogram
       C. Rectangle   D. None of these
  2.   Step by step written instruction for a process is called as _____.
       A. Flowchart   B. Algorithm
       C. Software   D. None of these
  3.   In C programming languages _____ are used to store values in memory.
       A. Variable   B. Operators
       C. Functions   D. None of these
  4.   _____ is used to represent float values.
       A. %c   B. %d
       C. %f   D. None of these
  5.   Consider the following code snippet:
       while (1)
       {
       printf(" Hello");
       }
       How many times execute above loop?
       A. 1   B. 10
       C. Infinite   D. None of these
  6.   An array in C programming language contains element of _____ data type.
       A. Complex   B. Same
       C. Different   D. None of these
  7.   A function in a C programming language can never have _____.
       A. Arguments   B. Return value
       C. Call to itself   D. None of these
  8.   A data structure in which insertion and deletion of an elements occurs at only one
       end is known as _____.
       A. Stack   B. Queue
       C. Tree   D. Graph

Q.2   Answer the following questions: [Any seven]   [14]
       1.   What do you mean by translator? Explain in brief.
       2.   Define program. Write a sample program that prints "C Program" as output.
       3.   Explain editors in brief.
       4.   List & draw out any four symbols of flowchart.
       5.   Explain printf() and scanf() functions with example.
       6.   Define arrays.
       7.   What do you mean by entry control loop?
       8.   Define non-primitive data structure.
       9.   Define trees.

| Q.3 | A | Draw the block diagram of computers. | [06] |
| | B | What is operator? Explain different types of operators with example. | [06] |

OR

| | B | Explain high level language and assembly language in detail. | [06] |

| Q.4 | A | Write difference between do-while, while and for loop. | [06] |
| | B | What is array initialization? Explain initialization of 1dimensional array with syntax and example. | [06] |

OR

| | B | Explain switch statement in detail with example. | [06] |

| Q.5 | A | Write a note on user defined functions. | [06] |
| | B | Explain structure in detail. | [06] |

OR

| | B | Write algorithm for push and pop operation on stack. | [06] |

| Q.6 | A | Define queue. Mention algorithm to insert and delete an element inside a queue. | [06] |
| | B | Explain singular linked list in detail with suitable example. | [06] |

OR

| | B | Discuss file management in detail. | [06] |

*****BEST OF LUCK*****