SARDAR PATEL UNIVERSITY
S.Y.B.Sc : SEMESTER – III
BIO INFORMATICS : US03CBNF01
Problem Solving Methodology and Programming in C

Date: 13/11/2013, Wednesday   Time:02:30pm to 05:30pm

Marks:70

Q.1   Multiple choice of Question: 10

[1] _____is a step by step approach to solve any problem.
(a) Process   (b) Algorithm
(c) Programming Language   (d) Compiler

[2] _____ is a pictorial representation of an algorithm.
(a) Data Diagram   (b) Flow Chat
(c) Pie Chart   (d) Program

[3] What is the standard decision symbol for a flowchart?
(a) circle   (b) diamond
(c) lozenge   (d) square

[4] The range of double data type is _____ bytes.
(a) 2   (b) 4
(c) 8   (d) 16

[5] Which of the following section is compulsory in C program?
(a) Main()   (b) Definition
(c) Documentation   (d) None of these

[6] _____ format specifier used for floating data type.
(a) %d   (b) %f
(c) %c   (d) %e

[7] In Array subscript can begin with number_____
(a) Zero   (b) One
(c) Three   (d) None of these

[8] When we declare array _____data type is use.
(a) int   (b) char
(c) float   (d) All of above

[9] A group of character is known as _____
(a) String   (b) Array
(c) Function   (d) All of above

[10] The function putchar ( ) requires _____parameter.
(a) One   (b) Two
(c) Three   (d) Four

Q.2   Attempt any 10 questions: 20

[1] Write an algorithm to find maximum from given three numbers.
[2] Draw a flowchart to find simple interest. Hint: SI=(P*R*N)/100.
[3] What is an algorithm? List Characteristics of an algorithm.
[4] Define Constant and Variable name.
[5] Explain ternary operator with example.
[6] Explain short hand operator in brief.
[7] What is array? List out the type of array use in c programming.
[8] Explain break and continue statement in C.
[9] Write difference between exit and entry controlled loop.
[10] Explain puts ( ) function with syntax and example.
[11] What is user–defined function? Give example of user defined
      function.
[12] Write the advantages of function.

Q.3   [A] Explain different generation of computer languages.   5

        [B] Draw a flowchart to check whether inputted number is   5
            prime number or not.

                              OR
Q.3   [A] What is Flowchart? Write advantages and disadvantages of   5
            flow chart.

        [B] Write an algorithm to check whether inputted number is prime   5
            number or not.

Q.4   [A] Explain Basic Structure of C program.   4

        [B] What is operator? Explain different operators with example.   6

                              OR
Q.4   [A] How variable can be defined in C? What are the different types   5
            of variables? Write difference between a variable and a constant.

        [B] Explain Escape sequence with example.   5

Q.5   [A] Explain following function with syntax and example.   5
            1. strcmp( )   2. strrev( )

        [B] Explain if..else & nested if statement with syntax and example.   5

                              OR
Q.5   Explain looping statements with syntax and example.   10

Q.6   [A] Define function? Explain type of category used in c with example   10

                              OR
Q.6   [A] Explain command line argument in c with example.   5

        [B] Explain function definition and function call with syntax and   5
            example

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