SARDAR PATEL UNIVERSITY

B.SC. (BNF) Examination October/November - 2018

US03CCBI01 : Problem Solving Methodology & Programming In C

Date: 20/11/2018, Tuesday   Time: 02:00 to 05:00 PM   Total Marks : 70

Q.1   Multiple choice questions: [10]

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

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

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

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

5. Which of the following backslash character constant is used for horizontal tab?
   (a) \n   (b) \t   (c) \h   (d) \y

6. Do-while loop is also known as _____ loop.
   (a) Entry level   (b) Exit level   (c) a &b   (d) None of this

7. _____ statement skips the remaining statement of the loop and control transfer to the condition.
   (a) Break   (b) Continue   (c) if   (d) switch

8. An array can be initialize either at compile time or at _____
   (a) Run Time   (b) Allocation Time (c) Released Time   (d) Not of above

9. _____ function is use for reading the string with the whitespace.
   (a) gets()   (b) puts()   (c) getc()   (d) putc()

10. _____ function count and return the number of character in a string.
    (a) strcpy()   (b) strlen()   (c) strupr()   (d) strrev()

Q.2 Write short answer of any ten [20]
1. Write an algorithm for find out N! (Factorial of N).
2. List Rules to draw flow chart.
3. List symbols used to draw flow chart. Explain any one.
4. Write Rules of variable name.
5. Write difference between pre-increment and post- increment operator.
6. Explain ternary operator with example.
7. Explain break statement with example.
8. Explain structure programming in brief.
9. Write difference between exit and entry controlled loop.
10. Write the advantage of function.
11. What is user – define function? Give one example of user define function.
12. What is string? Write the syntax of declaring string in c.

Q.3(A) What is an algorithm? Write advantages and disadvantages of an algorithm. [4]
Q.3(B) Draw a flowchart for check whether inputted number is prime number or not. [6]

OR

Q.3(A) What is flow chart? Write advantages and disadvantages of flowchart. [4]
Q.3(B) Write an algorithm for find out minimum from N numbers. [6]

Q.4(A) Explain Basic Structure of C program. [4]
Q.4(B) What is operator? Explain different operators with example. [6]

OR

Q.4(A) Explain basic data types used in C language. [4]
Q.4(B) Explain conditional statement (if...else, nested if and switch) with example. [6]

Q.5 Explain different looping statement with syntax and example. [10]

OR

Q.5 Explain initialization of 1D & 2D array with syntax and example [10]

Q.6(A) Define function? Explain type of function use in c with example [6]
Q.6(B) Explain following function with syntax and example [4]
1) strcpy ( )   2) strrev ( )

OR

Q.6(A) Explain following function with syntax and example [6]
1) strcmp ( )   2) gets ( )   3) puts ( )
Q.6(B) Explain command line argument in c with example. [4]

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