P. G. D. C. A. (Sem. I) (CBCS) Examination

November / December - 2018

CS - 02 : Problem Solving Methodologies and Programming in C

Faculty Code : 003

Subject Code : 1021002

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1 (a) Attempt the following :   **4**
   (1) C language has been developed by _____.
   (2) What is Dry-run ?
   (3) All preprocessor directives start with _____ symbol.
   (4) What is type casting ?

   (b) Attempt any **one** out of two.   **2**
   (1) Explain c-character set.
   (2) Explain Symbols of Flowchart.

   (c) Atermpt any **one** out of two :   **3**
   (1) Explain variable naming rules.
   (2) Explain structure of C program.

   (d) Attempt any **one** out of two :   **5**
   (1) Explain Operators in detail.
   (2) Explain Data types in C.

2 (a) Attempt the following :   **4**
   (1) Which loop is exit controlled loop ?
   (2) Give syntax of goto statement.
   (3) List out jumping statement.
   (4) Give syntax of for loop.

(b) Attempt any **one** out of two.   **2**
    (1) Explain conditional ternary operator.
    (2) Give difference between break and continue statement.

(c) Attempt any **one** out of two.   **3**
    (1) Explain Nesting of loops with example.
    (2) Explain switch case statement with example.

(d) Attempt any **one** out of two.   **5**
    (1) Explain looping control statement with example.
    (2) Explain else if ladder statement with example.

3 (a) Attempt the following :   **4**
    (1) List out I/O formatting functions.
    (2) Give syntax of strcmp ().
    (3) What is use of free () ?
    (4) By using _____ function we can clear the data from console.

(b) Attempt any **one** out of two :   **2**
    (1) Give difference between call by value and call by reference.
    (2) Explain pow () function.

(c) Attempt any **one** out of two :   **3**
    (1) List out string function and explain one in detail.
    (2) Explain storage class with example.

(d) Attempt any **one** out of two :   **5**
    (1) What is Recursion ? Explain with suitable example.
    (2) List out types of UDF and explain any two with example.

4   (a)   Attempt following :   **4**

                      (1)   _____ Keyword is used to define structure.

                      (2)   What is Array ?

                      (3)   _____ is a variable, also known as locator or indicator that points to an address of a value.

                      (4)   A union can be nested in a structure (True/False).

       (b)   Attempt any **one** out of two :   **2**

                      (1)   What is use of Arrays in Programming ?

                      (2)   Explain malloc () and calloc ().

       (c)   Attempt any **one** out of two :   **3**

                      (1)   Give differnce between Structure and Union.

                      (2)   Explain string array with example.

       (d)   Attempt any **one** out of two :   **5**

                      (1)   Explain types of arrays in detail with example.

                      (2)   Explain Nested structure with example.

5   (a)   Attempt followings :   **4**

                      (1)   Give syntax of rename ().

                      (2)   What is use of getw () function ?

                      (3)   Which function is used to find the end of a file ?

                      (4)   argc stands for _____.

       (b)   Attempt any **one** out of two :   **2**

                      (1)   Explain pointer to pointer.

                      (2)   List out file opening mode.

       (c)   Attempt any **one** out of two :   **3**

                      (1)   Explain Pointer within array.

                      (2)   Explain fseek (), rewind (), fflush ().

       (d)   Attempt any **one** out of two :   **5**

                      (1)   Explain command line arguments with suitable example.

                      (2)   Explain Pointer to Array with example.