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

October - 2017

CS - 02 : Problem Solving Methodologies & Programming in C

Faculty Code : 003

Subject Code : 1021002

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

1 (a) Attempt following questions :   4

   (1) What is Keyword ?

   (2) What is Operator ?

   (3) C Language has been developed by _____.

   (4) What is Dry-run ?

   (b) Attempt any one :   2

   (1) What is Variable ? Explain rules of Variable declaration.

   (2) Explain Arithmetic and Logical Operators.

   (c) Attempt any one :   3

   (1) Explain Hierarchy of Operators with example.

   (2) Explain symbols of Flowchart with its name and uses.

   (d) Attempt any one :   5

   (1) Explain different Data Types in C language.

   (2) Discuss the Structure of C Program.

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

    (1) What is Loop ?

    (2) Write Syntax of Simple if statement.

    (3) Write Syntax of While loop.

    (4) Write Syntax of for loop ?

  (b) Attempt any one : **2**

    (1) Explain Ternary Operator.

    (2) Give differences : While loop v/s. do....while loop.

  (c) Attempt any one : **3**

    (1) Explain switch.....case statement with example.

    (2) Explain Continue statement with its example.

  (d) Attempt any one : **5**

    (1) Explain else if ladder statement with example.

    (2) Explain Nesting of loops with example.

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

    (1) What is void data type ?

    (2) What is Pointer ?

    (3) What is use of cirscr( ) ?

    (4) What is use of getchar ( ) ?

  (b) Attempt any one : **2**

    (1) Explain fmod( ) and ceil( ).

    (2) Explain mktime( ) and gmtime( ).

  (c) Attempt any one : **3**

    (1) Explain printf( ), scanf( ) and delay( ).

    (2) Explain Recursion with its example.

(d) Attempt any one :   **5**

    (1) What is UDF ? Discuss different types of UDF.

    (2) Explain call by value and call by reference functions with its suitable examples.

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

    (1) Array mean collection of _____ data type values.

    (2) String is a _____.

    (3) An Array that uses more than two subscripts is referred to as _____ array.

    (4) Structure name is also known as _____.

(b) Attempt any one :   **2**

    (1) Explain how to initialize and access Single dimensional Array elements.

    (2) Give differences : Structure v/s. Union.

(c) Attempt any one :   **3**

    (1) What is Structure ? Explain how to initialize and access structure elements.

    (2) Explain Two-Dimensional Array.

(d) Attempt any one :   **5**

    (1) Explain Nested Structure concept with suitable example.

    (2) Explain UDF with Structure with suitable example.

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

           (1)   What is realloc( ) ?

           (2)   What is Random Access File ?

           (3)   Write syntax of remove( ).

           (4)   What is use of free( ) ?

   (b)   Attempt any one :   **2**

           (1)   Explain advantages of Pointer.

           (2)   Explain Pointer to Pointer.

   (c)   Attempt any one :   **3**

           (1)   Explain Pointer within Array with example.

           (2)   Explain getw( ), putw( ), fflush( ).

   (d)   Attempt any one :   **5**

           (1)   Discuss Pointer to Structure with any example.

           (2)   Explain Command Line Arguments with suitable example.

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