PBK-003-1041002   Seat No. _____

B. Sc. (I.T.) (Sem. I) (CBCS) Examination

November / December - 2018

CS - 02 : Problem Solving Methodologies & Programming in C

Faculty Code : 003
Subject Code : 1041002

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

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

   (1) Write down name of pre-programming techniques available in C.

   (2) What is variable ?

   (3) What is middle level language ?

   (4) What is translator ?

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

   (1) What is keyword ?

   (2) List out relational operator.

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

   (1) Explain implicit type casting.

   (2) Write down variable naming rules.

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

   (1) Explain structure of C program.

   (2) Explain data types of C.

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

         (1)   Write down syntax of while loop.

         (2)   Write down name of entry control loop.

         (3)   Write down syntax of if else statement.

         (4)   When { } is compulsory in looping and conditional statements ?

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

         (1)   Define : break.

         (2)   Explain if statement.

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

         (1)   Explain goto statement.

         (2)   Explain ternary operator.

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

         (1)   Explain do..while loop with example.

         (2)   Write a program to check number is armstrong or not.

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

         (1)   Which header file is used for isupper () ?

         (2)   Explain actual argument.

         (3)   Which is default storage class ?

         (4)   Explain malloc ()

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

         (1)   Explain no argument no return value with example.

         (2)   Explain ceil () and floor ().

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

  (1) Explain call by reference.

  (2) Explain return keyword.

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

  (1) What is recursion ? Explain with example.

  (2) Explain storage class available in C.

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

  (1) Write down names of user defined datatypes.

  (2) Write down name of structure member access operator.

  (3) Which character is used to terminate string ?

  (4) What is string ?

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

  (1) Declare structure with members variable rollno, name and age.

  (2) How to declare array of structure ?

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

  (1) Explain nested structure.

  (2) Difference : Structure v/s union.

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

  (1) What is Array ? Explain single dimensional array.

  (2) Write a program to find out maximum number from array.

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

    (1) What is file ?

    (2) Explain ftell ().

    (3) What is the size of any pointer variable ?

    (4) What is pointer ?

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

    (1) Write down file I/O operations in c.

    (2) List out file reading modes.

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

    (1) Explain remove () and rename ().

    (2) Explain pointer to pointer.

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

    (1) Explain command line argument with example.

    (2) Explain pointer with structure.

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