HDF-003-1031002   Seat No. _____

B. C. A. (Sem. I) (CBCS) Examination

November / December – 2017

CS-02 : Problem Solving Methodologies & Programming in "C"

(New Course)

Faculty Code : 003
Subject Code : 1031002

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

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

      (1)   What is flowchart?

      (2)   What is type casting?

      (3)   How many bits occupies by character data type.

      (4)   List out bitwise operator.

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

      (1)   Explain the typedef data type.

      (2)   Explain c-character set.

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

      (1)   Draw a flow chart to find out summation of even number between I to 10.

      (2)   List out variable naming rules.

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

      (1)   Explain structure of c language with example.

      (2)   List out c tokens and explain operators in detail.

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

      (1)   Which value is return by conditional operator when condition is false.

      (2)   Which type of value can be specified in switch expression?

      (3)   List out iterative control statements.

      (4)   Continue statement can be placed only _____ statements.

(b) Answer any one :   2

    (1) Explain break statements.

    (2) Explain ternary operators.

(c) Answer any one :   3

    (1) Explain if-else statements.

    (2) Describe for loop.

(d) Answer any one :   5

    (1) Explain switch statements with example.

    (2) Explain nested looping statements.

3 (a) Attempt the following :   4

    (1) Which value return by strcmp() when both string is same.

    (2) What is recursion?

    (3) Which is the default value of static storage class!

    (4) List out I/O formatting function.

(b) Answer any one :   2

    (1) Explain difftime() function.

    (2) Explain pow() function.

(c) Answer any one :   3

    (1) Describe the call by references with example.

    (2) List out string function and explain any one in detail.

(d) Answer any one :   5

    (1) List out types of udf and explain any two in detail.

    (2) Explain external and register storage class with example.

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

    (1) What is array?

    (2) Which operator is used to access a member element of structure?

    (3) How many ways to initialization an array.

    (4) The declaration int p[2]={ 1,2,3}; is illegal. (true/false).

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

    (1) Write difference between structure and union.

    (2) What are the slack bytes.

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

    (1) Explain string array with example.

    (2) Explain nested structure.

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

    (1) Explain Two-dimensional array with example.

    (2) Define a structure called student that describe the following information :
    Rollno, name and total marks obtained. Develop a program to read data for 10 students In a class and list them rank-wise.

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

    (1) A pointer is a _____ data type in c.

    (2) FILE is a _____ data type.

    (3) How many argument pass in fopen()

    (4) argc used for _____.

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

    (1) List out file opening mode.

    (2) Explain pointer to pointer.

5 (c) Answer any one : **3**

    (1) Explain rewind() function.

    (2) Explain pointer within array.

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

    (1) Explain command line arguments with example.

    (2) Write a program to copy the contents of one file into another.

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