



**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 1 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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