



**HDF-003-003108**

Seat No. \_\_\_\_\_

**B. C. A. (Sem. I) (CBCS) Examination**  
**November / December – 2017**  
**CS-02 : Problem Solving Methodologies &**  
**Programming in C**  
**(Old Course)**

**Faculty Code : 003**  
**Subject Code : 003108**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

1 Attempt the following : 20

- (1) What is Dry Run?
- (2) Range of Integer Data type is \_\_\_\_\_ to \_\_\_\_\_.
- (3) Give Definition of Constant.
- (4) What is the use of Clrscr( )?
- (5) UDF Stands for \_\_\_\_\_
- (6) Give output of following code.

```
void main( )  
{  
    int i=2;  
    switch(i)  
    {  
        case 1:  
            printf("A");  
        case 2:  
            printf("T");  
        case 3:  
            printf("M");  
    }  
}
```

- (7) Which Format Specifier is used to represent long double data type?

- (8) Which BackSlash character is used to print output in new line?
- (9) What is the use of Strlen( )?
- (10) Give definition of Algorithm.
- (11) Which Math function is used to return, square root of given number?
- (12) Which error will generate if user forget semi colon(;) after particular Statement?
- (13) Give definition of String.
- (14) What is Variable?
- (15) Pointer to Structure use \_\_\_\_\_ operator to access structure elements.
- (16) List out different Pre-Processor in C.
- (17) Which file handling function is used to close any opened file ?
- (18) Which operator is known as assignment operator in C ?
- (19) What is the output of following code ?
 

```
Void main( )
{
    printf ("%c","abcdefgh"[4]);
}
```
- (20) Use of Goto Statement.

- 2** (a) Attempt any **three** : **6**
- (1) Explain gets( ) and puts( ) with Example.
  - (2) What is Array ? How to Declare String Array ?
  - (3) Briefly explain Type Casting.
  - (4) Write down Syntax of Do While Loop.
  - (5) Write down flow chart for addition of two numbers.
  - (6) Explain toupper( ) with example.

- (b) Attempt any **three** : **9**
- (1) Explain Switch Case with Suitable Example.
  - (2) Explain Hierarchy of Operators.
  - (3) Briefly Explain Size of operator.
  - (4) Explain Malloc( ), Calloc( ) and Realloc( ).
  - (5) Explain For loop' with Suitable Example.
  - (6) Explain Pointer to Pointer in brief.
- (c) Attempt any **two** : **10**
- (1) Explain Data types.
  - (2) Write down Program code to check if given number is prime or not.
  - (3) Explain IF Else Statements with Short Example.
  - (4) Explain Call by Value and Call by Reference in detail.
  - (5) Differentiate Break v/s Continue.
- 3** (a) Attempt any **three** : **6**
- (1) Explain how to define structure.
  - (2) Explain Array with Matrices.
  - (3) What is Union? Explain how to declare Union.
  - (4) Explain Keywords in C.
  - (5) What is data file ? Write a statement to open file in Write mode.
  - (6) Explain Isalpha( ) and isdigit( ).
- (b) Attempt any **three** : **9**
- (1) Explain Exit( ) and Free( ).
  - (2) Explain any 2 Date and Time Functions.
  - (3) Briefly Explain Command Line Argument.
  - (4) Explain Pointer to Structure with suitable example.
  - (5) Write down Program code to Find out Factorial Number.
  - (6) Explain Different Character Sets in C.

(c) Attempt any **two** :

**10**

(1) Write down Program to print following pyramid :

```
5 4 3 2 1
  4 3 2 1
    3 2 1
      2 1
        1
```

(2) Explain UDF with types.

(3) Explain different types of Array in C.

(4) Explain Recursion with Suitable Example.

(5) Write note on Storage Classes.

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