



**HDF-003-004102**

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

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

**November / December – 2017**

**CS-02 : Problem Solving Methodology &  
Programming in C  
(Old Course)**

**Faculty Code : 003**

**Subject Code : 004102**

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

[Total Marks : 70

1 Attempt the following : 20

- (1) What is Flow chart?
- (2) Write down use of Strupr().
- (3) Give definition of Constant.
- (4) Give Syntax of for loop.
- (5) Which Header file is used to support different string functions?
- (6) What will be the output of following code.

```
void main( )  
{  
    int x=3, z,y=4;  
    clrscr();  
    z=(x- -) - (- -y);  
    printf(" x=%d, y=%d, z=%d", x,y,z);  
}
```

- (7) Give Defination of Algorithm.
- (8) Explain use of Goto Statement.
- (9) Give short cut key to run the C Program.
- (10) Explain use of Getch( ).
- (11) Write down statements to declare string array.
- (12) What is the use of textcolor( ) ?
- (13) To clear contents of the output screen which 'function is used in C?

- (14) What is Dry Run?
- (15) Write down statement to declare Multi Dimensional Array?
- (16) Explain fflush( ).
- (17) What is nested If...Else?
- (18) What is keyword ?How many keywords available in C?
- (19) What is the output of following code.
 

```
void main( )
{   int a=5, b;
    b=a++ + a++ + a++;
    printf("%d",b);
}
```
- (20) Explain use of gotoxy( ).

2 (a) Attempt any three : 6

- (1) Write down Structure of C Program.
- (2) Explain Conditional Operators with Example.
- (3) Briefly Explain different Character Sets.
- (4) Explain how to pass array elements to the Function.
- (5) Explain printf( ) with example.
- (6) Write down Algorithm to check if given number is positive or negative.

(b) Attempt any **three** : 9

- (1) Explain gets( ) and puts( ) with Example.
- (2) What is. Variable? Explain Scope of Variables.
- (3) Briefly Explain Break and Continue Statements with proper Example.
- (4) Explain any three operators in C.
- (5) Give difference between Structure and Union.
- (6) Explain Switch Case with suitable example.

(c) Attempt any **two** : **10**

- (1) What is Loop? Explain While and Do...While Loop with example.
- (2) Write down program code to get a number from user and check if given number is Armstrong or not.
- (3) Explain if-elseif with suitable example
- (4) Explain UDF with different types.
- (5) Explain Array with, types.

**3** (a) Attempt any **three** : **6**

- (1) Explain Typedef.
- (2) Briefly Explain union.
- (3) Explain Nesting of Loops in Brief.
- (4) Explain different symbols of flow chart.
- (5) Explain isupper() and islower().
- (6) Briefly Explain How to access Members of Structure by short example.

(b) Attempt any three : **9**

- (1) Write down program code for printing Fibonacci series on the screen.
- (2) Explain Different Memory Allocation Functions.
- (3) Write, down program code to perform following pyramid.

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

- (4) Explain Array of Structure with suitable example.
- (5) Explain Hierarchy of Operations.
- (6) Briefly Explain Symbolic constants.

(c) Attempt any two :

10

- (1) Write down Program code to count vowels and white spaces from given string.
  - (2) Explain C Pre-Processor in detail.
  - (3) Explain Storage Class in detail.
  - (4) Explain any four Maths functions in C Language.
  - (5) Explain `<stdio.h>` and `<conio.h>` with proper example.
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