

Roll No.....

**CBA-1594-U**

## B.C.A. First Semester

**(End Semester)**

**Examination, Dec.-2019**

# COMPUTER SCIENCE & APPLICATIONS

**Paper : CSA-CC-114**

## (Fundamentals of Programming using C)

**Time : Three Hours ] [Maximum Marks : 60**

Note :- The question paper is divided into three sections. Attempt questions as per direction.  $1 \times 10 = 10$

## SECTION - A

### (Objective Type Questions)

Note :- Choose the correct option.

1. (1) Compiler generate ..... file :

(a) Executable Code      (b) Assembly Code

(C) Object Code (d) None of the above

(2) Comment in 'C' language is to be enclosed in

(a) ##                      (b) //                      (c) <:|>                      (d) / \* \* /

(3) The format identifier '%l' is also used for :

(a) char                      (b) int                      (c) float                      (d) double

(4) What is the value of x in this 'C' code: void main()

 $\{$ 

```
int x = 4* 5/2 + 9;
```

$$\}$$

(a) 6.75                      (b) 1.85 set                      (c) 19                      (d) 3

(5) Datatype of the controlling statement of a SWITCH statement can not of the type :

(a) int                      (b) char                      (c) short                      (c) float

(6) The ' | o' character indicates: <http://www.dhsgsu.com>

(a) Where the string begins

(b) Where the strings ends

(c) Where the string is empty

(d) The length of a string

(7) Any 'C' program.....:

- (a) Must contains at least one function
- (b) Need not contain any function
- (c) need input data
- (d) None of the above

(8) The default parameter passing mechanism is :

- (a) Call by value
- (b) Call by reference
- (c) Call by value result
- (d) None of these

(9) What will be the output of the following 'C' code?

```
#include <stdio.h> http://www.dhsgsu.com
```

```
{  
int a [3] = {1,2,3};  
int * p= a;  
printf ("%p \ + %", p, a);
```

- (a) Same address is printed
- (b) different address in printed
- (c) Compile time error
- (d) Nothing

(10) What will be the output of the following 'C' code?

```
#include<stdio.h>  
void main()  
{  
char * S = "hello";  
charp * P = S;  
printf ("%C\ t %C", p [0], S [1];  
}
```

- (a) Run time error
- (b) hh
- (c) he
- (d) hi

## SECTION - B

(Short Answer Type Questions) 4×5=20

Note :- Attempt any four questions. Each question carries five marks.

1. Define flowchart. Explain flowchart symbols.
2. Explain the basic data types in 'C'.
3. Write a program to display the following pattern —

1 2 3 4

1 2 3

1 2

4. Explain the concept of recursion.

5. What is the use of pointers ? Discuss concept of declaration and initialization of pointers.

6. Write a program in C language for adding two arrays. <http://www.dhsgsu.com>

### **SECTION - C**

**(Long Answer Type Questions)**

**3×10=30**

Note :- Attempt any three questions. Each question carries ten marks.

1. Explain the following--

(a) Compilers

(b) Interpreters

(c) Assembler

(d) Source program

(e) Object program

2. Explain the logical and bitwise operators used in C with necessary program.

3. Describe the decision making statements and looping statements in C with an example.

4. Explain the purpose of a function prototype. And write a 'C' program for addition of two numbers by using function.

5. Define structure in 'C'. Also specify the pointer and structure with examples.