2021
BCA
[HONOURS]
(CBCS)
(B.Sc. First Semester End Examination-2021)
PAPER-C1T

Full Marks: 40   *Time: 02 Hrs*

The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as far as practicable
Illustrate the answers wherever necessary

1. **Answer any five questions of the following:**   **5x2= 10**

   a. What is the advantage of 'break' statement in switch case construct?

   b. How to initialize two dimentional array in C?

   c. Write short notes on strcmp( ).

   d. What is the difference between array and structure?

   e. Why constructor is used in C++?

   f. What is the advantage of inline function?

   g. Consider the C coding:

   void main()

        {

   inta=10;

        A<<=1;

```
printf("%d",a);
getch();
}
```

h. Explain encapsulation using an example.

Answer any four questions of the following: **5x4 = 20**

2. a) Find the output of the following and explain

```
int main ()
{
Int i = 6;
while (--i>0)
        printf ("Hi\t");
return (0);
}
```

    b) What is the benefit of switch statement?

3. a) What is the difference between break and continue statement?

    b) Write a program to find the factorial of last digit of a number.

4. a) Find the output and explain it

```
int main ()
{
inti= -6, j=4, k=0,m;
m= ++i&& ++j || ++k;
```

```
printf ("%d% d% d% d", i, j, k, m)
```

    b) What is the difference between call-by-value and call-byreference?

5. a) What are the advantages of function overloading in C++?

    b) Write a C++ program to find the highest of two number using constructor.

6. Write a program to extract each digit from a number and multiply them using object oriented concept.

7. Distinguish the friend function from member function with suitable example.

Answer any one questions of the following: **10x1 = 10**

8. a)What is recursion? Write a recursive program to find the GCD of two number.

    b) What are the difference between calloc() and malloc()?

9. a) What are the advantages of inheritance?

    b) Write a simple program to implement multiple inheritance.

    c) What do you mean by polymorphism?   2+5+3