Tilak Maharashtra Vidyapeeth
Internal Assignments

Course: **BCA - 1st year 2nd semester**
Subject: C and Introduction To Data Structures
Code: 44208
Marks: **60 Marks**

Assignment No. 1 (MARKS-20)

1. What are the different operators available in C?
2. Write a short note on "Symbolic constants"?
3. What are the different categories available in C?
4. Explain the use of GOTO Statement.
5. What is Entry Controlled loop and exit controlled loop?

Assignment No- 2 (MARKS-20)

1. What is an array? How 2-dimentional array is represented in memory?
2. Explain string related function with example?
3. Write Short note on Storage classes in C?
4. Write short note on Command Line Arguments.
5. What characteristics should an algorithm have?

Assignment No - 3 (MARKS-20)

1. What is Structures? How it is different from Union?
2. Write short note on Random Access file
3. Write short note on recursion?
4. What is file? Describe the various file opening modes?
5. What is pointer? How pointers are declared? Compare call by value and call by reference.

Tilak Maharashtra Vidyapeeth
Internal Assignments

Course: **BCA - 1st year 2nd semester**
Subject: C and Introduction To Data Structures
Code: 44210
Marks: **60 Marks**

Assignment no. 1

1. Write a program to print following output (MARKS-20)

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

2.
```
A B C D E
A B C D
A B C
A B
A
```

3.
```
1
0 1
1 0 1
0 1 0 1
1 0 1 0 1
```

4.
```
* 1
* * 2
* * * 3
* * * *4
* * * * * 5
```

5.
```
#
& &
# # #
& & & &
# # # # #
```

Assignment No. 2 (MARKS-20)

1. Write a program to Compare two string using function
2. Write a program to count the number of characters and words in the line.
3. Write a program to find out the prime numbers between 1 to 500
4. Write a program to sort two dimensional integer array.
5. Write a function that accept 5 digit number and return the sum of it to main.

Assignment No. 3 (MARKS-20)

1. Write a program to print factorial using recursive function.
2. Write a program to print array
3. Write a program to accept the values in structure array and pass it to function and using function print the values.
4. Write a program to read a file and copy its contents to another file
   (Use command line arguments and file functions)
5. Write a program to demonstrate the use of array of structures.