

C PRACTICAL LEARNING VIDEOS MODULE

FOR

ELECTRONICS STUDENTS OF B. SC. S-VI

OF

GONDWANA UNIVERSITY, GADCHIROLI

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DEPARTMENT OF ELECTRONICS

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VERSION-1

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SECTION-B: (OPTIONAL/ELECTIVE PAPER)

ELECTIVE-I: C-PROGRAMMING-I:

Exp. No.1: C-programs on operators and expressions.

EXP1A: Write a C-Program to add and multiply two numbers 34 and 73.

EXP1B: Write a C-Program to add and multiply two integer numbers entered by user.

EXP1C: Write a C-Program to add and multiply two real numbers entered by user.

EXP1D: Write a C-Program to evaluate following expressions:

$$x = 45 / 5 - 1 * 3 + 9, \text{ and}$$

$$y = 10 - 3 \% 8 + 6 / 4$$

Exp. No.2: C-programs on Input/Output.

EXP2A: Write a C-Program to display:

Programming is fun.

Programming in C is even more fun.

EXP2B: Write a C-Program to enter roll no., name and result of a student and display the same on the output screen.

EXP2C: Write a C-Program to enter a line of string and display the same on the output screen.

EXP2D: Write a C-Program to print 12345 and 98.7654 in the following format:

```
12345
12345
000001234
5
```

```
98.77
98.77
9.88e+001
```

Exp. No.3: C-programs on decision making and branching using if, if..else and switch statements.

EXP3A: Write a C program using **if** statement to increase number by 15 if it is less than 35 otherwise to keep as it is.

EXP3B: Write a C program using **if-else** statement to check whether a integer number entered by user is EVEN or ODD.

EXP3C: Write a C program using **switch** statement to check whether a character entered by user is vowel or consonant.

EXP3D: Write a C program to check voter's eligibility based on entered voter's age.

Exp. No.4: C-programs on decision making and branching using nested if-else and if-else ladder statements.

EXP4A: Write a C program to find largest among three numbers entered by user using nested if-else statement.

EXP4B: Write a C program to test whether a number entered by user is divisible by 2 and 3 using nested if-else statement.

EXP4C: Write a C program to find largest among four numbers entered by user using if-else ladder statement.

EXP4D: Write a C program to display week day using if-else ladder statement.

Exp.No.5: C - programs on decision making and looping using **while** statement.

EXP5A: Write C-Program to display 1 to 10 using while loop..

EXP5B: Write C-Program to find sum of digit of a given number.

EXP5C: Write C-Program to reverse a given number.

EXP5D: Write C - Program to evaluate expression $y = x^n$, where n is non-negative integer number.

Exp.No.6: C - programs on decision making and looping using **do - while** statement.

EXP6A: Write C - Program to display 10 to 1 using **do – while** statement.

EXP6B: Write C - Program to check whether a given number is palindrome or not using **do-while** statement.

EXP6C: Write C - programs to print even numbers between 10 to 30 using **do-while** loop.

EXP6D: Write a C - program to add numbers until the user enters zero using **do-while**. **do...while**.

Exp.No.7: C – programs on decision making and looping using **for** statement.

EXP7A: Write C - Program to print “Programming is fun.” n times, where n is given by user.

EXP7B: Write C-Program to find sum and average of n numbers given by user.

EXP7C: Write C - Program to calculate the sum of first n natural numbers using for loop statement.

EXP7D: Write C - Program to print numbers from 5 to n (entered by user) at steps of 5 and find their sum using for loop statement..

Exp.No.8: C-programs on nesting of loops.

EXP8A: Write a C - program to display the pattern like right angle triangle as shown below using an asterisk.

```
*  
* *  
* * *  
* * * *
```

EXP8B: Write a C - program to make such a pattern like a pyramid with a number which will repeat the number in the same row.

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

EXP8C: C - program to print the number pattern as given below using nesting of while loops.

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

EXP8D: C – program to print the multiplication table from 1 to 5 as given below:

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25
6	12	18	24	30
7	14	21	28	35
8	16	24	32	40
9	18	27	36	45
10	20	30	40	50