**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY**

**BURLA, SAMBALPUR**

(Formerly University College of Engineering, Burla)



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**SIMULATION AND MODELLING LAB**

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| **YEAR - 3rd (6th Sem)** |
| **ROLL NO. 1602040031** |

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**Experiment No: 1**

**AIM OF THE EXPERIMENT:**

I. WRITE A PROGRAM IN MATLAB TO FIND FIBONACCI SERIES USING FUNCTION

II**.** WRITE A PROGRAM IN MATLAB TO FIND FIBONACCI SERIES WITHOUT USING FUNCTION

III. WRITE A PROGRAM IN MATLAB TO FIND FACTORIAL USING FUNCTION

IV. WRITE A PROGRAM IN MATLAB TO FIND FACTORIAL WITHOUT USING FUNCTION

**PROGRAMS**

**I. WRITE A PROGRAM IN MATLAB TO FIND FIBONACCI SERIES USING FUNCTION:**

**CODE:**

numlib::fibonacci(5)

**OUTPUT**

ans =

1 1 2 3 5

**II. WRITE A PROGRAM IN MATLAB TO FIND FIBONACCI SERIES WITHOUT USING FUNCTION:**

a=1;

b=1;

c=1;

n=10;

fprintf('%d ',c);

for i=1:n

fprintf('%d ',c);

c=a+b;

a=b;

b=c;

end

**OUTPUT**

1 1 2 3 5 8 13 21 34 55 89

**III. WRITE A PROGRAM IN MATLAB TO FIND FACTORIAL USING**

**CODE:**

factorial(5)

**OUTPUT**

ans =

120

**IV. WRITE A PROGRAM IN MATLAB TO FIND FACTORIAL WITHOUT USING FUNCTION:**

**CODE:**

i=1;

n=5;

res=1;

for i=1:n

res=res\*i;

end

res

**OUTPUT**

res =

120

**OUTPUT**

**Submitted by:**

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