



**REPORT  
ON  
SUCCESSFUL COMPLETION OF  
WORKSHOP ON**

**“Virtual Labs”**

**Organized By  
FST Department  
ICFAI University, HP**

**Submitted By:**

**Ms. Pooja Sharma**

**ICFAI Nodal Coordinator, Virtual Labs**

**ICFAI University, Himachal Pradesh**

## **Declaration**

We are highly indebted to our Hon'ble Vice Chancellor,  
Prof. (Dr.) Ramanjeet Singh for his encouragement,  
consistent support, guidance and blessings.

# CONTENTS

1. Schedule of Workshop
2. Details about the Workshop
3. Participant details
4. Brochure, Media Coverage Clip and Screenshots of the  
Workshop

# ACTIVITY-2

**Title of Workshop:**

“Workshop on Virtual Labs”

**Duration – One Hour**

**Timings – 03:00-04:00 pm**

**Date- 18 November, 2021**

**Webinar Mode – Online**

**Registration Link – <https://forms.gle/WzPkEx6Y9re7uuXx8>**

**Meet Link- <https://zoom.us/j/99486029891>**

**SECHEDULE  
OF  
WORKSHOP**

# SCHEDULE

02:50 PM	Entry start (Google Meet)	Mr. Lakshdeep Singh
03:00 PM	Welcome Address	Ms. Pooja Sharma
03:05 PM	Message from Hon'ble Vice-Chancellor, ICFAI University HP	Prof.(Dr.) Ramanjeet Singh
03:10 PM	Workshop on "Virtual Labs"	Mr. Prateek Sharma
04:00 PM	Vote of Thanks	Dr. R K Bhardwaj

**DETAILS ABOUT  
WORKSHOP**

**Virtual Labs Team, IIT Delhi has successfully conducted an online workshop for the students of ICFAI University, Himachal Pradesh on 18<sup>th</sup> November, 2021**

Virtual Labs team, IIT Delhi has successfully conducted second online workshop for the students of ICFAI University, Himachal Pradesh on 18<sup>th</sup> November, 2021. Virtual Labs is an initiative of the Ministry of Human Resource Development (MHRD), Govt. of India under the National Mission on Education through ICT. One can perform the experiments easily and free of cost on this platform. The URL of Virtual Labs is [www.vlab.co.in](http://www.vlab.co.in).

The workshop was conducted via Zoom and was kick started with the permission of Hon'ble Vice-Chancellor, ICFAI University, Himachal Pradesh. Ms. Pooja Sharma delivered the Welcome address and the importance and objectives of Virtual Labs.

Thereafter, the workshop was held under the supervision of Mr. Prateek Sharma, Virtual Labs Mentor, IIT Delhi. He took the online session and helped the students to learn more about Virtual Labs. During his session, he demonstrated various experiments that would cater to the students of Science and Engineering. More than 150 students and 20 faculties attended the online workshop through Zoom platform.

After such an informative session, the event concluded with the Vote of Thanks given by Dr. R K Bhardwaj (HOD, FST) who expressed his gratitude to Vice-Chancellor Sir, Guest Speaker Mr. Prateek Sharma, organizing team and all the students and faculty who attended the event and made it a huge success.

This workshop was coordinated by Ms. Pooja Sharma, Nodal Coordinator of Virtual Labs, The ICFAI University, Himachal Pradesh.

**PARTICIPANT**

**DETAILS**

## **PARTICIPANTS DETAILS**

- **STUDENTS**

Total Students Participant: 150

- **FACULTIES**

Total Faculties Participant: 20

# **BROUCHER & SCREENSHOTS**

THE ICFAI UNIVERSITY, HIMACHAL PRADESH

# WORKSHOP ON VIRTUAL LABS

in collaboration with IIT  
- Delhi



MEET Link:

<https://zoom.us/j/99486029891>

18

NOV  
2021

TIME:  
3PM-4PM



E-Certificate will be issued for all those who register & attend the workshop



ICFAI<sup>®</sup>  
UNIVERSITY



**CHIEF PATRON**

Prof. (Dr.) Ramanjeet Singh  
Vice - Chancellor  
ICFAI University  
Himachal Pradesh



**SPEAKER**

Mr. Prateek Sharma  
Senior Field Engineer  
Virtual Labs  
IIT Delhi

Designed by Ms. Pooja Sharma

Dear Sir/Madam,

Greetings from ICFAI University, Himachal Pradesh!

Happy to inform and invite you that FST Department of The ICFAI University, Himachal Pradesh is organising a **Workshop on Virtual Labs**

**Date** 📅: 18 November, 2021

**Time** 🕒: 03:00pm onwards

**Mode of Workshop:** Online

**Registration Link:**

<https://forms.gle/WzPkEx6Y9re7uuXx8>

**Meet Link:** <https://zoom.us/j/99486029891>

**E-Certificate will be issued for all those who register and attend the workshop**

**Join Workshop link five minutes before starting the event**

Thanks and Regards,  
FST Department,  
ICFAI University, Himachal Pradesh

4:16 pm ✓

Recording...



# Virtual Labs

An Initiative of  
**Ministry of Education (MoE)**  
 under the aegis of  
**The National Mission on Education through ICT (NME-ICT)**



ICFAI Group



Pooja Sharma, FST

Prateek Sharma



Prateek Sharma

Zoom Meeting You are viewing Shivam Sundaram's screen View Options

ICFAI Group Pooja Sharma, F... Prateek Sharma Shivam Sundaram

ICFAI Group Pooja Sharma, FST Prateek Sharma Shivam Sundaram

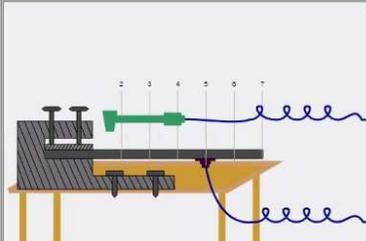
Recording...

Workshop on Virtual Labs Virtual Labs - Mechanical Engin... Welcome to Virtual Labs - A Mini... Modal analysis on a Cantilever

va-coep.vlabs.ac.in/impactTestCantilever/impactTestCantilever.html

### Modal Analysis On A Cantilever

College of Engineering, Pune  
 (An Autonomous Institute of Government of Maharashtra)



Observations from the plot(Frequency Response Function,FRF)  
 Record the frequencies corresponding to peaks in the graph and discuss with your teacher about the reasons for differences observed, if any:

CONTROL PANEL

Cross Section

Width(b) :  m Height(d) :  m Length(L) :  m

Cross Section Area :  m<sup>2</sup>

Moment of Inertia :  m<sup>4</sup>

Material of Cantilever: stainless Steel

Density :  kg/m<sup>3</sup>

Young's Modulus :  x 10<sup>9</sup> N/m<sup>2</sup>

at Node :

Activate Windows  
 Go to PC settings to activate Windows.

Participants (117)

Find a participant

- IG ICFAI Group (Host, me)
- SS Shivam Su... (Guest)
- L Lakshdeep (Co-host, guest)
- PS Pooja Sharma, ... (Co-host, guest)
- PS Prateek Sharma (Co-host, guest)
- A: Aakash :) (Guest)
- a aashima bansal (Guest)
- Abhishek Rawat (Guest)
- A3 Akanksha 3002 (Guest)
- AM Akanksha Mehta (Guest)
- AM Akshay Malik (Guest)
- AI Akshita, isha (Guest)
- AK Amrit kaur (Guest)
- A Anish (Guest)
- A Anish (Guest)

Audio Start Video Security Participants Polls Chat Share Screen Reactions More

3:55 PM 11/18/2021

Zoom Meeting | You are viewing Shivam Sundaram's screen | View Options

ICFAI Group | Pooja Sharma, F... | Prateek Sharma | Shivam Sundaram

Recording... | ICFAI Group | Pooja Sharma, FST | Prateek Sharma | Shivam Sundaram

Virtual Lab for IMAGE PROCESSING

Objective Introduction Theory Procedure Experiment Assessment Summary

Image Arithmetic

Select the secondary image, select appropriate parameters and click on Run.

Select Image | Reset | Run

Select Operation | Select Fitting

- Addition
- Subtraction
- Difference
- Multiplication
- Division

Select Fitting

- Clipping
- Auto-Scaling

Select Secondary Image

Dull | Bright | Gradient

Input size: 300 x 300 | Output size: x

Start

Activate Windows: Go to PC settings to activate Windows.

zoom.us is sharing your screen. | Stop sharing | Hide

Participants (122)

Find a participant

- IG ICFAI Group (Host, me)
- SS Shivam Sundaram (Guest)
- L Lakshdeep (Co-host, guest)
- PS Pooja Sharma, ... (Co-host, guest)
- PS Prateek Sharma (Co-host, guest)
- A: Aakash (Guest)
- a aashima bansal (Guest)
- Abhishek Rawat (Guest)
- A3 Akanksha 3002 (Guest)
- AM Akanksha Mehta (Guest)
- AM Akshay Malik (Guest)
- AK Amrit kaur (Guest)
- A Anirudhiya (Guest)
- A Anish (Guest)
- A Ansh (Guest)

Audio | Start Video | Security | Participants | Polls | Chat | Share Screen | Reactions | More | End

3:41 PM 11/18/2021

Zoom Meeting | You are viewing Shivam Sundaram's screen | View Options

ICFAI Group | Pooja Sharma, F... | Prateek Sharma | Shivam Sundaram

Recording... | ICFAI Group | Pooja Sharma, FST | Prateek Sharma | Shivam Sundaram

Virtual Labs

Computer Science & Engineering → Problem Solving Lab → List Of Experiments

Introduction  
Theory  
**Objective**  
Manual  
Experiment  
Quizzes  
Feedback

Factorials

Although the factorial function has its roots in combinatorics, formulas involving factorials occur in many areas of mathematics. There are  $n!$  different ways of arranging  $n$  distinct objects into a sequence, the permutations of those objects. Factorials occur in algebra for various reasons, such as via the already mentioned coefficients of the binomial formula, or through averaging over permutations for symmetrization of certain operations. Factorials also turn up in calculus, for example they occur in the denominators of the terms of Taylor's formula, basically to compensate for the fact that the  $n$ -th derivative of  $x^n$  is  $n!$ . Factorials are also used extensively in probability theory. Factorials can be useful to facilitate expression manipulation. Here we present two problems based on factorials.

Problem 1:  
Given a positive integer, find the number of digits in the factorial of the number.

Input Specification

zoom.us is sharing your screen. | Stop sharing | Hide

Activate Windows: Go to PC settings to activate Windows.

Participants (124)

Find a participant

Waiting Room (2) | Message | Admit all

- N Neelam (Guest) | Joining...
- N Neelam (Guest) | Joining...

Joined (124)

- IG ICFAI Group (Host, me)
- SS Shivam Sundaram (Guest)
- L Lakshdeep (Co-host, guest)
- PS Pooja Sharma, ... (Co-host, guest)
- PS Prateek Sharma (Co-host, guest)
- a aashima bansal (Guest)
- Abhishek Rawat (Guest)
- A3 Akanksha 3002 (Guest)
- AM Akanksha Mehta (Guest)
- AM Akshay Malik (Guest)
- A Arkhita (Guest)

Audio | Start Video | Security | Participants | Polls | Chat | Share Screen | Reactions | More | End

3:30 PM 11/18/2021

Zoom Meeting

Recording... View

RUKESH KOMJIR	Pooja Sharma, FST	ICFAI Group	Dr Ratnesh Jaswal	Rachna Thakur
Yuvraj	Nikita Rajpurohit	Swapneel Devya...	Madhu bala	Akanksha Mehta
Pratima	Sourabh Rajput	Abhishek Rawat	Balram Yadav	Prateek Sharma
Ram Krishana Bhardwaj	Geeta Devi	Shash kumar pal	realme C2	राजेंद्रा सिंह
Raman Singhthakur	Rani kumari	Mahi Shakti	Nishu	Hero

Participants (109)

Find a participant

Waiting Room (1) Message

- kanav Gupta (Guest)

Joined (109)

- IG ICFAI Group (Host, me)
- RUKESH KOMJIR (Guest)
- PS Pooja Sharma, ... (Co-host, guest)
- L Lakshdeep (Co-host, guest)
- PS Prateek Sharma (Co-host, guest)
- A: Aakash ) (Guest)
- a aashima bansal (Guest)
- A Abhilash Thakur (Guest)
- Abhishek Rawat (Guest)
- A3 Akanksha 3002 (Guest)
- AM Akanksha Mehta (Guest)

1

Invite Mute All

Audio Start Video Security Participants 110 Polls Chat 3 Share Screen Reactions More End

4:00:46 PM 11/18/2021