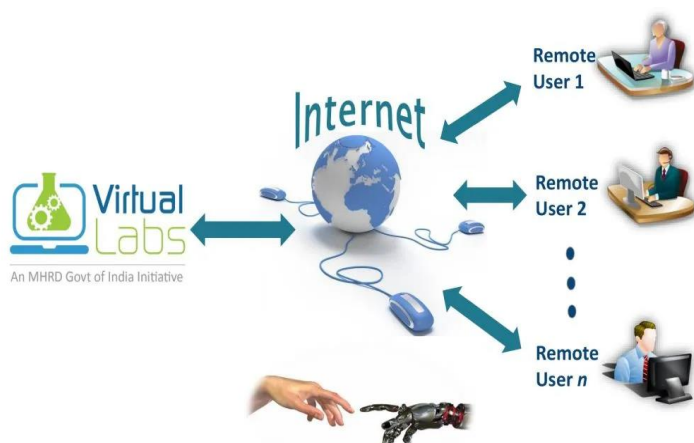# STATE LEVEL WORKSHOP ON VIRTUAL LABS
(14th -15th JUNE 2024)

INTRODUCTION & PROGRAM SCHEDULE

With the growing population and availability of the Information and Communication Technologies (lCT), web- based teaching is adopted in education these days, especially in the last couple of years of deadly pandemic. Virtual Labs, a Mission Project developed under the aegis of National Mission on Education through Information and Communication Technology (NMEICT). In NMEICT, MoE, are the web tools for education that acts as an alternative to the physical laboratories. Virtual labs are an online learning system where students can access and perform their laboratory work on software applications which are virtually installed. Using these labs, students can avail of various tools of learning like additional web resources, video-lectures, animated demonstration, and self-evolution. Virtual labs have been designed to provide remote access to labs at the undergraduate level, postgraduate level and for the research scholar in various disciplines of science and engineering. The virtual labs are being jointly developed by IIT Delhi, IIT Bombay, IIT Guwahati, IIT Kharagpur, IIT Roorkee, IIT Kanpur, IIIT Hyderabad, College of Engineering Pune, Dayalbagh University Agra, NITK Surathkal and Amrita University Coimbatore. IIT Delhi is the coordinating Institute.

OBJECTIVES OF THE WORKSHOP

- To understand the concept of Virtual Labs developed by all llTs and other participating institute for remote experimentation. To arouse the curiosity of the students and permit them to learn at their own pace and in their own time through remote experimentation. This would enhance their basic and advanced concepts of the subject.
- To provide Hands-On experience on Virtual Labs related to various disciplines of Engineering and Sciences.

BENEFITS OF USING VIRTUAL LABS

- Virtual Labs are free to use.
- Developed in Self Learning mode.
- Includes many Innovative experiments.
- Over 120 Virtual Labs be accessed through
- Accessible even on Smartphone/Tablet

Virtual Labs, IIT Delhi in Collaboration with Government Degree College Nagrota Bagwan, HP, invites you to the very First State Level Workshop on Virtual Labs in Himachal Pradesh. Our Nodal Centre at GCNB, Himachal Pradesh, is using Virtual Labs for various courses of applied science and computer applications like, Physics, Chemistry, Environment Science Electronics and Computer Science.

Limited Seats: Participation is First Cum First Serve
 (For Complete details: check Brochure at http://gdcnb.org/

Registration Link: https://forms.gle/G9476bLdoZJPQFZCA

Contact person: **Dr. Manish Sharma (8629000115), Nodal Coordinator Government Degree College Nagrota Bagwan,**
&
Virtual Labs Team, Indian Institute of Technology Delh

Organized by: Government Degree College Nagrota Bagwan, HP 176047
In association with
Virtual Labs Team, llT Delhi, Hauz Khas New Delhi-110016

Program Schedule (DAY 1)

14ᵗʰ June 2024
(Participants -Faculty of Science from Degree Colleges only)

Registration/High Tea	**9:00am-10:00am**	**Entrance Main Building**
Inauguration	**10:00 am-10:30am**	**Chief Patron Address & Program Introduction**
Technical Session I		
Introduction of virtual Lab to Science Faculty	**10:30am-11:00am**	**Keynote Speaker from IIT Delhi**
Technical Session II		
Demo of Virtual Lab	**11:00am-12:00pm**	**Virtual lab team ,IIT Delhi**
Tea Break(12:00pm-12:30 pm)		
Technical Session III		
Hands on Session (In coordination with Virtual Labs Team, IIT Delhi & Technical Assistance Team Host College)	**12:30pm-2:00pm**	1. **Learning Physical Sciences through Vlabs** 2. **Learning Chemical Sciences through Vlabs** 3. **Learning Life Sciences through Vlabs** **&** **Others**
Lunch Break (2:00pm-2:45 pm)		
Closing(Day1)	**2:45 pm -3:15pm**	**Music, Feedback & Distribution of Certificates**
National Anthem & Group Photograph		

Program Schedule (DAY 2)

15ᵗʰ June 2024
(Participants -Faculty of Engineering, Polytechnic, BCA & Host College only)

Registration/High Tea	**9:00am-10:00am**	**Entrance Main Building**
Inauguration	**10:00 am-10:30 am**	**Chief Patron Address & Program Introduction**
Technical Session I		
Introduction of virtual Labs to Engineers & Others	**10:30am-11:00am**	**Keynote Speaker from IIT Delhi**
Technical Session II		
Demo of Virtual Lab	**11:00am-12:00pm**	**Virtual lab team ,IIT Delhi**
Tea Break(12:00pm-12:30 pm)		
Technical Session III		
Hands on Session (In coordination with Virtual Labs Team, IIT Delhi & Technical Assistance Team Host College)	**12:30pm-2:00pm**	**Learning Computer Sciences through Vlabs** **Learning Mechanical Engg. through Vlabs** **Learning Electronics Engg. through Vlabs** **Learning Simple Experiments through Vlabs** **& Others**
Lunch Break (2:00pm-2:45 pm)		
Valedictory Function	**2:45 pm -3:15pm**	**Feedback ,Distribution of Certificates** **Vote of Thanks**
National Anthem & Group Photograph		