* **Conducted Session on Virtual Practical Learning Of “Ex-Pharm” Series on Computer-Assisted-Learning (CAL) Software:**
* Computer-assisted learning is a part of undergraduate experimental pharmacology teaching.
* The goal of introducing students to the Ex-Pharm Series Computed-Assisted-Learning (CAL) Software is:
* To demonstrate an alternative method to the animal experiments and emphasize its significance in pharmacology and drug development.
* To familiarize students with the software’s interface and basic functionalities, guiding them through parameter input, graph reading, and result interpretation by faculties, senior residents, and junior residents.
* A separate practical class about the use and demonstration of CAL software in pharmacology was conducted in the lecture theater before providing hands-on training to the batch 2021 and batch 2022 undergraduate MBBS students.
* Students were divided into groups for hands-on exercise and provided guidance and support in using CAL software, addressing questions and clarifying concepts to enhance understanding on experiments such as:

1. **Effects of drugs on dog Blood Pressure and Heart Rate**
2. Effects of different vasopressors and vasodepressors on dogs’ blood pressure and heart rate were demonstrated.
3. Reversal action of adrenaline (Dale’s vasomotor reversal)
4. Reversal action of acetylcholine (Nicotinic action of acetylcholine)
5. **Effects of different drugs on frog heart**

The effect of various drugs and chemicals on a frog’s heart by observing parameters such as change in heart rate and force of contraction were demonstrated.

1. **Bioassay of histamine on guinea pig ileum.**

Demonstrated how to obtain a dose-response curve (DRC) of histamine on guinea pig ileum and to find out the unknown concentration of histamine by matching bioassay.

**HANDS-ON TRAINING ON COMPUTER ASSISTED LEARNING (CAL) SOFTWARE:**











