Industry Collaboration-CDAC

The Department of Information Technology has successfully contributed to ONLINE LABS (OLABS), developed by Amrita Vishwa Vidyapeetham & CDAC, Mumbai & Funded by Ministry of Electronics & Information Technology. This initiative was started in the year 2020, and till the current year 18 OLABS have been successfully completed and 8 more are ongoing in the current Academic Year.

The initiative is based on the idea that lab experiments can be taught using the Internet, more efficiently and less expensively. Its content is aligned to NCERT/CBSE and State Board Syllabus for Physics, Chemistry, and Biology Labs from Class 9 to Class 12 and includes interactive simulations, animations, and lab videos.

Following are the details of the Virtual Labs and Educational Games developed by the students under the mentorship of Dr. Sasikumar, Executive Director (CDAC Mumbai) and successfully deployed in the OLABS repository.
Link: https://www.olabs.edu.in/

AY:2020-2021

1. Educational Game on financial literacy.
2. Virtual Lab Physics based on Archimedes principle.
3. Golf based educational game about elements and properties.
4. Intelligent Tutoring System for Math.
5. Virtual Lab based on - Single displacement Reaction.
6. Virtual Labs based on - Germinating seeds to observe how plants grow from seed.
7. Virtual Labs based on - Observation of pond water for presence of micro-organisms.
8. Virtual Labs based on - Heat Transfer through Conduction.
9. Virtual Labs based on -To study the process of evaporation.
10. Virtual Labs based on -What do all acids and bases have in common.

AY:2021-2022

1. Virtual Lab based on-Vedic Maths Game.
2. Virtual Lab based on-Educational Map Game.
3. Virtual Lab based on-Banking Game.
4. Virtual Lab based on-Skeleton (Bones).
5. Virtual Lab based on-Probability.
6. Virtual Lab based on-Chemistry.
7. Virtual Lab based on-Math Tutoring System.
8. Virtual Lab based on-Planetary.

AY:2022-2023

1. Verify Basic Proportionality Theorem.
2. Different types of Conic Sections.
3. Constructing a square-root spiral.
4. Draw cumulative frequency curve of multiple types.
5. Verify the angle between two planes is the same as the angle between their normals.
6. Determine the probability of 1-6 by throwing a die 500 times and compare with theoretical probabilities.
7. Graph of the form $ax+by+c<0$, $c<0$ represents only one of the two half planes.
8. Verify section formula by graphical method.