## Brief Report on "Laboratory Learning- A Hands on Approach"

The Department of Agriculture, Integral Institute of Agricultural Science and Technology (IIAST), strives to impact a well-rounded learning experience emphasising the importance of theoretical knowledge and its practical implementation. In accordance with this, The Department of Agriculture, Integral Institute of Agricultural Science and Technology (IIAST), Integral University, Lucknow, conducted a three-days training sessions for lab instructors from September 3, 2023 to September 5, 2023 and their students from September 18, 2023 to September 20, 2023. The primary objective of this training was to enhance the proficiency of lab instructors in utilizing new laboratory equipment within the department and to equip them with the knowledge and skills necessary to effectively demonstrate various scientific instruments used in their respective labs and fieldwork and to equip the students with the knowledge and skills necessary to effectively use various scientific instruments required for their research work.

During the training session, a range of essential scientific instruments were demonstrated by expert presenters Er. Anurag Singh from Genix, Er. Sujeet Singh from Cyto Gene, Mrs. Madhulika Singh from Cyto Gene and Dr. Balendu Gupta from Gentech. These demonstrations provided the students with valuable insights into their operation and application in various agricultural disciplines. A wide array of instruments and equipment, including Protein Electrophoresis Gel, Flame Photometer, COD Digestion Unit, Spectrophotometer, BOD, Shaking Incubator, Nitrogen Distillation Unit, Soil Core Sampler, Drop Spillway, Chute Spillway, Drop Inlet Spillway, H Flume, Hydraulic Flume, Parshall Flume, Multi Cylinder Engine, Air Cleaner, Electric System of Tractor, Lubrication System, Cooling System, Engine for Dismantling, Furrow Opener Model, Manually Operated Sprayer, Eicher Tractor Engine (Old Cut Section), Gear Box with Stand, Differential Unit with Stand, Hydraulic Pump System with Stand, Air Cooled Engine and Ring Compressor were part of the demonstration program.

The training conducted by the Department of Agriculture, IIAST was highly successful in achieving its objectives. Lab instructors gained hands-on experience and comprehensive knowledge of essential scientific instruments, enabling them to enhance their effectiveness in the labs and fieldwork. The comprehensive instrument demonstrations in the various labs provided students with valuable practical insights into their respective fields of study. These

sessions fostered a deeper understanding of the subject matter and prepared our students for real-world challenges in their chosen disciplines. The hands-on experience and exposure to a wide range of instruments will undoubtedly contribute to the quality of education and research conducted within our institution. The institution's commitment to fostering a culture of learning and innovation is exemplified through initiatives such as these training sessions, which contribute significantly to the academic and professional development of students. The Program was observed under the guidance of Prof (Dr.) Mohd. Haris Siddiqui, Dean, Faculty of Agricultural Science and Technology, Integral University and Prof. Saba Siddiqui, Head, Department of Agriculture, IIAST, Integral University. The training program was expertly coordinated by the team of faculty coordinators Dr. Faria Fatima, Dr. Deepti Shrivastava and Dr. Khalid Habib.

## **Glimpses of the Training program**











