## GOVERNMENT DEGREE COLLEGE FOR WOMEN, BEGUMPET Dept. of Biotechnology and Zoology

## WORKSHOP AND TRAINING ON BIOMOLECULAR TECHNIQUES

## dt:14-11-2022

Keeping in view of many newly erected diseases related to genetics, the Department of Zoology organized "workshop on Molecular Biology Techniques" to get aware of various techniques and its uses for the students. Molecular Biology primarily concerns understanding the interactions between the various systems of a cell including the interactions between DNA, RNA and protein synthesis as well as learning how these interactions are regulated. It provides an in-depth understanding of the mechanisms related to the cell's physiology and survival. While the classical methods retain their importance, the high fidelity techniques of molecular biology gather additional corroborative, reliable and reproducible data.

**Objective of the program:** Molecular biology pertains to the study of living systems at the DNA,RNA, protein levels and how these molecules can be modified and harassed for practical applications. Knowledge of the natural function of these molecules in the cell provides a context appropriate for further advancement in the rapidly expanding areas of functional genomics, cell biology, biotechnology, microbiology, diagnostics, therapeutics and personalized medicine.

**Outcome of the program:** Students will understand about molecular diagnosis using nucleic acids (DNA or RNA) is not only limited to medicine, but can be applied in so many diverse fields

The final year students of BtZC(50) attended a workshop on Molecular and Clinical Genetics, the workshop included various techniques like genetic counseling, isolation of DNA, proteins, comet assay, techniques like Ultrasound and karyotyping in identification of genetic diseases., 1. DNA isolation ,2. Agarose gel electrophoresis 3. pcr4. T3 ,T4,TSH profile,5. ESR,6. Pedigree analysis,7. Observing down syndrome patients in the presence of a doctor,8. FISH,9. Chromosome analysis.

The Director of Institute of Genetics Dr.Vijaya Laxmi and Dr. Shilpa reddy and other research scholars guided the students for one week program

## No.of students attended: 45

















