



वैश्वेक कुटुम्बकम्
ONE EARTH - ONE FAMILY - ONE FUTURE



सत्यमेव जयते

गृह मंत्रालय
MINISTRY OF
HOME AFFAIRS



विद्यया अमृतं अश्नुते

Course on
**Recent Trends in DNA Examination:
Advances and Impediments in Analysis
Report Writing and Court Evidence**
(04-08 August, 2025)
(5 Days)



विद्यया अमृतं अश्नुते

**National Forensic
Sciences University**

Knowledge | Wisdom | Fulfilment

An Institution of National Importance

(Ministry of Home Affairs, Government of India)

ABOUT THE COURSE

Forensic DNA analysis is considered to be the most irrefutable evidence in the criminal justice system. The workflow of routine forensic DNA analysis includes collection of biological samples, analysis of the samples in the laboratory and the preparation of a DNA report. Preparation of a DNA report is highly crucial as it reflects the quality tedious experimental work carried by the DNA examiner in the laboratory. Besides, the based on this report the fate of the criminal is decided in the court of law. Hence, the forensic scientists should be aware of the standard reporting format to be produced in the court of law. Besides conducting the experimental work and the preparation of the DNA report, the DNA examiner is also entitled to give testimony in the court as asked. There are many instances where due to improper testimony in the court, the useful DNA report is not admissible in the court. Hence, a forensic DNA examiner should develop the skill of court testimony presentation also.

Though it is the primary role of a DNA examiner to prepare a DNA report, its beneficiaries include the judiciary, investigating officers and the prosecution officials. Hence, the scientific language of a DNA report need to be understood by the beneficiaries to draw conclusion based on this report. Hence, they should be sensitized and make them capable enough to understand a DNA report in an unambiguous manner. Looking into this important aspect of a DNA report, this five day training program has been planned to discuss on various formats of DNA reports, its preparation, to learn the art of court testimony, and other aspects related to the topic.

COURSE OBJECTIVES

- 1 To understand a DNA report and its preparation guidelines.
- 2 To update the participants about the latest advances in Forensic DNA Testing.
- 3 To learn the art of court testimony.

COURSE CONTENTS

1. An overview of routine Forensic DNA analysis: Principle and Practices
2. DNA Analysis Report writing: Various Formats and need of Standardization
3. Collection and Preservation of Biological Samples for forensic DNA examination
4. UMID: the first DNA database in India for identification of unidentified dead bodies
5. Understanding a Medico-Legal Report in sexual assault examination
6. Case studies and reporting pattern in Sexual assault cases
7. Case studies and reporting pattern in paternity Dispute
8. Art of Court Evidence
9. Admissibility and Relevance of DNA evidence in the Indian Courts
10. Statistical Analysis in Forensic DNA analysis and its necessity in reports
11. Standardized Reporting pattern in Forensic DNA cases: an international perspective
12. Relevance and analysis of mitochondrial DNA sequencing in Forensic DNA analysis
13. Accreditation process and its necessity in Forensic DNA analysis.
14. Reporting of Atypical cases by Forensic DNA analysis
15. Application and Practical demonstration of NGS technique in forensic DNA analysis
