



**Semester-I**

**Class: LL.M.**

**Paper Code: LM-109**

**Forensic Studies**

**Credit: 02**

**Introduction**

This course is part of Optional Subject in LL.M. programme. The subject is taught to the students in the first semester of the LL.M. The course encompasses various aspects forensic science, its meaning, relationship with law, principles of forensic science and their application in crime investigations in India. The basic introduction of Forensic Science Lab setup and its organization have also been discussed. The course thoroughly discusses the crime scene and its significance in crime investigation. The Role of forensic evidences collected from crime scenes and its production in the court of law, its admissibility and evidentiary value has been included in detail. At the conclusion, the course shall elucidate recent advances in forensic science techniques through brief description of various forensic science techniques.

**Course Objectives**

1. To discuss the fundamentals of Forensic Science
2. To discuss the principles of Forensic Science and its applications in Law.
3. To discuss the Forensic Science Lab setup and its organization in India.
4. To discuss the significance of crime scene and forensic evidences in crime investigation.
5. To discuss various forensic investigation techniques in brief.

**Learning Outcomes**

Towards the end of the course the students would be apprised of and would be able to comprehend the following –

1. Fundamentals of Forensic Science.
2. Principles of Forensic Science and its applications in Law.
3. Forensic Science Lab setup and its organization in India.
4. Significance of crime scene and forensic evidences in crime investigation.
5. Brief overview of forensic investigation techniques.

## **MODULE 1**

### **Forensic Science & Criminal Jurisprudence**

- 1.1 Significance, History & Development of Forensic Science in Criminal Jurisprudence;
- 1.2 Basic Principles of Forensic Science and Their Applicability in Investigation;
- 1.3 Branches of Forensic Science;
- 1.4 Relationship between Law and Forensic Science and Role of Forensic Science in Administration of Justice;
- 1.5 Organizational Structure of Forensic Science Labs and Forensic Science Set Up at Central / State Level in India.

## **MODULE 2**

### **Crime Scene and Forensic Evidence**

- 2.1 Scene of Crime and Forensic Investigation;
- 2.2 Managing Crime Scene & Its Hierarchy: Documentation, Photography/Videography;
- 2.3 Search Patterns of Crime Scene: Collection, Packaging, Labelling & Forwarding of Exhibit to Forensic Laboratories;
- 2.4 Preservation of Samples Collected from Crime Scene, Relevance of Samples Collected and Significance of Chain of Custody of Evidence Collected from Crime Scene;
- 2.5 Types of Forensic Evidence: Physical, Biological, Chemical and Psychological.

## **MODULE 3**

### **Admissibility and Evidentiary Value of Forensic Evidence**

- 3.1 Forensic Evidence and Its Admissibility in Law;
- 3.2 Expert Opinion and Forensic Evidence;
- 3.3 Admissibility of Expert Evidence in the Court of Law;
- 3.4 Relevance and Admissibility of Forensic Evidence in Medico-Legal Cases;
- 3.5 Evidentiary Value of Forensic Evidence.

## MODULE 4

### Recent Advances in Forensic Science Techniques

- 4.1 Cyber Crimes and Cyber Forensics, Offences under IT Act, 2000;
- 4.2 Study of Extortion Calls, Hoax Call and Drugs Transactions through Cyber Forensics and Voice identification Techniques;
- 4.3 Narco Analysis and its Significance, Admissibility of Narco- Analysis test results in the Court, Brain Mapping, Limitations of Brain Mapping Technique, Admissibility in the Court, Polygraph test, Polygraph as Forensic Investigative Tool, NHRC Guidelines for Polygraph Test;
- 4.4 Use of Biometric Methods for Personal Identification Information;
- 4.5 DNA Finger Printing Techniques.

### (B) PRESCRIBED READINGS:

#### PRESCRIBED BOOKS

1. Ramachandran, Forensic Evidence, Lawmann's, 2023.
2. G Chatterjee, Scientific Criminal Investigation Legalities, Procedures and Case Studies, Lexmann, 2023.
3. K.S. Narayan Reddy, The Essentials of Forensic Medicine & Toxicology, 35<sup>th</sup> ed., 2022.
4. B. S. Nabar, Forensic Science in Crime Investigation, Asia Law House, 3rd ed.Reprint 2023.
5. US Department of Justice, Handbook of Forensic Science, Manas Publications, 2010.

#### PRESCRIBED LEGISLATIONS:

1. Indian Evidence Act, 1872.
2. Criminal Procedure (Identification) Act, 2022.

#### PRESCRIBED REPORTS:

1. BOOK OF ABSTRACT 24th All India Forensic Science Conference, Theme: Harnessing New Vistas in Academics & Forensic Science.
2. Guidelines for Forensic Medical Examination in Sexual Assault cases (2018).
3. The (Malimath) Committee Report on Reforms of Criminal Justice System, 2003.

  
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