

**CLASS:- LL.M. 3<sup>rd</sup> SEMESTER**

**OPTIONAL PAPER**

**PRINCIPLES OF FORENSICS AND MEDICAL JURISPRUDENCE IN CRIMINAL JUSTICE SYSTEM**

Paper: 303-B

Max. Marks: 100

Credits: 5

Time: 3 Hours

Note:

1. There shall be total Five Units in the question paper.
2. Unit-I shall contain one compulsory question having four parts of five marks each. This question shall be spread over the entire syllabus.
3. There shall be two questions in each Unit i.e. Unit-II to Unit-V.
4. The student is required to attempt four questions by selecting one question from each Unit i.e. Unit-II to Unit-V. Each question shall carry twenty marks.

**COURSE OBJECTIVES:**

- To Know the Concept, Object, Scope and Development of Forensic Science and its relation with Law and its Role in Administration of Justice.
- To Study the Organizational Structure and Functioning of Forensic Labs, Laboratories and other Institution in process of Criminal Investigation.
- To Examine the Significance of Crime Scene Evidences and Types of Evidences and Admissibility of Expert Evidence.
- To Understand the Technique of Investigation viz. Finger Printing, Brain Mapping, Polygraph Test, Narco Analysis, DNA Test, etc.
- To Know about the Forensic Ballistics, Injuries and Explosives.

**UNIT-I**

***Significance of Forensic Science in Administration of Justice***

- Definition, Object, Scope and development of Forensic Science,
- Relationship between Law and Forensic Science,
- Significance of Forensic Science in administration of justice
- Organizational structure of Forensic Science Labs in India: Central Forensic Science Laboratories, Forensic Science Laboratories,
- National Crime Records Bureau,
- National Institute of Criminology and Forensic Science,
- Finger Print Bureau,
- Central Detective Training School.

**UNIT-II**

***Types of Evidence***

- Crime Scene evidence;
- Preservation of evidence;
- Types of Evidence: Physical Evidence, Chemical Evidence, Biological Evidence;

- Meaning of Expert Evidence, Presentation of Expert Evidence, Admissibility of Expert Evidence,
- Crime Scene Documentation and Lab Investigation
- Forensic Evidences and Criminal Laws.

### **UNIT- III**

#### ***Techniques of Investigation***

- Concept, History, Advantages;
- Limitations and Legal Admissibility of Techniques of Investigation: Finger Printing, Brain Mapping, Lie detector, Poly graph Test, Voice Identification, Narco Analysis, DNA Test;
- Forensic Ballistics: Firearms and their classification, Bullet, Weapon, Cartridge Case Identification, Nature of injuries – Entry and Exit wounds.

### **UNIT- IV**

#### ***Analysis & Analytical Methods for detection***

- Chemical and Toxicological Analysis: Drugs of Abuse & Narcotic drugs, Toxicological examination of poisons & alcohol, Toxicological examination of Viscera, Petroleum Products, Food Adulteration Explosives: Definition of Explosion & Detonation, Chemistry of explosives, Disposal& Handling,
- Fire Scene Investigation: Analysis& Interpretation of fire scenes, Fire Dynamics, Fire Debris
- Analysis & Analytical Methods for detection & Characterization.

### **LEARNING OUTCOME:**

- The Course shall help the Students to Understand the Concept, Nature and Scope of Forensic Science and its relation with Law in Administration of Justice.
- The Students will be able to examine the Functioning of Forensic Labs, Laboratories and other Institution in Process of Criminal Investigation.
- The Course will help the Students to understand the Various Technique of Investigation viz. Finger Printing, Brain Mapping, Polygraph test, Narco Analysis, DNA Test, etc.
- The Course shall be helpful to learn about the Forensic Ballistics, Injuries and Explosives.
- The Students will examine the significance of Forensic Science in Administration of Justice.

### **SUGGESTED READINGS:**

- 1 B.R.Sharma : Forensic science in Criminal investigation and Trial.
- 2 Dr. Veerraghavan : Handbook of Forensic Psychology
- 3 Parikh : Text book of Medical Jurisprudence, Forensic Medicine and Toxicology
- 4 Nanda, B.B. Tewari, R.K.: Forensic Science in India: A Vision for the Twenty First Century
- 5 S.H.James, J.J.Norby : Forensic Science : An Introduction to Scientific and Investigative Techniques
- 6 Dr. Jaishankar & Amin : Forensic Science in Criminal Investigation