

FORENSIC SCIENCE AND FINGERPRINT

Class: B.Sc II Forensic Science

DURATION: Three Months

Name of Co-ordinator: Mr. SMITESH S. NALAGE

Department of Forensic science

1. Title: Fingerprint Analyst

2. Year of implementation: 2020

Structure of Skill Development Course

Duration	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch
3 Month	20	30	50	02	30

Syllabus

Learning Objectives:

1. To learn basics of Forensic science and Fingerprint science.
2. To Understand the emerging trends in Forensic science.
3. To Understand need, scope, significance and branches of Forensic Science.
4. To Learn collection, taking, packaging and preservation of different and comparison of different types of Fingerprint.

Theory Syllabus (20 Hrs)

Unit I: Forensic Science

Basics, Ethics, Rules, Laws, Procedures, Cross Examinations, Investigating the Crime Scene (The Crime Scene and the Collection of Evidence); Investigating and Processing Physical Evidence, The Microscope and Forensic identification of Hair and Fibers, Toxicology, Forensic Medicine, DNA and Serology Questioned Documents and Handwriting, Forensic Psychology, Anthropology, Forensic Engineering, Forensic Entomology, Wildlife Forensics and other important issues.

Unit II: Introduction to Fingerprint

History and Development of Fingerprints; Classification of Fingerprints; Henry system of fingerprint classification; identifying various fingerprint patterns; identifying individuals from fingerprint patterns. Lifting fingerprints from various objects. Types of Fingerprints and Class & Individual Characteristics; Different methods of latent fingerprint development; Photography of fingerprints; Fingerprint Chart Preparation, FBI FD 258 Card Fingerprinting, Comparison / Verification of fingerprints, Automatic fingerprint identification system, Fingerprint expert in court, Expert Opinion Writing etc.

Practical Syllabus (30 Hrs)

List of Experiments: 24 hr

1. To study the Laws in Forensic Science.
2. Identification of Physical, Biological and Chemical evidences at crime scene.
3. Investigation of Documents and Handwriting.
4. Identification and development of Latent fingerprint and to study class and individual characteristics.
5. Classification of Fingerprints
6. Identification of various fingerprint patterns at different surface.
7. To prepare fingerprint chart, FBI FD 258 card.
8. Write a report on expert opinion and court trails.

Project/ Field Visits/ Industrial Visit: 06 hr

Learning Outcomes:

1. To learn about the emerging trends in Forensic Science.
2. To understand the criminal justice system in India and admissibility of expert testimony.
3. To get the knowledge about basics of Fingerprint.
4. To understand different types of Fingerprint and Classification of Fingerprint.
5. To learn about the different development techniques of Fingerprint.
6. To get the knowledge about comparison of Fingerprint.

Recommended Books:

1. W.J. Tilstone, M.L. Hastrup and C. Hald, Fisher's, Techniques of Crime Scene Investigation, CRC Press, Boca Raton (2013). (Unit-I,II,III,IV)
2. Police Handbook.

3. Advance in Fingerprint Technology by Henry C. Lee and R. E. Gaensslen.
4. Classification and Use of Fingerprint, E R Henry.
5. Fingerprint Identification (Handbook), Surinder Nath.

BOS Sub Committee:

1. Mr.Smitesh Nalage
2. Miss. Payal Dahotre

Expert Committee:

1. Mr. Vilas Chavan
2. Miss. Monika Mali