

மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம்
திருநெல்வேலி – 627 012

**Manonmaniam Sundaranar University
Thirunelveli – 627 012.**



கல்விசார் நிலைக்குழுக் கூட்டம்

**MEETING OF THE STANDING COMMITTEE ON
ACADEMIC AFFAIRS HELD ON 09.02.2017**

**Syllabus for Diploma in Forensic Technology Course offered
through Directorate of Vocational Education
Community Colleges from 2017 - 2018**

DIPLOMA IN FORENSIC TECHNOLOGY
SCHEME OF EXAMINATION

Subject code	Title of the Paper	Credit	Hours	Passing Minimum
Semester I				
C17FC11	Principles of Criminology	6	90	40/100
C17FC12	Fundamentals of Forensic Science	6	90	40/100
C17FC13	Basics of Forensic Medicine	6	90	40/100
C17CE10	Communicative English	6	90	40/100
C17FCP1	Practical- I Serology	6	90	40/100
Semester II				
C17FC21	Crime Scene Investigation	6	90	40/100
C17FC22	Physical Evidences in Forensic Science	6	90	40/100
C17LS23	Life Skill	6	90	40/100
C17FC24	Finger Print Classification	6	90	40/100
C17FCP2	Practical- II Digital Finger Print and Impressions	6	90	40/100
Semester III				
C17FC31	Law and Criminal Behaviour	6	90	40/100
C17FC32	Forensic Toxicology	6	90	40/100
C17FC33	Handwriting and Typewriting Analysis	6	90	40/100
C17FC34	Institutional visits and Case Studies	6	90	40/100
C17FCP3	Practical- III- DNA Finger Printing	6	90	40/100
Semester IV				
C17FC41	Forensic Biology	6	90	40/100
C17FC42	Ballistics	6	90	40/100
C17FCP4	Internship	6	90	40/100
C17FCPW	Dissertation	12	180	40/100

Eligibility for admission: Pass in 12thstd examination conducted by the Govt. of Tamil Nadu Board of Secondary Education, Government of Tamil Nadu or any other equivalent examination.

Examination: Passing Minimum for each paper is 40%. Classification will be done on the basis of percentage marks of the total marks obtained in all the papers and as given below:

40 % but less than 50 %	- Third class
50 % but less than 60 %	- Second class
60 % and above	- First class

Syllabus

First Semester:-

- Paper I - Principles of Criminology
- Paper II - Fundamentals of Forensic Science
- Paper III - Basics of Forensic Medicine
- Paper IV - Communication English
- Paper V - Practical- I Serology

Second Semester:-

- Paper VI - Crime Scene Investigation
- Paper VII - Physical Evidences in Forensic Science
- Paper VIII - Life Skill
- Paper IX - Finger Print Classification
- Paper X - Practical- II Digital Finger Print and Impressions

Third Semester:-

- Paper XI - Law and Criminal Behaviour
- Paper XII - Forensic Toxicology
- Paper XIII - Handwriting and Typewriting Analysis
- Paper XIV - Institutional visits and Case Studies
- Paper XV - Practical- III- DNA Finger Printing

Fourth Semester:-

- Paper XVI - Forensic Biology
- Paper XVII - Ballistics
- Paper XVIII - Internship
- Paper XIX - Dissertation

SEMESTER I

(C17FC11) PAPER 1- Skill Paper 1: PRINCIPLES OF CRIMINOLOGY

Unit-I: Introduction

Criminology: Definitions, historical perspectives, nature and scope. Social and Legal concept of Crime. Criminal Justice Agencies. Origin of Criminology. Status of Criminology in India. Stages of Crime. Elements of Crime.

Unit-II: Criminological Thoughts

Schools of Criminology- Demonology, Classical, Neo-Classical Schools, Positive School, Cartographic School, Biological and Constitutional School - Factors: Heredity, Ecological and Economic factors.

Unit-III Sociology of crime

Juvenile, Adult and Elders. Group, Community, Society. Norms, Customs, Mores, Folklore. Anomie theory, Social disorganization and Crime, Sub-Culture. Culture conflict theory, Differential opportunity theory and Social Theories.

Unit-IV: Psychology of crime

Normal Behaviour, Abnormal Behaviour, Deviance, Delinquency. Memory, learning Need and Motivation. Adjustment, adaptability and Reactivate behaviour.

Unit-V: Forms of Crime

Crimes against Person, Property and state and its sub-classifications. Traditional crime, Modern Crimes, Technology supported Crimes and Contemporary forms of Crimes.

(C17FC12) PAPER 2-Skill Paper 2: FUNDAMENTALS OF FORENSIC SCIENCE

Unit-I: Forensic Science

Forensic Science-definition, history, development & scope. Principles and Methods of Forensic Science- State and Central Forensic Science Laboratories. Mobile Forensic Science Laboratory.

Unit-II: Basic Methods

Criminalistics – Methodology and techniques Scene of Crime: General crime scene procedure – notes of observation, photography, sketching.

Unit-III: Wings of Forensic Science

Department/ Area / Specializations in Forensic Science. Traditional VS Modern departments.

Unit-IV: Evidence Identification

Classification of physical evidence– class and individual characteristics. Identification and individualization of physical evidence. Locards Principle of exchange Varieties of trace evidence. Footwear impressions: Tyre marks, skid marks – tool marks and their significance. Questioned documents. The study of Glass Fractures.

Unit-V: Ballistics and Arson

Ballistics- history and importance. Fire arms-nature, types and classification.

(C17FC13) PAPER 3-Skill Paper 3: BASICS OF FORENSIC MEDICINE

Unit-I: Forensic Medicine

Forensic Medicine-Definition, nature and scope. Inquests. Medico Legal documents- Evidences- Dying declarations- Identification of dead and living persons. Medico-legal autopsy. Consent – Euthanasia.

Unit-II: Identification

Identification – Data, Race, Sex, Age, Stature – Scars, Tattoo marks-Anthropometry and Dactylography. Medico legal importance of Age- Examination of decomposed and mutilated bodies. Preservation of bodies- Presumption of death- Exhumation.

Unit-III: Injuries

Wounds and injuries. Definitions- Mechanical Injuries: abrasions, contusions, Lacerations, Incisions, Cut Wounds, Punctured wounds, Thermal Injuries, Electrical Injuries, Fire Arm and blast injuries.

Unit-IV: Death Patterns

Natural and Unnatural death and its forms. Asphyxial death: Hanging, Strangulation, Smothering, Gagging, Choking, Dry and wet Drowning – Battered baby syndrome– Methods of torture.

Unit-V: Sex related issues

Potency- Sterility- virginity- Artificial insemination and test tube babies- Pregnancy, Signs of recent and remote pregnancy, Surrogate mother, disputed paternity and maternity. Abortion, Delivery & Infanticide. Acts of Commission and omission– Sexual offences: Natural, Unnatural and perversions.

(C17CE10) PAPER 4: COMMUNICATIVE ENGLISH

Unit I: Learning context

Concept of learning – Learning style –Grammatical framework – sentence framing – paragraph and texts

Unit II: Reading

Basic concept – Purposes of reading-Decoding-Reading materials – Barriers of reading

Unit III: Writing

Basic concept-Writing style-Terminology-stages-English spelling and punctuation – Written texts

Unit IV: Speaking

Language functions-Conversation- Features of spoken English – Types of English course: functional English, English literature, advance English – Phonetic

Unit V: Developing Communication Skills

Meaning –Classroom presence- Features of developing learning process- Practical skills and Listening- uses of communicative English

References

1. Raman,m.&S.Sharma (2011) communication skills,OUP,New Delhi: India
2. Lata,P.&S.Kumar(2011) communication skills,OUP,New Delhi: India,
- 3.Leech,G&J.Svartvik(2002) A communicative grammar of English,Pearson,India,
4. Sethi,J. and P.V. Dharmija (2007) A course in Phonetics and spoken English.Second edition, Prentice hall: New Delhi

(C17FCP1) PAPER 5: PRACTICAL- I

Blood Analysis, Phenolphthalein Test, Benzedine Test, Blood Pattern Analysis, Grouping, Species Identification.

SEMESTER II

(C17FC21) PAPER 6- Skill Paper 4: CRIME SCENE INVESTIGATION

Unit-I: Crime Scene management

Criminals, criminal behavior, criminal profiling, portrait parley, general crime scene procedures and their management, Crime Scene survey, Crime Scene Documentation, collection and preservation of physical evidence, crime scene reconstruction

Unit-II: Recognition of Bloodstain Patterns

History of Bloodstain Pattern interpretation, properties of human blood, target surface considerations, Size, Shape and Directionality of bloodstains, Spattered blood, other Bloodstain Patterns, interpretation of Bloodstain on clothing and footwear, Documentation and Photography for Bloodstain Pattern Analysis.

Unit-III: Fingerprints

Dactylography. Patterns of finger prints. Lifting Finger Prints. Importance of finger prints.

Unit-IV: Forensic Documents

Various types of forensic documents: genuine and forged documents, classification of forensic documents.

Unit-V: Impressions and Prints

Footprints: Importance, Gait Pattern, Casting of footprints in Different medium, Taking Control samples.

Tyre Marks/prints and Skid marks, taking control samples, Forensic Significance.

Lip Prints- Nature, Location, collection and evaluation, taking control samples, Forensic Significance.

Bite Marks- Nature, Location, collection and evaluation, taking control samples, Forensic Significance.

Ear Prints- Nature, Location, collection and evaluation, taking control samples, Forensic Significance.

(C17FC22) PAPER 7- Skill Paper 5: PHYSICAL EVIDENCES IN FORENSIC SCIENCE

Unit - I. Basics of Physical Evidence

Physical evidence, types and importance in a criminal investigation. Protecting a scene of crime – various steps involved, contamination issues.

Unit -II. Principles of Physical Evidence

Laws and Principles, basics of Forensic Science. Classification of Physical Evidence and Recording. Locards Principle of exchange Varieties of trace evidence

Unit –III. Classification of Physical Evidence

Physical evidence– class and individual characteristics. Identification and individualization of physical evidence. Pollens, fibers, metal fragments, Paint, Soil, glass particles, dust and airborne particles etc., their significance.

Unit - IV. Physical Evidence Collection & Packaging

Recovery and preservation of samples from a crime scene– biological, toxicological, petroleum, explosives, trace items, projectiles and bullets.

Unit - V. Legal Validity of Physical Evidence

Criminal Procedure code and its relevance to physical evidence. Expert opinion. Law of Evidence and its relevance to physical evidence.

(C17LS23) PAPER 8: LIFE SKILL

UNIT- I ATTITUDE : Positive thinking – Goal setting – Problem Solving and Decision making – Leadership and Team Work.

UNIT- II COMMUNICATION SKILLS: Oral communication: Concept of English language – Fluency – Verbal communication in official and public situations.

UNIT-III COMMUNICATION SKILLS: Written Communication: Comprehension – Writing a formal letter like application for Job, enquiry, reply, complaint and such others – preparation of Resume, Curriculum Vitae.

UNIT- IV COMPUTING SKILLS – 1: Introduction to Computers, its various components and their respective functions – Memory storage devices – Microsoft (MS) Office – MS Word.

UNIT - V COMPUTING SKILLS – 2 Internet Basics – Origin of Internet – MODEM – ISP – Upload – Download – e-mail – Origin of worldwide web (www) Browsers – Search engines.

Reference books:

Life skill, Manonmaniam Sundaranar University Publications Division (2011)

(C17FC23) PAPER 9- Skill Paper 6: FINGER PRINT CLASSIFICATION

Unit-I: Nature and Definition

Fingerprint and its uniqueness. Finger print Photography. Dactylography and its importance.

Unit-II: Latent Fingerprints with Powder method

Identifying, Marking and importance of Preservation. To develop Latent fingerprints with Powder method. Different Powder used, extraction and preservation.

Unit-III: Finger Print Analysis

Analysis using Plain and Rolled inked fingerprints and to identify the patterns. Analysis using powders. Lifting of Finger Prints.

Unit-IV: Basic Analysis

How to perform ridge tracing and ridge counting. To identify ridge characteristics. Lifting of Fingerprints. Scientific Report writing.

Unit-V: Using technology support

Concept of computational loading, comparing, coding, decoding and inferences of Fingerprints.

(C17FCP2) PAPER 10: PRACTICAL II- Ten Digit Finger Print Classification- Latent Finger Prints, Foot Prints, Tool Marks and Tyre Impression.

SEMESTER III

(C17FC31) PAPER 11- Skill Paper 7: LAW AND CRIMINAL BEHAVIOUR

Unit 1. Offence Typology

Classification of offences: Cognizable and Non cognizable offence, bailable and non bailable offences, compoundable and non-compoundable Crimes under Dowry offences.

Unit 2. Process of Law Making

Process of Criminalization. Offences and its impact. Stages in criminal proceedings- FIR, Investigation, prosecution and trial stage. Remand and bail processes. Crimes under Special and Local laws.

Unit 3. Legal Procedures

Procedures involved in detection of crime– latest evidence based research in detection and prevention of crime. Different agencies involved in crime detection and prevention Indian Police System – State & Central level. Functions and role of media, Role & Functions of Police.

Unit 4. Crimes under Forensic purview

Prohibition Act, Crimes under Immoral Traffic Act, Specific offences under the Indian Penal Code (Homicide, sexual offences, offences against property). Understanding behavioral patterns.

Unit 5. Information Technology Law

IT Act 2000: Scope, Objectives, E- Governance, Creation, Recognition and Verification of Digital Signature, Digital Signature and Penalties under IT Act 2000, Certifying Authority and Controller. Emerging trends in Information Technology law.

(C17FC32) PAPER 12- Skill Paper 8: FORENSIC TOXICOLOGY

Unit 1. Introduction

Introduction and concept of forensic toxicological examination and its significance.

Unit 2. Poisons

Plant Poison, Animal Poison, Metallic Poison) classification of poisons, types of Poisoning. The routes of administration of poison.

Unit 3. Natural and Chemical Poison

Classification of natural poison and its properties. Classification of Chemical poison and its properties. Drug abuse and its impact.

Unit 4. Collection and preservation

Collection and preservation of toxicological collection and preservation of toxicological exhibits in fatal and survival cases, signs and symptoms of poisoning, mode of action and its effect on vital functions. Evidence Vesra.

Unit 5. Medico-legal Importance

Medico-legal and post mortem examination report/finding studies, specific analysis plan/ approach to toxicological examination of poisoning samples, excretion of poisons, detection of poisons on the basis of their metabolic studies, interpretation of analytical data and forming of opinion.

(C17FC33)PAPER 13- Skill Paper 9: HANDWRITING AND TYPEWRITING ANALYSIS

Unit 1. Functions of Examiners

Collection protocols of writing standards and process of comparison. Examination of built-up documents and determination of sequence of strokes. Determination of age of documents by examining various factors. Comparison of documents, examination of seal rubber & other mechanical impressions.

Unit 2. Basic Principles in Handwriting

Various types of forensic documents: genuine and forged documents, classification of forensic documents: Specimen writings, admitted writings, examination and their use. Writing materials and ink in use.

Unit 3. Preservation of Handwritings

Basic Principles in Handwriting Handling, preservation and marking of documents, natural variation and disguise in writing, Principle of Handwriting Identification, general and individual characteristics, Basic Tools needed for forensic documents.

Unit 4. Basic Principles in Typewriting

Photocopy & photocopier examination: - photocopier identification, visual photocopy examination, photocopy forgery. Paper & watermark examination: - Paper size and thickness, paper opacity, colour and brightness, understanding watermarks. Examination of alterations, erasures, overwriting, additions and obliterations. Decipherment of secret writings, indentations & charred documents.

Unit 5. Preservation of Type written scripts

Various types of typewriting devices- examination of typewriters with proportional letter spacing, electronic typewriters, dot matrix, inkjet & laser printers, machines used for printing security documents, cheques, and currency notes, etc. Basic Principles in Basic Tools needed for forensic documents.

(C17FCPW) PAPER 14- Industrial Visit: INSTITUTIONAL VISITS AND CASE STUDIES

The objective of this paper is to familiarize the students of Forensic Technology with the functioning of the various institutions of the criminal justice system and forensic department. The students are expected to make observational visits to a police station, a court of criminal trial, Crime records bureau, Police Control Room, Institutions for the treatment of drug addicts, and all Forensic Science department in the district. The students will undertake the visits under the guidance of a faculty and will prepare a detailed report for evaluation for the final examination. Along with this each student should complete a minimum of three case studies and present it before the examiners.

(C17FCP3) PAPER 15- PRACTICAL- III- DNA FINGER PRINTING

SEMESTER IV

(C17FC41) PAPER 16- Skill Paper 10: FORENSIC BIOLOGY

Unit 1. Introduction Forensic Biology

Crime Scene Investigation- Protection of Biological Evidences- Documentation Chain of Custody- Recognition of Biological evidences encountered in various cases. Search & Collection of Biological Evidences- Packaging & transportation of Biological Evidences

Unit 2. Analysis of Biological Fluid

Saliva, Semen, Vaginal Fluid, Urine, Sweat, Serological Concepts, Antigen / Antibodies, Polyclonal antibodies, Monoclonal antibodies, Antiglobulins, Serological Techniques, Electrophoretic Methods – Agarose gel, SDS, Natured/Denatured, Identification of Blood
Properties, Blood Grouping – Human & Non-human, Presumptive & Confirmatory Tests, Human & Animal Hair morphology

Unit 3. Analysis of Skeletal Remains

Forensic Anthropology, Skeletal system & bone formation, Skeletal indicators of health & injuries, Identification of joint wear & deterioration, Estimation of Age, Sex & Race, Estimation of Time Since Death, Human V/s Animal Bone morphology, Facial Reconstruction.

Unit 4. Forensic Odontology

Development of Dental structure, Estimation of Age, Sex & Race, Bite mark Analysis.

Unit 5. Forensic Entomology and Botany

Basic Principle of Insect Biology, Life Cycle, Estimation of Time of Death. Forensic Botany Identification of Plant specimen, Analysis of pollen & aquatic microorganisms, Techniques for dating specimens using plant material.

(C17FC42) PAPER 17- Skill Paper 11: BALLISTICS

Unit 1. Introduction

Introduction, General consideration, Parabolic trajectory of a bullet, Vacuum trajectory and calculation of remaining velocity, Air resistance, Bullet drop, Wind deflection, Gyroscopic drift, Twist versus stability, Canting, Shooting up/ down, Velocity of falling shot and falling bullet,

Unit 2. Physics of Ballistics

Escape velocity, Maximum horizontal and vertical range of shot pellets, Ricochet; Critical angle for ricochet for the bullet and the surface, Relationship between the angle of incidence and ricochet, Stability in flight after ricochet, Lethal effects of ricochet bullet.

Unit 3. Terminal (Wounds) Ballistics

Introduction, Stopping power of bullet, Injuries and the quantity of energy of projectiles, Shock, wave and cavitations effect, Wounding mechanism, Elements of wound

Unit 4. Ballistics Nature

Nature of Target- Velocity of projectile, Constructional features of projectile. Range; Classification of range (maximum horizontal/ vertical, effective, dangerous, safe and legal sense), Contact Range, Point blank range, near range, chips range, distant range. Penetration of shots in different regions of the body.

Unit 5. Legal Aspect in Fire Arms and Ammunitions

Licensing of Fire Arms and Ammunitions, Fire Arms and Ammunitions- Offenses and Penalties- Arms Act, 1950.

(C17FCPw) PAPER 18- Practical IV. INTERNSHIP

All the students are expected to take this paper compulsorily. The objective of this paper is to provide field level experience to the students of Forensic Technology and professionally equip them to find appropriate places in the allied fields of Forensic Science. The students will be placed for internship at anyone of the following agencies for a period of 21 days.

The agencies to be covered for internship include

- Governmental agencies
- Non- governmental agencies
- Private detective agencies and etc.,

During this period the students are expected to work for the organization under the guidance of an experienced person. The Students will take up the regular activities of the organization like field work, administrative activities, lab work and related activities, training and report writing depending upon the requirements of the organization.

Each student will be evaluated by his/her supervisor in the organization during the internship period, through a Confidential performance appraisal report filled and sent to the Head of the Department/ Course- Co-ordinator, directly. The students are required to submit a record based on activities/roles performed by them during the internship. The student will be evaluated at the end of the semester based on the performance appraisal report, record, and a public viva-voce.

(C17FCPW) PAPER 19- Dissertation. DISSERTATION AND VIVA-VOCE

All the students are expected to take this paper compulsorily. The objective of this paper is to provide opportunity for the students to make use of their knowledge regarding the various steps involved in conducting a research project under the supervision of a guide. The faculty at various stages of research will assist the students. The students will be encouraged to select their research problems relevant to the field of forensic science and Criminal justice. The completion of the research project by the students under the supervision of the faculty would provide with sufficient training to take up research related assignments in governmental and voluntary organizations within India and abroad.

RECOMMENDED READINGS

- Ahmed Siddique, (1993), Criminology, Problems and Perspectives, III Edn., Eastern Book House, Lucknow.
- Akers, R.L., and Sellers. C.S. (2004) Criminological Theory: Introduction, Evaluation, and Application. 4th Edition. Los Angeles; Roxbury Publishing.
- Alan Langford, John Dean et al. Practical Skills in Forensic Science.
- Albert S. Osborn Questioned Documents.
- Allen, Friday, Roebuck and Sagarin, (1981), Crime and Punishment: An introduction to Criminology. The Free press. New York.
- Apurba Nandy (2002) Principles of Forensic Medicine
- Atkins. Physical Chemistry.
- B. J. Fisher, W.J. Tilstone, C. Woytowicz. Introduction to Criminalistics: The foundation of Forensic Science.
- Bann, Polson C.J., Knight Bernard, Essentials of Forensic medicine.
- Barrard and Gerald. The Identification of Firearms and Forensic ballistics.
- Barry A.J. Fisher., (2000) Techniques of Crime Scene Investigation, 6th Edition, CRC Press, New York.
- Basu S.C., Handbook of Forensic Medicine and Toxicology.
- Bernard, T.G., Vold, G.B., and Snipes, J.B. (2002) Theoretical Criminology. Fifth Edition. New York: Oxford University Press.
- Brain J Heard. Handbook of Firearms and Ballistics Examination and Interpreting Forensic Evidence. 2nd Ed. Publication: Wiley-Blackwell.

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- Brendan Maguire & Polly F. Radosh, (1999), Introduction to Criminology, Wadsworth Publishing Company, Boston, U.S.A.
 - Brent E. Turvey. Criminal Profiling: An Introduction to a Behavioral Evidence Analysis, 3rd ed.
 - Brian H. Kaye (2005) Science and the Detective, VCH, Weinheim, Federal Republic of Germany.
 - Briges B. C. Criminal Investigation, Practical Fingerprinting.
 - Bukshi P.M. and R.K. Suri Guide to Cyber and E- Commerce Laws by - Bharat Law House, New Delhi.
 - Camps F.E, Gradwohl's Legal medicine.
 - Chatterjee S. K. Speculation in Fingerprint Identification.
 - Chockalingam, K. (1997), 'Kuttraviyal' (Criminology) in Tamil, Parvathi Publications, Chennai.
 - Cullen, F.T., and Agnew, R. (2003) Criminological Theory: Past to Present. Second Edition. Los Angeles, CA: Roxbury Publishing Company.
 - Curran, D.J., and Renzetti, C.M. (2001) Theories of Crime. Second Edition. Boston: Allyn and Bacon.
 - Duncan C.D.. Advanced Crime Scene Photography.
 - Edwin H. Sutherland and Donald R. Cressey (1974), Principles of Criminology, Lippincott, Philadelphia.
 - Elliot Mabel and Fransco E. Merrill, (1961), Social Disorganisation, N. Harper and Row, New York.
 - George Vold and Thomas J. Bernard, (1986), Theoretical Criminology, Oxford University Press, New York.
 - Gibbons, D.C. (1994) Talking About Crime and Criminals: Problems and Issues in Theory.
 - Glasstone S. Thermodynamics for Chemists.
 - Guharah P.V. Forensic Medicine.
 - Gupta and Kumar Vol I and Vol II. Heterocyclic Chemistry.
 - Harry Elmer Barnes and Negley K. Teeters, (1966), New Horizons in Criminology, Prentice Hall, New Delhi.
 - Henry C Lee. Crime Scene Handbook. Timonthy Palmbach.
 - Ishaya I. and D. Deghilee. Insecticides with Modes of Action.
 - James S.H, JJ Nordby. Forensic Science: An Introduction to Scientific and Investigative Techniques.
 - John E. Conklin, J.E., (1981), Criminology, Macmillan, London.
 - John M. Butler. Fundamentals of Forensic DNA Typing.
 - Lee J.D. Concise Inorganic Chemistry.
 - Madan, Malik and Tuli. Advanced Inorganic Chemistry.
 - Morgan, King Introduction to Psychology, Weiss and Schopler, VII edition, (1989) McGraw Hill, India.
 - Moris and Boyed. Organic Chemistry.
 - Murray. Harper's Biochemistry.
 - Ordway Hilton. Scientific Examination of Questioned Documents.
 - Paranjepe, N.V. (2002). Criminology and Penology, Central Law Publications, Allahabad.

- Parikh C.K. Text Book of Medical Jurisprudence, Forensic Medicine and Toxicology.
- Patric Jones. Crime Scene Processing and Laboratory Work Book.
- Peter R. De Forest et.al (1983) Forensic Science: An introduction to Criminalistics, McGraw Hill Book Company, New York.
- Peter White (Ed.) (1998) Crime Scene to Court – The essentials of Forensic Science, The Royal Society of Chemistry, UK.
- Puri, Sharma and Pathania. Principles f Physical Chemistry.
- Richard Saferstein. Criminalistics: An Introduction to Forensic Science, 9th ed.
- Rojer J. Willand (1997) PI: Self study guide on becoming a private detective, Paladin press.
- Ross M. Gardner and Tom Bevel. Practical Crime Scene Analysis and Reconstruction.
- Rosy J. Methahon (2000) Practical Handbook for private Investigations, CRC Press.
- Rukmani Krishnamurthy. Introduction to Forensic Science in Crime Investigation.
- Rukmani. Crime Scene Management with Special Emphasis on National level Crime Cases.

- Saferstein R., (2001) Criminalistics: An introduction to Forensic Science, Prentice Hall, Eaglewood Cliffs, New Jersey, 2001.
- Sharma B.R. Forensic Science in Criminal Investigation and Trial, 4th ed.
- Shrikant H. Lade Forensic Biology.
- Stuart H. James . Forensic Science: An Introduction to Scientific and Investigative Techniques 3rd ed.
- Stuart H. James. Scientific & Legal Applications of Bloodstain Pattern Interpretation.
- Tiwari R.K. Compute Crime and Computer Forensic.
- Veerraghavan. Handbook of Forensic Psychology.
- William G. Eckert., (1997) Introduction to Forensic Sciences, CRC press New York.
- Williams, F.P. and McShane, M.D. (2004) Criminological Theory. Upper Saddle River, NJ: Prentice Hall.
- Wilson R. Harrison, Friction Ridge Skin By James F. Cowger. Suspect Documents their scientific examination.
- Wilson Wall. Forensic Science in Court- The Role of Expert Witness.
