

Syllabus

Of

P.G. Diploma in Criminology and Forensic Science

Semester I

2008-2009

School of Studies in Anthropology

**Pt. Ravishankar Shukla University
Raipur (C.G.)**

P.G. Diploma in Criminology and Forensic Science

Scheme of Examination

2008 - 2009

Semester - I			
Sl. No.	PAPER	NAME OF PAPER	Maxi. Marks
1	Paper I	Fundamentals of Forensic Science and Physical Evidence	100
2	Paper II	Fundamentals of Criminology	100
3	Paper III	Lab Course- I	100
		Total	300
Semester - II			
1	Paper IV	Toxicology and Forensic Chemistry	100
2	Paper V	Fundamentals of Police Science	100
3	Paper VI	Lab Course-II	100
			300
		Grand Total	600

NOTE:

The Examination shall be conducted in Theory & Practical Course.

Examination in P.G. Diploma in Criminology and Forensic Science Shall be conducted in two Semester.

The P.G. Diploma shall consists of 600 marks & each semester shall consists of 300 marks.

All papers are compulsory of 100 marks each.

The course structure is as follows:

Semester- I

Paper- I

Fundamentals of Forensic Science and Physical Evidence

Maxi. Marks-100

UNIT- I

Definition, History, Development and Scope of Forensic Science
Scene of Crime, Sketching of Crime Scene and collection of Physical Evidences
Cause of Deaths, Examination in Drowning, Burning, Firearms Hanging, Strangulation, Throttling, Poisoning and Natural Deaths,

UNIT- II

Forensic Science and Jurisprudence:
General exceptions of Indian Penal Code
Offences against Persons (Murder, Rape, Throttling) & Property (Robbery, Theft, Dacoiti, Extortion)
Indian Evidence Act- 45, Sections 59-73 and section 137 & 138

UNIT- III

Importance of Handwriting & Documents in Forensic Science
Handling and Preservation of Documents
Methods of Examination of Documents
Tool Marks, Track Marks, Comparison of Tool Marks and Track Marks

UNIT- IV

Dermatoglyphics and Criminology & Forensic Science
Personal identification from Finger Prints
Types and classification of Finger Prints (Henry's classification)
Development and Lifting of Latent Finger Prints
Finger Prints Problems, Foot Print, Palmar & Sole (Shoe) Prints.

UNIT- V

Biology and Serology in Forensic Science
Identification of Blood, Semen, Hair .
The primary Blood groups systems: ABO, Rh etc.
Determination of blood groups and paternity and maternity disputes.
Basics of DNA Finger printing in paternity disputes

Recommended Readings:

1. Suriender Nath : An Introduction to forensic Anthropology.
2. R. Safferstin: Hand book of forensic science
3. Ohara & Osterburn : Criminalistics
4. P.L.Krik : Criminalistics
5. B.R. Sharma: Forensic Science in Criminal investigation & Crime
6. C.R. Parikh: Parikh's Textbook of Medical Jurisprudence & Toxicology
7. A.S. Osborn: Questioned Documents
8. Hilton : Scientific Examination of questioned documents
9. R.A. Gregory : Scientific identification of disputed documents, Finger Prints & Ballistics.
10. W.R. Harris : Suspected Documents
11. J.V.P. Conway: Evidential Documents
12. S. Goldblatt: Document Evidence & Identification
13. C.Cummins & R. Midlo: Introduction to Dermatographics: Finger, Sole & Toe.

Semester- I

Paper- II

Fundamentals of Criminology

Maxi. Marks -100

UNIT- I

Definition and Scope of Criminology.
Characteristics of Crime.
Criminology in the systems of science.

UNIT- II

The Causes of crime, its level and general description
The differentiation approach to the assessment of cause of crime.
The inter connection of social and biological factors in the cause of crime.

UNIT- III

Schools of Criminology and its concept.
Demonological, School of Freewill, Classical School, Neo Classical School,
Geographical School, Socialistic School Italian school, Psychological, Multifactor.
Criminal Psychology.

UNIT- IV

Prevention of Crime
The basic principle of the legal regulation of social prevention
Juvenile Court, Juvenile Delinquency, Juvenile Reformatories.

UNIT- V

Objects of Punishment and its Critical analysis
Modern concept of Penology
Capital punishment
Prison system
Reformation in Judicial System.

Recommended Books:

1. Barns & Teeters: New Horizon in Criminology
2. Conkin: Criminology
3. Suderland and cressy: The Principals of Criminology
4. Siegel Laary, J: Criminology

Semester-I

Paper- III

Lab Course- I

Maxi. Marks- 100

1. Sketching of crime scene spot and collection of physical evidences. Its packing and preservation.
2. Preliminary examination of erase, overwriting, secret writing
3. Recording, identification & classifications of Dermatoglyphic Prints.
4. Development of latent finger prints on Glass, Paper, Walls & Polished surface.
5. Casting of Foot Prints.
6. Drawing & identification of the skull & other skeletal bones.
7. Determination of height of a person on the basis of bones.
8. Some anthropometrical measurements: Stature, Head length, Head breadth, Cephalic Index.
9. Measurement of upper limbs & lower limbs.

Syllabus

Of

P.G. Diploma in Criminology and Forensic Science

Semester II

2009-2010

School of Studies in Anthropology

**Pt. Ravishankar Shukla University
Raipur (C.G.)**

Semester- II

Paper- IV

Toxicology and Forensic Chemistry

Maxi. Marks-100

UNIT- I

Definition and scope of Toxicology,
Classification of poison,
Examination of poison in viscera, blood and urine
General study and analysis of Narcotic drugs
Pesticides, Poisonous plants and Acidic and Alkaline drugs
Abuse of drugs, LD50 of Drugs

UNIT- II

Introduction to RDX
Definition of high explosive & low explosives
Type of explosive: Hand grenade, Crud bombs, Throw bombs, Fuse bombs, Time bombs, letter bombs.
Application of U.V., I.R., X-ray, TLC, GLC & HPLC in forensic science.

UNIT- III

Identification and examination of narcotic and psychotropic drugs
Examination of inflammable liquids like kerosene, petrol gasoline etc.
Isolation of inflammable liquid in cloths of burns cases, alcoholism and poisonous alcohol
Examination of Ink, Paper, Paint, Fiber, Duplicate Goods

UNIT IV

Bio-chemical markers of individuality
Distribution of genetics markers in man
Interpretation of bio-chemical markers in the investigation of crime

UNIT- V

Classification of firearms and cartridges
Firearms injuries, wound ballistics
Comparison of cartridges firing process
Reconstruction of firearms cases
Fire works, Examination of exploded material

Recommended Reading:

1. L.N. Modi : Medical Jurisprudence & toxicology
2. S.N. Tiwari : Monograph on Toxicology
3. R.A. Goegory : Scientific identification of disputed documents, finger prints and Ballistics
4. M.P. Goutam & S. Goutam: Poisonous Medicinal Plants
5. ECG Clark: Isolation and identification of drugs. Vol. Vol. II and I.
6. K.Kumar : Forensic Ballistics in Criminal justices
7. B.R. Sharma: Fire Arms in criminal investigation & Trials
8. Di. Mio: Gunshot Wound
9. Mathews: Fire Arms Identification
10. Garry Alan: Poison Detection in Human Organs
11. Burrad : Identification of Fire arms and Forensic Ballistics
12. Hatcher, Jehny dellons : Fire Arms Investigation & Evidence
13. S.N. Garn & B.C. Jauhari : Fire arms & forensic Ballistics
14. MC Shane: Exterior Ballistics
15. Harry E. Thomas: Hand Book of Pharmaceutical & Clinical measurements & analysis
16. Kenneth A. Connors: A Text Book of Pharmaceutical Analysis
17. O. Hara & Osterberg : An Introduction to Criminalistics

Semester- II

Paper- V

Fundamentals of Police Science

Maxi. Marks- 100

UNIT- I

Procedure in court as per Criminal Procedure Court
Importance of precaution and difference in setiontrias
Summons, Warrant and Summary Trial, Case Diary

UNIT- II

Investigation of the following of cases:

1. Murder
2. Theft and House Breaking
3. Road, Railway and Air Accidents
4. Arson
5. Exclusion with reference to Naxalite problem and terrorism
6. Sting Operation

UNIT- III

Reformation of Police System
Application of Police in maintaining the law and order
Limitations of police system with reference to human rights
Police system in India and its various organizations
Modernization of police system with reference to control system and modern equipment

UNIT- IV

First Information Report, Search, Seizure, Arrest
Interrogation, Preparation of Charge sheet.

UNIT- V

Role of Community in Police Corruption
Use of Criminal Profile for Crime Investigation

Semester- II

Paper- VI

Lab Course-II

Maxi. Marks -100

1. Physical demonstration of Ganja, Bhang, Charas, Opium, Brown Sugar and Psychotropic drugs
2. Identification of drugs, pesticides and ink by thin layer chromatography (TLC)
3. Laboratory examination of blood, semen, urine & saliva
4. Isolation of DNA from blood & analysis of some Forensic DNA Markers
5. Extraction of inflammable liquids from clothes and their preliminary examination
6. Examination of Explosive substance. Identification of shooter
7. Laboratory examination of shot gun resident by chemical test
8. Separation and identification of some volatile poisons from urine, viscera.
9. Report writing based on the visits to Forensic Science Laboratory/ Finger Print Bureau / Police Station / Jail / Court/ Medical College/ Crime Spot/ Accidents & Other relevant institutions etc.