P.G. Diploma in Criminology and Forensic Science

Semester I

July2016- December-2016

Pt. Ravishankar Shukla University, Raipur PG Diploma in Criminology and Forensic Science[Credit System] Scheme of Examination

		July 2016-December 2016			
FIRST	Paper No.	Title of Papers	Marks		Credit
Semester		-	(External)	(Internal)**	
	I	Fundamentals of Forensic Science and Physical Evidence	80	20	8
	II	Fundamentals of Criminology	80	20	8
	LC-I	Lab Course-I	80	20	4
	Total		300		20
		January 2017-June 2017			<u> </u>
SECOND	Paper No.	Title of Papers	Marks		Credit
Semester		•	(External)	(Internal)**	
	I	Toxicology, Forensic Chemistry and Forensic Biology	80	20	8
	II	Fundamentals of Police Science	80	20	8
	LC-II	Lab Course-II	80	20	4
	Total		300		20

Semester I

Paper - I

Fundamentals of Forensic Science and Physical Evidence

MAX. Marks- 80

MIN.Marks - 27

UNIT -I

Definition, History, Development and Scope of Forensic Science.

Scene of Crime and Collection of Physical Evidences, Packing and sending for analysis.

Sketching of Crime Scene Spot.

Introduction of Forensic Photography, Role of Photography in Forensic Science.

Camera: Its parts and functioning, Enlarger and other Equipments used in Photography, Developing and Printing methods.

UNIT-II

Forensic Science and Jurisprudence, Medical Jurispredence.

Forensic Examination in Burning, Firearms, Poisoning, Railway cutting,

Stabbing explosion, Sexual offences

Death: Cause of Death, Death from Asphyxia: Drowning, Hanging, Strangulation,

Throttling.

Procedure in Court as per Criminal Procedure Code

Indian Evidence Act- 45, Sections 59-73 and Sections 137 & 138.

UNIT-III

Introduction and Classification of Questioned Documents.

Examination of Documents.

Basis of Handwriting Identification – Individuality of Handwriting

Various Writing Features and Their Estimation.

Examination of Signatures.

Examination of Alterations, Erasers, Over Writing, Additions and Obliterations.

UNIT-IV

Dermatoglyphics in Criminology & Forensic Science History of Dermatoglyphic Prints developments Personal identification from Finger prints

Types and Classification of Finger Prints (Henry's Classification)

Battley's Single Print Classification

Development and Lifting of Latent Finger Prints

Finger prints problems, Foot print, Palmar, Sole & Toe Prints, Tool marks, Lip prints.

References:

- 1. R. Safferstin: Hand book of forensic science
- 2. Ohara & Osterburn: Criminalistics
- 3. P.L.Krik: Criminalistics
- 4. B.R. Sharma: Forensic Science in criminal investigation & crime
- 5. C.R. Parikh: Parikh"sTextbook of Medical Jurisprudence &

Toxicology

- 6. J.V.P. Conway: Evidential Documents
- 7. S. Goldblatt: Document Evidence & Identification
- 8. C.Cummins & R. Midlo: Introduction to Dermatographics: Finger, Sole & Toe.
- 9. Albert Osborn Questioned documents.
- 10. Chales. C. Thomas Type writing identification
- 11. Hardless. H.R. Disputed document, handwriting and thumbs print identification.
- 12. Wilson. R. Harrison Suspended documents their scientific examination
- 13. Hilton Scientific Examination of questioned documents
- 14. R.A. Goegory Scientific identification of disputed documents, Finger Prints &
- 15. W.R. Harris Suspected Documents

Semester I

Paper - II

Fundamentals of Criminology

Max. Marks- 80

Min.Marks - 27

UNIT-I

Definition, aims, nature and scope of Criminology.

History and Development of Criminology.

Role of Criminology in Forensic Science.

Relationship of Criminology with other sciences: Forensic science, Psychology,

Anthropology, Sociology and Law.

Schools of Criminology and its Concept.

Pre-classical School: Demonological, School of Freewill, Classical School, Neo- Classical School, Geographical School, Socialistic School, Italian School, Psychological School, Multifactor Theory

UNIT-II

The Characteristics and Relationship of Concept of Crime.

The Concept of Crime and its Socio-Legal Aspects.

The Causes of Crime, its level and General Description

The Differentiation approach to the assessment of Cause of Crime

The inter connections of Social and Biological in the Cause of Crime.

Biological problems in the complex of Anti Social Behavior

UNIT-III

Criminal Psychology

Prevention of crime

The concept of Social Prevention and limits of its functioning

The basic principle of the Legal regulation of Social Prevention

Juvenile Court, Rehabilitation Homes, Reformatories

UNIT-IV

Objects of Punishment and its Critical Analysis Modern concept of Penology Capital Punishment
Prison System
Modern Concept of Prison
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

5. Singh Shyamdhar: Essentials of Criminology (Hindi)

Semester I

Lab Course - I

Max. Marks- 80

Min.Marks - 27

- 1. Over view of instruments.
- 2. Sketching of Crime scene spot and collection of Physical evidences.
- 3. Its Packing, Preservation and Sending.
- 4. Recording, Identification & Classifications of Dermatoglyphic Prints.
- 5. Development of Latent finger prints on glass, paper, wall, polished surface etc.
- 6. Photography of Latent Finger Prints, Casting of Foot prints.
- 7. Photographic Techniques.
- 8. Preliminary Examination of Questioned Documents.
- 9. Examination of Ink by Thin Layer Chromatography (TLC).
- 10. Classification of Fingerprints by Henry "s Ten Digit Classification.
- 11. Examination of Tool marks using Comparison Microscope.
- 12. Classification of Lip prints: Suzuki and Tuschihasi classification.

References:

- 1. R. Safferstin: Handbook of forensic science
- 2. Ohara & Osterburn: Criminalistics
- 3. P.L.Krik: Criminalistics
- 4. B.R. Sharma: Forensic Science in criminal investigation & crime
- 5. C.R. Parikh: Parikh"sTextbook of Medical Jurisprudence &Toxicology
- 6. J.V.P. Conway: Evidential Documents
- 7. S. Goldblatt: Document Evidence & Identification
- 8. C.Cummins & R. Midlo: Introduction to Dermatographics: Finger, Sole & Toe.
- 9. Albert Osborn Questioned documents.
- 10. Chales. C. Thomas Type writing identification
- 11. Hardless. H.R. Disputed document, handwriting and thumbs print identification.

P.G. Diploma in Criminology and Forensic Science

Semester II

Semester II

Paper-I

Toxicology, Forensic Chemistry and Forensic Biology

MAX. Marks- 80

MIN.Marks - 27

UNIT- I

Toxicology: Definition.

Classification of Poisons.

Various types of Plant Poisons.

Study of Insecticides and Pesticides.

Examination of Poisons in Viscera, Blood and Urine.

UNIT-II

Introduction to Narcotic Drugs and Psychotropic Substances (NDPS) Act 1985.

General Study of Narcotic Drugs and Psychotropic Substances.

Examination of Narcotic Drugs.

Adulteration in Jwelleries, Petroleum Products.

Examination of Inflammable Liquids like Kerosene, Petrol, Diesel.

UNIT-III

Introduction to Forensic Biology

Study of Body Fluids and Biological Materials: Blood, Urine, Saliva, Semen, Vaginal Swab,

Vomit, Hair and Fibres, DNA.

Role of DNA in Paternal and Maternal Disputes.

DNA Fingerprinting and personal identification.

Forensic Examination of Body Fluids and Biological Materials.

Wildlife Forensics: Its role and Importance.

UNIT-IV

Introduction to Forensic Anthropology

Identification of Bone – Morphological, Anatomical Characteristics, Determination of Age, Sex, Race, Stature.

Forensic Odontology: Definition, Pattern, Type and Structure of Teeth, Age

determination Identity of Person

Study of Bite Marks and their Forensic Significance.

Role in mass disaster, Dieses of teeth and their significance in personal identification.

References:

1. R. Safferstin: Handbook of Forensic Science

2. Ohara &Osterburn: Criminalistics

3. P.L.Krik: Criminalistics

4. B.R. Sharma: Forensic Science in Criminal Investigation & Crime

5. C.R. Parikh: Parikh' s Textbook of Medical Jurisprudence & Toxicology

6. Surinder Nath Forensic Anthropology

7. Forensic Toxicology Manual, Ministry of Home Affairs, DFS

Semester II

Paper - II

Fundamentals of Police Science

MAX. Marks- 80

MIN.Marks - 27

UNIT- I

History and Development of Police System.

Reformation of Police System.

Application of Police in maintenance the Law and Order.

Limitations of Police System with reference to Human Rights

UNIT-II

Investigation of the following cases:

- 1. Murder
- 2. Theft and Burglary
- 3. Road, Railway and Air Accidents
- 4. Arson
- 5. Sting Operation

UNIT-III

First Information Report, Search, Seizure, Arrest Interrogation, Final Crime Theory, Preparation of Charge sheet. Procedure in Court as per Criminal Procedure Court Simons Trial, Warrant Trial, Case Diary.

UNIT-IV

Role of Community in Police Corruption.

Use of Criminal Profiling in Crime Investigation.

Police System in India and its various organizations

Modernization of Police System with reference to Control system and Modern equipment

Semester II Paper - III Lab Course – II

Max. Marks- 80

Max.Marks - 27

- 1. Determination of height of an individual by the long bones.
- 2. Determination of Sex of an individual by the Skull, Pelvic, Girdles and Long bones.
- 3. Determination of age of an individual by the skull and Long bones.
- 4. Identification of Drugs, Pesticides by Thin Layer Chromatography (TLC).
- 5. Preliminary and Confirmatory Examination of Blood.
- 6. Examination of Saliva.
- 7. Isolation of DNA from Blood, Saliva, Hair root.
- 8. Personal identification through DNA markers
- 9. Morphological & Microscopic examination of hair and fibers.
- 10. Examination of Inflammable liquids.
- 11. Analysis and Study of Bite Marks.

References:

- 1. R. Safferstin: Handbook of Forensic Science
- 2. Ohara &Osterburn: Criminalistics.
- 3. P.L.Krik: Criminalistics
- 4. B.R. Sharma: Forensic Science in Criminal Investigation & Crime
- 5. C.R. Parikh: Parikh"sTextbook of Medical Jurisprudence & Toxicology
- 6. Surinder Nath: Forensic Anthropology
- 7. Forensic Toxicology Manual, Ministry of Home Affairs, DFS