

OPEN ELECTIVE PAPER
Offered by the Department of Genetics in 3rd semester

FORENSIC SCIENCE				
Open Elective	Paper Code: 16GENO2	Credits: 3	Max. Marks: 80	Time: 3 Hours
<u>Course Outcomes</u>				
<p>CO-1: Students would be able to know about the basics and history of forensic science in India and worldwide.</p> <p>CO-2: Students would be able to describe mandate, set-up of and report writing of Forensic Science in accordance with Indian justice system.</p> <p>CO-3: Students would be able to explain the relationship between forensic science and police system.</p> <p>CO-4: Students would know about recent trends like geo-forensics, biometric and bioterrorism in relation to Forensic Science</p>				
<u>Instructions</u>				
<p>There will be a total of nine questions. Question No. 1 will be compulsory and shall contain eight to ten short answer type questions without any internal choice and it shall cover the entire syllabus. The remaining eight questions will include two questions from each unit. The students will be required to attempt one question from each of the four units. The students will attempt five questions in all.</p>				
Unit –I				
<p>Forensic Science: Definition of Forensic Science, Role of the Forensic Laboratory, History and Development of Forensic Science in India, Branches of Forensic Science. Administration and Organizational Setup: Brief introduction to DFSS, CFSL, GEQD, SFSL, RFSL, MFSL, FPB, NICFS, CDTS, NCRB and BPR&D. Educational qualifications and employment in Forensic Science Laboratory.</p>				
Unit –II				
<p>Forensic Evidences: Concise of Forensic Physical, Biological, Chemical and Psychological Sciences, types of cases and evidences involved. Laws and Principles of Forensic Science: Law of Exchange (Locard), Law of Individuality, Law of Comparison, Law of Progressive Changes and Law of Probability. Criminalistics: Definition, Securing & Searching methods, Documentation of crime scene. Methods of collection of forensic evidences, Role of Police at the Crime scene, scientific help at crime scene, handling of various types of crime scenes by police.</p>				
Unit –III				
<p>Basics of signature and handwriting comparison, fake currency note examination. Classification of Fingerprint patterns, cases involved methods of development and comparison of fingerprints. Forensic expert, Admissibility of Forensic testimony in Court of law, Frye and Daubert standards, Cross Examination, Ethics in Forensic Science. Accreditation of Forensic laboratories by NABL.</p>				

Suggested Books:

- 1) James, S.H and Nordby, J.J. (2003) Forensic Science: An introduction to scientific and investigative techniques CRC Press,
- 2) Saferstein : Criminalistics (1976) Prentice Hall Inc., USA.
- 3) Sharma, B.R. (1974) Forensic Science in Criminal Investigation and Trials, Central Law Agency, Allahabad, 1974.
- 4) J A Siegel, P.J Saukko (2000) Encyclopedia of Forensic Sciences Vol. I, II and III, Acad. Press