

TAMILNADU PUBLIC SERVICE COMMISSION
HALF YEARLY EXAMINATIONS AND LANGUAGE TESTS –
APRIL - 2026

FORENSIC SCIENCE
(FOR POLICE OFFICERS)

Time : 3 Hours

Maximum Marks : 100

(WITHOUT BOOKS)

1. Answer any FIVE of the following : (5 × 10 = 50)
- (a) Fingerprints play a crucial role in identifying suspects. Explain the methodology used to classify & record ten-digit & single digit fingerprint impressions at a crime scene.
 - (b) Explain the forensic examination of disputed documents. What are some common signs of forgery & how can an officer identify them?
 - (c) In the investigation of a murder case, you find that an identification number on a firearm has been erased. Describe the forensic process of restoring erased identification numbers.
 - (d) Firearm examination & ballistics play an important role in solving violent crimes. What are the key characteristics of a fired cartridge or bullet that can help identify the weapon used in a crime?
 - (e) In arson cases, forensic experts must analyse the remains of a fire scene to determine the cause. Discuss the key methods used to identify accelerants & evidence of fuel adulteration in an arson investigation.
 - (f) Describe the standard procedure for the preservation of a crime scene (SOC). Why it is crucial to follow these steps meticulously during an investigation?
 - (g) Describe the role of forensic anthropology in identifying human remains. What specific features of the skeletal remains are examined?

[Turn over

2. Write short notes on any FOUR of the following :

(4 × 5 = 20)

- (a) Latent fingerprints
- (b) Gunshot Residue Analysis
- (c) DNA typing techniques
- (d) Forensic serology
- (e) Alternate light source in forensics
- (f) Role of portrait Parle' in forensic investigation.

3. Answer any TWO of the following :

(2 × 15 = 30)

- (a) Discuss the importance of Digital evidence in criminal investigations & the SOP for its search & seizure.
 - (b) Discuss the forensic examination of explosive substances. How do field level forensic tools assist in explosive detection?
 - (c) Explain the forensic techniques used to detect counterfeit currency. How do modern security features in bank notes help prevent counterfeiting?
 - (d) Explain the importance of the chain of custody in forensic investigations. What are the legal implications of breaking the chain?
-