

# LAW CAPSULE

FOR LAW COMPETITIVE EXAMS

## SCIENTIFIC INVESTIGATION TECHNIQUES



Scientific Investigation Techniques involve collection, comparison and interpretation of physical evidence found at crime scenes or collected from suspects and victims. Collection, Analysis and Interpretation of various types of evidence may connect a suspect to a

crime, associate particular items to a specific source or determine the circumstances surrounding an event.

Some of the Scientific Investigation Techniques, which have gained popularity with Indian investigation agencies in recent times, are as follows: -

Sl. No.	Scientific Investigation Techniques	Particulars
1.	Brain Mapping / Brain Fingerprinting	In this technique to reveal the truth the accused is seated before a computer with a helmet fitted with sensors on his head. An assortment of audio-visual clips, some broadly related to the crime (probe clips), those related to familiar incidence (target clips) and a lot of irrelevant clips are played. The sensors monitor the thought processes by reading electrical waves provoked by the images. The result is termed positive if subject's reaction to clips related to crime matches with the one when he sees familiar events.
2.	Narco-Analysis / Truth Serum Test	In this technique the information is extracted from subject under the influence of drugs. The subject is administered truth serum or barbiturate drugs till the person reaches a stage of hypnosis. The subject is then interrogated. This was first used in <i>Godhra</i> probe. It is allowed only after a written order of police and a no objection from the trial court and subject are obtained. Sodium Pentothal is currently the drug of choice in India.
3.	Polygraph Test / Lie Detector Test	A very recent, controversial yet a successful technique is polygraph test. The test determines whether or not statements made by the subject taking the test are deceptive. During the test, the subject is monitored by a polygraph machine. The polygraph machine simultaneously records changes in physiological processes such as heartbeat, blood pressure, and respiration, often used as a lie detector.

### Forensic Institutions in India

Forensic in Latin means "belonging to the forum," and currently meaning pertaining to the courts. Thus, forensic testimony or forensic medicines are used to assist the court or the attorneys in legal matters,

including trials. The country has 32 Forensic Science Labs (FSLs). The Union Government has directed all States to equip their police force with mobile forensic science laboratories.