



SNS COLLEGE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION)

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Recognized by UGC saravanampatti (post), Coimbatore-641035.



Department of Biomedical Engineering

Course Name: 19BMB301 – Diagnostic and Therapeutic Equipment

III Year : V Semester

UNIT 4- SENSORY EQUIPMENT

Topic - Polygraph



POLYGRAPH



POLYGRAPH:

A polygraph, also known as a lie detector, is a device that measures and records various physiological responses while a person is asked a series of questions. The goal is to determine whether the person is telling the truth or lying.



Types of polygraph tests:

- Concealed Information Test (CIT): Measures responses to specific information.
- Comparison Question Test (CQT): Compares responses to relevant and control questions
- Guilty Knowledge Test (GKT): Assesses knowledge of specific details.



Polygraphs typically measure:

- Heart rate
- Blood pressure
- Respiration rate
- Skin conductivity (sweat)
- Muscle activity



Polygraphs are commonly used:

- National security screenings
- Court proceedings
- Law enforcement investigations



Factors:

- **Test related factor**
- **Individual factor**
- **Physiological factor**
- **Psychological factor**
- **External factor**



APPLICATIONS:



- law enforcement
- national security
- forensic psychology
- insurance and finance
- personnel screening
- research and academia
- clinical psychology