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#### PRESENTATION ON

## Centurion UNIVERSITY ROLE OF FORENSIC SCIENTIST IN **POST BLAST INVESTIGATION**

CUFS 2416 EXPLOSIVE AND POST BLAST INVESTIGATION

B.SC. FORENSIC SCIENCE (SEM 6) SCHOOL OF FORENSIC SCIENCES **BHUBANESHWAR CAMPUS** 

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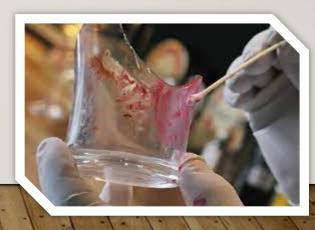
#### INTRODUCTION

#### FORENSIC SCIENCE

- The application of scientific methods and techniques to matters under investigation by a court of law.
- Forensic scientists use analytical and scientific techniques to examine evidence from crimes and prepare legal statements that summaries the results for court cases.







### ROLE OF FORENSIC SCIENTIST IN POST BLAST SCENE

- Identification of the explosive material with the help of field detection kits.
- Identification of the component of IED.
- Technical assistance in handling and disposal of live bombs.
- Proper collection and preservation of evidences at the scene of crime.
- Identification and analysis of evidences.
- Reconstruction of crime scene
- Photography and videography of the scene.
- Sketching and documentation of the scene.
- Maintaining the chain of custody.





#### FORENSIC SCIENTISTS INVOLVED IN POST BLAST INVESTIGATION

In a post blast investigation there are two types of experts i.e.



### **CRIME SCENE EXPERT AT POST BLAST SCENE**

FORENSIC EXPERT	ROLE IN EXPLOSION SCENE OF CRIME
EXPLOSIVE EXPERT	<ul> <li>To determine the type of explosive material used.</li> <li>To ascertain effectiveness and fatal intensity of bomb.</li> <li>Type of any Improvised Explosive Device, IED involved in the explosion</li> <li>To ascertain the cause of explosion, whether it was an intentional act or result of any negligence.</li> </ul>
BOMB SQUAD	<ul> <li>Type of mechanism of live bomb.</li> <li>Handling of live bomb at the crime scene.</li> <li>Diffusion of live bomb as per standard measures.</li> </ul>
FORENSIC EXPERT	<ul> <li>Searching of crime scene</li> <li>Collection and preservation of evidence such as physical evidence, trace evidence, debris, parts of IED, etc.</li> <li>Documentation of crime scene.</li> <li>Reconstruction of crime scene.</li> </ul>
FORENSIC BIOLOGIST	<ul><li>Collection and preservation of body fluid.</li><li>Collection of body part and tissue.</li></ul>

FORENSIC EXPERT	ROLE IN EXPLOSION SCENE OF CRIME
FINGERPRINT EXPERT	<ul> <li>Search for possible fingerprints on different places.</li> <li>To develop and make latent fingerprint visible.</li> <li>Lifting of developed fingerprint from immovable objects.</li> <li>To develop fingerprint from the skin of finger tips taken from the deceased hands.</li> </ul>
PHOTOGRAPHY AND VIDEOGRAPHY EXPERT	<ul> <li>To prepare a video film of the scene before collecting the evidences.</li> <li>The location of the clues should be documented through photography.</li> <li>Photograph should be taken from every appropriate angle to establish exact location of various object including dead bodies.</li> </ul>
DOCUMENT EXPERT	• Collect and preserve any sort of document evidence.(Letter, Papers, etc.)
FORENSIC PSYCHOLOGIST	<ul> <li>Forensic Psychologists help to better understand the human behavior of criminals, witnesses, victims.</li> </ul>

## LAB EXPERT IN POST BLAST INVESTIGATION

FORENSIC EXPERT	ROLE IN EXPLOSION SCENE OF CRIME
FORENSIC CHEMIST	<ul> <li>To extract or separate explosive residue or their decomposed product from the debris.(Debris from the crater surface and underneath soil)</li> <li>To conduct preliminary test and confirmatory test.</li> <li>To carry out instrumental analysis of residue.</li> </ul>
FINGERPRINT EXPERT	• Examination of print both visible and latent.
FORENSIC BIOLOGIST	<ul> <li>To analyze the body tissues found on the crime scene.</li> <li>To carry out DNA profiling.</li> <li>Blood grouping.</li> </ul>
MEDICO-LEGAL EXPERT	<ul> <li>They perform postmortem of the dead bodies found on the crime scene.</li> <li>Identification of unknown dead bodies, It's age, race, sex, etc.</li> <li>Evaluation of injuries and wound.</li> <li>To establish linkage between human organ whether belong to the same individual.</li> </ul>

# THANK YOU.