

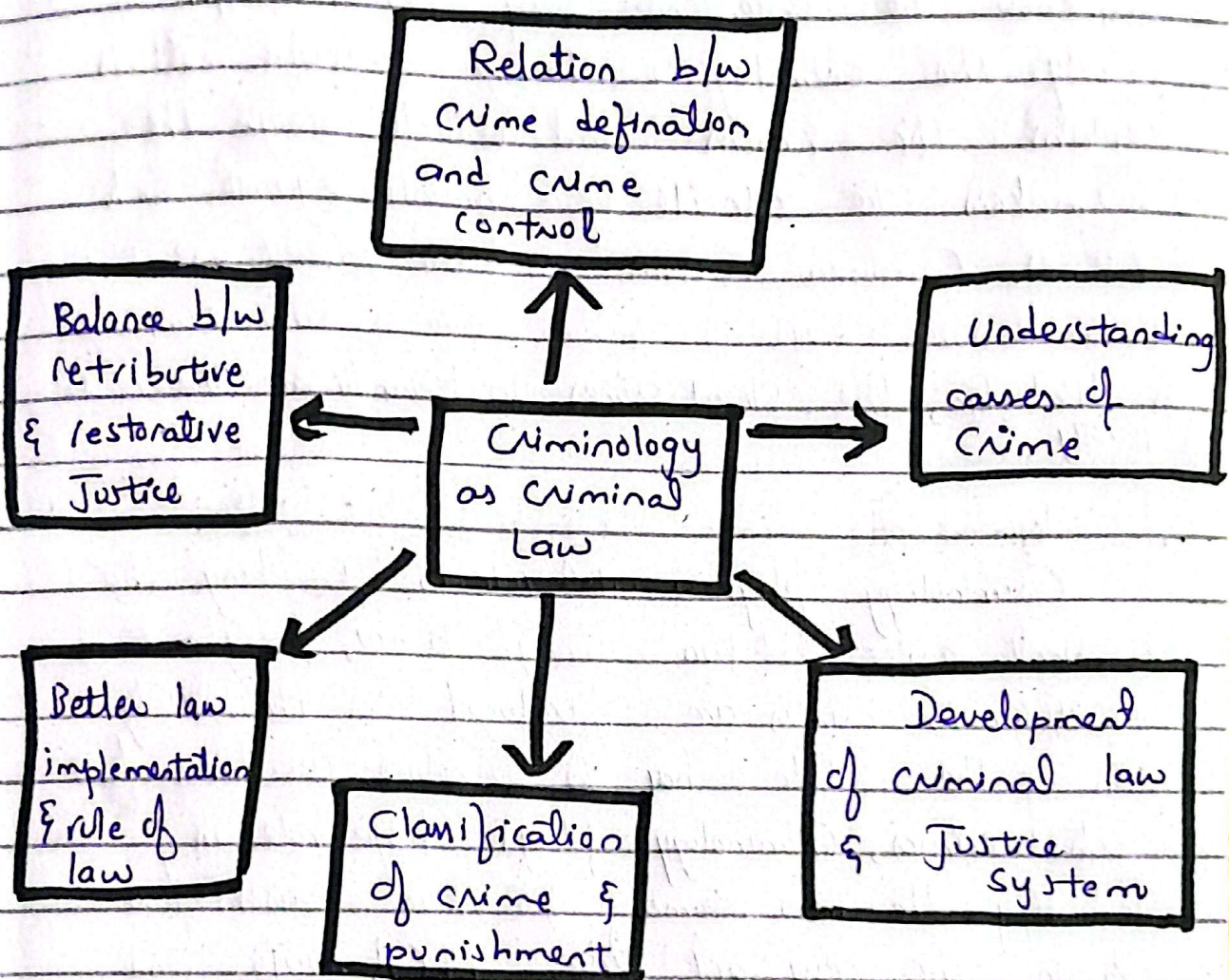
Question:

Discuss the scope of criminology as science dealing with study of criminal law, forensic & criminal investigation.

INTRODUCTION

Criminology is the scientific field that studies, crimes, criminals, victims and the social reaction towards crime. It works side by side with criminal law, forensic science and criminal investigation. Criminal law deals with what crime is and what punishment should be given. Forensic science deals with the scientific method that is used to provide scientific evidences for proving guilty and innocence. Criminal investigation deals with the methods of investigations that are used to collect evidence and identify offenders. Criminology connects all three fields by exploring why crime happens, how they should be controlled and how justice can be served. In Pakistan, where cybercrime, terrorism and drug crime are rising, criminology plays a key role in improving the justice system. In short criminology provides basic knowledge but criminal law & forensic science implements the knowledge into rules & punishments, ensuring justice and protection for citizens.

CRIMINOLOGY AS CRIMINAL LAW



1. Relation b/w Crime definition & Control

Criminal law defines crime while criminology explains why the act became a crime in society. Criminology study the social, moral and legal nature of crime but criminal law gives a legal label to the particular behaviour. Criminology helps lawmates understand which behaviour should be

criminalized and why. For example the domestic violence is considered as crime after the criminological research.

2. Understanding Causes of Crime

Criminology and criminal law both work together to understand why crimes happen in society. The criminologists through scientific methods explain the reasons and which helps the law makers to decide punishments against such crimes. Common reasons include poverty, unemployment, peer pressures, drugs & broken families. For example in Pakistan, the street crimes in Karachi are the result of poverty.

3. Development of Criminal law & Justice System

Criminology plays a vital role in tracking the criminal law's evolution through history. As the time passes new crimes are introduced in the society and the state has to introduce laws for such crimes. Criminology plays a huge role in identifying the new crimes & their causes. For example the new act like PECA 2016 and Anti-terrorism act 1997 shows that criminology has a vital role in defining such legal frameworks.

4. Classification of Crime & Punishments

Criminology helps the legal ~~sys~~ system to identify different types of crimes like violent crime, cyber crime, white collar crime and juvenile delinquency. Each crime requires a different type of law and punishment. Criminology guides the lawmakers to design the punishment that reduces crime, protects society and ensures

fair justice according to each type of offense. For example: social media crimes are increasing in Pakistan so new punishments were introduced in PECA 2016.

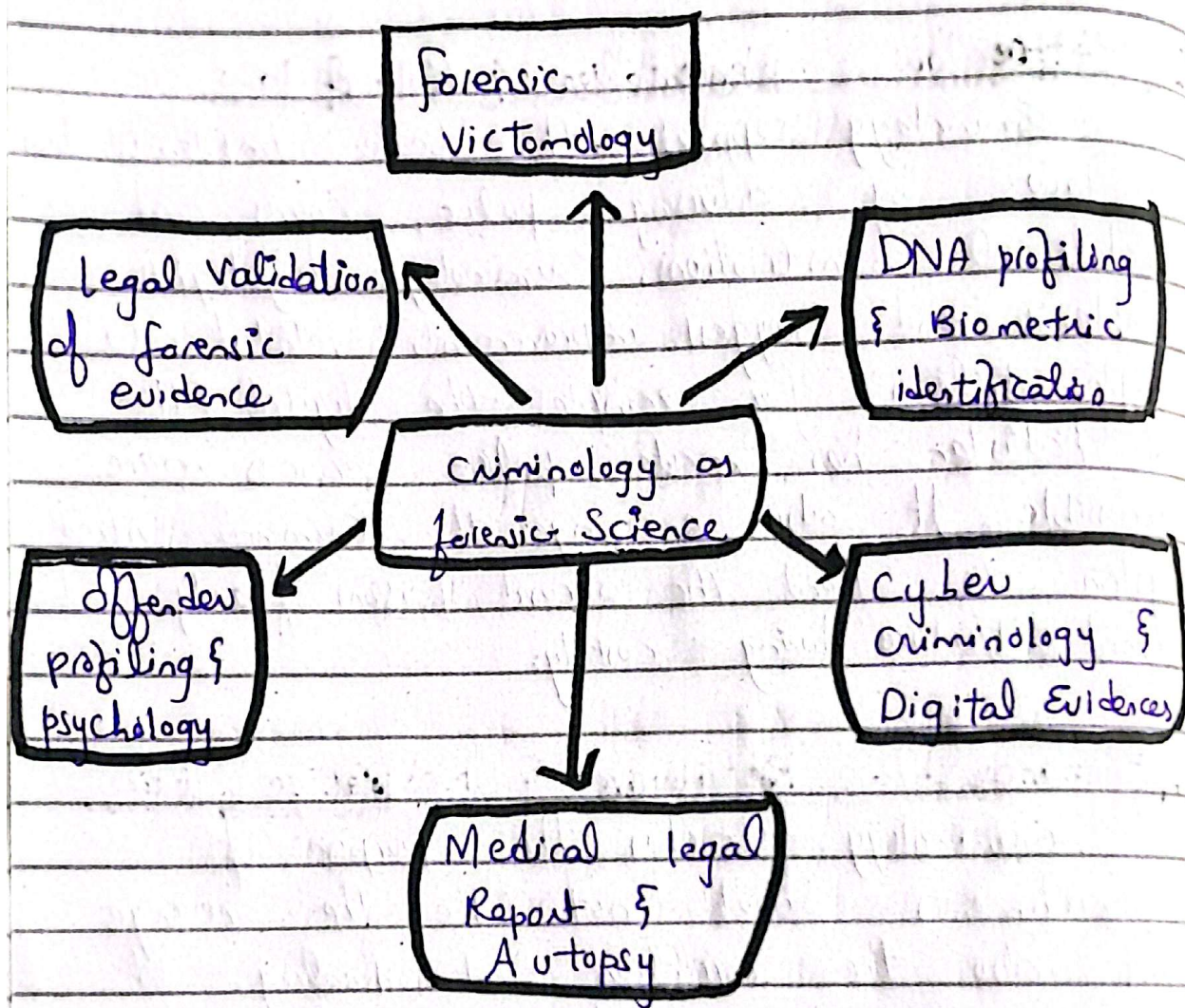
5. Better law implementation & Rule of law

Criminology supports the better implementation of law by advising police, courts and correlational institutions. Criminology highlights problems and suggest improvements related to implementations, for example the digital files in Pakistan has made police services more accessible. It also encourage the criminal justice system to treat the accused persons fairly and avoid torture during custody.

6. Balance b/w Retributive & Restorative Justice

Criminology teaches the purpose of punishments should not be the revenge but also the correction and healing. It supports the idea that society benefits more if offender become better person. For instance, Programs like probation and parole helps offender live under supervision while working in society. In property crimes, Criminals can compensate victim financially and participate in community services. Therefore, Criminology helps defending the human rights and developing a justice system that not only punish but repair damage.

CRIMINOLOGY AS FORENSIC SCIENCE



1. Forensic Victimology

Forensic victimology study victims to understand why they were targeted and how crime happened. Criminology works with forensic science to analyse victims' lifestyle and behaviours. For example, by studying the harassment and domestic violence cases, police can predict risks and design safety plans. Together criminology and forensic victimology make investigation more accurate and improve safety strategy.

2. DNA profiling & Biometric Identification.

Biometric and DNA profiling plays vital role in crime detection. DNA profiling helps identify criminals by collecting blood, hair and biological samples from the crime scene. For example in Zainab Mulden case, DNA matched the criminal and led to fast justice. Systems like NADRA fingerprint records & facial recognition cameras improves public trust and ensure real offenders are punished.

3. Cyber Criminology & Digital Evidences

Cyber crime deals with crimes committed through computer, phones and internet. Criminology study the motive of cybercriminals and forensic experts track their digital footprints as IP & mac address. To deal with this, PEAC 2016 & Cybercrime Wing FIA were established to investigate digital evidence. Criminology and cyber, forensic science plays vital role in understanding crimes, causes and prevention measures.

4. Medical legal Report (MLR) & Autopsy

Medicolegal report are very important in criminal investigations, specially in murder cases. Forensic doctors examine the body to determine causes of death, weapon used and time of death. Criminology use scientific evidence to support investigation and prevent wrongful punishment. Post mortem reports clearly shows whether the death was natural, accidental, suicidal or homicidal. The collaboration b/w criminology and forensic medicine ensure reliable evidence and fair judgement.

5. Offender Profiling & Psychology

Offender profiling studies a criminal's behaviour, personality and mental condition. Criminology works with forensic psychology to identify serial killers, sexual offenders and habitual criminals. Profiling also predicts which groups are more at risk of committing crime. Therefore, offender profiling supports crime control.

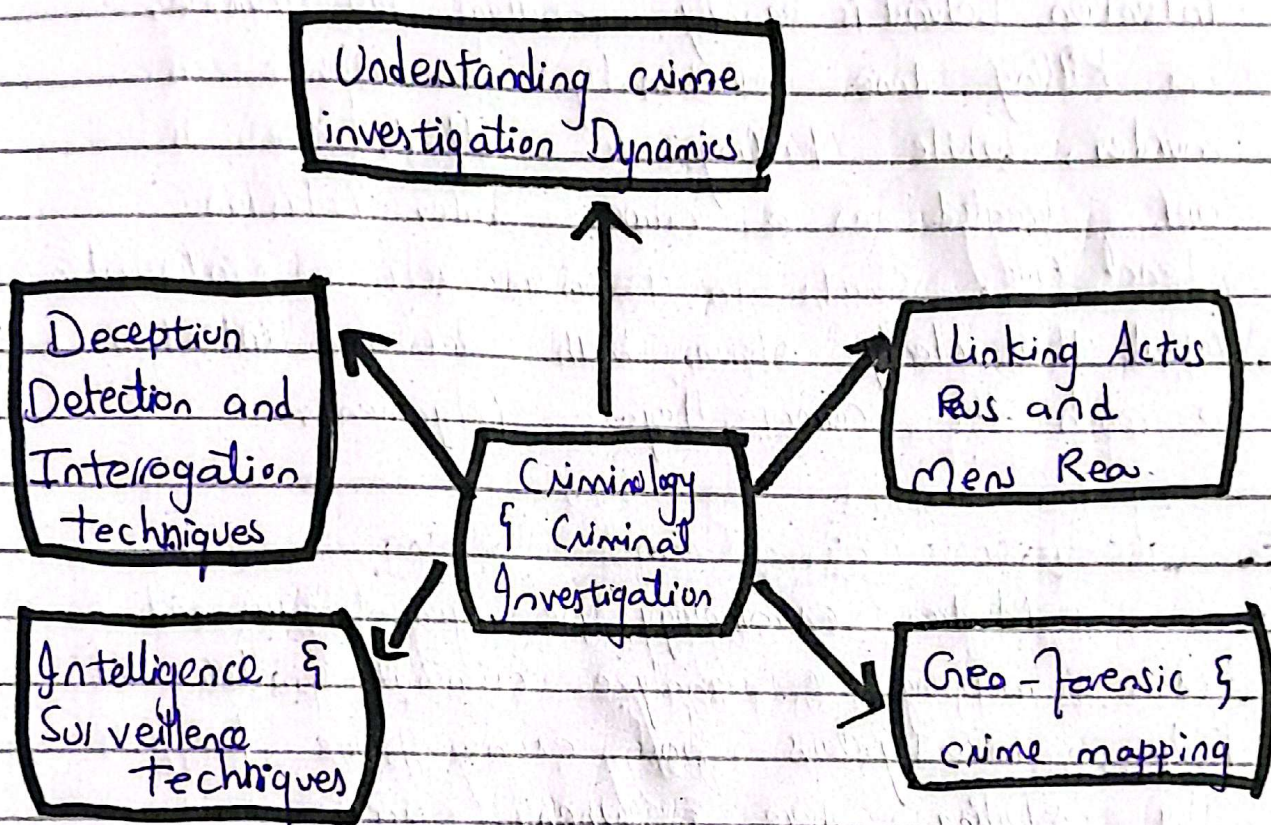
6. Legal Validation of Forensic Evidence

Criminology supports laws that allow scientific evidence in courts. In Pakistan **Article 73 and article 164**

of **Qanun-e-Shahadat Order** make forensic evidences like DNA, signatures, voice recognition, CCTV footage and electronic records are legally acceptable.

This is very important because witnesses can lie but scientific proof is strong and reliable. Thus in terrorism cases there forensic evidences are considered as the strongest evidences. By accepting the new technology, ~~the~~ and the help of criminology the legal systems become more modern and fair. Thus criminology strengthens justice through scientific approach.

CRIMINOLOGY AND CRIMINAL INVESTIGATION



1. Understanding crime investigation Dynamic

Criminology teaches methods of collecting evidence, interviewing witnesses and protecting crime scenes. When crime scenes are properly handled, it becomes easier to recreate what happened and link suspect to the crime. Modern policies like CTD, and safe city policy are trained with criminological techniques to improve fairness and accuracy. This reduces wrongful arrests and ensure justice.

2. Linking Actus Reus & Mens Rea

Criminology helps investigators understand that a crime is not just a physical act — the intention behind is equally important. For example, a killing done intentionally for revenge is murder, while killing in self-defense is not treated as a crime under Pakistan Penal Code. Courts in Pakistan rely on investigation reports that clearly show both act and intention to reach the correct legal judgement.

3. Geo-Forensic & Crime Mapping

Modern criminology uses geo-forensics and crime mapping to analyze criminal patterns. It helps investigators find crime-prone hotspots by studying where & when crimes occur repeatedly. In Lahore, Safe City Authority uses geo-mapping to locate robbery and bike-snatching hotspots, allowing police to prevent crimes before they happen. It also helps identify routes used by criminals to escape.

4. Intelligence & Surveillance Techniques

Criminology promotes intelligence-based policing, where crime is controlled using advance information and technology instead of waiting for crimes to happen. Tools like phone tracking, CCTV surveillance,

NAPRA biometric matching and social media monitoring help identify criminals quickly. By combining criminology and technology, law enforcement becomes proactive and more effective in public protection.

5. Detection & Interrogation Techniques

Criminology teaches ethical and scientific interrogation methods to uncover truth without violence or torture. Tools like polygraph tests and forensic psychology interview help investigators understand real motives and keep human rights safe. Deception detection builds trust with victims & witnesses, reduce false confession and ensure the real offenders are punished.

FINAL REMARKS

Criminology is closely linked with criminal law, forensic science and criminal investigation. It explains why crime happens, how it should be defined and how evidence and investigation must be handled. In Pakistan, applying criminological research can solve modern crime challenges such as cybercrime, terrorism, and violence against women. Therefore, criminology is not only a field of study but a practical tool for building a safe, fair and law-abiding society.