

## Firearm Injuries, Physical Agents, Toxic Gases – Drafted IK

1. You have been called upon to a scene where a house fire has occurred. A young businessman and his wife were living in that house. The wife of the businessman, in critical condition with liquid burns on her face had been admitted to the hospital by the neighbours. It was reported by the police that the woman was recovered from the front yard of the house. The businessman was found dead in the sitting room with a bleeding firearm injury on his head. He had got second degree burns on some parts of his body.
  - 1.1) List five (5) medico-legal issues you have to address in this investigation.
  - 1.2) List the forensically significant observations you need to make at this scene and state their relevance to address above mentioned issues.
  - 1.3) The woman succumbed to her injuries despite treatment without making any statement regarding her injuries. You have decided that these burns are due to deliberate throwing of acid on to her face. Discuss the scientific basis for this opinion.
  - 1.4) The man was brought for autopsy. List the autopsy findings that would have assisted you to conclude that the firearm injury is a rifle firearm injury and the range is distant range.
  - 1.5) Discuss the strengths and limitations of the above conclusion
  - 1.6) Give your opinion to the court of law, concluding that the man has died due to house fire and not due to rifle bullet injury considering the expected findings.
  - 1.7) State 2 (two) toxic gases that can be eliminated from a house fire
  - 1.8) Outline the mechanism of causation of toxicity of each of these gases.