



**THE OPEN UNIVERSITY OF SRI LANKA**  
**FACULTY OF HUMANITIES AND SOCIAL SCIENCES**  
**DEPARTMENT OF LEGAL STUDIES**  
**LL.M IN CRIMINAL JUSTICE ADMINISTRATION**  
**FIRST YEAR - FINAL EXAMINATION – 2013/2014**  
**LWP2308– MEDICAL SCIENCE IN CRIMINAL INVESTIGATION**  
**DURATION: 03 HOURS**

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**DATE: 07<sup>th</sup> June 2014**

**TIME: 9.30 a.m. – 12.30 p.m.**

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**Total No. of Questions : 06**

**Answer four (04) questions only.**

**Candidates will be penalized for illegible handwriting.**

01. A 20 year old male is brought to rural hospital by a group of people who claimed he was found lying unconscious by the side of the road. He has a bleeding injury on the back of his head and a depressed skull fracture. There are multiple superficial injuries elsewhere on the body. The medical officer wants to transfer him to the nearest general hospital but the ambulance drivers are on strike.
- Write three (03) possible causes for his head injury.
  - Explain how the injuries of this patient will help in establishing the circumstances of trauma.
  - State giving reasons the possible categories of hurt in this patient.
  - Discuss the legal implications of the delay in the transfer of this patient.
02. A body of a 65 year old female, who was living alone, was found lying on the floor of her bedroom with a rope around her neck. The body was found at 4.00 p.m. and she was last seen alive at 9.00 p.m. the previous night.

- a) Name four (04) postmortem changes that are useful in the estimation of time since death.
  - b) Describe how one of the changes mentioned above would assist the Forensic Pathologist in determining the time since death.
  - c) Discuss the medico-legal importance of conducting a scene visit in this case.
  - d) Describe the autopsy findings that will help the Forensic Pathologist to establish the cause of death in this case.
03. A 30 years old married woman and a mother of two, alleges that three people known to her had repeated sexual intercourse with her in spite of her protest, 16 hours ago. She said that she struggled with them continuously, but could not escape.
- a) Describe the examination findings on her body that will support her allegation that she resisted the assailants.
  - b) Discuss the difficulties in interpreting the possible genital findings in this victim.
  - c) List three (03) samples that could be obtained from this victim to identify the assailants.
  - d) Briefly discuss how DNA profiling could assist the outcome of the criminal trial in this case.
04. An unidentified human body was recovered from the Kelani river in the early hours of the morning. Police believe the body to be that of an Advanced Level student who had gone missing two days before. She had recently threatened to commit suicide by drinking a poisonous substance and jumping into the river after a broken love affair.
- a) State the main objectives in conducting an autopsy on this dead body.
  - b) Describe the important autopsy findings that will help the forensic pathologist in ascertaining if the death was due to drowning.

- c) Name, giving reasons, four (04) important specimens that should be collected when conducting the autopsy on this body.
- d) Briefly outline the methods by which the identity of the body can be established as that of the missing student.
05. An unmarried young woman dies on admission to the hospital with a history of fever, abdominal pain and progressive deterioration in consciousness. At the inquest, her mother reveals that the deceased had visited an abortionist 4 days back after she had become pregnant from her boy friend.
- a) Define the term “Criminal Abortion”.
- b) List four (04) common methods used to perform criminal abortions in Sri Lanka.
- c) Describe the health related complications that could arise from one of the methods mentioned above.
- d) List the most likely autopsy findings in this woman.
- e) Critically evaluate the law of abortion in Sri Lanka, suggesting amendments.
06. A driver was arrested after he knocked down a pedestrian. He was produced before a Judicial Medical Officer to be examined for drunkenness.
- a) Describe the main steps in performing a clinical examination for drunkenness.
- b) List four conditions that may mimic drunkenness.
- c) State the difficulties encountered when assessing drunkenness of drivers through the methods used in Sri Lanka by;
- i. The police
  - ii. The medical officer
- d) Suggest suitable amendments to the Motor Traffic Act to improve the examination and prosecution of drunk drivers in Sri Lanka.
- e) List the likely external and internal injuries of the pedestrian who was dead on admission to hospital.

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