



UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES – SEPTEMBER 2019
FORENSIC MEDICINE

Date: 9.10.2019

Time: 9.00 am to 12.00 pm (3 hours)

ANSWER ALL THE FIVE QUESTIONS

Answer each **part** in a separate answer book.

PART A

1. A 64-year-old retired bank manager presents to a physician with severe backache and is diagnosed to have Multiple Myeloma. During the initial discussions with the patient's wife and three children regarding the patient's condition, they express their reluctance to inform the diagnosis to the patient and urge the physician not to do so and treat to make him as comfortable as possible.

The patient was treated symptomatically and was not referred to an oncologist.

Few months later when the patient visited another doctor in the private sector on his own, he was informed about the condition he was suffering from. He was also told that a bone marrow transplant could possibly cure his condition, but it is now too late because he was older than 65 years which is the cut off limit to consider for bone marrow transplant. Following this, the patient quarrels with the family and ingests a weedicide but survives the suicidal attempt.

Later he decided to sue the physician who diagnosed his condition first, for not letting him know about it and thereby preventing him from getting treated. He has also complained to Sri Lanka Medical Council (SLMC) alleging that the physician's action amounts to serious professional misconduct.

- 1.1 Briefly describe the major ethical principle violated by the physician in this case. (10 marks)
- 1.2 State the five basic elements that should be followed when this ethical principle is applied in routine hospital practice. (10 marks)
- 1.3 Briefly describe three other ethical principles involved in this case. (15 marks)
- 1.4 Explain how SLMC describes 'serious professional misconduct'. (20 marks)

1.5 Briefly describe how SLMC would investigate the complaint made by the patient against the physician. (15 marks)

1.6 Describe how you would establish negligence of the physician in this case. (20 marks)

1.7 State the possible defenses that could be submitted by the physician to justify his action. (10 marks)

2. Two adult females living alone in an old estate bungalow located in the middle of a 5 acre land were found dead by the workers of the estate in the following morning. It appeared that they were sexually abused and killed by gagging and manual strangulation. Their living rooms in the second floor of the bungalow were disturbed and important documents related to their inheritance of several other lands were found missing. Several valuable items of the bungalow including jewelry and other devices in the estate were also reported missing.

Police launched a massive search operation in the area with Scene of Crime Officers (SOCO). The consultant JMO of the area was also requested to attend the initial high profile meeting. A gang of five youth suspected of carrying out the homicidal event were apprehended within two days of the operation. It was revealed that two of the suspects were former employees of the estate.

2.1 State 5 medico-legal issues related to this case. (5 marks)

2.2 Describe 5 essential advices you would give to SOCO prior to Crime Scene Examination of this case. (15 marks)

2.3 Briefly describe 5 important steps that you would follow in the post-mortem examinations of the deceased. (15 marks)

2.4 Briefly describe 2 special dissections that you would carry out during the post-mortem examinations. (15 marks)

2.5 Briefly describe 5 essential things that you would do if police produce all 5 youth for medico-legal examination on the day 2 evening. (20 marks)

2.6 Briefly describe how you would advise Police about the dispatch of retained forensic samples of this case to relevant authorities. (15 marks)

2.7 Briefly describe the legal provisions related to the offence of 'Rape' in Sri Lanka. (15 marks)



PART B

3. A middle aged man was found the side of the road following hit and run by a vehicle. There were no eye witnesses and vehicle was not identified. At the outpatient department of Teaching Hospital, Jaffna he was pronounced dead on admission.
- 3.1. Discuss the factors that can influence the pattern of injuries (40 marks)
- 3.2. Describe the mechanism of causation and possible injuries in each of the following
- (a). Primary Impact (10 marks)
 - (b). Secondary impact (10 marks)
 - (c). Secondary Injuries (10 marks)
 - (d). Run over injuries (10 marks)
- 3.3. List Five (5) cause of deaths related to this death. (20 marks)
4. A male body was found 300m away from Tellipalai Base hospital in an abandoned house. Body was decomposed and massive maggot activity also noted. The left upper limb below the forearm and left foot were missing. Police suspected the body of a man who was missing from the Tellipalai psychiatry unit 3 days back.
- 4.1. List the medico-legal issues related to this death. (20 marks)
- 4.2. How would you confirm the identification of this person? (40 marks)
- 4.3. Discuss the possible ways to estimate the time since death regarding this death. (40 marks)
- 5.
- 5.1. Outline the features of entry wound caused due to rifled firearm at different distance. (50 marks)
- 5.2. Compare and contrast the appearance of ligature marks in hanging and ligature strangulation. (50 marks)