



UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES (PART I) JULY 2024
ACADEMIC YEAR –2019/2020
FORENSIC MEDICINE - PAPER II

Date: 01.07.2024

9.00 am to 12.00 noon (03 hours)

Answer all five (5) questions

Answer each part in a separate answer book

PART A

1)

- 1.1. Define contrecoup injury of the brain and describe the mechanism of production. (25 marks)
- 1.2. Describe how you would differentiate a spontaneous from a traumatic intracerebral haemorrhage. (25 marks)
- 1.3. A 40-year-old male was brought to the hospital in a state of altered consciousness. No proper history was available. Examination and investigations revealed a scalp contusion, skull fracture, and a small extradural haemorrhage. The Glasgow Coma scale (GCS) was 12. He was observed and managed conservatively in the neurosurgical unit and discharged on the third day.
 - 1.3.1. Define the term "Hurt" (10 marks)
 - 1.3.2. Discuss the terms Grievous hurt and Non-grievous hurt. (20 marks)
 - 1.3.3. Discuss the medico-legal classification of injuries/category of hurt in the case scenario mentioned above. (20 marks)

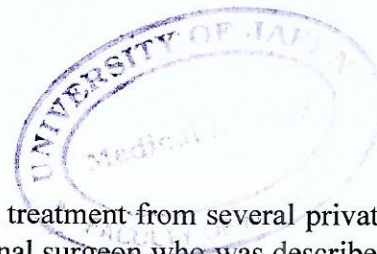
2.

- 2.1. List five (05) plant poisons and their toxic substance/s. (20 marks)
- 2.2. Describe the clinical features and autopsy findings of deaths that occur following poisoning by all the plants that you have mentioned in question 2.1. (80 marks)

PART B

3. A 21-year-old motorbike rider collided with and was run over by a container truck while attempting to pass a vehicle on the A9 road. He was a known drug and alcohol addict. He died within 30 minutes of being admitted to a local hospital.
- 3.1. List five (05) injuries that might have caused death within 30 minutes of this rider's accident. **(10marks)**
 - 3.2. Police personnel are first unable to identify the body due to its altered facial appearance. Briefly outline how you are going to identify the deceased positively during the autopsy. **(20 marks)**
 - 3.3. Describe five (05) observations that could support the run-over injury in this case. **(15 marks)**
 - 3.4. In Sri Lanka, what is the legal blood alcohol limit for drinking and driving? **(05 marks)**
 - 3.5. Describe how alcohol affects driving. **(20 marks)**
 - 3.6. How do police officers establish drunken driving on Sri Lanka's roads? Briefly summarize. **(15 marks)**
 - 3.7. List three (03) samples you would gather during the autopsy for toxicological analysis. **(15 marks)**
4. A 15-year-old girl was brought to the ward after alleging sexual abuse by her boyfriend at her home.
- 4.1. What is the legal age for sexual consent in Sri Lanka? **(5 marks)**
 - 4.2. List five (05) distinct forms of sexual abuse presentations. **(10 marks)**
 - 4.3. Describe the likely findings of a vaginal examination on this girl. **(40 marks)**
 - 4.4. List the samples you plan to acquire from this girl, as well as the potential analysis you can do with them. **(15 marks)**
 - 4.5. The police detained the alleged accused and brought him in for a medico-legal examination. Describe how you plan to proceed. **(30 marks)**

PART C



5. A 52-year-old female had recurrent back pain and had been on treatment from several private practitioners for some time. Later, she privately consulted a spinal surgeon who was described as a surgeon of long-standing, good repute, and vast experience. Initially, she was advised by the surgeon about conservative management, but as she continued to have the symptoms and developed bilateral weakness of her legs and bladder frequency, and irritability, she was asked to undergo surgery.

Subsequently, she underwent an elective left-sided L4/L5 discectomy. Post-surgery, her leg pain was exacerbated, and the back pain did not resolve. She felt that her left leg was weak and that she had reduced sensation in her vulva and surrounding area. Her bladder symptoms continued.

Following the surgery, she was treated in a pain clinic and by another surgeon. Despite further treatment, the patient was left with back pain, disabling leg pain, altered sensation and weakness in her left foot and ankle, altered sensation of bladder fullness, and reduced sexual sensation.

The consenting process for the major surgical procedure took place via a 5-minute telephone consultation, a letter written by the spinal surgeon to the patient, and a conversation immediately prior to the surgery. The letter of the spinal surgeon overestimated the benefits and underestimated the risks. The sections in the consent form in relation to patient benefits and risk of surgery also were not completed.

- 5.1. Outline the major ethical principle violated by the spinal surgeon in this case. (10marks)
- 5.2. State the five basic elements that should be followed when this ethical principle is applied in routine hospital practice. (10 marks)
- 5.3. Outline three other ethical principles involved in this case. (15 marks)

She complained to the Ministry of Health about the incident and decided to sue the spinal surgeon at the District Court for damages suffered by her.

- 5.4. Define the most likely offense committed by the spinal surgeon in this case. (5 marks)
- 5.5. Describe how you would establish it in this case. (15 marks)
- 5.6. State the possible defenses that could be submitted by the spinal surgeon to justify his action. (10 marks)

She has also complained to the Sri Lanka Medical Council (SLMC), alleging that the spinal surgeon's action amounts to serious professional misconduct.

- 5.7. Explain how SLMC describes 'serious professional misconduct' and whether the patient's complaint is justifiable. **(20 marks)**
- 5.8. Outline how SLMC would investigate the complaint made by the patient against the spinal surgeon. **(15 marks)**