



UNIVERSITY OF JAFFNA, SRI LANKA  
SECOND EXAMINATION FOR MEDICAL DEGREES – SEPTEMBER 2020  
FORENSIC MEDICINE

Date: 03.10.2020

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. An undecomposed body of a young male with a penetrating injury of the head was recovered by the police early in the morning from the road side.
  - 1.1 Describe the medico-legal issues in this case. (30 marks)
  - 1.2 State how you would carry out the medico-legal investigation to resolve these issues. (70 marks)
2.
  - 2.1 Critically analyze the methods available to estimate the time since death. (60 marks)
  - 2.2 Discuss the difficulties faced by the Judicial Medical Officer in estimation of time since death in Sri Lanka (30 marks)
  - 2.3. Outline the suggestions to rectify the problems identified in 2.2. (10 marks)
3.
  - 3.1. List five plant poisons and their toxic substance/s. (40 marks)
  - 3.2. Describe the clinical features and autopsy findings on three of the suspected poisonings you have mentioned above. (60 marks)

**PART B**

4. A 32-year-old mother pregnant with her first child, has type1 diabetes and was concerned during her pregnancy that the size of her baby might lead to difficulties with a vaginal delivery. She expressed general concerns about it throughout her antenatal care. The risk of shoulder dystocia (the baby's anterior shoulder becoming stuck behind the mother's pubic symphysis) occurring was not discussed by the Obstetrician and a plan was made for vaginal delivery.

During her son's delivery, shoulder dystocia occurred, and, despite the best efforts of the obstetric team, there was a twelve-minute delay between the delivery of his head and his shoulders. Over this time, the blood flow through the umbilical cord was compromised and the newborn suffered a significant hypoxic injury which resulted in brain damage and



cerebral palsy. Baby also suffered an avulsion of the brachial plexus, rendering his arm useless.

- 4.1 Outline the major ethical principle violated by the Obstetrician in this case. (10 marks)
- 4.2 State the five basic elements that should be followed when this ethical principle is applied in routine hospital practice. (10 marks)
- 4.3 Outline three other ethical principles involved in this case. (15 marks)

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

- 4.4 Define the most likely offence committed by the Obstetrician in this case (5 marks)
- 4.5 Describe how you would establish it in this case. (15 marks)
- 4.6 State the possible defenses that could be submitted by the Obstetrician to justify his action. (10 marks)

Mother has also complained to Sri Lanka Medical Council (SLMC) alleging that the action of the obstetrician amounts to serious professional misconduct.

- 4.7 Explain how SLMC describes 'serious professional misconduct' and whether the patient's complaint is justifiable. (20 marks)
- 4.8 Outline how SLMC would investigate the complaint made by the patient against the Obstetrician. (15 marks)

### PART C

- 5. A 17-year-old female admitted to the emergency unit in a semi-conscious state on Saturday evening following a day out with her new boyfriend. The treating Physician suspecting a sexual assault and as a forensic doctor, you are called upon for medico-legal examination.
  - 5.1 Briefly discuss the issues related to obtaining consent in this patient. (20 marks)
  - 5.2 Discuss the possible general and genital examination findings and its medico-legal significance in this patient. (40 marks)
  - 5.3. List the samples that you would collect during the examination in this case. (10 marks)
  - 5.4. The examination findings revealed that she has been sexually abused. List the referrals that you would do in this patient and mention the reasons for each referral. (15 marks)
  - 5.5. On the same day night police officers producing her boyfriend for medico-legal examination. Briefly describe how you would proceed with your examination. (15 marks)