

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (FORENSIC MEDICINE) EXAMINATION (2018 PROSPECTUS)
NOVEMBER 2022

Date: 16th November 2022

Time: 10.00 a.m. – 1.00 p.m.

SEQ PAPER

Index No:

Answer all six (06) questions.

Answer the questions in the space provided.

1. A 25-year-old man was admitted to the hospital following a gunshot wound to the head at his residence. The only eyewitness says that the patient placed a revolver on the right side of his own head and pulled the trigger. However, the family allege that he was shot by the eyewitness. You are the Consultant Judicial Medical Officer(JMO).
 - 1.1. Prior to surgery the neurosurgeon contacts you for medico-legal advice. State the advice you will give, with reasons. (30 marks)

- 1.2. You visited the victim's residence following the request made by the police.

List ten (10) observations of the scene to determine the possible circumstances of the incident. (10 marks)

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- 1.3. Surgical team have requested for organ retrieval for donation since the patient was diagnosed brain death. Briefly discuss the role of the JMO in addressing the issues that may be encountered. (15 marks)

- 1.4. When you conduct the post-mortem examination, the autopsy findings are corroborative with the statement of eyewitness.
Interpret the expected findings. (30 marks)

- 1.5. You detected that the operation notes of neurosurgery indicate that the entry wound is on the left and exit on right side of the head. Discuss how you would communicate with the neurosurgeon regarding the consequences that may arise following documentation of such opinion on the Bed Head Ticket. (15 marks)

2. An owner of a vehicle received a telephone call around 12.00 noon saying that his 40-year-old driver who has been at a fuel queue since 6.00 p.m. on the previous day was consuming alcohol and misbehaving with some unruly people. The owner went and found him drunk and brought him back home. The owner had also noticed that the driver had a half-emptied liquor bottle in his hand when he got into the back seat of the car and that it was empty when he got down at home. As the driver was drunk, he was asked to stay in his room. After about fifteen minutes, the vehicle owner heard a noise resembling breaking of a glass and found him seated on the floor inside his room with bleeding from his right forearm and a glass of a cupboard inside his room was also broken. A cloth was wrapped around his forearm and was taken to the nearest district hospital in about half an hour. The doctor had attended and then transferred to the close by teaching hospital. The vascular surgeon had operated on the same day.

2.1. If you are the Senior Registrar who is attending to the Medico-Legal Examination Form (MLEF) of the patient who is in the ICU, on the following day.
Tabulate ten (10) important medicolegal factors that should be considered and the steps to be taken. (20 marks)

- 2.2. He underwent below elbow amputation of his right upper limb on the third day of admission and has been continuously managed in the ICU. However, he died on the seventh day of admission.

You received an order from the ISD for a post-mortem examination. The relatives had serious concerns regarding a possible delay in attending to the patient at the district hospital.

State three (03) important instructions that you would give to the police before proceeding further. (15 marks)

- 2.3. Briefly discuss the probable conditions or pathologies that should be considered at autopsy in relation to Cause of Death indicating relevant special dissections and autopsy room investigations with reasons.

(25 marks)

- 2.4. List four (04) natural contributory factors for the death in a case of this nature. (10 marks)

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2.5. Discuss the probable manner of death giving reasons. (15 marks)

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2.6. The relations requested to cremate the body. The Magistrate seeks your opinion regarding the mode of disposal and further steps to be followed.

State your recommendations to the Magistrate. (15 marks)

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3. A 35-year-old man arrested for theft was kept in police custody with two other inmates overnight. He was found dead, suspended from an iron bar of the gate using his sarong in the early morning by the other inmates. His feet were touching the ground. Following the scene visit and the autopsy you were of the view that it was a suicidal ligature suspension.

3.1. Justify your opinion giving reasons based on the possible observations from the scene and autopsy. (20 marks)

- 3.2. His wife, a 32-year-old woman, was pregnant with a period of amenorrhoea of 14 weeks at the time of his death. She was psychologically disturbed by this incident with serious suicidal ideas. The managing obstetrician suggested therapeutic termination of pregnancy.

Briefly discuss this decision considering the legal basis for termination of pregnancy. (15 marks)

- 3.3. However, finally, termination was not performed, and she was managed until delivery at 36 weeks. Both the mother and the baby were discharged two days after delivery despite the relatives' concerns regarding the psychological disturbance of the woman. Three days later, the baby was found dead with blunt injuries to the head, and the mother admitted that she killed the baby.

List five (05) medico-legal issues in this case. (10 marks)

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- 3.4. Relations alleged that the obstetrician prematurely discharged her, resulting in this tragedy.

List the criteria that need to be fulfilled to complete the charge of medical negligence. (10 marks)

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- 3.5. Evaluate whether the allegation of medical negligence could be proven in this case, considering the criteria you have mentioned in 3.4. (25 marks)

3.6. Briefly discuss the role of the Bolam principle in this case. (20 marks)

4. A 15-year-old girl was admitted to the hospital by the police following a complaint received through the 119, with the alleged history of “physical and sexual abuse” by the stepfather for last three months. Mother of the girl has left the country for domestic work five months ago since the stepfather is a cannabis user causing economic problems to the family.
- There were no relatives close by and she was admitted to the ward by the police with a neighbour as a bystander.
- History revealed frequent assaults and sexual abuse by the stepfather.
- You are the JMO attending this case.

- 4.1. Briefly explain the ethical issues related to obtaining consent in this case.
(15 marks)

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- 4.2. During the clinical case conference, it was revealed that this girl has low Intelligence Quotient (IQ).

Briefly describe the difficulties you may encounter during the medico-legal examination of this child.
(15 marks)

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- 4.3. You noted multiple external injuries and scars on the child. The girl had a past medical history of uncontrolled epilepsy from childhood. You suspect physical child abuse in this child.

Discuss the difficulties encountered in interpreting these injuries and scars. (25 marks)

4.4. Vaginal examination, investigations and referrals revealed following findings.

- Healed 4 mm linear pale scar at fossa navicularis
 - Hymen was annular in shape. There was a fresh tear at 7 O'clock position extending to base with contact bleeding.
 - Healed hymenal tear at 4 O' clock position extending to the base
 - Reddish vaginal mucosa
 - Vaginal swab was negative for spermatozoa.
 - Negative for sexually transmitted diseases
 - Urine dip test is positive for cannabis
 - Low IQ and features of acute stress reaction.
 - Chronic malnutrition

State your opinion to the courts based on these findings. (25 marks)

- 4.5. State the plan of management for this girl according to the national guidelines for sexually abused children. (20 marks)

6. Two male adult friends ("A" and "B") went out in the morning to the beach to spend the day. In the late evening, on the same day the family members of "A" called "B" and said that "A" had not returned home. "B" said that they left the beach in the evening around 6.00 p.m. but did not know what happened after that.

Three days later a male body was washed ashore 5 miles away from the place where they were spending the day. The missing person was a 45-year-old and was a good swimmer.

- 6.1. List five (05) important medico legal issues related to this death.

(05 marks)

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- 6.2. Tabulate five (05) methods you could use for identification of this

individual with possible limitations.

(20 marks)

Method	Limitations

6.3. The identity of the deceased person was established as "A".

Outline the difficulties you may encounter in establishing that the death had occurred on the date of missing. (20 marks)

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6.4. Discuss the difficulties faced by you to determine the cause of death as drowning in this case. (20 marks)

- 6.5. Later "B" disclosed the police that they had a verbal argument. However, he refused any physical violence. Furthermore, "B" said that he left the place leaving "A". The autopsy revealed numerous blackish areas including the face and defects on the skin. The Magistrate who viewed the body at the scene, wanted to get your opinion regarding the possible physical violence.

State your opinion giving reasons. (20 marks)

- 6.6. A group of extended family members and neighbours had gathered outside the mortuary on the date of post-mortem examination.

Discuss how you would conduct post-autopsy conference with the bereaved family and include your ethical duties towards them. (15 marks)