

Question Paper

Exam Date & Time: 17-Mar-2025 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD PROFESSIONAL YEAR MBBS PART I DEGREE EXAMINATION - MARCH 2025

SUBJECT : FORENSIC MEDICINE & TOXICOLOGY

(CBME SCHEME - 2019/2020/2021 BATCHES - REPEATERS)

Marks: 100

Duration: 180 mins.

Answer all the questions.

Section Duration: 20 mins

Choose the Single best response for the answer:

Answer all the questions.

Use diagrams to illustrate appropriately wherever necessary.

1. A dead fetus was recovered from a dustbin of a hospital. It was brought for autopsy by the Investigating officer. The fetus was 38 cm in length.

- 1A) Explain the objectives of conducting medicolegal autopsy in this case. (3)
- 1B) Deduce the approximate age of the fetus from the finding above citing the principle behind it. (2)
- 1C) How could you explain the viability of fetus in this case. (2)
- 1D) Describe the features which help to diagnose this condition when it was present in the mother's womb. (3)

2. An orthopedics resident performed a procedure for setting a posterior slab for fracture of left forearm and the patient was asked to report after 1 day for further treatment. The patient did not report on the designated day and reported after 15 days and presented with tissue necrosis and nerve damage because the cast was too tight. The patient filed a case of negligence against the head of the orthopedics department.

- 2A) Is the head of the department liable for the wrong? Explain the principle behind fixing the liability in this case. (3)
- 2B) Can the late reporting of patients be used as a defense in this case? Explain the underlying principle. (3)
- 2C) Does this case fulfill the components of negligence- Explain. (4)

3. Write Briefly:

- 3A) Explain the importance of oath in court proceedings and discuss the conditions where oath is not necessary for the witness. (4)
(2+2 = 4 marks)
- 3B) A 65-year-old hypertensive with chief complaints of acute chest pain died during the transit to (4)

hospital and brought for autopsy as a case of death on arrival. Mention the Preferred Heart dissection technique with diagram and mention the identifying features of left ventricular hypertrophy.

(2+2 = 4 marks)

- 3C) Explain the froth characteristics in a case drowning and differentiate between salt water and freshwater drowning. (4)
(1+3 = 4 marks)
- 3D) A body was brought for medicolegal autopsy with raised core temperature. (4)
i) Identify the conditions where the body temperature is raises after death.
ii) Explain cooling of the body with a diagram.
(2+2 = 4 marks)
- 3E) A knife with dried reddish-brown stain over it was found near the dead body and sent to Forensic Science Laboratory for examination. Illustrate the steps with the help of flow chart for examination to be conducted for retrieval, confirmation of blood and correlation. (4)
- 3F) An 18-year-old girl was found dead inside a closed room with an incised wound over neck with a sharp knife clasped in her right hand. She had hesitation cuts in her left forearm. Identify the distinguishing features which could point towards the suicidal manner of death and describe the characteristic features of hesitation cuts. (4)
(2+2 = 4 marks)
- 3G) A person sustained fracture in lower end of tibia following a vehicular accident. (4)
i) Identify the type of injury and mention its Medicolegal Importance.
ii) Describe the types of pedestrian injury.
(2+2 = 4 marks)
- 3H) A 35-year electrician died due to direct contact with 220V electric wire. Describe the features of an entry wound of electrocution with endogenous electric burn. (4)
- 3I) A chronic alcoholic presented with altered sensorium, violent behavior, visual hallucinations, and coarse tremors in hand in a rehabilitation center after 4 days of admission. Explain the condition and its medicolegal importance. (4)
- 3J) A doctor diagnosed a case of measles during OPD and immediately reported it to higher authorities. Illustrate with examples other conditions where the doctor is bound by the law to divulge the information to the authorities. (4)
- 3K) A patient developed a severe cutaneous reaction following injection of a radiocontrast dye. Differentiate therapeutic misadventure and medical maloccurrence with comment on their applicability in this case. (4)
- 3L) A 25-year-old male was found unconscious in the park. On examination multiple IV prick marks and scars are found over both the forearms. His pupils were dilated, and blood pressure was 160/ 90 mmHg with jet-black tongue. (4)
i) Identify the causative agent and explain its mechanism of action.
ii) Describe the psychiatric manifestation in its chronic use.
(2+2 = 4 marks)
- 3M) A 30-year-old farmer was brought to the emergency with a history of snake bite on the left foot and presented with ptosis and frothing from mouth. (4)
i) Identify the Nature of the envenomation and mechanism of action of the venom.
ii) Describe the steps involved in management of such cases.
(2+2 = 4 marks)
- 3N) A 19-year-old woman was brought to the emergency with history of consumption of phenyl for 2 hours and presented with greenish discoloration of urine. (4)
i) Explain the role of gastric lavage in this case and list the contraindications of the procedure.
ii) Describe the Mechanism of action of the causative agent and reason for change in color of urine.
(2+2 = 4 marks)
- 3O) Describe the conditions of diminished autonomy in doctor patient relationship with examples. (4)

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