



KENYATTA UNIVERSITY

**EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICAL
LABORATORY SCIENCE**

HML 401: FUNDAMENTALS OF FORENSIC SCIENCE

3rd TRIMESTER 2021/2022

TIME: 2 HOURS

INSTRUCTIONS:

SECTION A: Answer all the questions (4 marks each)

1. Define the following terms;
 - a) Throttling 1 mark
 - b) Strangulation 1 mark
 - c) Lynching 1 mark
 - d) Smothering 1 mark
2. Describe the classification of skin burns 4 marks
3. Differentiate between;
 - a) Somatic and molecular death 2 mark
 - b) Mechanism and manner of death 2 mark
4. Explain the medico-legal importance of tattoo marks 4 marks
5. Outline the quantitative assays used in forensic toxicology 4 marks

SECTION B: Answer ONE Question (20 marks)

6. Describe the
 - a) a) medico-legal application of fingerprints 10 marks
 - b) samples collected during medico-legal autopsy 10 marks
7. Describe the external postmortem findings in;
 - a) hanging 10 marks
 - b) drowning 10 marks

SECTION C: Answer all the questions in the Answer booklet (0.5 mark each)

1. Bite mark is an example of:
 - a) Pressure abrasion
 - b) Graze abrasion
 - c) Scratch abrasion
 - d) Pattern abrasion

2. NOT true about fresh water drowning:
 - a) Hyperkalemia
 - b) Hypovolemia
 - c) Ventricular fibrillation
 - d) Hemolysis
3. Stellate wound is produced with firearm in:
 - a) Contact shot
 - b) Close shot
 - c) Range within 60 cm
 - d) Distant shot
4. Increased salivation is seen in death due to:
 - a) Strangulation
 - b) Hanging
 - c) Drowning
 - d) Cyanide poisoning
5. True about somatic death are all, except:
 - a) Cooling of the body
 - b) Cessation of spontaneous respiration
 - c) Cessation of circulation
 - d) Flat isoelectric EEG
6. The dead body of a murdered person is brought for preservation in mortuary. Statement NOT correct is:
 - a) The body should be stored averagely at 4°C.
 - b) The body can be embalmed before postmortem.
 - c) The body should be never undressed before the forensic doctor has seen it.
 - d) The body can be stored at -20°C to preserve it for long duration
7. Split lacerations are due to:
 - a) Blunt object
 - b) Sharp object
 - c) Sharp heavy object
 - d) Pointed object

8. Postmortem staining gets fixed within:
- a) 1 h after death
 - b) 6 h after death
 - c) 12 h after death
 - d) 24 h after death
9. During autopsy, foreign body is found in respiratory tract; manner of death is:
- a) Homicide
 - b) Suicide
 - c) Accident
 - d) Natural
10. Postmortem lividity is unlikely to develop in a case of:
- a) Drowning in well
 - b) Drowning in a fast flowing river
 - c) Postmortem submersion
 - d) Drowning in chlorinated swimming pool
11. All are true about rigor mortis, except:
- a) Seen immediately after death
 - b) It last 18-36 h in summer
 - c) It disappears in the sequence as it appears
 - d) It last 24-48 h in winter
12. In dry drowning:
- a) Death occurs in few days of submersion episode
 - b) Death occurs due to sudden immersion in cold water
 - c) Water does not enter lungs because of laryngeal spasm
 - d) Seen in alcoholics due to drowning in shallow pool
13. The temperature ideally preferred to preserve the body for autopsy is
- a) -10°C
 - b) 0°C
 - c) 4°C
 - d) 10°C
14. Lynching is a type of:
- a) Homicidal hanging
 - b) Suicidal hanging
 - c) Judicial hanging
 - d) Accidental hanging

15. Immediate sign of death is:

- a) Rise in body temperature
- b) Dilatation of pupil
- c) Changes in skin
- d) Cessation of respiration & circulation

16. Algor mortis is:

- a) Cadaveric spasm
- b) Hypostasis
- c) Cooling of body
- d) Rigor mortis

17. Postmortem lividity is useful to access:

- a) Time since death
- b) To know the weapon used
- c) Position of the body after death
- d) Both a) and c)

18. A dead body in casualty showed fine lathery froth coming out of the mouth and nostrils, cause of death is:

- a) Drowning
- b) Morphine poisoning
- c) Strangulation
- d) Dhatura poisoning

19. In typical hanging, knot is placed at:

- a) Occiput
- b) Chin
- c) Left side of mandible
- d) Right side of mandible

20. In a firearm injury, blackening seen around the entry wound is due to:

- a) Flame
- b) Smoke
- c) Unburnt powder
- d) Hot gases