

03/25

The West Bengal University of Health Sciences
MBBS 3rd Professional Part-I MBBS Examination (New Regulation)
December-2025

Subject: FMT
Time: 3 hours

Full Marks: 100

Attempt **all** questions and answer in **sequential** order. The figures in the margin indicate full marks.

1. a) An unknown male subject was brought by the police from the roadside in unconscious state with bleeding from the nose, graze abrasions and bruises over the body. 1+4+4+(3+3)
 - i) What is the probable cause of the injuries?
 - ii) What is the primary impact injury and secondary impact injury?
 - iii) Enumerate the different types of intracranial hemorrhages.
 - iv) What is lucid interval? Explain its mechanism.

- b) A 17 year old girl was brought to the hospital by police for medico legal examination with history of alleged forceful sexual intercourse by her boyfriend 12 hours ago after intoxicating her. 3+1+6+5
 - i) What are the prerequisites for the examinations?
 - ii) Who can give consent for examination of the above case?
 - iii) What are the possible genital and extra genital findings that may be found on examination?
 - iv) What is the rape trauma syndrome?

2. Answer the following:
 - a) Define suffocation. What are its different types? Discuss in brief the features of traumatic asphyxia. 2+3+5

 - b) While travelling by train, a male person of 40 years age has taken some sweets offered by his co-passenger. Subsequently he fell into a deep sleep and when recovered, he was found with hyperpyrexia, blurred vision, dry skin and stripped off his belongings. 1+(1+4)+2+2
 - i) What could be the probable poison used in this case?
 - ii) Briefly mention the active principles, other signs and symptoms of this poisoning.
 - iii) How will you manage this case?
 - iv) Clinically how will you differentiate between this poisoning with heat stroke?

 - c) A male fetus of crown to heel length 45 cm is recovered from a dustbin next to a hospital. Umbilical cord is cut and clamped with a plastic clamp. 2+2+(3+3)
 - i) How will you estimate the age of the fetus during autopsy?
 - ii) What are the fallacies of hydrostatic test?
 - iii) What is sudden infant death syndrome? Briefly describe its etiopathology.

3. Write short notes on the following: 2x5
 - a) Objectives of medico legal autopsy.
 - b) Professional misconduct.

4. Explain the following statements:

- a) Rule of nine is not applicable in all individuals.
- b) Margins of fire arm entry wound are not always inverted.
- c) Absence of froth does not rule out death due to drowning.
- d) BAL is contraindicated by IV route.
- e) Death is not an event but a process.

5×4

5. Choose the correct option for each of the following:

10x1

i. Which of the following is the antidote for cyanide poisoning?

- a) Atropine b) Naloxone c) Sodium nitrite d) Activated charcoal

ii. Environmental condition promoting Adipocere formation is:

- a) Dry and hot b) Warm and humid c) Dry and optimum d) Cold and moist

iii. Kevorkian sign is observed in:

- a) Retina b) Cornea c) Pupil d) Iris

iv. Chance fracture in road traffic accident is produced by :

- a) Bumper b) Steering wheel c) Seatbelt d) Windscreen

v. Choking of a shotgun implies:

- a) Blocking of the barrel b) Constriction at the terminal end of the barrel
- c) Missing the target during firing d) Grooving on the inner aspects of the barrel

vi. When an autopsy surgeon wants to send the specimen for histopathological examination, it should be preserved in:

- a) 50% glycerine b) 10% formal saline c) Rectified spirit d) Saturated solution of common salt

vii. First carpal bone to appear is:

- a) Lunate b) Capitate c) Hamate d) Scaphoid

viii. Undertakers' fracture is commonly seen in:

- a) Skull b) Cervical spine c) Lumbar spine d) Thoracic spine

ix. Total number of teeth at 8 years of age is:

- a) 8 b) 12 c) 18 d) 24

x. Toluidine blue is used to identify:

- a) Seminal stain b) Fresh mucosa abrasion c) HPV d) None