

015/23

**The West Bengal University of Health Sciences**  
**MBBS 3rd Professional Part-I Examination (New Regulation)**  
**April-May 2023**

**Subject: Forensic Medicine & Toxicology****Full Marks : 100**  
**Time : 3 hours**

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) A 13 year old girl is brought to you by police with alleged history of penetrative sexual assault two days back. She is being accompanied by both her parents. She tells you that the accused was a neighbor and she tried to resist him and fight back.  
Whom will you take the consent from? Which law will this case be registered under? How will you tell the age of the nail scratch abrasions you find on her thoracic region? What do you know about SAFE kit? Describe the procedure of medical examination of the survivor. What are the samples you will collect and for what purpose? 1+1+3+3+5+2
- b) A case of alleged snake bite in a 25 year old female has been brought to you in the emergency with a tight ligature above the bite site on upper limb.  
How will you release the ligature? How will you differentiate between neurotoxic and haematotoxic snake bite based on symptoms? How will you manage a case of neurotoxic snake bite? What is the composition of polyvalent anti snake venom in India? 3+4+5+3
2. a) What is mixed dentition? How will you differentiate between temporary and permanent teeth? Enumerate Gustafson's criteria. Which criteria can be applied to a living person? 2+3+4+1
- b) Explain the conditions must be satisfied to prove a doctor to be negligent. Mention the defences & precautions to avoid charge of medical negligence with a clarification about the applicability & limitations of contributory Negligence in this regard. 3+2+2+3
- c) Define drowning. Enumerate different types of drowning. What are the post-mortem findings in a case of death following drowning? What is the surest sign of antemortem drowning? What is Oedema Aquosum? 2+2+3+1+2
3. Write short notes on the following: 2 x 5
  - a) Importance of maintaining professional secrecy in medical practice with its exceptions.
  - b) Classify disorders of sexual differentiation with examples.

**P.T.O**

4. Explain the following statements:

5 x 4

- a) Menaughton rule and sec.84 IPC are not same.
- b) Oximes are useful in treatment of OPC poisoning if patient admitted early but totally ineffective in carbamate poisoning.
- c) Caffey syndrome has a peculiar pattern of finding-both clinically & radiologically.
- d) Depth of stab wound may not always correspond to length of weapon in case of full length penetration.
- e) Examination of skin around wound of entry helps to determine distance of firing.

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

10x1

- i) Highest percentage of tetra hydro cannabinol is seen in
  - a) Ganja
  - b) Charas
  - c) Marijuana
  - d) Bhang
- ii) Krogman's table tells us about:
  - a) Accuracy in determining sex from various bones of an adult skeletal remains
  - b) Accuracy in determining stature from various bones of an adult skeletal remains
  - c) Calculating time since death in a decomposed body
  - d) Accuracy in determining age from various bones of an adult skeletal remains
- iii) Sui-sutari is made from.
  - a) Semecarpus anacardium
  - b) Abrus precatorius
  - c) Mercury sulfide
  - d) Snake venom
- iv) Which one of the following is caused by sharp force impact:
  - a) Laceration
  - b) Abrasion
  - c) Incised wound
  - d) Contusion
- v) Kevorkian sign is a post-mortem change seen in:
  - a) Eyes
  - b) Around the mouth
  - c) Coronary vessels
  - d) Kidneys.
- vi) 'Ecstasy' belongs to the family of:
  - a) Poisonous mushrooms
  - b) Methamphetamine
  - c) Asphyxiants
  - d) CNS depressants
- vii) Test for identification of species from blood stain is.
  - a) Takayama test
  - b) Benzidine test
  - c) Precipitin test
  - d) Teichmann's test
- viii) False regarding Methanol poisoning -
  - a) Effects are due to formic acid
  - b) Fomepizole competitively inhibits aldehyde dehydrogenase
  - c) Blindness
  - d) Metabolic acidosis
- ix) Magistrate inquest is done in all of the following cases except
  - a) Custodial deaths
  - b) Dowry death
  - c) Death in Police firing
  - d) Death of husband within 7 years of marriage
- x) All parts are considered as 9% to calculate body surface area in burn injury except:
  - a) Anterior Chest
  - b) Any of upper limb
  - c) Head and neck
  - d) Perineum