#### PAPER - I

Time : 3 hours Max. Marks : 100

FRM/D/10/09/I

# Attempt all questions in order. Each question carries 10 marks.

- In which part of the brain would you expect intracranial hypertensive hemorrhage to occur most commonly and why? Describe in brief the Forensic neuropathology of intracranial hypertensive hemorrhage.
- 2. How would you define positional asphyxia? Give its classification. Explain each sub type giving main characteristics of each.
- What do you understand by Rape Kit? As a Forensic Pathologist, how would you investigate a case of rape and sexual assault?
- What is Battered Spouse Syndrome? Give its psychopathological and legal aspects.
- How can histology be helpful in the practice of Forensic Pathology?
  Discuss with examples.
- 6. What is Marfan's Syndrome? What are the usual lethal mechanisms in this disorder? How would you determine that a sudden death has occurred as a result of Marfan's Syndrome? What are the conditions / activities which exacerbate underlying pathological features of Marfan's Syndrome?
- 7. What are the classical signs of asphyxia? Describe their pathogenic mechanism.
- 8. What is an immunoassay? Enumerate and discuss some major Forensic applications of immunoassay.
- 9. Define hypothermia. What are the various physiological responses at various temperatures? What are the various pathological lesions encountered in a case of hypothermia?
- 10. What are primary impact injuries, secondary impact injuries and secondary injuries? Explain with help of diagrams.

#### PAPER - II

Time Max. Marks: 100

: 3 hours

FRM/D/10/09/II

Attempt all questions in order. Each question carries 10 marks.

- What is Post Traumatic Stress Disorder (PTSD)? Briefly describe the 1. main characteristic features of PTSD?
- Define intersex and mention its types. 2.
- What is Gustaffson's method? Enumerate various changes used in this 3. formula.
- What is dactylography? Mention its types. How would you determine 4. the age of a fingerprint?
- Write short note on anthropometry and its relevance to identification of 5. an individual.
- How viscera are preserved during post mortem examination for 6. chemical analysis?
- Define adipocere. Describe its medico-legal importance. 7.
- What is sexual asphyxia? How is it produced? 8.
- What is Café coronary? Discuss its medico-legal significance. 9.
- What is false virgin? How will you examine such a case? 10.

#### PAPER - III

Time

: 3 hours

Max. Marks: 100

FRM/D/10/09/III

Attempt all questions in order. Each question carries 10 marks.

- Explain the concept of "Vicarious Liability". Comment on its application in criminal cases and civil suits.
- 2. Discuss about drug dependence and abuse. State the differences between drug addiction and drug habituation.
- 3. State the common modes of action of antidotes. Write a note on chelating agents.
- 4. Classify barbiturates. State the signs, symptoms and treatment of barbiturate poisoning.
- 5. Discuss the signs, symptoms and treatment of methyl alcohol poisoning.
- 6. Describe signs, symptoms, post mortem appearances and treatment of a case of poisoning by sulphuric acid.
- 7. Define the doctrine of "Res ipsa loquitur". State conditions satisfying this doctrine. Give examples.
- 8. Comment on ethical and legal issues in blood transfusion. Discuss the hazards of blood transfusion.
- Describe signs, symptoms, autopsy findings and treatment of methyl isocyanate poisoning.
- 10. Describe the clinical features and treatment of plumbism.

#### PAPER - IV

Time

: 3 hours

Max. Marks: 100

FRM/D/10/09/IV

Attempt all questions in order. Each question carries 10 marks

- 1. Define scar. How will you estimate the age of scars?
- Define infanticide. What are the acts of omission or deliberate neglect? 2.
- What is mummification? What are the factors necessary for 3. mummification? Describe its medico-legal importance.
- Define contusions. How will you estimate the age of a bruise? 4.
- Define exhumation. Describe the procedure followed in exhumation in 5. India.
- Describe the anatomy of female genital system. What is its relevance 6. to our understanding of sexual assault findings?
- Describe the morphology of alveolar type I and type II cells. What is its 7. relevance to fetal maturity?
- Describe hypersensitivity. What is its relation to penicillin anaphylaxis? 8.
- 9. Describe the anatomy of middle ear. What relevance it has in Forensic Medicine?
- Describe the examination of conduction system of heart and its 10. forensic importance.