

**FORENSIC MEDICINE**

**PAPER-IV**

Time: 3 hours  
Max. Marks:100

FRM/D/19/09/IV

**Important Instructions:**

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

**Write short notes on:**

1. Discuss DNA profiling. What are the recent advances in Forensic DNA techniques? 5+5
2. a) CODIS system. 5+5  
b) Principle of Real time PCR.
3. Discuss recent advances in Lie detection techniques. Discuss role f-MRI in lie detection. 5+5
4. a) Genomic approaches translate into forensic applications. 5+5  
b) Retaining organs for museum - legal and ethical issues.
5. Describe Channelopathies. Discuss concept of molecular autopsy. 5+5
6. Discuss how and why you should integrate advanced imaging techniques into your daily forensic practice. 10
7. a) Recent advances in bed side screening of poisons. 5+5  
b) Locked in syndrome.
8. What is criminal investigative analysis(CIA)? How it plays significant role to determine the psychology of person involved in crime? 4+6
9. Define computer forensics and discuss role of digital forensic in crime investigation. 10
10. a) Simon sign. 5+5  
b) Reconstruction of scene by forensic animation.

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