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Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2026
(CBCSS)

Forensic Science

FSC 4E 27—MODERN TRENDS IN FINGERPRINT SCIENCE

(2020 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

Section A*Answer any **four** questions.**Each question carries 2 weightage.*

1. Give the chemical composition of Eccrine and Apocrine glands
2. What are Anti-stroke powders ?
3. Write about Ruthenium Tetroxide method.
4. What is the mechanism of European Chelate method ?
5. Comment on the 'Challenging Surfaces' for fingerprints.
6. Give the method of enhancement of latent fingerprints by phosphorescence.
7. What is the meaning of 'Latent-to-Ten-Print' search in AFIS.

(4 × 2 = 8 weightage)

Section B*Answer any **four** questions.**Each question carries 3 weightage.*

8. Describe the anatomy of friction ridge skin.
9. Elucidate on the principles of fingerprint science.
10. Give the mechanism and conduction of 'soot' method.

Turn over

11. How is Iodine fuming method used for fingerprint development ?
12. What are the Amino acid and protein reagents ? Write a note on Zinc oxide nanoparticles.
13. What are minutiae feature extraction and orientation ?
14. How can DNA profiling be utilized from fingerprint residue ?

(4 × 3 = 12 weightage)

Section C

*Answer any **two** questions.*

Each question carries 5 weightage.

15. Describe the procedure and utility of powder suspension technique.
16. Describe the post mortem fingerprint techniques.
17. Write a note on Gold nanoparticles.
18. What is AFIS ? Give the system architecture required for it. Add a note on advantages of AFIS.

(2 × 5 = 10 weightage)