TAMILNADU PUBLIC SERVICE COMMISSION

HALF YEARLY EXAMINATIONS AND LANGUAGE TESTS – OCTOBER - 2020

SCIENTIFIC AIDS TO INVESTIGATION

(FOR POLICE OFFICERS)

Time : 3 Hours   Maximum Marks : 100

(WITHOUT BOOKS)

1. **Answer any TWO of the following.**   (2 × 10 = 20)

    (a) What is the difference between admitted and specimen signature.

    A person stayed in a lodge, after committing an offence, he disguised his writing / signature in the register. In that case how will you prove the documentary evidence?

    (b) In criminal investigation, blood pattern studies are more useful than blood group studies. Comment on it.

    (c) What are the objectives of search in the scene of crime? Describe the various methods of search adopted in the crime scene by the investigating officer.

2. **Answer only ONE of the following Two questions :**   (1 × 20 = 20)

    (a) In a scene of exhumation, a skeleton of female dead body is disinterred. What are the measures to be taken while exhuming the dead body? Further what are the requirements to be done by the Investigating officer for skull super imposition?

    Or

    (b) What is Finger print? Describe the uses of patterns and ridge characteristics of fingerprints. Explain the various methods of taking fingerprints of the dead body at various stages of decomposition.

3. (a) In the investigation of Road Traffic Accident Cases, discuss the significance of

$(4 \times 2\frac{1}{2} = 10)$

  (i) Tyre mark evidence

  (ii) Skid mark evidence

  (iii) Glass evidence

  (iv) Paint evidence.

  (b) What are the things to be observed examining the offending vehicles?

$(1 \times 10 = 10)$

4. What is DNA? Describe the uses of DNA fingerprinting in criminal investigation. Explain the types of samples to be collected for DNA profiling analysis and point out the Do's and Don'ts for investigating officer, who is working with DNA evidence?

5. (a) Write about the homemade bombs and other Improvised Explosive Devices (IEDs).

  (b) State the instructions regarding the handling and disposal of bombs.

$(2 \times 10 = 20)$

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