

中央警察大學 105 學年度碩士班入學考試試題

所 別：刑事警察研究所

組 別：偵查科學組

科 目：刑事鑑識概論

作答注意事項：

1. 本試題共 4 題，每題各占 25 分；共 2 頁。
2. 不用抄題，可不按題目次序作答，但應書寫題號。
3. 禁用鉛筆作答，違者不予計分。

一、請解釋下列名詞：

- (一) R_f value
- (二) mitochondrial DNA
- (三) ppb
- (四) 乳化現象 (Emulsification)
- (五) medullary index (MI)

二、關於纖維跡證之特性及鑑識，請回答下列問題：

- (一) 天然纖維與人造纖維之差異為何？
- (二) 如何採證纖維跡證？
- (三) 哪些纖維特性可以有效比對？

三、Please answer the following two questions about forensic serology.

- (一) List and describe the forensic tests used to characterize a stain as blood.
- (二) Why would you perform presumptive serology tests? (Why not send blood stain evidence straight for DNA typing?)

四、A wide variety of scientific instruments or methodology has long been used in forensic analysis. Some are proved to be very useful and become an indispensable tool on the analyses of evidences. Please answer the following questions.

(一) Describe the value or function of the following techniques in forensic sciences:

1. Chromatography
2. Spectrophotometry
3. Microscopy
4. Immunoassay

(二) What types of evidence would be applicable using the above techniques? For each, propose at least two evidential examples and explain it.