

Enrollment No.....



## Faculty of Science

End Sem (Odd) Examination Dec-2022

FS3CO07 Forensic Dermatoglyphics

Programme: B.Sc. (Hons.)

Branch/Specialisation: Forensic  
Science**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

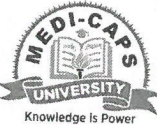
- Q.1 i. Fingerprints are created by- **1**  
 (a) Touch on a glass  
 (b) Transferring DNA from one object to another  
 (c) Ridges of the skin  
 (d) Very oily skin
- ii. Fingerprints are \_\_\_\_\_ characteristics. No two people have the identical ridge pattern. **1**  
 (a) Direct evidence (b) Class  
 (c) Collusion (d) An individual
- iii. The study of fingerprint is known as- **1**  
 (a) Entomology (b) Dactyloscopy  
 (c) Palynology (d) Trichology
- iv. The skin layer between the epidermis and dermis is the \_\_\_\_\_. **1**  
 (a) Cuticle (b) Subcutaneous  
 (c) Basal (d) Top
- v. The following forms finger ridges on finger- **1**  
 (a) Dermal cells (b) Minutiae  
 (c) Core (d) Delta
- vi. Sweat has highest concentration of- **1**  
 (a) Salt (b) Fatty Acid (c) Water (d) Urea
- vii. In which year AFIS system is fully developed- **1**  
 (a) 1999 (b) 1996 (c) 1991 (d) 1992
- viii. The final purple colour that is produced while developing latent fingerprint with ninhydrin is- **1**  
 (a) Reinberg purple (b) Ruheman's purple  
 (c) Rutherford purple (d) Ruby purple

- ix. Oldest optical method used for fingerprint development is \_\_\_\_\_. **1**  
 (a) Luminescence (b) Polylight source  
 (c) Alternate light source (d) Laser
- x. Which of the following is not one of the features that must be present in order for a fingerprint pattern to be classified as a loop pattern- **1**  
 (a) A minimum ridge count of one  
 (b) A ridge ending  
 (c) A core  
 (d) A delta

- Q.2 i. What is fingerprint? Write a note on forensic significance of fingerprint. **2**  
 ii. Give a detailed note on formation of ridges. **3**  
 iii. Write about all the collection methods for fingerprint. **5**  
 OR iv. Write about the scientists and their contribution in the field of forensic fingerprint. **5**
- Q.3 i. Differentiate between plastic fingerprint and latent fingerprint. **2**  
 ii. Explain the different fingerprint patterns. **8**  
 OR iii. What are minutiae? Explain the different forms of minutiae. **8**
- Q.4 i. What is class evidence? **3**  
 ii. Discuss about the single digit classification system. **7**  
 OR iii. What is ten-digit classification system? Explain. **7**
- Q.5 i. Write a detailed note on sweat composition. **4**  
 ii. Explain about developing method of latent fingerprint. **6**  
 OR iii. Discuss about the uses of alternative light sources for detection of fingerprint. **6**
- Q.6 Attempt any two:  
 i. Write about palm prints and their forensic significance. **5**  
 ii. What are lip prints? Explain its classification their characteristics. **5**  
 iii. Discuss about the ear prints and their forensic significance. **5**

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# Scheme of Marking

	<p style="text-align: center;">Faculty of Science End Sem (Odd) Examination Dec-2022 Forensic dermatoglyphics (FS3CO07)</p> <p>Programme: B.Sc. <span style="float: right;">Branch/Specialisation:</span></p>	
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**Note: The Paper Setter should provide the answer wise splitting of the marks in the scheme below.**

Q.1	i)	c. ridge of the skin	1
	ii)	d. individual	1
	iii)	b. dactyloscopy	1
	iv)	b. subcutaneous	1
	v)	a. dermal cells	1
	vi)	c. water	1
	vii)	a. 1999	1
	viii)	b. Ruheman's purple	1
	ix)	a. luminescence	1
	x)	b. a ridge ending	1
Q.2	i.	Definition Forensic significance - 2 prints	1 1
	ii.	process - complete process development	3
	iii.	Collection procedure - minimum - 5 prints	5
OR	iv.	Scientists and their contributions	5
Q.3	i.	Plastic fingerprint Latent fingerprint	1 1
	ii.	Fingerprint patterns	8
OR	iii.	Minutiae definition Various forms	2 6
Q.4	i.	definition	3
	ii.	Classification Explanation	3 4

OR	iii.	classification	7
Q.5	i.	Sweat definition composition	1 3
	ii.	Developing methods	6
OR	iii.	Different alternative source	6
Q.6	i.	Definition Forensic importance	2 3
	ii.	Definition classification	2 3
	iii.	Definition Forensic importance	2 3

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