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**SARDAR PATEL UNIVERSITY**

**M. Sc. (Forensic Science) – Second Semester Examination (CBCS)**

**Monday, 18<sup>th</sup> March, 2019**

**10:00 a.m. to 1:00 p.m.**

**PS02CFSC21: DNA Fingerprints and Laws (Criminal Justice System)**

**Total Marks: 70**

- Note: (1) Figures to the right indicate marks.  
 (2) Draw a neat and labeled diagram, wherever necessary.

**Q. 1 Choose the most appropriate answer from the four alternatives given: [08]**

- i. The proportions of whorl, loop and arch in the populations is .....  
 a) 5 : 65 : 35      b) 65 : 35 : 5      c) 35 : 65 : 5      d) 15 : 55 : 35
- ii. A method of taking the fingerprints using printers ink was developed by.....  
 a) Dr. Henry Faulds      b) Edmond Locard      c) Sir E. R. Henry      d) Thomas Taylor
- iii. ....biomolecule reduces osmium tetroxide in to osmium results in to black colour.  
 a) Aminoacids      b) Carbohydrates      c) Fatty acids      d) Nucleic acids
- iv. ....fingerprint pattern doesn't have delta.  
 a) Arches      b) Radial loop      c) Ulnar loop      d) All of these
- v. The fingerprint found on mud are lifted by.....method.  
 a) Casting      b) Cellotape      c) Powder      d) Chemical
- vi. In the classification, pair IV includes \_\_\_ index and \_\_\_ middle.  
 a) Right and Right      b) Right and Left      c) Left and Left      d) Left and Right
- vii. The facts bearing upon opinion of experts is under \_\_\_\_\_ section of IEA.  
 a) 46      b) 299      c) 293      d) 291
- viii. IPC section 415 stands for \_\_\_\_\_.  
 a) Forgery      b) Deformation      c) Criminal trespass      d) Cheating

**Q.2 Answer any SEVEN from the following: [14]**

- i. Differentiate between radial loop and ulnar loop.
- ii. Define the terms : Ridges and Creases.
- iii. How would you search fingerprints at crime scene?
- iv. What are chance prints?
- v. Diagrammatically explain ridge tracing.
- vi. Differentiate between culpable homicide and murder.
- vii. Write a short note on explosive act.
- viii. Enlist various methods for lifting of the fingerprints.
- ix. What is extortion?

- Q.3(a) What are the features of fingerprints. Explain any 4 in short. [6]  
(b) What purposes ridges serve in human life. [6]
- OR**
- (b) What are the importance of fingerprints? Discuss contribution of Sir Edward Richard. [6]
- Q.4(a) Explain silver nitrate and ninhydrin methods for the development of fingerprints. [6]  
(b) Describe procedure for taking rolled impression. [6]
- OR**
- (b) Give an overview of powder based methods for the development of fingerprints. [6]
- Q.5(a) Give an overview of Henery's system of classification. [6]  
(b) Discuss AFIS. [6]
- OR**
- (b) Discuss classification systems other than Henery's system. [6]
- Q.6(a) Discuss prison system in criminal justice. [6]  
(b) Explain the section 47, 299 and 375 of criminal justice system. [6]
- OR**
- (b) Give an overview of wildlife/ environment protection act. [6]

