AIBE - 2020

Full Marks: 100
Time Allowed: 3 Hrs.

Pass Marks: 60
Date 20.02.2021

Note: i) Answer maybe written in English or Hindi
    ii) All questions are compulsory.

Q.1 Fill in the blanks with suitable answers: (Marks 1 x 10)
i. Two qualities of ridge are ________ and ________.
ii. Ninhydrin solution reacts with the ____________.
iii. Depressions between the ridges are called ____________.
iv. ________ is called the father of Finger Print Science.
v. The decision of giving opinion on eight identical point was taken at ____ during the first biennial Forensic Science Conference in the year ______.
vi. Finger Print expert evidence U/s of law__________.
vii. The chance print developed on a mirror can be photographed by using ________ light.
viii. Write full form of NIST ________ and WSQ ________
ix. In human beings papillary ridges are found only on ________ and _______ surfaces.
x. Developing the chance prints by Cyanoacrylate fumigation produces ______ coloured prints.

Q.2 State whether true or false: (Marks: 1 x 10)
i. Palm Prints are not admissible evidence.
ii. Core and Delta are necessary for Finger Print comparison.
iii. Taking Finger Prints of a arrested persons is violation of constitutional rights.
iv. Ridge pattern on the finger of child are formed before birth.
v. Creases are not considered in finger print identification.
vi. Digitization of fingerprints is useful in easy data storage, search and retrieval.
vii. A plastic impression is a perfect negative reproduction of ridge structure.
viii. Chance print and latent print are one and the same.
ix. No two fingerprints are identical unless they are produced by the same finger of the same person.
x. The ridges persist from cradle to grave.
Q.3  Write the short note any four of the following pioneer of a F.P. Science:  
(Marks: 2.5 x 4)

i. Sir Francis Galton.
ii. Hemchandra Bose and Azizul Haque
iii. Importance of Quality Thumb/Finger Prints on Document cases.
iv. Finger printing of Juvenile in conflict with the Law.
v. Challenges before Indian police in achieving 100% Finger print Records of criminals.

Q.4  How to take finger prints in following conditions:  
(Marks: 3 + 3+4)

i. Where Dead body has been in the water for a longer time.
ii. When the skin of the fingers becomes shrunken and hard.
iii. Explain the sections of law under which fingerprints of arrested and convicted person is taken.

Q.5  i. What is NAFIS? Explain the salient features and utility of the system.  
(Marks: 5x2)

II. Write note on FED/Live Scanner Technology.

Q.6  Name the technique / method for development of fingerprints on the following:  
(Marks: 1x10)

i. Polished wooden table with layers of fine dust print.
ii. A partially burnt and melted wax candle.
iii. A multi colored metal box of sweets.
iv. On currency note.
v. Blood stained knife.
vii. Rear view mirror.
vii. Old paper.
viii Revolver.
ix. Greasy print.
x. Pepsi can.

Q.7.  i. Explain the use of fingerprints technology for civil purposes and its importance.  
(Marks: 5)

ii. The largest civil finger print data in India is available with UIADAI (ADHAAR). This Data is not available for the Police, why? Write your comments.  
(Marks:5)
Q.8. Define and draw the following: (Marks: 2.5x4)
   1. Central Pocket Loop.
   ii. Lateral Pocket Loop.
   iii. Accidental Pattern.
   iv. Tented Arch.

Q.9. What do you understand by the chance print? How many kinds of chance prints are found at the Scene of Crime? Describe each with examples. (Marks 10)

Q.10. (a) Classify the following (only Primary and Secondary) (Marks 5)

<table>
<thead>
<tr>
<th></th>
<th>RT</th>
<th>RI</th>
<th>RM</th>
<th>RR</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulnar Loop</td>
<td>Ulnar Loop</td>
<td>Whorl</td>
<td>Ulnar Loop</td>
<td>Central Pocket Loop</td>
<td>Ulnar Loop</td>
</tr>
<tr>
<td>LT</td>
<td>LI</td>
<td>LM</td>
<td>LR</td>
<td>LL</td>
<td></td>
</tr>
<tr>
<td>Ulnar Loop</td>
<td>Radial Loop</td>
<td>Whorl</td>
<td>Ulnar Loop</td>
<td>Whorl</td>
<td></td>
</tr>
</tbody>
</table>

(b) Criticize the following (Take Primary as Correct) (Marks 5)

5/19 rRa
aA