ALL INDIA BOARD EXAMINATION FOR F.P. EXPERTS -2014

Time Allowed: 3 Hrs.  Max Marks : 100
Dated:  15/11/2014  Pass Marks:  60

THEORY PAPER

N.B.
• Answers should be brief and to the point
• Answers may be given in Hindi / English
• Each question carries 10 marks.

Q.1 Fill in the blanks
   a) Dust prints are directly....................
   b) If all the right hand fingers bear whorl patterns and all the left hand bear loop patterns, the
      primary classification is..................
   c) Depression between the two ridges is called ________________
   d) Two qualities of ridges are________________________and________________________
   e) A gap caused in a ridge by some foreign matter is called _____________
   f) The webbing of the fingers is called ______________
   g) The most commonly found pattern in all digits is ________________________
   h) Fingerprint evidence is________________________
   i) __________________ are not visible in forged prints even on magnification.
   j) Ridge characteristics are also known as ______________________

   (1x10)

Q. 2 State True or False
   (a) Central pocket loop is the three types of the loop patterns.
   (b) Palm prints are not admissible evidence.
   (c) Lifting of prints in a scene of crime is done where there is no chance for photography.
   (d) Ridges are formed after birth.
   (e) Finger prints can be forged successfully.
   (f) Core and Delta are necessary for identification.
   (g) No two fingerprints are identical unless they are produced by the same
       finger of the same person.
   ( h) With plain finger prints, the rolled finger prints can be verified.
   (i) With advancement of age fingerprints also change.
   ( j) Taking of finger Prints of an arrested person will infringe constitutional rights.

   (1X10)
Q. 3 How will you develop chance prints on the following articles?

a) On currency note
b) Rear view mirror of a car
c) A transparent glass tumbler
d) Black Polythene bag
e) White Painted Door
f) Mirror
g) Bottle smeared with oil
h) Black shining body of a Mobile
i) Steel knob of a car
j) Old Documents

Q.4 Criticize the following formula taking primary as correct.

(a) \[ \frac{32}{32} U-a \]

(b) Write in brief about the Automated Finger Print Identification System (AFIS)

Q. 5 Find the primary classification formulae of the following for Record. & Search

<table>
<thead>
<tr>
<th>Right Thumb</th>
<th>Right Index</th>
<th>Right Middle</th>
<th>Right Ring</th>
<th>Right Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>Radial Loop</td>
<td>Plain Arch</td>
<td>Missing</td>
<td>Whorl</td>
</tr>
<tr>
<td>Left Thumb</td>
<td>Left Index</td>
<td>Left Middle</td>
<td>Left Ring</td>
<td>Left Little</td>
</tr>
<tr>
<td>Whorl</td>
<td>Ulnar Loop</td>
<td>Whorl</td>
<td>Missing</td>
<td>Missing</td>
</tr>
</tbody>
</table>

Q.6. Draw the diagrams of the following

(i) Platform ridge
(ii) Accidental Pattern
(iii) Any four ridge characteristics
(iv) Delta by Divergence
(v) Crested loop

Q.7 Write the correct answer.

I. Printers ink is most suitable for taking fingerprints because

(i) it does not run into furrows
(ii) It dries up quickly
(iii) It gives a good contrast
(iv) All of the above
II. Pores are
   (i) 1\textsuperscript{st} level ridge details
   (ii) 2\textsuperscript{nd} level ridge details
   (iii) 3\textsuperscript{rd} level ridge details
   (iv) None of the above

III. Which of the following is a valued pattern?
   (i) Radial Loop
   (ii) Central Pocket Loop
   (iii) Ulnar loop
   (iv) Tented Arch

IV. Which of the following is superglue?
   (i) Ninhydrin
   (ii) Cyanoacrylate
   (iii) Silver Nitrate
   (iv) Iodine Fuming

V. Which of the following are chance prints?
   (i) Visible prints
   (ii) Plastic prints
   (iii) Latent prints
   (iv) All of the above

Q.8 Answer the following (Any four)
(a) When and how Diapositive method of photography techniques applied in fingerprint work?
(b) Under what section of law a convict is finger printed?
(c) Is it possible to determine the sex of a person from the fingerprints?
(d) What are different oddities found in fingers of human hands?
(e) What is the difference between latent print and an inked print?

Q.9 Write short notes on (Any four)
(a) Finger print Enrolment Device (FED)
(b) Gradational Patterns
(c) Fingerprints and law of probability
(d) Sir Francis Galton
(e) Sir E R Henry
(f) NIST and WSQ

Q.10 (a) What are the functions of Finger Print Bureau? (5)
   (b) How will you record fingerprints of a dead body in which rigor mortis has set in? (5)