

**ALL INDIA BOARD EXAMINATION FOR F.P. EXPERTS -2012**

**Time Allowed: 3 Hrs.**  
**Dated: 24.11.2012**

**Max Marks : 100**  
**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). Developing the Chance prints by Cyanoacrylate crystals produces ..... coloured prints
- b). Two associates of Sir E.R. Henry ..... and ..... had been accepted as two ..... pioneers of Finger Print Science
- c) The first horizontal ridge upon which the vertical trend is found on a tented arch is called ..... ridge.
- d) The first Finger Print Bureau of the world was established in ..... in the year.....
- e) The system immediately in use before the finger print system was .....
- (f) Ninhydrin Solution reacts with the.....
- g) The most commonly found pattern in all digits is .....
- h) The colour of ridges exhibited on spraying Leuco Malachite green on blood print 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) Palm Prints cannot be used for the purpose of personal identification.
- (b) Core and delta are necessary for fingerprint comparison.
- (c) Chance print and latent print are one and the same.
- (d) With advancement of age fingerprints also change.
- (e) The most commonly found ridge characteristics in fingerprints is enclosure.
- (f) One single point of non- identity is sufficient to prove the non-identity between two prints.
- (g) No two fingerprints are identical unless they are produced by the same finger of the same person.
- (h) Identical twins have identical fingerprints.
- (i) Ridges change after death.
- (j) Taking finger prints of an arrested person is violation of the constitutional rights.

**(1X10)**

**Q. 3 How will you develop chance prints on the following articles?**

- a) Cover page of a multi-colored magazine
- b) Broken eggshell of a boiled egg.
- c) Black shining body of a Mobile
- d) Black coloured tile
- e) Mirror
- f) Blood stained knife
- g) White paper
- h) Steel knob of a car
- i) Inside a transparent glass tumbler
- j) White Enameled plate

(1X10)

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

(a)  $\frac{9}{2} \quad \frac{U-a}{Rtr}$  (5)

**(b) How will you record finger prints of a dead body in which rigor mortis has set in?** (5)

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

<b>Right Thumb</b>	<b>Right Index</b>	<b>Righ Middle</b>	<b>Right Ring</b>	<b>Right Little</b>
Ulnar loop	Whorl	Ulnar loop	Whorl	Amputed
<b>Left Thumb</b>	<b>Left Index</b>	<b>Left Middle</b>	<b>Left Ring</b>	<b>Left Little</b>
Amputed	Amputed	Whorl	Ulnar loop	Amputed

(10)

**Q.6. Draw the diagrams of the following**

- (i) Twinned loop
- (ii) Central Pocket loop
- (iii) Tented Arch
- (iv) Delta by Divergence
- (v) Enclosure

(2 X5)

**Q.7 Write short notes on (Any four)**

- (i) Platform Ridge
- (b) Gradational Patterns
- (c) Minutiae or ridge Characteristics
- (d) Nascent ridges
- (e) Ninhydrin method for development of latent Prints
- (f) NIST and WSQ
- (g) Live Scanner

(2 1/2 X4)

**Q.8 Answer the following (Any four)**

- (a) Under what section of law you can take the finger prints of a convict?
- (b) Why Plain prints are taken on a Finger print Slip?
- (c) Who is an expert in accordance with the provision of law?
- (d) Which ink is considered highly suitable for taking finger prints and why?
- (e) Is there any difference in the ridge characteristics of twins?

**(2 1/2x4)**

**Q .(9) Write the correct answer.**

**I. Delta is also known as**

- (i) Inner Terminus
- (ii) Outer Terminus
- (iii) Upper terminus
- (iv) Lower Terminus

**II. In twinned loop there is/are**

- (i) No delta
- (ii) One delta
- (iii) Two deltas
- (iv) Three deltas

**III. In India, for fixing the identity between two prints, the number of ridge characteristics required in their relative position is**

- (i) 16
- (ii) 17
- (iii) 12
- (iv) 8

**IV. Which of the following is superglue?**

- (i) Cyanoacrylate
- (ii) Ninhydrin
- (iii) Silver Nitrate
- (iv) Iodine Fuming

**V. Who first gave the idea of tracing a chance print through finger Prints?**

- (i) Sir Henry Faulds
- (ii) Sir E.R. Henry
- (iii) Sir Francis Galton
- (iv) Sir William Herschel

**(2X5)**

**Q.10 (a) What are the defects found in a forged print?**

**(5)**

**(b) Write in brief about the Automated Finger Print Identification System (AFIS). (5)**