

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

Right Thumb	Right Index	Righ Middle	Right Ring	Right Little
Ulnar loop	Whorl	Ulnar loop	Whorl	Amputed
Left Thumb	Left Index	Left Middle	Left Ring	Left Little
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)**