

## SOMATOSCOPY

①

### EARS

#### ① DARWIN'S TUBERCLE

- This is evaluated from the head profile view in Frankfurt horizontal plane.
- The presence of tuberculum auriculae upon the helix is evaluated :-

- ① present
- ② missing

#### ② EAR LOBES

- Attachment of an ear lobe to a cheek.

- ① present
- ② absent

- Size = long, Medium, Short
- Shape = Tongue shaped  
Triangular  
Square  
Arched

#### ③ SUPRA - ORBITAL RIDGES

#### ③ EAR BREADTH OR PHYSIOGNOMIC EAR BREADTH.

Result of this measurement is the straight distance in-between the two most lateral points of the ear, where one point lies at the base of the ear and other point lies at the posterior border of the ear cartilage.

#### ④ CIRCUMFERENCE OF THE HEAD (Horizontally)

This measurement shows the max. circumference of the head in horizontal position. One end of the steel tape is held on glabella (g) by left hand. The other end is held with right hand and taken round following the opisthocranium (op)

and again taken back to glabella (g). [g-op]

#### ⑤ SCAR MARKS AND OCCUPATIONAL MARKS

Scars - A scar is fibrous tissue produced as a result of healing of wound and it is covered by epithelium devoid of hair follicles, sweat glands or pigments.

#### Identification by Scars

- ① Incised wound = linear
- ② Lacerated wound = Irregular
- ③ Stab wound = oval, elliptical or triangular
- ④ Burns or corrosive chemicals = Irregular
- ⑤ Vaccinations = Circular, oval, flat or slightly elevated

Occupational Marks - Occupational marks are produced on the skin of a person in response to the particular type of occupation. These marks include callosities, prick marks, burns, scorched skin, skin diseases etc.

- Guitarist, Rickshaw pullers = Callosities
- Tailors = Callosities and prick marks
- Handling of chemicals, cements, oil, drug, medicines, tobacco = Dermatoses

#### SOMATOMETRY

##### ① HEAD

- ① • Maximum Head length = Straight distance from glabella (g) to opisthocranium (op).
- ② Max. Head Breadth = <sup>straight</sup> Distance between two eurya (eu) i.e. euryon to euryon.
- ③ Head Height = Projective distance between tragion (t) and vertex (v).



like (g). Ig-op-  
issue produced as a  
nd it is covered  
follies, sweat glands

## FACE Total

- (1) Facial Height = Straight distance b/w Nasion (n) and gnathion (gn).  
(2) Upper Facial Height = Straight distance in between nasion (n) and prionthion (pr).

## (3) NOSE

- (a) Nasal Height = Straight distance b/w nasion (n) and subnasale (sn).  
(b) Nasal Breadth = Straight area b/w two alaria (al).  
(c) Nasal Depth = Straight distance from the tip (prionthion) to the hind-most point of nasal septum.

## (4) EAR

- (a) Ear length = Superaurale (sa) and subaurale (sb).  
(b) Ear breadth = Already covered.

- (5) BODY WEIGHT = Weight should be taken by means of standard weighing machine with fine accuracy. It should be taken with minimum clothes and barefoot.

## (6) HAND and ARM

- (a) Arm length = acromion (a) and dactylion (da).  
(b) Length of upper arm = acromion (a) and radiale (r).  
(c) Length of forearm = radiale (r) and dactylion (da).  
(d) Length of hand = stylium (sty) and dactylion (da).

## (7) FOOT

- (a) Length of Foot = Acropodion to pteronion  
(b) Breadth of Foot = Metatarsal-tibiale and Metatarsal-fibulare

⑧ Height / Stature .

#### INDICES

① CEPHALIC INDEX  $\bar{E}$  (gives the idea about the length & breadth of skull.)

$$CI = \frac{BPD}{OFD} \times 100$$

$\left\{ \begin{array}{l} BPD = \text{Biparietal diameter} \\ OFD = \text{Occipitofrontal dia.} \end{array} \right\}$

Cephalic index also referred to as cranial ratio

② Nasal Index (to differentiate sexual, ethnic, and racial changes)

$$NI = \frac{\text{Nasal Width}}{\text{Nasal Height}} \times 100$$

③ Cranial Index same as Cephalic Index

④ Upper Facial Index = (Sex determination)

$$UFI = \frac{\text{Upper facial height}}{\text{Bizygomatic breadth}} \times 100$$