Identification:

ISHITA KANODIA

Identification: determination of the individuality of a person based on certain physical characteristics ⟹ exact fixation of personality.

→ Identification is required in:

- living persons
- recently dead persons
- decomposed bodies
- mutilated & burned bodies
- skeleton

Corpus Delicti: Body of offence / Essence of Crime.

→ the facts of any criminal offence (eg: murder)

Identification Data:

i) Race & religion
ii) Sex
iii) Age
iv) General development, stature
v) External peculiarities
vi) Complexion & features
vii) Anthropometric measurements
viii) Fingerprints, Footprints
ix) Teeth
x) Personal effects (clothing / jewellery)
xi) Handwriting
xii) Speech & voice
xiii) Gait, mannerism, habit
xiv) Memory & education.

Race:

1] Complexion:
- Indians ⟹ Brown
- Europeans ⟹ Fair
- Negroes ⟹ Black

2] Eyes:
- Indians ⟹ dark
- Europeans ⟹ blue/green.

ISHITA KANODIA

3] Hair:

- Indians ⟹ black, thin hair
- Europeans ⟹ fair / light-brown / reddish
- Mongolians ⟹ coarse & dark
- Negroes ⟹ woolly hair

4] Clothes

5] Skeleton: Cephalic index (C.I.) = $\frac{\text{Maximum breadth of skull}}{\text{Maximum length of skull}} \times 100$

(breadth → between both parietal eminences; length → between glabella & external occipital protuberance.)

- Dolico-cephalic (long-headed) ⟹ CI: 70-75 ⟹ Negroid
- Mesati-cephalic (medium-headed) ⟹ CI: 75-80 ⟹ Caucasoid
- Brachy-cephalic (short-headed) ⟹ CI: 80-85 ⟹ Mongoloid.

Sex: best bone for sex determination = pelvis.

→ has to be determined in case of: • heirship • marriage • divorce • legitimacy • impotence • rape

1] Sex Chromatin: single specimen of buccal smear / saliva / hair follicle

→ Quinacrine dihydrochloride stains Y chromosome (bright fluorescent body in the nuclei of male cells)

→ Fluorescent Fluelgen reaction using acriflavin Schiff reagent for X chromosomes (bright yellow spot in nuclei).

→ Sex chromatin cannot be made out in decomposed bodies.

2] Intersex: intermingling, in one individual, of characters of both sexes in varying degrees, including physical form, reproductive organs & sexual behaviour.

→ results from some defects in embryonic development.

ISHITA KANODIA

→ 4 groups:

i) Gonadal Agenesis: testes/ovaries have never developed.

ii) Gonadal Dysgenesis: external genital organs are present, but testes/ovaries fail to develop at puberty.

Klinefelter's Syndrome:
- male anatomical structure, female nuclear sexing.
- 47 chromosomes (XXY).

Turner's Syndrome:
- female anatomical structure, male nuclear sexing.
- 45 chromosomes (XO).

iii) True Hermaphroditism: condition of bisexuality in which an ovary & a testicle or 2 ovotestis are present with the external genitalia of both sexes.

iv) Pseudo-hermaphroditism: gonadal tissue of only one sex is seen internally, but external appearance is of the opposite sex.

	Male	Female
Gonads	Functioning testis, penis, prostate.	Functioning ovary, uterus, vagina
Build	Larger, ↑ muscular development.	Smaller, ↓ muscular development.
Shoulders	Broader than hips.	Narrower than hips.
Waist	Ill-defined.	Well-defined.
Trunk	Abdominal segment smaller.	Abdominal segment longer.
Thorax	Dimensions more.	Shorter & rounded.
Limbs	Longer.	Shorter.
Arms	Flat on section.	Cylindrical on section.
Thighs	Cylindrical.	Conical (greater fat deposition).
Gluteal region	Flatter.	Full & rounded.
Wrists, ankles	Not delicate.	Delicate.
Breasts	Not developed.	Developed.
Pubic hair	Thick & extends upwards to umbilicus (rhomboidal).	Thin, horizontal, covers mons veneris only (triangular).

3] **Skeleton:** determination of sex is based mainly upon the appearances of the pelvis, skull, sternum & long bones.

→ pelvis is the most accurate single bone for sex determination.

General Skeletal Features:

	Male	Female
General size	Larger, more massive	Smaller, slender.
Long bones	Ridges, depressions & processes are more prominent.	Less prominent.
Shaft	Rougher	Smoother, thinner.
Articular surfaces	Larger	Smaller.
Metacarpal bones	Longer & broader	Shorter & narrower.
Weight	4.5 kg.	2.75 kg.

Skull:

	Male	Female
General appearance	Larger, longer (dolichocrania).	Smaller, rounder (brachycrania).
Capacity	1500 – 1550 ml.	1350 – 1400 ml.
Architecture	Rugged (muscle ridges ↑ marked).	Smooth.
Forehead	Steeper, less rounded.	Vertical, round, full, infantile.
Glabella	Rough & more prominent.	Smooth, small or absent.
Frontonasal junction	Distinct angulation.	Smooth, curved.
Orbits	Square, low-set, relatively smaller, rounded margins.	Rounded, high-set, relatively larger, sharp margins.

	Male	Female
Supraorbital ridges	Prominent & rounded.	Less prominent, sharper or absent.
Cheek bone	Heavier, laterally arched.	Lighter, more compressed.
Zygomatic arch	More prominent.	Less prominent.
Nasal aperture	Higher & narrower.	Lower & broader.
External auditory meatus	Bony ridge along upper border is prominent.	Often absent.
Frontal eminences	Small.	Large.
Parietal eminences	Small.	Large.
Mastoid process	Wider, longer, round, blunt.	Narrow, short, smooth, pointed.
Digastric groove	More deep.	Less marked.
Occipital condyles	Large.	Small.
Foramina	Larger.	Smaller.
Foramen magnum	Relatively large & long.	Relatively small & round.
Teeth	Larger.	Smaller.

Mandible:

	Male	Female
General size	Larger & thicker	Smaller & thinner.
Chin	Square (U-shaped)	Rounded.
Body height	At symphysis ⇒ greater	At symphysis ⇒ smaller.
Ascending ramus	Greater breadth	Smaller breadth.
Angle of body & ramus	Less obtuse (< 125°), prominent & everted.	More obtuse, not prominent, inverted.
Condyle	Larger.	Smaller.
Mental tubercle	Large & prominent.	Insignificant.

Pelvis:

ISHITA KANODIA

	Male	Female
General	Deep funnel.	Flat bowl.
Ilium	Less vertical.	More vertical.
Preauricular sulcus	Not frequent ; narrow, shallow	More frequent, broad, deep.
Acetabulum	Large (d ≈ 52 mm), directed laterally, deeper.	Small (d ≈ 46 mm), directed anterolaterally, narrower.
Obturator foramen	Large, oval, base upwards.	Small, triangular, apex forwards.
Greater sciatic notch	Smaller, narrower, deeper.	Larger, wider, shallower.
Iliopectineal line	Well-marked & rough.	Rounded & smooth.
Ischial tuberosity	Inverted.	Everted.
Ischiopubic rami	↑ everted, thicker, rougher.	↓ everted, thinner, smoother.
Symphysis	Higher, bigger & narrower (in width).	Lower, wider & rounded (↑ distance between 2 pubic tubercles).
Subpubic angle	V-shaped (~ 70-75°).	U-shaped (~ 90-100°).
Pelvic brim/inlet	Heart-shaped.	Circular/elliptical.
Pelvic cavity	Conical, funnel-shaped.	Broad & round.
Pelvic outlet	Smaller.	Larger.
Sacrum	Longer, narrower; promontory well-marked.	Shorter, wider; Promontory is less marked.
Coccyx	Less movable.	More movable.
Ischiopubic index	73-94.	91-115.
Sciatic notch index	4-5.	5-6.

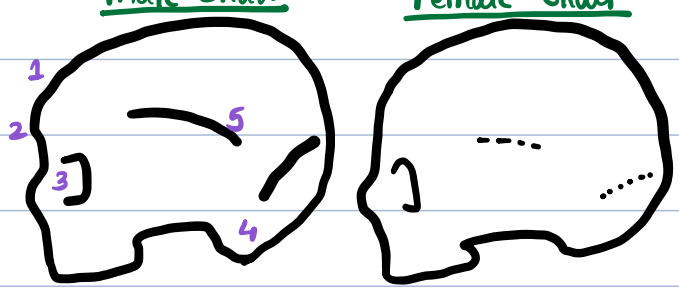
ISHITA KANODIA

$$\text{Ischiopubic index} = \frac{\text{Pubic length (mm)}}{\text{Ischial length (mm)}} \times 100$$

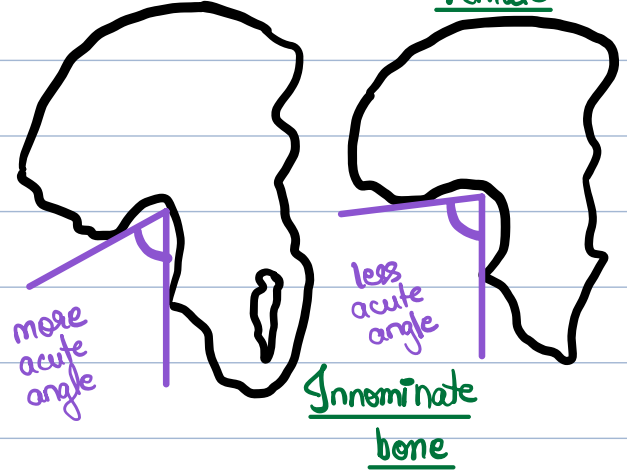
$$\text{Sciatic notch index} = \frac{\text{Width of sciatic notch}}{\text{Depth of sciatic notch}} \times 100$$

Femur:

	Male	Female
Head	Larger; 2/3 of sphere. ($d \approx 47$ mm).	Smaller. < 2/3 of sphere. ($d \approx 45$ mm).
Neck	forms obtuse angle with shaft ($\sim 125°$).	angle subtended is less obtuse.
Bicondylar width	74 - 89 mm (↑).	67 - 76 mm (↓).



1 = receding forehead
2 = prominent glabella
3 = square orbits
4 = large mastoid process
5 = prominent muscle ridges.



Age: determined from ← teeth, ossification of bones, secondary sex characters, general development (children)

ISHITA KANODIA

I] Teeth: alveolar cavities are formed around 3-4 months of IUL.

	Temporary Teeth	Permanent teeth
Size	Smaller, lighter, narrower (except: temporary molars ⟹ longer than permanent)	Heavier, stronger, broader (except: permanent premolars replacing temporary molars are smaller)
Direction	Anterior teeth are vertical	Anterior teeth are usually inclined a little forwards.
Crown	China-white colour	Ivory-white colour
Neck	More constricted	Less constricted
Root	Roots of molar are smaller & more divergent	Roots of molars are larger & less divergent
Ridge	Ridge at the junction of the crown with fangs is present	No ridge
Number	20 (4I, 2C, 4M in each jaw)	32 (4I, 2C, 4PM, 6M in each jaw)

Gustafson's method: age estimation of adult > 21 years depends on the following physiological changes in dental tissues: AP SRTC

i) **Attrition:** due to wear & tear from mastication ⟹ occlusal (upper) surface of the teeth is destroyed gradually.

ii) **Periodontosis:** regression of the gums & periodontal tissues surrounding the the teeth occurs in advancing age ⟹ teeth become loose & fall off.

iii) **Secondary dentin:** may develop from the walls within the pulp cavity ⟹ decrease in size of cavity (occurs due to ageing).

iv) Cementum apposition: cementum ↑ in thickness (due to changes in tooth position)

→ Secondary cementum is slowly & continuously deposited throughout life in the form of incremental lines ⟹ age can be calculated by counting these.

v) Root resorption: involves both cementum & dentin

vi) Transparency of root: not seen until 30 years of age.

→ Canals in the dentin are gradually filled by mineral ⟹ they become translucent ∴ dentine becomes transparent due to rarefaction.

→ Transparency of root occurs from below upwards in lower jaw & from above downwards in upper jaw.

Eruption of deciduous teeth:

Central incisor	• Lower	6 – 8 months
	• Upper	7 – 9 months
Lateral incisor	• Upper	7 – 9 months
	• Lower	10 – 12 months
First molar		12 – 14 months
Canine		17 – 18 months
Second molar		20 – 30 months

Eruption of permanent teeth:

ISHITA KANODIA

1st molar	6-7 years
Central incisor	6-8 years
Lateral incisor	7-9 years
1st premolar	9-11 years
2nd premolar	10-12 years
Canine	11-12 years
2nd molar	12-14 years
3rd molar	17-25 years

Boyde's Method: cross-striations develop in the enamel of teeth till the complete formation of enamel ⟹ represent daily incremental lines.
→ age of an individual can be calculated in terms of days by counting the number of lines from the neonatal line onwards.

Stack's Method: estimation of age of infants from the weight & height of the erupting teeth of child.

II] Ossification of Individual Bones:

Wrist Joint:

Ossification Centre	Age of Appearance	Age of fusion
Lower end of radius	2 years	18-19 years
Lower end of ulna	6 years	17-18 years

Ossification Centre	Age of Appearance	Age of fusion
Carpal bones		
C • Capitate	2nd month	–
H • Hamate	3rd month	–
T • Triquetrum	3rd year	–
L • Lunate	4th year	–
S • Scaphoid	5th year	–
T • Trapezium	5th year	–
T • Trapezoid	6th year	–
P • Pisiform	10 - 12 years	–
Base of 1st metacarpal	3rd year	15 - 17 years
Phalanges	5 - 7 years	16 - 18 years

Pelvis:

Ossification Centre	Age of Appearance	Age of fusion
Upper end of femur		
• Head	6 months – 1 year	} 17 - 18 years
• Greater trochanter	4 years	
• Lesser trochanter	12 - 14 years	
Ischio-pubic ramus	–	Union: 6 - 7 years
Tri-radiate cartilage ossification	Commences at 13 years	Completes at 15 years
Iliac crest	14 - 16 years	20 years
Ischial tuberosity	16 - 18 years	21 years

Pelvimetry:

1) Sciatic index = $\frac{\text{Width of sciatic notch}}{\text{Depth of sciatic notch}}$ { Male: 4-5, Female: 5-6

2) Ischiopubic index = $\frac{\text{Length of pubis}}{\text{Length of ischium}}$ { Male: < 90, Female: > 94

3) Sacral index = $\frac{\text{Breadth of sacrum}}{\text{Anterior length of sacrum}}$ { Male: < 122, Female: > 116.

From femur:

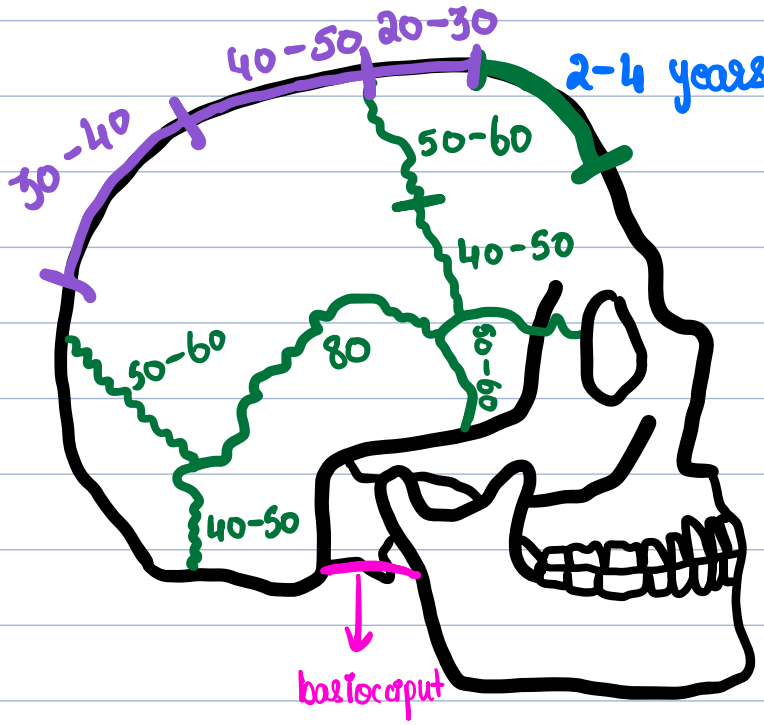
Height = total length of femur × 3.5 + 2.5 (for soft tissue attachments.)

Ossification Centre	Age of Appearance	Age of fusion
Lower end of femur	9 months IUL	—
Upper end of tibia	At birth	16 - 18 years
Upper end of fibula	4th year	16 - 18 years

Humerus:

Ossification Centre	Age of Appearance	Age of fusion
Head	1st year	16 - 18 years
Greater tubercle	2nd year (fuse with each other after 5 years)	16 - 18 years
Lesser tubercle	5th year (fuse with each other after 5 years)	16 - 18 years
Acromion	14 - 16 years	18 years
Coracoid Process	3 years	16 - 18 years

ISHITA KANODIA



2-4 years → metopic suture.

To measure volume of the skull ⇒ pour sand.

Total height:

Humerus	20%
Tibia	22%
Fibula	22%
Femur	27%.

basiocaput & basisphenoid suture ⇒ 18-20 yrs.

→ If outer sutures are not fused ⇒ check inner sutures.
→ Inner sutures: not fused < 25 years
fused > 25 years.
→ Infant skull: closure of – posterior fontanelle = 6-8 months
– anterior fontanelle = 18 months.

Sacrum

Coxpobasal index = Breadth of body / Breadth of base

{ Male: > 45
Female: < 40

Medicolegal Importance of Age:

I] 1 year: Infanticide

II] 5 years: According to Sec. 6 (a) of the Hindu Minority & Guardianship Act 1956, a minor who has not completed the age of 5 years shall ordinarily be in the custody of the mother.

III] 7 years: According to s. 82 IPC, child < 7 years is not capable of committing a crime ⇒ because child cannot be guilty (not attained Mens rea).

I] 12 Years:

→ s. 83 IPC: crime committed by a child between 7-12 years of age is not an offence, if he hasn't attained sufficient maturity of understanding.

→ s. 89 IPC: age of consent for general physical examination.

→ Unsworn evidence of a child < 12 years is admissible if the court thinks he does not understand the nature of an oath.

→ According to Child Labour Act, a child under 12 years of age should not be engaged as a servant in shops.

II] 14 Years:

→ According to Indian Factory Act, a person < 14 years of age should not be employed in any factory / mine.

III] 16 Years:

→ Age of consent for sexual intercourse in females has been raised from 16 years to 18 years of age.

→ Statutory Rape: (s. 375 IPC) sexual intercourse with a girl below 16 years of age even with her consent amounts to rape.

→ According to the Indian Arms Act, a person < 16 years of age cannot keep any firearm or ammunition in his possession.

→ Age for Juvenile (under Juvenile Justice Act) has been lowered from 18 to 16 years.

ISHITA KANODIA

IV] 18 Years:

→ According to the Juvenile Justice Act 2000 ⟹ any person between 12 & 18 years of age, who has committed an offence, is criminally responsible but is not to be treated as an adult person & should be dealt under Juvenile Legislation.

→ According to s. 300 IPC under exception 5 ⟹ culpable homicide is not murder, when the person whose death is caused, being > 18 years of age, suffers death or takes the risk of death with his own consent.

→ According to s. 305 IPC ⟹ If any person under 18 years of age (insane / debaious / idiot / intoxicated) commits suicide, whoever abets the commission of such suicide, shall be punished with death / imprisonment for life / imprisonment for a term not exceeding 10 years.

→ Age of voting in India.

→ Age of consent for sexual intercourse in females.

→ Age of marriage for girls.

→ Age of consent for surgery / any diagnostic or therapeutic procedures which may have inherent risks of causing death / grievous hurt.

→ According to MTP Act 1971, a pregnant woman < 18 years cannot give consent for termination of pregnancy ∴ husband / guardian must give written consent for the same.

→ Person of age 18 years & above only can make a valid will.

→ According to Section 2(F) of the Transplantation of Human Organs Act 1994 ⟹ a person > 18 years only can donate one of his paired organs for transplantation.

V] 25 Years:

→ minimum age eligibility to contest for membership of Parliament & membership of Legislative Assembly of State.

VI] 30 Years:

→ minimum age to consent for membership of Rajya Sabha & State Legislative Council.

VII] 35 Years:

→ minimum age for contesting in the election for the post of Vice President & President of India & Governor of any state.

ISHITA KANODIA

Age of Foetus:

→ Developing ovum = first 7–10 days after conception.

→ Embryo = 1st week – 8th week

→ Foetus = 8th week – birth.

Rule of Hasse: length of foetus is measured from the crown to heel in cm.

→ In the first 5 months of pregnancy ⇒ square root of length = age of foetus in months.

→ Hasse's modification of Morrison's Law: During the last 5 months ⇒

$$\frac{\text{length (cm)}}{5} = \text{age in foetus in months.}$$

Stature: after the age of 30 ⇒ the process of senile degeneration causes gradual decrease in stature ~ 0.6 mm per year.

Anthropometry (Bertillon System): based on the principle that after the age of 21 years, dimensions of the skeleton remain unchanged.

→ Data recorded – descriptive data
– body marks
– body measurements

→ this system has been replaced by dactylography.

Dactylography: fingerprint system / dermatoglyphics

→ study of ridge patterns in the skin.

→ Principle: fingerprints are impressions of patterns formed by the papillary or epidermal ridges of fingertips.

→ ridge patterns of fingers appear between 12–16 weeks of IUL.

→ **Classification:**
- Loops < radial, ulnar
- Arches < plain, tented, exceptional
- Whorls < concentric, spiral, double spiral, almond-shaped
- Composite < central pocket loops, lateral pocket loops, twinned loops, accidentals

→ patterns are not inherited & paternity cannot be proved.
(pattern is different even in identical twins)

Poroscopy: further study of fingerprints ⟹ examines pores on fingers.
→ ridges on fingers & hands are studded with microscopic pores, formed by mouths of ducts of subepidermal sweat glands.
→ this method is useful when only fragments of fingerprints are available.

Mutilation of fingerprints: criminals attempt to mutilate the pattern by self-inflicted wounds / burns or application of corrosives ⟹ but they are not destroyed unless the true skin is completely destroyed.
→ Impairment of fingerprint pattern is seen in:
- coeliac disease
- leprosy
- eczema
- electric injury
- application of corrosives
- exposure to radiation.

Lipprints (Cheiloscopy): fissures & grooves on the lips are characteristic of the individual.
→ patterns: – vertical – intersected – branched – reticular, etc.

Scars: fibrous tissue covered by epithelium without hair follicles, sweat glands or pigments, produced from healing of a wound.
→ injury to the dermis produces a scar.
→ Scars are permanent.

→ Good lighting is essential for the examination of scars.
→ Scars may indicate the type of injury which produced them
- incised wounds ⇒ linear scar.
- secondary healing ⇒ wider & thicker scars
- laceration ⇒ scars are irregular, more prominent, adherent to deeper tissues

→ scars produced in childhood grow in size.
→ scars can be erased by excision & skin grafting.

MLI:

→ important marks of identification in a person.
→ shape of the scar may indicate the nature of the weapon/agent that caused the injury.
→ age of the scar is important in a criminal offence.
→ linea albicantes may indicate previous pregnancy.
→ disfigurement due to scars amounts to a grievous hurt.
→ the accused may attribute scars of wounds to disease/therapeutic procedures.

Tattoo Marks: designs made in the skin by multiple small puncture wounds with needles or an electic vibrator dipped in colouring matter.

→ commonly used dyes:
- India ink
- Carbon black
- Indigo
- Cinnabar/vermillion (red)
- chromic acid (green)
- Prussian blue.

Erasing Tattoo Marks: If the pigment has been deposited below the epidermis, it will very slowly become fainter over the years.

→ If the dye is deposited into the deeper layers of dermis ⟹ it will be removed by phagocytes.

1] **Surgical Methods:** – complete excision & skin grafting
– production of burn by means of a red hot iron
– scarification
– Carbon dioxide snow.

2] Electrolysis

3] Caustic substances

4] Lasers beam

MLI:

→ useful as identification marks in a person.
→ religion
→ God of worship
→ Culture / life-style
→ presence of indecent figures ⟹ perversion.
→ gang members may wear a tattoo of allegiance & symbolism.
→ illicit drug users may have tattoos to obscure injection sites.

Hair: (Trichology = study of hair) Hair grows at ~ 0.4 mm / day.

	Human hair	Animal hair
Character	Fine & thin	Coarse & thick
Cuticle	Cuticular scales ⇒ broad, short, thin & irregularly annular	Cuticular scales ⇒ very large & have step-like / wavy projections
Cortex	Thick, well-striated, 4–10 times as broad as medulla	Thin, not more than twice as broad as medulla
Medulla	Narrow, continuous / fragmented, may be entirely absent	Continuous & wider
Pigment	Evenly distributed	Mostly present in the medulla
Precipitin test	Specific for human	Specific for different animals
Medullary index	< 0.3	> 0.5

$$\text{Medullary index} = \frac{\text{diameter of medulla}}{\text{diameter of shaft}}$$

MLI:

→ hair is important in crime investigation, as it remains identifiable on the clothes, body & alleged weapons for a long time.

- motor vehicles responsible for injuries may be identified by the detection of hair on the vehicle.
- In rape & sodomy ⇒ pubic hair of the accused may be found on the victim.

→ Stains on hair may indicate the type of offences (mud stains ⇒ struggle, seminal stains ⇒ sexual offences, salivary stains, etc.)

→ Nature of weapon can be made out from the injuries to the hair & bulb.
→ Hair is useful in identification (particularly in case of dyeing / bleaching / artificial waving).
→ Age of a person may be determined from the growth of hair on different parts of the body.
→ Sex may be determined from the pattern of hair distribution on the body.
→ Singeing of hair ⇒ burns / close-range firearm injury.
→ helpful in differentiating scalds from burns.
→ Chronic poisoning with heavy metals ⇒ poison can be detected in the hair

Bite Marks: abrasions / contusions / lacerations (or a combination)

→ human bites ⇒ semicircular / crescentic (caused by front teeth ⇒ incisors, canines)
→ teeth may cause clear, separate marks or form a continuous / intermittently broken line.
→ sucking action → reduces air pressure over the centre → multiple petechial haemorrhages. (due to rupture of capillaries & small venules)
- petechiae may be confluent to produce a contusion.

Charting of Teeth: (Dental Notations)

1] Zsigmondy Notation: temporary teeth ⇒ Roman numerals
Permanent teeth ⇒ Arabic numerals

Permanent:

R								L							
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

Temporary:

V	IV	III	II	I	I	II	III	IV	V
V	IV	III	II	I	I	II	III	IV	V

ISHITA KANODIA

2] Cunningham (Universal) Notation:

Permanent

RU															LU
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
RL															LL

Temporary

A	B	C	D	E	F	G	H	I	J
T	S	R	Q	P	O	N	M	L	K

3] Navy Notation: the digits & letters start from the right side of each jaw.

Permanent

Navy notation

RU															LU
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
RL															LL

Temporary

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T

4] Palmes Notation:

Permanent

Palmer notation

R															L
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8

Temporary

5E	4D	3C	2B	1A	A1	B2	C3	D4	E5
5E	4D	3C	2B	1A	A1	B2	C3	D4	E5

4] FDI (Federation of Dentaire International):

ISHITA KANODIA

Permanent

RU								1	2							LU
18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28	
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38	
RL								4	3							LL

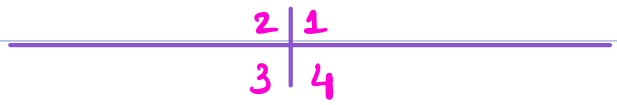
Temporary

55	54	53	52	51	61	62	63	64	65
85	84	83	82	81	71	72	73	74	75

aka double digit system:

- 1st digit = quadrant
- 2nd digit = tooth

Modified FD1:



5] Haderup System:

similar to Palmer's notation except that it uses a + sign to designate upper teeth & a − sign for lower teeth.

Skull-Photo Superimposition:

technique applied to determine whether the skull is that of the person in the photograph.

→ negative of the photograph is prepared.

→ negative is placed under the ground glass of a camera & salient features of the face are marked out carefully on the glass.

→ the skull is then photographed & a negative is made.

→ Negatives of the photograph & the skull are super-imposed & compared.

→ this test is of a more negative value ⟹ it can definitely be stated that the skull & the photograph are not those of the same person.