

OneShot 4.0

Forensic

Medicine

DBMCI · 2026



FORENSIC MEDICINE

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“

**FMT
Simplified.
Ranks
Amplified.**

- Dr. Vishwajeet Singh

”



SEXUAL OFFENCES

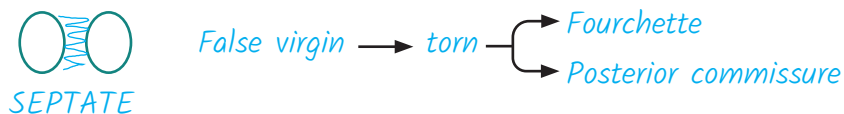
SEXUAL ASSAULT VICTIM EXAMINATION

- Detailed history - has to be taken first.
- INFORM POLICE
- "Consent" - $\geq 12Y$ VICTIM
 - Not giving consent \swarrow Psychology. Counsell' \rightarrow Written informed Refusal
- T/t of injuries - (Yes) \leftarrow
- Rule out STDs, pregnancy
- Accused examination
- LUGOL'S IODINE test \rightarrow BROWN
- ♀ VAG EPITHELIAL Cells

Hymen

- Fimbriated hymen resembles tears due to penovaginal penetration

\cong HYMEN \Rightarrow 5' - 7' = P.V penetration. (Posterolateral)
 Tears 11' - 1' = FB/FINGER
 FIMBRIATED \swarrow



Genital Swabs \rightarrow SEMEN Exam" \rightarrow till 4 days
 \rightarrow Sperm exam \rightarrow till 3 days
 \rightarrow Sperm motility \rightarrow upto 12 Hrs.

Sexual perversions = **PARAPHILIA**

By getting hurt - **MASOCHISM**

By hurting - **SADISM**

Cross dressing - **TRANSVESTISM = EONISM**

Rubbing private parts in public - **FROTTEURISM**

Display private parts in public - **EXHIBITIONISM**

Rectal enema - **KLISMAPHILIA**

By objects - **FETISHISM**

Obscene - telephone calls - **SCATOLOGIA**

Obscene - language - **COPROLALIA**

Obscene - sounds of sexual activity - **ECOUTERISM**

Obscene stories to partner - **NARRATOPHILIA**

OTHER HIGH YIELDS :

- Anal intercourse = **SODOMY / BUGGERY = GREEK LOVE**
- Oral intercourse = **SIN OF GOMORRAH = FELLATIO / BUCCAL COITUS.**
- Lesbianism = **TRIBADISM = SAPPHISM**

}	Active Partner - DYKE
	Passive Partner = FEMME
- Super fecundation = **2 diff act of coitus in same menstrual cycle.**
- Super fetation = **2 diff act of coitus in diff menstrual cycle.**
- **PSEUDOCYESIS = Spurious pregnancy.**
- Suppositious child = **fictitious child**
- Posthumous child = **@BIRTH → Father is dead.**

MEDICAL JURISPRUDENCE - "MTP ACT-2021"

LAW IN MEDICINE

CONSENT → ♀ > 18 Y (IF MINOR → LEGAL GUARDIAN)

INDICATIONS

I FOR PREG UPTO 20 wks → 1 Dr. OPINION.

- SERIOUS RISK to ♀/FETUS.
- PREG. d/t CONTRACEPTIVE FAILURE by ♀ or HER PARTNER

II FOR PREG b/w 20-24 wks → 2 Drs. OPINION.

- SERIOUS RISK to FETUS
- SPECIAL CATEGORY of ♀
 - MINOR
 - MENTAL ILLNESS
 - MENTAL RETARDATION → IQ LEVEL

< 20 - PROFOUND
 +14 : 20-34 - SEVERE
 +14 : 35-49 - MOD
 +19 : 50-69 - MILD
 +19 : 70-89 - B.L
 +19 : 90-109 - (N)

- PHYSICAL DISABILITY
- PREG d/t RAPE / SEX ASSAULT / INCEST

↓
 S.I b/w CLOSE RELATIVES
 C.M ⇒ ↑↑ AR

- CHANGE IN MARITAL STATUS [D/W]
- DISASTER/EMERGENCY

III. PREG > 24 wks → MEDICAL BOARD OPINION



WHO CAN DO MTP ?

1. MD/DGO - OBS/GYN
2. R.M.P
 - with 6M HOUSE SURGEON SHIP EXP.
 - or
 - with 1Y Experience
3. R.M.P → ASSISTED IN 25 MTPs → **SDONE ALONE**

4. R.M.P $\left\{ \begin{array}{l} \text{with } \geq 3 \text{ M EXP.} \\ \text{or} \\ \text{with 10 MTP's BY } \underline{\text{MEDICAL METHOD}} \\ \underline{\text{M + M}} \quad \text{Q} \end{array} \right.$
- PREG UP TO 9 Weeks \rightarrow ANY OF FOUR (1, 2, 3, 4)
 - 9 - 12 Weeks \rightarrow 1, 2, 3
 - > 12 Weeks \rightarrow 1, 2
 - MTP REGISTER presented UPTO \rightarrow 5 YRS.
 - MED RECORDS OF INDOOR PTS. \rightarrow 3 YRS.
 - Pt. No. [CONFIDENTIALITY]
 - MONTHLY REPORT SENT TO D.H.S
 - If Pt. demands M.R Copy \Rightarrow Dr to Provide with in 3 DAYS



NOTES



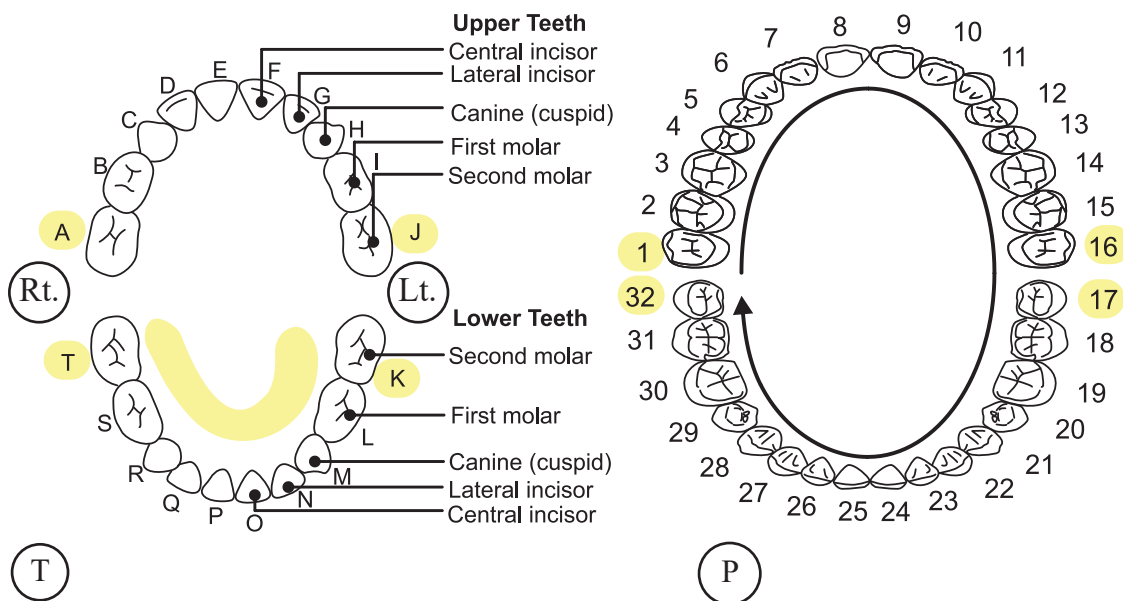
POWER OF COURTS

	Imprisonment	Fine
Judicial magistrate	I	F
2 nd CLASS		
1 st CLASS		
CJM		
Sessions		
ASSISTANT SESSION		
ADDITIONAL DISTRICT & SESSION		
DISTRICT & SESSION		
High court		
Supreme court		



NOTES

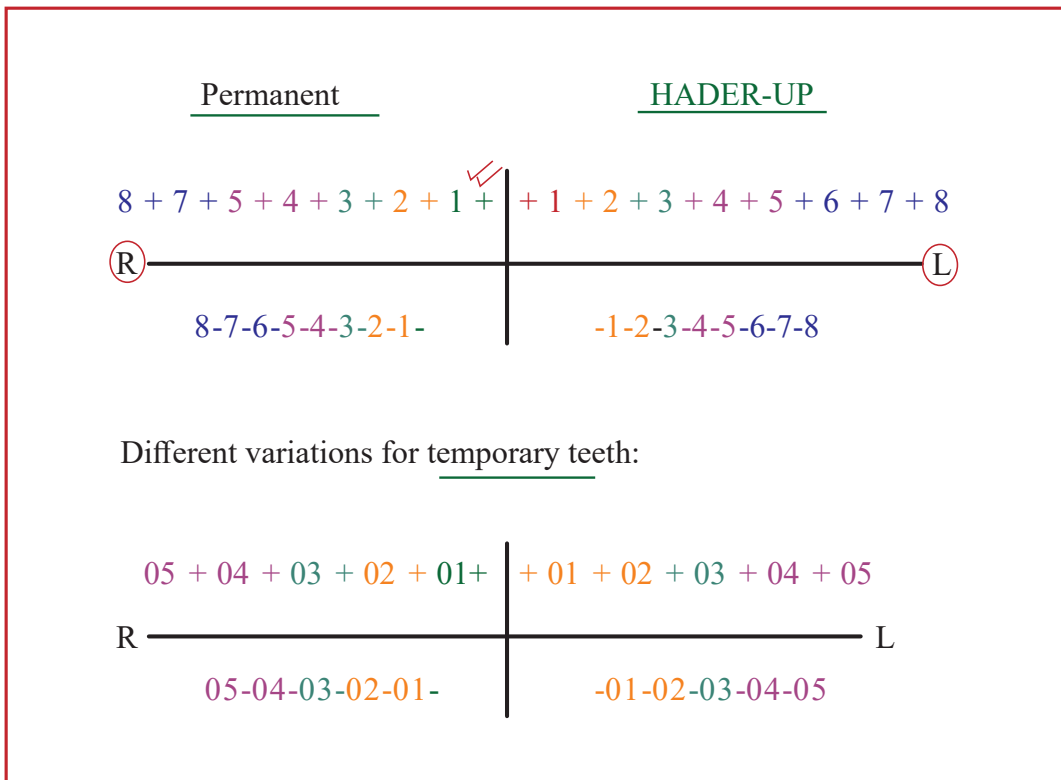
IDENTIFICATION



UNIVERSAL CUNNINGHAM'S
(U.C)

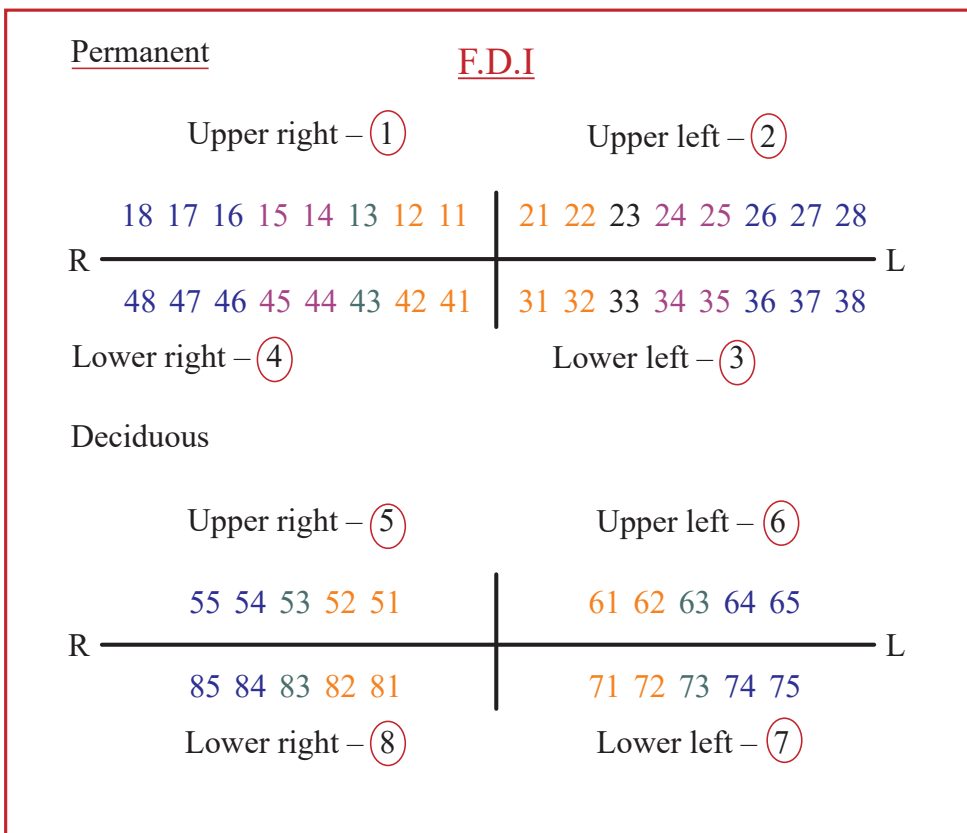
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EDCBA	ABCDE	87654321	12345678
<u>TEMP</u>		<u>PERM</u>	

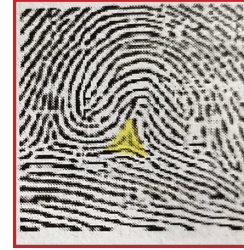
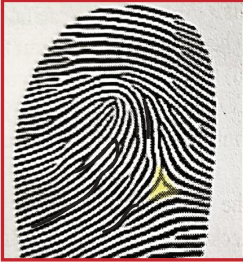
PALMER'S



“ + 3 ” = (L) upper perm.C

33 no





Match the following in relation to fingerprint changes

<i>A-pattern retained but change in distance b/w ridges</i>	<i>1. Rickets</i>
<i>B- complete loss of pattern with ridges atrophy</i>	<i>2. Coeliac disease</i>
<i>C- incomplete ridge atrophy</i>	<i>3. Dermatitis</i>
<i>D- permanent loss of fingerprint</i>	<i>4. Leprosy</i>
<i>E- ridge alteration</i>	<i>5. Acanthosis nigricans</i>

- A. A-1, B-2, C-3, D-4, E-5
 B. A-4, B-1, C-3, D-2, E-5
 C. A-4, B-1, C-2, D-3, E-5
 D. A-1, B-4, C-3, D-2, E-5

Male pelvis brought by police was analyzed in Forensic department. To consider this as male pelvis bone which features should be present:

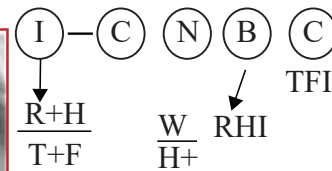
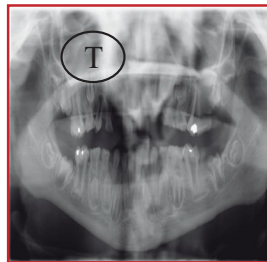
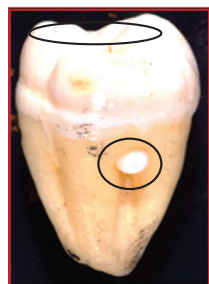
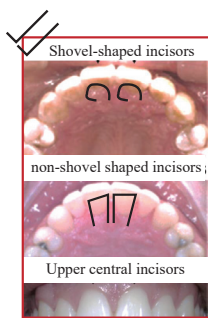
- i. Large & oval obturator foramen
 ii. Sacroiliac joint surface (till S2)
 iii. Large acetabulum
 iv. Subpubic angle - V shaped
 v. Ischial tuberosity inverted
 vi. Prominent preauricular sulcus
 vii. Small, deep & narrow greater sciatic notch

- A. 1, 2, 3, 4, 5
 B. 1, 3, 4, 5, 7
 C. 1, 2, 3, 6, 7
 D. 1, 3, 4, 6, 7

Female skull brought by police was analyzed in Forensic department. To consider this as female skull bone which features should be present:

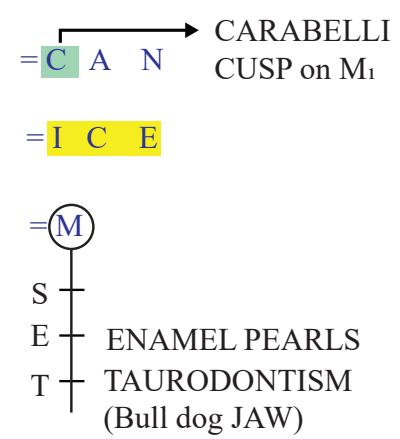
- i. Prominent F & P eminence
- ii. Lower & broader nasal aperture
- iii. Small, smooth glabella
- iv. Square orbits
- v. Prominent cheek
- vi. Round chin

- A. 1, 2, 3, 5
- B. 1, 4, 5, 6
- C. 1, 2, 3, 6
- D. 2, 3, 4, 5



$$C.I = \frac{BREADTH}{LENGTH} \times 100$$

- **D** = 70-74.9
- **M** = 75-79.9
- **B** = 80-85

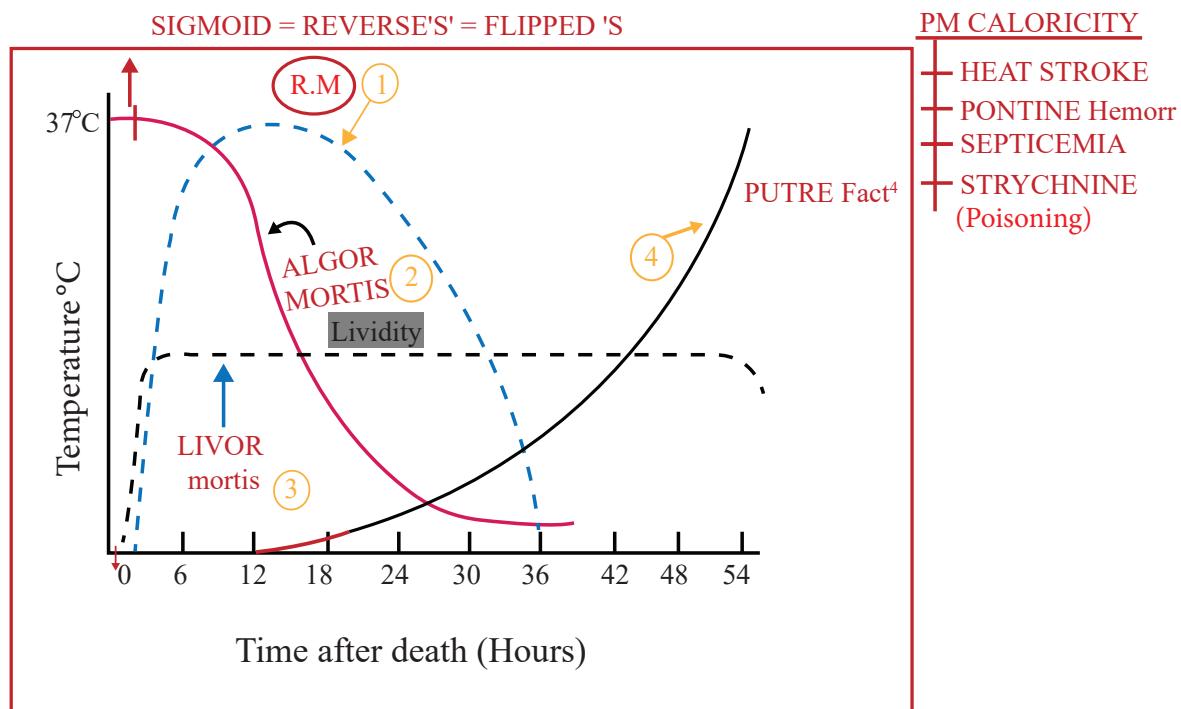




NOTES

THANATOLOGY

✓ IMMEDIATE	✓ EARLY	✓ LATE
Insensibility & loss of voluntary power- EARLIEST	EARLIEST -Changes in skin = pallor & loss of elasticity	✓ Putrefaction
Cessation of respiration	EYE changes	✓ Adipocere
Cessation of circulation	ALGOR MORTIS	✓ Mummification
	LIVOR MORTIS	
	RIGOR MORTIS	



PM ARTIFACTS

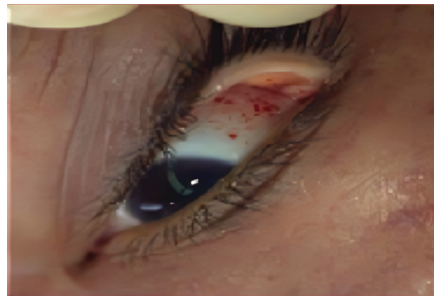
Tache noire

Undertakers # = # C₆-C₇

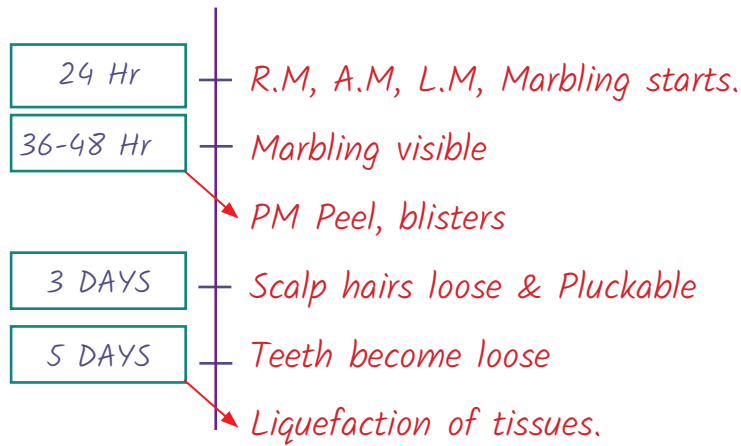
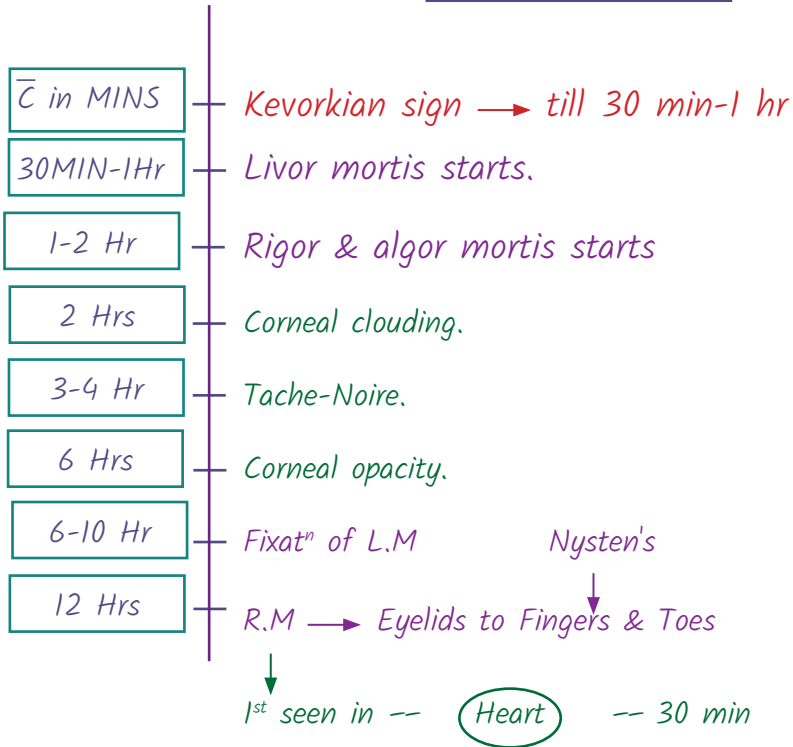
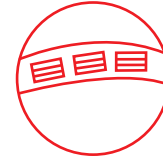
Kennedy phenomenon

Rayalseema phenomenon

Prinsloo & Gordon



TIMELINES






NOTES



NOTES

ASPHYXIA



Hanging	Strangulation	Drowning
Complete FORCE of Neck compression ↳ Wt. of body	By ligature material : (L.S)	Dry = ATypical ↓ LARYNGOSPASM.
Incomplete / partial ↳ Wt. of HEAD > BODY	By hands - (T = M.S)	D in cold water = HYDROCUTION = IMMERSION SYND ↓ VAGAL SHOCK.
Typical ↳ KNOT@MID-Occipital	By iron collars- GARROTTING = SPANISH WINDLASS	Wet = Typical DEATH AFTER ↓ 24Hrs
Atypical ↳ KNOT ANYWHERE ELSE	By bend of elbow- MUGGING	Post immersion syndrome = SECONDARY (D) ↓ ELECTROLYTE
Accidental →  SEXUAL Asp Suicidal → M.C METHOD M.C(S)POISON → OPC M.C S Poison in North India = <u>CELPHOS</u> Homicidal ↳ LYNCHING Judicial → M.C COD = #C2-C3	By bamboo sticks- BANSDOLA	IMBALANCE.





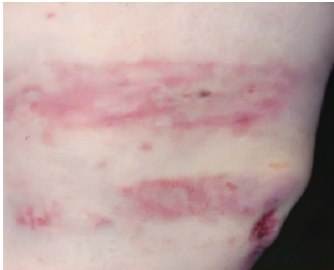
NOTES

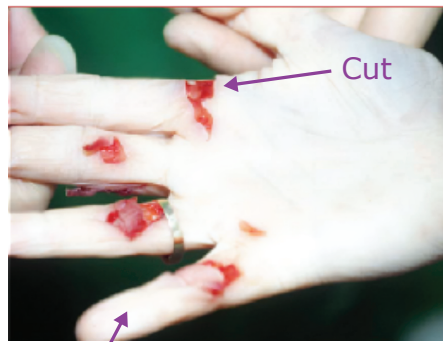
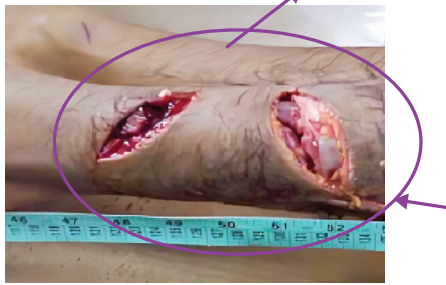


NOTES



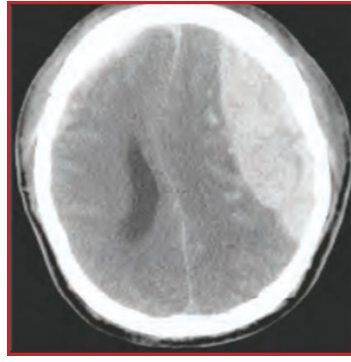
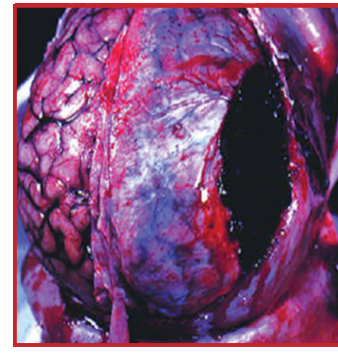
INJURIES



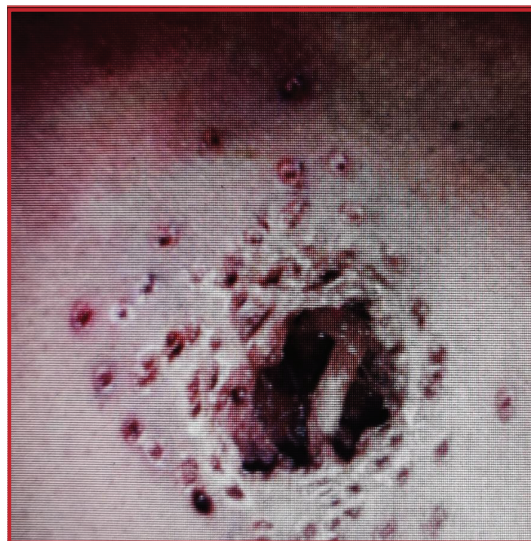
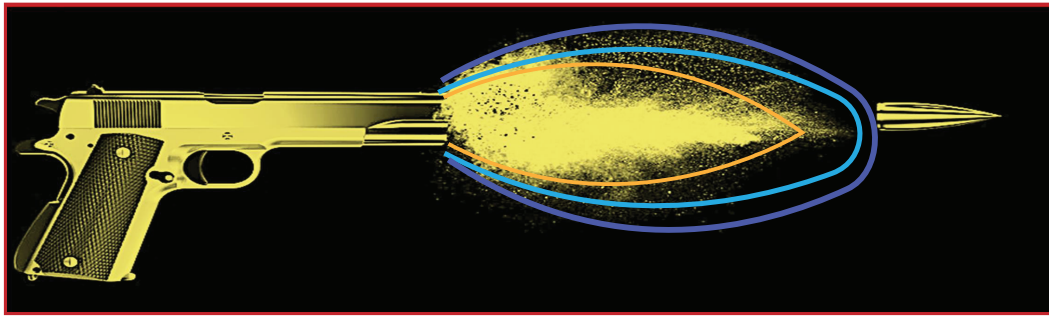


ACTIVE DEFENCE WOUND
↳ a/w HOMICIDE.

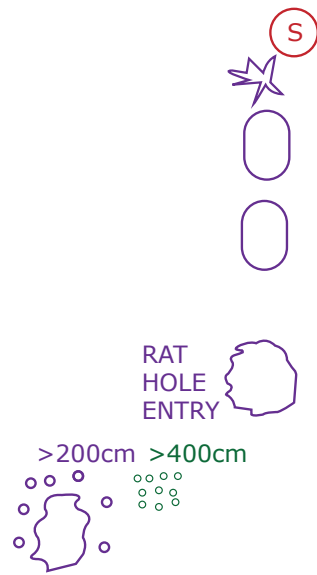
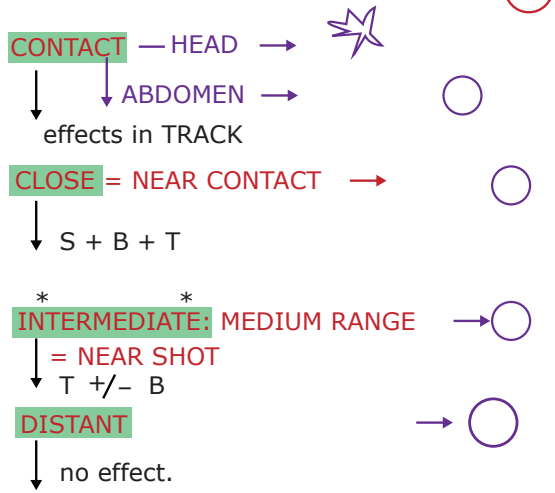
Passive D.W
↳ back of forearm



RANGE



F → SINGEING S → BLACKENING
 UNBURNT G.P Particles → TATTOOING (R)



Smokeless (⇓ smoke)

RANGE DISTANCE WISE [cm]

TYPE of Weapon	(S)	(B) x2	(T) x2-x3	Notes
① Pist of & Rendv.	upto 7.5 cm	15	30 - 45 cm	CLOSE → upto 7.5 INT → 7.5-45 cm. D → >45cm.
② MILITARY (R)	15 cm	30	60 - 90	
③ SHOT GUN 75 15 10 P C S CLOSE → upto 30 INT 30- 180 cm	30 cm	60	120 - 180	



NOTES



NOTES

TOXICOLOGY

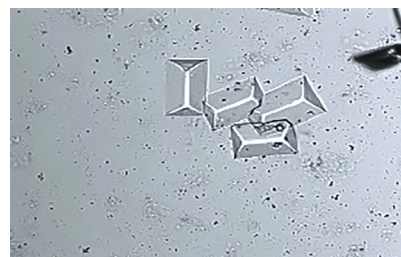
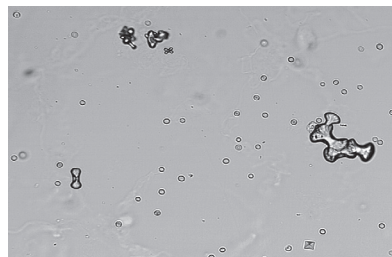
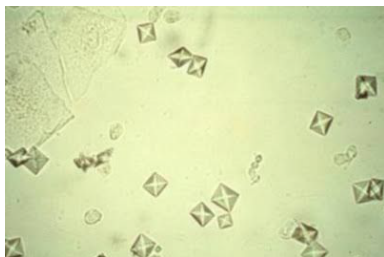
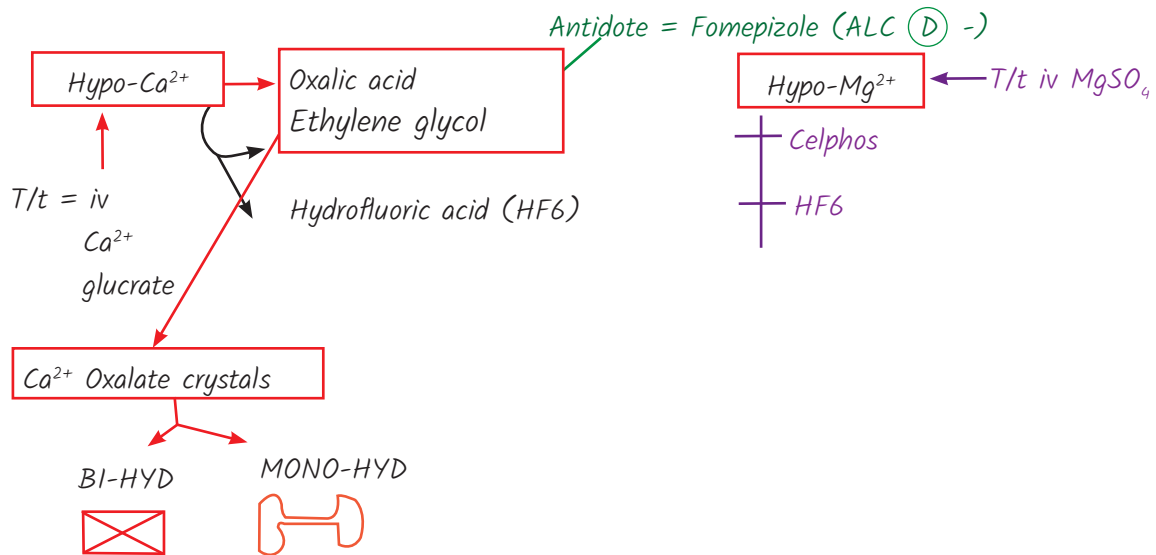
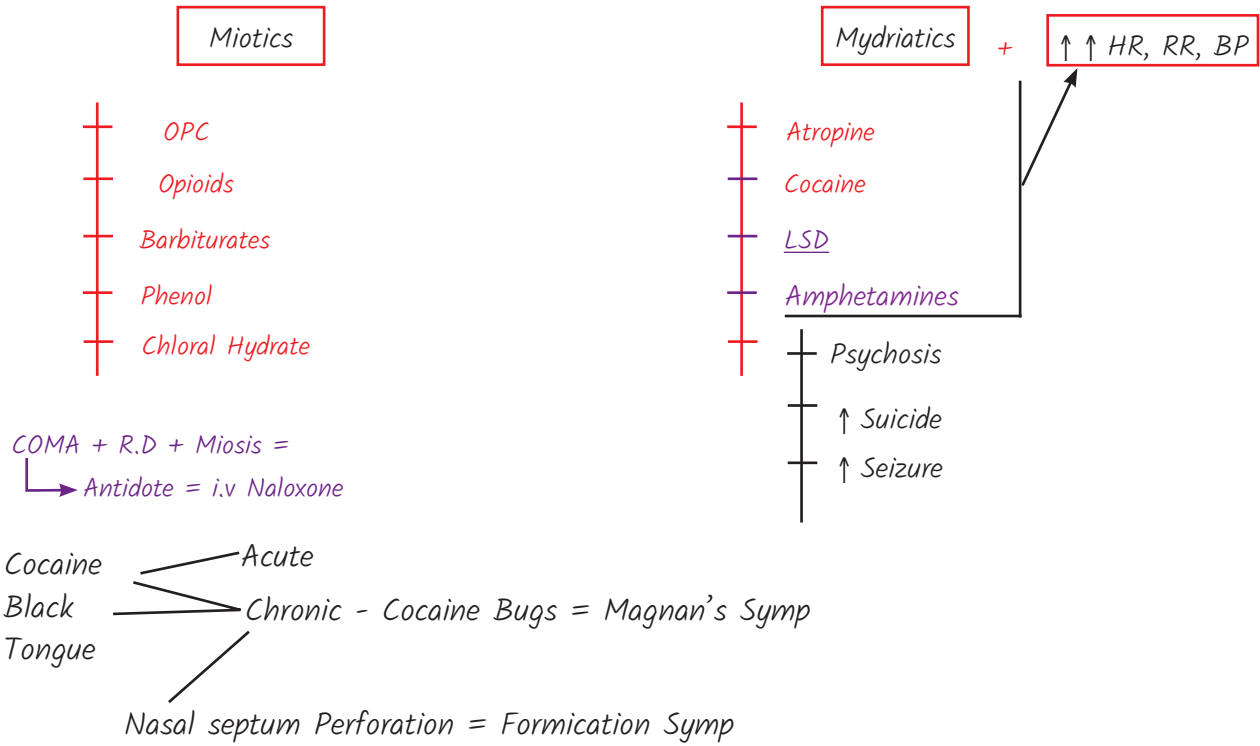
TOXICOLOGY
Duties of a Dr in poisoning { Dr. → INFORM Police (39 CrPC) Preserve samples.
General Mx of poisoning
Corrosives, alcohol, agricultural, dhatura, strychnine
NDPS
Metallics - As, Th, Pb, Hg, Cd, Fe
Phosphorus
$CuSO_4$
SNAKES- identification & Mx
Plant poisons- abrus, marking nut

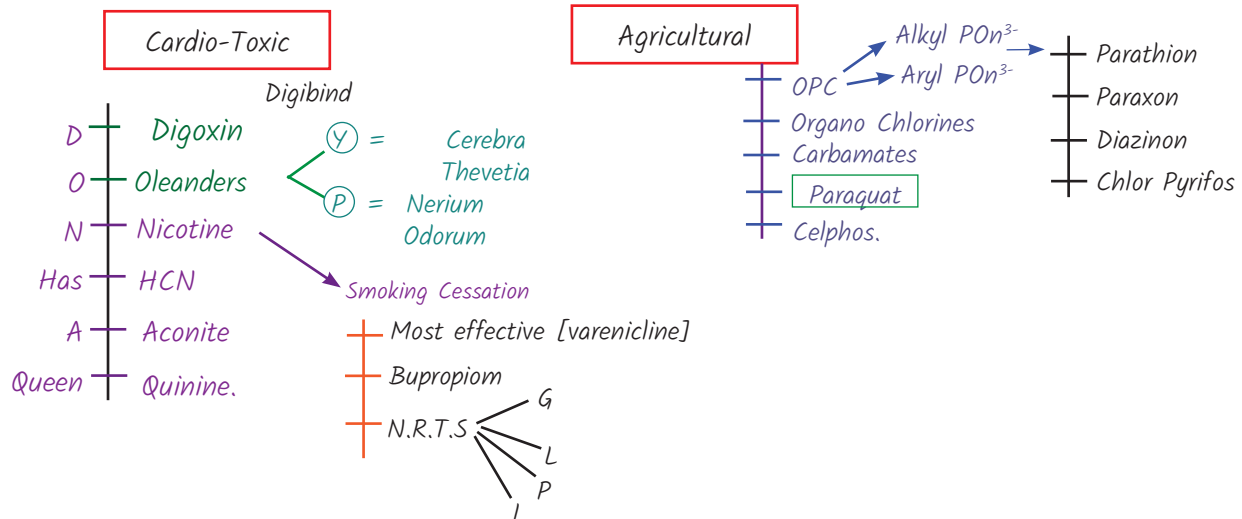
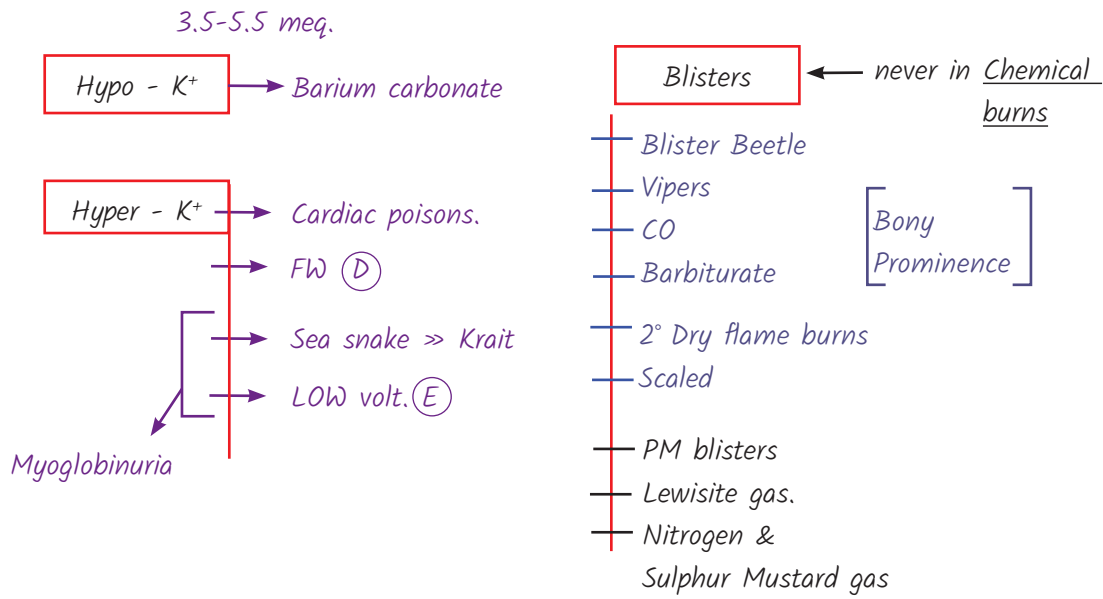
{ Organs → $Na^+ Cl^-$
 Blood → $Na^+ F^-$
 Urine → Thymol
 Virological → Liquid Nitrogen >> 50-80% Glycerol
 Histopath → 10% Formalin

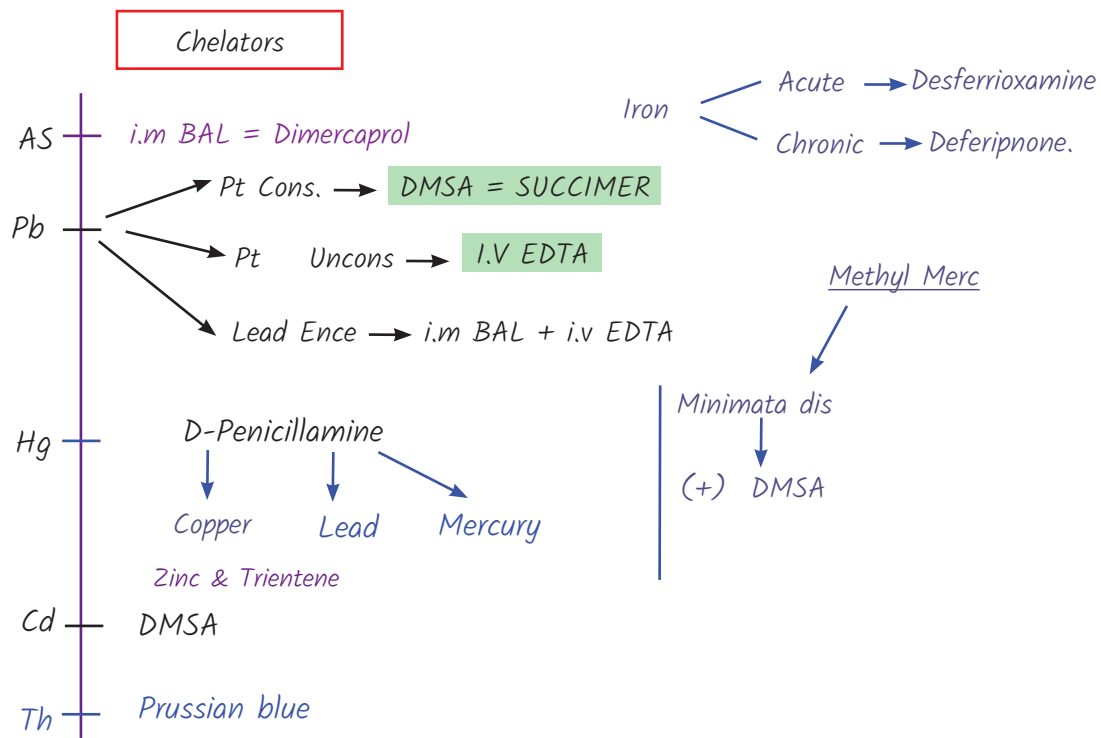
Blood for DNA Analysis

↓

E.D.T.A







Odour

Acrid pear like	Chloral hydrate » Paraldehyde
Bitter almond	CN ⁻
Burnt rope	Cannabis
Garlicky	As, P, OPC, Celphos
Rotten egg	H ₂ S
Rotten fish	Phosphides — Al = Celphos — Zn
Shoe-Polish	Nitrobenzene

ARSENIC POISONING



RAIN DROP PIGMENTATION

WHITE RADIO-OPAQUE POWDER



BLACK FOOT DISEASE

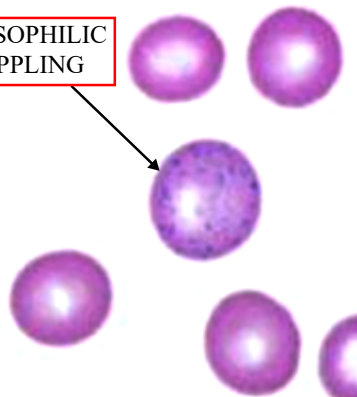


LEAD MONOXIDE



LEAD POISONING

BASOPHILIC STIPPLING



PMS COLOURS

BLUISH-PURPLE	NORMAL
BLUISH-GREEN	H ₂ S
CHERRY RED	CO
BRIGHT RED/BRICK RED	H ₂ CN
PINK	REFRIGERATED BODIES HYPOTHERMIA < 35°C
DARK BROWN	PHOSPHORUS
CHOCOLATE BROWN	↑↑ Meth Hb Antidote: Methylene blue

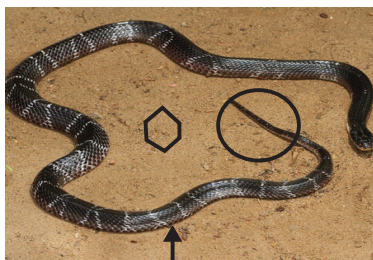
T/t = EXCHANGE TRANSFUSION [>50-70 mg%]



C.C



C.C



COMMON KRAIT



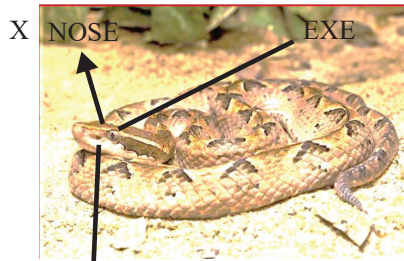
BANDED KRAIT



RUSSELL'S VIPER



SAW Scaled
VIPER



PIT → (HEAT SENSORS)
VIPERS



Sea Snake

PADDLE
like
TAILS





SEMECARPUS
ANACARDIUM
A/P = BHILAWANOL
&
SEMECARPOL

Juice → ACIDIC



ABRUS
Precatorious
(RATTI / GUNCHI)

A/P - ABRIN

CHILLI → Curv. gmards
C-6



DHATURA Seeds
-BROWN
-Kidney Shape
-On c/s Embryo
Curved Outwards

STRYCHNOUS
NUX VOMICA



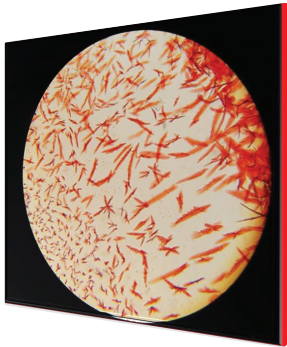
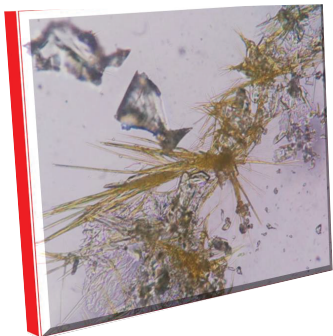
-Strychnine
-Brucine
-Loganin



NOTES



TRACE EVIDENCE





NOTES

NEW LEGAL SECTIONS

BNSS

CrPC	BNSS	
2(c)	2 (g)	COGNIZABLE OFFENCE= police can arrest a person without warrant from magistrate
2(l)	2 (o)	NON-COGNIZABLE= require warrant for arrest
2(w)	2 (x)	SUMMON CASE= case related to an offence for which punishment is < or equal to 2 Y
2(x)	2 (z)	WARRANT CASE= punishment >2 yrs

BNSS

CrPC	BNSS	
39	33	Public to inform police of certain offences
53-A	52	Rape accused examination
164-A	184	Rape victim examination
61-69	63 - 71	deal with SUMMONS
174	194	Police Inquest
176	196	Magisterial Inquest
311	348	Power to recall witness.

BNSS

CrPC	BNSS	
327	366	<i>In camera trial (trial in closed, confined space with limited no of people) by a woman judge (in rape, gang rape & POCSO cases)</i>
357(C)	397	<i>Hospital role for victims of sexual assault and acid attack--- first-aid for victims to be free of cost & if hospital refuses then punishable under 200 BNS</i>
416	456	<i>Commutation (change) of DEATH sentence to Life imprisonment of a PREGNANT female by high court.</i>

BNS

	BNS Sections
<i>Consent, age, insanity</i>	1- 30
<i>Sexual offences</i>	63- 86
<i>Criminal abortion</i>	88- 92
<i>Murder, C.H, abetment, organized crime, terrorist act</i>	100- 113
<i>Hurt, G.H, assault</i>	114- 130
<i>Summon</i>	206-208
<i>Perjury , miscellaneous</i>	227- 301
<i>Forgery</i>	336-338

BNS [1-30]-CONSENT, AGE, INSANITY

IPC	BNS	
44	2(14)	<i>Defines Injury</i>
51	2(23)	<i>Defines Oath</i>
82	20	<i>No criminal responsibility of child < 7 yr</i>
84	22	<i>No Criminal responsibility of insane= Mc Naughtens rule=test for insanity in India.</i>
85	23	<i>Act under involuntary intoxication is not an offence</i>
86	24	<i>Act under voluntary intoxication is an offence</i>
90	28	<i>Consent is invalid under certain situations</i>
92	30	<i>Consent not mandatory for life saving procedures in good faith of patient</i>

BNS [227 – 301]- PERJURY, MISCELLANEOUS

IPC	BNS	
191	227	<i>Defines PERJURY (GIVING FALSE EVIDENCE under Oath)</i>
192	228	<i>Fabricating false evidence</i>
193	229	<i>PUNISHMENT FOR PERJURY</i>
197	234	<i>Issuing false certificate required by law is punishable</i>
201	238	<i>Disappearance of evidence.</i>
202	239	<i>Intentional omission/ concealment of information by a witness</i>

BNS [227 – 301]- PERJURY, MISCELLANEOUS

IPC	BNS	
269	271	<i>Negligent act to spread disease dangerous to life (eg- corona, hiv/aids, hep-B) is punishable.</i>
270	272	<i>Malignant act to spread disease dangerous to life (eg- corona, hiv/aids, hep-B) is punishable</i>
297	301	<i>Showing disrespect to dead body. Eg- Trespassing burial site, Necrophilia, Necrophagia</i>

BNS [63 – 86] - SEXUAL OFFENCES

IPC	BNS	
375	63	<i>Defines Rape</i>
376(1)	64 (1)	<i>Punishment for rape</i>
376(2)	64 (2)	<i>Rape by person in authority- police/relative/teacher/military/repeatedly with one/ insane & pregnant female</i>
376(3)	65 (1)	<i>Rape in < 16 Y</i>
376 AB	65 (2)	<i>Rape in < 12 Y</i>

BNS [63 – 86] - SEXUAL OFFENCES

IPC	BNS	
376 A	66	Persistent vegetative state / death of victim
376 B	67	Sexual intercourse by husband with wife during separation without her consent
376 C	68	Sexual intercourse (not amounting to rape) by person in authority
	69	S.I by deceitful means – promotion /employment/inducement/marriage
376 D	70 (1)	Gang rape
376 DA	70 (2)	Gang rape in < 18 Y
376 DB		
376 E	71	Repeat offenders
228 A	72	Disclosure of victim's identity

BNS [63 – 86] - SEXUAL OFFENCES

IPC	BNS	
354	74	Sexual Assault to woman with intent to outrage her modesty.
509	79	Sexual Insult to woman with intent to outrage her modesty.
354 A	75	Sexual harassment
354 B	76	Sexual Assault to disrobe
354 C	77	Voyeurism = peeping tom = scoptophilia = scophophilia
354 D	78	Stalking
304 B	80	Dowry death

BNS [63 – 86] – SEXUAL OFFENCES

IPC	BNS	
493	81	<i>Cohabitation caused by a man deceitfully inducing a belief of lawful marriage</i>
	82(1)	Marrying again during lifetime of H/W
498	84	<i>Enticing or taking away or detaining with criminal intent a married woman</i>
498 A	85	<i>Punishment for Cruelty by husband / relative of husband</i>
	86	<i>Defines cruelty</i>

BNS [88 – 92] – CRIMINAL ABORTION

IPC	BNS	
312	88	<i>Criminal Abortion with consent</i>
313	89	<i>Criminal Abortion without consent</i>
314	90	<i>Death of mother during abortion</i>
315	91	<i>Preventing a live birth or causing a live born to die after birth</i>
316	92	<i>Causing death of quick unborn child while trying to kill mother</i>
317	93	<i>Abandoning a child < 12 years by parents</i>
318	94	<i>Concealment of birth by secret disposal of dead body</i>

BNS [100 – 113] – MURDER, C.H, ABETMENT, ORGANIZED CRIME, TERRORIST ACT

IPC	BNS	
299	100	<i>Defines Culpable Homicide (C.H)</i>
300	101	<i>Defines Murder</i>
304	102	<i>Punishment for C.H without intention</i>
302	103	<i>Punishment for Murder</i>
304	105	<i>Punishment for C.H not amounting to murder</i>
304-A	106	<i>Rash/negligent act causing death</i>

BNS [100 – 113] – MURDER, C.H, ABETMENT, ORGANIZED CRIME, TERRORIST ACT

IPC	BNS	
305	107	<i>Abetment of suicide of child/insane</i>
306	108	<i>Abetment of suicide</i>
307	109	<i>Attempt to Murder</i>
308	110	<i>Attempt to C.H</i>
	111	<i>Organized crime & syndicate</i>
	112	<i>Petty organized crime</i>
	113	<i>Terrorist act</i>

BNS [114 - 130] - HURT, G.H, ASSAULT

IPC	BNS	
319	114	Defines HURT
323	115	Punishment for voluntarily causing HURT
320	116	Defines G.H [clause A-H]
325	117	Punishment for voluntarily causing G.H
324,326	118	Punishment for voluntarily causing H / G.H by dangerous weapon /means
334,335	122	Punishment for voluntarily causing H / G.H on provocation IM +/- SK SY +/- 10K

**116 - THE FOLLOWING KINDS OF HURT ONLY ARE DESIGNATED AS "GRIEVOUS",
NAMELY:--**

- (a) Emasculation
- (b) Permanent privation of the sight of either eye
- (c) Permanent privation of the hearing of either ear
- (d) Privation of any member or joint
- (e) Destruction or permanent impairing of the powers of any member or joint
- (f) Permanent disfiguration of the head or face
- (g) Fracture or dislocation of a bone or tooth
- (h) Any hurt which endangers life or which causes the sufferer to be during the space of fifteen days in severe bodily pain, or unable to follow his ordinary pursuits.

BNS [114 - 130] - HURT, G.H, ASSAULT

IPC	BNS	
328	123	<i>HURT by poison/ stupefying drug</i>
326 A, B	124	<i>Acid attacks (attempt /actual act)</i>
350	129	<i>Criminal force</i>
351	130	<i>Assault</i>

BSA

IEA	BSA	
32	26	<i>D.D</i>
45	39	<i>Expert witness</i>
107	110	<i>Presumption of survivorship</i>
108	111	<i>Presumption of death</i>



NOTES