

# FORENSIC PATHOLOGY

## DEATH AND CHANGES AFTER DEATH

### Short essays

1	Define death. Classify the changes that occur on the body after death and add a note on the major postmortem changes. Enlist the factors which favour the adipocere formation <i>11, 15, 34</i> [KU,RGU,TU]	3	Mention the various factors that help in estimating the time since death. Describe rigor mortis in brief. [RGU,TU]
2	What is postmortem interval? Discuss in detail the various factors that are helpful in determining the postmortem interval	<i>V 52</i>	[TU]

### Short answers

1 ✓	What are the differences between contusions and livor mortis <i>19</i> [KU Feb 23]	17 ✓	Post mortem cooling of the body <i>16</i> [RGU]
2 ✓	Caspers dictum <i>34</i> [KU,TU]	18	Differentiate between Adipocere and mummification [KU,RGU,TU]
3 ✓	Differentiate between Contusion and post mortem staining <i>19</i> [KU]	19	Changes of body in putrefaction <i>27</i> <i>34, 36</i> [KU,RGU]
4 ✓	Algor mortis <i>16</i> [KU,RGU,TU]	20 ✓	Suspended animation <i>16</i> [KU,RGU,TU]
5	Saponification <i>Adipocere</i> <i>V 57</i> <i>34</i> [KU]	21 ✓	Brain-stem death <i>12</i> [KU,RGU]
6	Differentiate between Rigor mortis and pugilistic attitude [KU,TU]	22 ✓	Post mortem lividity <i>17</i> [KU,RGU]
7 ✓	Livor mortis <i>17</i> <i>V 55</i> [KU,TU]	23	Rigor mortis and medicolegal application <i>21</i> [KU,RGU]
8 ✓	Draw and label Time since death graph <i>16</i> [KU]	24	Characteristic features of putrefaction <i>27</i> [RGU]
9 ✓	Maceration <i>40</i> [KU]	25	Forensic entomology <i>30</i> [RGU]
10 ✓	Differentiate between Post mortem lividity and contusion <i>19</i> [KU]	26	Foamy liver [RGU]
11 ✓	Differentiate between Somatic and molecular death <i>13</i> [KU]	27	Pathological postmortem examination [RGU]
12 ✓	Cadaveric spasm <i>24</i> [KU,RGU,TU]	28	Embalming <i>37</i> [RGU,TU]
13	Presumption of death <i>38</i> [RGU]	29 ✓	Marbling of skin <i>29</i> [TU]
14 ✓	Rule of 12/ Rule of Dozen [TU]	30 ✓	Cadaveric lividity [TU]
15 ✓	Postmortem hypostasis [TU]	31	Age from wounds [TU]
16 ✓	Postmortem calicity <i>17</i> [TU]	32 ✓	Changes that occur in an eye after death <i>26</i> [TU]

Give precise answers						
1	Pink teeth	30	[KU]	3	Caspers dictum	[KU,TU]
2	Kevorkian sign	26	[TU]		What is contact pallor [KU Feb 23]	

## MECHANICAL ASPHYXIA AND DROWNING

Long essays			Short essays			
1 ✓	A forty years old man's body is brought for post mortem. An oblique ligature mark is present over the neck. Dried salivary stain over right angle of mouth. Hyoid bone is intact.  Answer the following: <ul style="list-style-type: none"><li>• What is your probable opinion regarding cause of death.</li><li>• Difference between hanging and strangulation. 295</li><li>• How will you differentiate ante mortem hanging from post mortem hanging 289</li></ul>	[KU]	1	Classify mechanical asphyxia.What are the types of hanging.What are the autopsy findings of hanging and mention its medico legal aspects 273, 276,	[KU]	
2 ✓			2	Define hanging.Describe the post mortem findings in a case of death due to typical hanging. Add a note on auto erotic sexual asphyxial death 273	[KU,RGU,TU]	
3 ✓			3	Define drowning. Describe the postmortem findings of a death due to drowning 307	[RGU,TU]	

Short answers						
1	Differentiate between wet drowning and dry drowning	[KU]	13	Burking	305	[KU]
2 ✓	Partial Hanging 284, 285	[KU,TU]	14	Types of Anoxia 273	[KU]	
3	Draw and label Diatoms 313	[KU]	15	Internal finding in a case of death due to drowning	[KU]	
4 ✓	Differentiate between Ligature mark seen in suicidal hanging and strangulation 295	[KU]	16	PALTAUF'S hemorrhage 310	[KU,TU]	
5 ✓	Lynching 288	[KU, RGU, TU]	17	Traumatic asphyxia 303	[KU, RGU, TU]	
6	Cafe coronary 302	[KU, RGU, TU]	18	Signs of ante mortem hanging	[KU]	
7 ✓	Diatom test 313	[KU, TU]	19	Differentiate between Complete and partial hanging 287	[KU]	
8 ✓	Sexual asphyxias 287	[KU, TU]	20	Draw and label Ligature mark pattern in strangulation	[KU]	
9	Draw and label Hyoid bone fractures 298	[KU]	21	Neck findings in a case of death due to hanging	[KU]	
10 ✓	Describe the post-mortem findings In death due to drowning [KU, RGU]		22	Pathophysiology of death in fresh water and Salt water drowning 307	[RGU]	
11 ✓	Describe the post-mortem findings In death due to drowning [KU, RGU]		23	Types of Hyoid bone fractures with Medicolegal implications	[RGU, TU]	

12	Throttling	295	[RGU]	24 ✓ Bansdola	298	[RGU,TU]
25	Judicial hanging	288	[RGU]	31 ✓ Mention the important differentiating features between hanging and strangulation		[RGU]
26 ✓	Dry drowning	312	[TU]			[TU]
27	Asphyxial Stigmata		[TU]	32 Drowning in the sea water		[TU]
28	Anoxic Blebs		[TU]	33 ✓ Gagging	301	[TU]
29	Classify violent asphyxia deaths		[TU]	34 ✓ Oedema aquosum		[TU]
30 ✓	Auto erotic deaths		[TU]	35 Mugging	300	[TU]

#### Give precise answers

1 ✓	Diatom test	313	[KU,TU]	3 ✓ Bansdola		[RGU,TU]
2 ✓	Cutis anserina		[TU]			

## THERMAL DEATH

#### Short essays

1	Describe the external and internal postmortem findings in burns. Write briefly on causes of death in burns					[RGU]
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#### Short answers

1	Causes of death in burns	231	[KU]	2	Differentiate between Ante mortem burns and post-mortem burns	236	[KU]
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## INFANT DEATH

#### Long essays

1 ✓	A dead fetus was recovered from the dust bin. Crown heel length was 35 cms. Finger nail marks with contusions were noted in the neck. Answer the following:						
	✓ Estimate the gestational age with reason			✓ Mention the ossification centers which are likely to be found in this case	102		
	✓ Is this fetus viable or not 412			✓ What is the cause of death		[KU]	

#### Short essays

1 ✓	Wreden's test	416	[KU]	3 ✓ Define live birth. Explain the various signs of live birth	413	[RGU]
2	Define Infanticide. Describe methods usually adopted for carrying out infanticide. Add a note on macerated fetus					[RGU]

#### Short answers

✓ 1 ✓ Caput succedaneum	417	[KU,TU]	✓ 9 Signs of a live born child	Maceration - 410	[KU,TU]
✓ 2 ✓ Still born baby	410	[KU]	✓ 10 Sudden infant death syndrome	422	[KU,RGU]
✓ 3 ✓ Caffey syndrome	420	[KU,TU]	✓ 11 Rule of Hasse 103		[KU,TU,RGU]
✓ 4 ✓ Spaldings sign	411	[KU,TU]	✓ 12 Differentiate between Respired and unrespired lung	416	[KU,TU]
✓ 5 ✓ Autopsy findings in battered baby syndrome	420	[KU,RGU]	✓ 13 Sudden infant death		[RGU]
✓ 6 ✓ Battered baby syndrome	420	[RGU,TU]	✓ 14 Precipitate labour	418	[RGU]
✓ 7 ✓ Munchausen's Syndrome by Proxy	422	[RGU]	✓ 15 Viability of a foetus	412	[RGU,TU]
✓ 8 ✓ Cot death	422	[RGU]	✓ 16 Hydrostatic test	414	[RGU,TU]

#### Give precise answers

✓ 1 When does the ossification centre for lower end of femur appear [KU Feb 23]	✓ 4 Give one sign of a live birth during foetal autopsy	[KU Feb 23]
✓ 2 ✓ Spaldings sign	✓ 5 ✓ Hydrostatic test	[RGU,TU]
✓ 3 ✓ Still born baby	✓ 6 ✓ Viability of a foetus	[RGU,TU]

## MEDICOLEGAL AUTOPSY AND EXHUMATION

#### Short answers

1 ✓ Draw and label Body incisions during postmortem examination	47	[KU,RGU]	11 ✓ Differentiate between Medico legal and pathological autopsy	48	[KU,RGU]
2 ✓ Exhumation and Its Legal procedure	62	[KU, RGU]	12 ✓ Bloodless dissection of neck	280	[KU,RGU]
3 ✓ Aims of medico legal autopsy	45	[KU]	13 ✓ Draw and label Skin incisions at autopsy	47	[KU]
4 ✓ Objectives of medico legal autopsy		[KU,RGU]	14 ✓ Difference negative autopsy from Obscure autopsy with examples	332 , 331	[RGU]
5 Various methods of removal of Organs at Autopsy		[RGU]	15 ✓ Negative autopsy and its causes	332	[RGU]
6 Artefacts	337	[KU,RGU]	16 ✓ Examination of skeletal remains	65	[RGU]
7 Precautions in autopsy of HIV infected body		[RGU]	17 ✓ Exhumation		[KU,RGU]
8 ✓ Obscure autopsy	331, 62	[RGU,TU]	18 ✓ Undertakers Fracture	337	[TU]
9 ✓ Psychological Autopsy	65	[TU]	19 ✓ Preservation of viscera for histopathological EXAMINATION		[TU]
10 Resuscitation artifacts	337	[TU]			

## OTHERS (starvation , sudden death, anaesthetic and operative death )

Short essays			
1	Define Death. Discuss the complications and Deaths from Anaesthesia and Surgery	[TU]	
Short answers			
1	Death due to malnutrition	[RGU]	3 Sudden death [TU]
2	PM Findings in starvation death	[RGU]	

## CLINICAL FORENSIC MEDICINE

### IDENTITY

#### Short answers

1 ✓	Write a short note on superimposition with respect to identification 113 [KU Feb 23, RGU, TU]	19	Differentiate between Morphology of temporary teeth and permanent teeth 88 [KU]
2 ✓	Temporary dentition 86 [KU]	20	Draw and label Four main patterns of finger prints 108 [KU]
3	Draw and label Vertical section of incisor tooth showing physiological changes [KU]	21	Draw and label Gustafson's method age determination from teeth [KU, TU]
4	Draw and label age determination from teeth 87 [KU]	22	DNA Fingerprinting 113 [RGU]
5 ✓	Intersex 74 [KU, RGU, TU]	23	Draw and label Barr body 78 [KU]
6 ✓	Differentiate between Human hair and animal hair 119 [KU]	24	Dactylography and types 107 [KU, RGU]
7 ✓	Hermaphroditism [KU]	26	Tattoos 111 [KU, TU]
8 ✓	Draw and label Types of finger print pattern [KU]	27	Cephalic index [RGU]
9	Differentiate between Male pelvis and female pelvis 25 pdf [KU]	28	Poroscopy and cheiloscopy [RGU]
10	Corpus delecti 71 [RGU, TU]	29	Identification from Teeth [RGU]
11	Scars 120 [RGU]	30	Anthropometry 107 [RGU]
12	Foot prints 110 [RGU]	31	Hair [RGU]

13	Medico legal importance of age 16	[TU]	32	Barr body	[TU]
14	Dermatoglyphics	[TU]	33	Dichotomy	[TU]
15	Concealed sex	[TU]	34	Calligraphy	[TU]
16	Klinefelter's Syndrome	[TU]	35	Age of criminal responsibility	[TU]
17	Chieiloscopy	[TU]	36	Medico legal importance of age 18	[TU]
18	Turner Syndrome	[TU]			

#### Give precise answers

1	Arch, whorl, composite and loop are types of lip prints. True/False [KU Feb 23]		4	Turner Syndrome	[TU]
2	Cephalic index	[RGU]	5	Klinefelter's Syndrome	[TU]
3	Barr body	[TU]	6	Age of criminal responsibility	[TU]

## FORENSIC TRAUMATOLOGY

### MECHANICAL INJURIES

#### Short essays

1	Define and classify Mechanical injury. Describe the types and medico legal importance of abrasions	129	[TU]	2	Classify Injuries? Differentiate Ante mortem wounds from post mortem wounds? Discuss the causes of death from wounds?	129, [TU]
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#### Short answers

1	Difference between Chop wounds and Lacerated wounds	148	[KU]	10	Draw and label external injury in stab wounds	[KU]
2	Differentiate between True bruise and artificial bruise	137	[KU]	11	Difference between suicidal and homicidal cut throat injuries	141 [RGU,TU]
3	Lacerations	137	[KU, RGU,TU]	12	Incised wounds	139 [RGU]
4	Fabricated injury	151	[KU,RGU,TU]	13	Stab wounds	143 [RGU]
5	Differentiate between Suicidal and homicidal cut throat wounds	141	[KU]	14	Chop wounds	142 [RGU,TU]
6	Ectopic contusion		[KU]	15	Patterned injuries	[RGU,TU]
7	Color changes in contusion		[KU]	16	Internal injuries caused by blunt force on abdomen	[RGU]

8	Differentiate between Ante mortem and post mortem bruise	136	[KU]	17	Tentative cuts	[TU]
9 ✓	Estimation of time since injury in contusion		[KU]	18	Pseudo bruise	[TU]
19	Hesitation cuts	139	[KU,RGU]	22	Defence wounds	150 [TU]
20	Artificial bruises		[TU]	23	Difference between Perforating and penetrating injuries	[TU]
21	Avulsion	138	[TU]			

### Give precise answers

1 ✓	Types of lacerations		[KU, RGU,TU]	5	Define Incised wounds	[RGU]
2	Color changes in contusion		[KU]	6	Define Stab wounds	[RGU]
3	Hesitation cuts		[KU,RGU]	7	Define Chop wounds	[RGU,TU]
4 ✓	Defence wounds		[TU]			



## FORENSIC BALLISTICS *firearm injuries*

### Short essays

1 ✓	Define firearms. What are the different types. Give a brief description on choking and rifling	156	[KU]	3 ✓	Different features seen in close-shot rifled firearm injury and the reason behind each feature. Mention six differences between entry wound and exit wound	167, 174 [KU Feb 23]
2	Classify firearms and describe the wounds caused by shot gun missile at different ranges of firing	163	[RGU]	4	Enumerate the effects of bomb explosive injuries, what are the methods to identify the mutilated bodies?	[TU]

### Short answers

1 ✓	Souvenir bullet	162	[KU,TU]	12 ✓	Draw and label Entry wound of rifled firearm from a close range	[KU] 171
2	Entry wound in a fire arm injury		[KU]	13 ✓	Calibre of a fire arm	156 [KU,TU]
3	Draw and label Wound of entry of rifled fire arm in a contact shot		[KU]	14 ✓	Draw and label Entrance wound caused by rifled firearm fired from a distance within the reach of flame	174 [KU]
4	Draw and label Longitudinal section of cartridge of rifled firearm		[KU]	15 ✓	Differentiate between Entrance wound and exit wound caused by a bullet	174 [KU,RGU,TU]
5 ✓	Draw and label Longitudinal section of shot gun cartridge	160	[KU]	16 ✓	Draw and label Cross section of a rifled barrel	156 [KU]
6 ✓	Abrasion collar	NES V 106	[KU,TU]	17 ✓	Choking and Rifling in firearms	[RGU,TU]
7	Draw and label Cross section of shot gun cartridge		[KU]	18	Spectroscopy	[RGU]
8 ✓	Tandem bullet	161	[KU,RGU,TU]	19 ✓	Ricochet bullet	161 [RGU,TU]

9	Rifling	[RGU]	20	Dangerous weapons	[RGU]
10	Bore of a shotgun	[RGU]	21	Examination of mutilated human remains	[RGU]
11	Composition of smokeless gunpowder	[TU]	22	Cannelure	[TU]
23	Puppes rule 173	[TU]	24	Dum dum bullet	[TU]

#### Give precise answers

1	What is the mixture of injuries seen in a bomb blast consisting of abrasions, contusions and punctate lacerations called. [KU Feb 23]	4	Define Dangerous weapons	[RGU]	
2	Abrasion collar	[KU,TU]	5	Puppes rule	[TU]
3	Composition of smokeless gunpowder	[TU]			

## REGIONAL INJURIES

#### Long essays

1	A 30 years old male comes to trauma center with history of head injury. He does not remember the incident. After a couple of hours he loses consciousness and his condition progressively deteriorates and he dies. Answer the following: •What is the likely diagnosis •What is the medico legal importance of this condition	4	Define Dangerous weapons	[RGU]
	Diagnosis :SUBDURAL/EXTRADURAL HEMORRAGE	195, 193		

#### Short Essays

1	Describe the various injuries sustained by a pedestrian being hit by a motor vehicle. Add a note on railway injuries	213, 220 [RGU]	2	Enumerate Intracranial Hemorrhages. Explain in detail about the extra dural hemorrhage.	[TU]
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#### Short answers

1	Substantiate your answer with reasons Accidents are a complex phenomenon of multiple causation. Justify	[KU]	15	✓Ring fracture	[KU]
2	✓Whiplash injury	201	[KU,TU]	16 ✓Cut fractures	[KU]
3	Secondary impact and secondary injuries	[KU]	17	Differentiate between Epidural hemorrhage and heat hematoma	234 [KU]
4	Fractures of the skull	184	[KU]	18 Extradural hemorrhage	[RGU,TU]
5	Injuries seen in pedestrians in road traffic accidents	[KU]	19	✓Punch drunk syndrome	191 [RGU]
6	✓Signature fracture	[KU]	20	Subarachnoid haemorrhage	[RGU]

7	Primary impact injury	[KU]	21	Subdural haemorrhage	[RGU]
8	Different types of intra-cranial hemorrhages	[KU]	22	Types of skull fractures	[RGU]
9	Contrecoup injury	[KU]	23	Draw and label Circle of Willis	197 [KU]
10	Draw and label Intracranial hemorrhages	193	[KU]	24	Intracranial hemorrhage [TU]
11	Coup and contra coupe injuries	187	[KU, RGU, TU]	25	Gutter fracture [TU]
12	✓ Pond fracture	[TU]	26	Automatism	[TU]
13	✓ Spider Fractures	[TU]		✓ Railway spine	202 [RGU]

## Give precise answers

1	What is another name for 'depressed' fracture	[KU Feb 23]	4	✓ Define Punch drunk syndrome	[RGU]
2	Define Coup and contra coupe injuries	[KU, RGU, TU]	5	✓ Types of skull fractures	[RGU]
3	✓ Define Whiplash injury	[TU]			

## THERMAL INJURIES

## Essays

✓ A 26-year-old woman following an altercation with her husband regarding dowry allegedly locked herself up in a room, poured kerosene over herself and set herself on fire. Her parents allege that she was strangulated by her husband and then her body was set on fire by the in laws. Her body was found by the police. At autopsy, the body had dermo-epidermal burns all over the body, The joints of the upper limbs and lower limbs were flexed. On dissection, trachea had soot particles and mucosa was red and inflamed Is this a case of ante-mortem or post-mortem burns. Justify your answer. 236 [VERBAL BF <sub>3</sub> ] Classify burns according to Wilson. 230 Which feature in this case denotes 'pugilistic attitude'. What is the mechanism 232 How do you calculate the percentage of burns. Explain with a labelled diagram. 231	[KU Feb 23]
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## Short Essays

1	Define burns and classify. How will you differentiate between ante mortem and post mortem burns? What are the causes of death due to burns?	230, 236, 231	[RGU, TU]
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## Short answers

1	✓ Differentiate between ante mortem and post mortem burns	[KU]	7	✓ Draw and label Rule of nine	231	[KU]
2	Estimation of burns on a body	[KU]	8	✓ Dupeyren's Classification of Burns	230	[RGU, TU]
3	✓ Differentiate between Flame Burns and scalds	238	[KU, RGU, TU]	9	Heat hematoma	234 <i>charring of shell due to intense heat</i>

4 ✓ Joule burn	242	[KU, RGU, TU]	10	Heat ruptures	[TU]
5 Rule of nine		[RGU, TU]	11	Heat exhaustion	[RGU]
6 Immersion foot		[RGU]	12	Heat stroke	[RGU]

## ELECTRICAL INJURIES

### Short answers

1 ✓ Filigree burns	246	[KU, RGU, TU]	2	Arborescent Markings	[TU]
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## MEDICOLEGAL ASPECTS OF INJURIES

### Short answers

1 ✓ Dowry deaths	253	[KU, RGU]	5	Crush syndrome	[RGU]
2 ✓ Grievous hurt <i>See 320 IPC</i>	253	[RGU, TU]	6	Justifiable homicide	[RGU]
3 ✓ Difference between antemortem and postmortem wounds	<i>268</i>	[RGU]	7	Air embolism – cause and autopsy findings	[TU]
4 ✓ Sec 320 IPC / Grievous hurt		[RGU]	8 ✓	Sec 320 IPC	[RGU]

### Give precise answers

9 ✓ Define Grievous hurt	[KU, RGU, TU]	11 ✓ Define Sec 320 IPC	[RGU]
10 Which section deals with Vitriolage	[KU Feb 23]		

## SEXUAL OFFENCES

### Long essays

1 ✓ Define Section 375 IPC. <i>354</i>	• Describe in detail about the procedure of examination of female survivor of sexual assault. <i>356</i>	• What are the material evidences to be collected from the survivor <i>360</i>	[KU]
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### Short essays

1 ✓ Define paraphilia. Enumerate and describe the different kinds of paraphilic disorders [KU Feb 23] <i>371</i>	4 ✓ Define Rape. Describe the findings in a case of rape on a virgin. Add a note on procedure of examination and materials to be collected in a case of alleged rape	[KU]
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✓ 2	Define Rape as per IPC. Describe in detail the genital examination findings of a child victim of rape. List the evidentiary materials to be collected in a case of alleged rape.	[RGU]	✓ 5	Define Rape as per section 375 IPC. Describe the findings in a case of rape of married woman of age 30 years who is accustomed to sexual intercourse. Mention the evidentiary material that needs to be collected from this victim of rape	[RGU,TU]
✓ 3	The protection of children from sexual offenses Act,2012 (POCSO act) with recent amendment [RGU] 366		✓ 6	Describe the unnatural sexual offences. Write briefly on sexual perversions. 367	[RGU]

### Short answers

✓ 1	Aphrodisiacs	[KU,TU]	12	Fetishism	372	[KU]
✓ 2	Peeping Tom /Voyeurism/ Scopophilia 373	[KU,TU]	13	Drug facilitated sexual assault	360	[KU]
✓ 3	Buggery 368	[KU]	14	Sadism		[RGU,TU]
✓ 4	Lugol's iodine test 364	[KU]	15	Bestiality	371	[RGU,TU]
✓ 5	Section 375 of IPC with recent amendments [KU,RGU]		16	Exhibitionism	372	[RGU]
6	Disputed paternity 397	[KU]	17	Describe the procedure of examination of an accused, arrested on a charge of committing rape		[RGU]
✓ 7	Examination findings in a 14 year old victim of rape	[KU]	18	Voyeurism	373	[RGU,TU]
✓ 8	Adultery 367	[RGU]	19	Necrophilia		[TU]
✓ 9	Masochism 372	[RGU]	20	Marital rape		[TU]
✓ 10	Tribadism 370	[RGU]	21	Indecent assault	373	[TU]
✓ 11	Sodomy 368	[RGU,TU]	22	Scopophilia	373	[TU]
✓ 12	Transvestism [RGU,TU]		27	Bobbit Syndrome	372	[TU]
✓ 13	S.354 IPC 373	[RGU]	28	Spanish Fly		[TU]
25	Molestation [TU]		29	Indecent assault	373	[TU]
✓ 26	Statutory rape <i>normal physiologic intercourse with a girl below 18 yrs even with her consent.</i> [TU]					

## PREGNANCY AND ABORTION - MEDICOLEGAL ASPECTS

### Long essays

1	A 16 years old unmarried woman was brought to casualty with high temperature, tachycardia and dyspnea. On examination the woman showed pelvic emphysema, wine coloured foul smelling discharge from the vagina and died shortly while undergoing treatment. Answer the following:
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	•What is the provisional diagnosis	•Causative organism	•Post mortem findings	•Medico legal aspects	[KU]
	Diagnosis :SEPTIC ABORTION	404			

Short Essays					
1	Write the definition and types of artificial insemination? Discuss the indications, biological and legal aspects of artificial insemination and its status in India. [RGU] 31 <sup>pdh</sup> I 348		3 ✓	Define and classify abortion. Write in detail about the diagnosis and evidence of criminal abortion in a dead. Add a note on medico legal importance of criminal abortion 404 + ppt	[TU]
2 ✓	Write the definition and types of artificial insemination? Discuss the indications, Biological and legal aspects and precautions of Artificial insemination?				[TU]

Short answers					
1 ✓	Defloration 389	[KU, RGU, TU]	13	Quickening and its medicolegal importance 392	[KU]
2 ✓	Draw and label Spermatozoa 383	[KU]	14	Signs of virginity 390	[KU, RGU]
3 ✓	Confirmative signs of pregnancy / true hymen 394	[KU]	15 ✓	Positive signs of pregnancy 394	[KU, RGU]
4 ✓	False virgin 390	[KU, RGU, TU]	16 ✓	Lochia 396	[KU, RGU, TU]
5 ✓	Signs of recent delivery in a dead body 396	[KU]	17	Complications of criminal abortion ppt	[KU, RGU, TU]
6	Vaginismus	[KU]	18	Draw and label Different types of hymen 389	[KU]
7 ✓	MTP ACT ppt 401	[KU, RGU]	19 ✓	Superfoetation and Superfecundation 394	[KU, RGU]
8 ✓	Impotence in males 342, 344	[KU]	20	Artificial insemination and its legal complications	[RGU, TU]
9	Genital findings in a deflorated woman	[RGU]	21	Medicolegal Importance of impotence	[RGU]
10	Legitimacy	[RGU]	22	Sterility 347	[RGU]
11 ✓	PNNDT Act 395	[RGU]	23	Disputed paternity	[RGU]
12	Phantom pregnancy	[RGU]	24 ✓	Super fecundation 394	[RGU, TU]
25 ✓	Types of Hymen 389	[RGU]	30 ✓	Signs of recent delivery in living 396	[RGU, TU]
26	Sterilization and its medicolegal importance	[RGU]	31	Blood grouping in disputed paternity	[RGU]
27	Surrogate mother	[RGU, TU]	32	Ecbolics	[TU]
28	Posthumous child	[TU]	33	Paternalism	[TU]
29	Atavism	[TU]	34	Pseudocyesis	[RGU, TU]

Give precise answers					
1 ✓	Define False virgin	[KU, RGU, TU]	4 ✓	Signs of recent delivery in living	[KU, RGU, TU]
2 ✓	Define Artificial insemination	[RGU, TU]	5 ✓	Positive signs of pregnancy	[KU, RGU]

# MEDICAL JURISPRUDENCE

## COURTS AND LEGAL PROCEDURES

### Short essays

1 ✓	• Define inquest. • Mention the different types of inquest held. • Describe in detail about the magistrate inquest	547 [KU, RGU, TU]	3	What is Inquest? Explain the commonest type of inquest held in India. Explain briefly about Summons and Hostile witness	453 [RGU] 458 [KU]
2 ✓	Describe the procedure of recording evidence in Court. Write briefly on dying declaration.	453, 452			

### Short answers

1 ✓	Differentiate between Perjury and hostile witness	454	[KU]	9 ✓ Perjury	[KU, RGU, TU]
2 ✓	Cross examination	454	[KU, RGU]	10 Differentiate between Coroner inquest and police inquest	457 [KU] [KU, RGU, TU]
3 ✓	Magistrate inquest	452	[KU, RGU, TU]	11 ✓ Police inquest	[KU, RGU, TU]
4 ✓	Dying declaration	452	[KU, RGU, TU]	12 Conduct of doctor in witness box	456 [RGU]
5 ✓	Direct examination	454	[RGU]	13 Chain of custody	451, 452 [RGU]
6	Juvenile court	450	[RGU]	14 Types of witnesses	453 [RGU, TU]
7	High court	449	[RGU]	15 Conduct money	448 [RGU, TU]
8	Medical examiner system	452	[RGU]	16 Supreme court of	449 [RGU]
17 ✓	Documentary evidence	452	[TU]	20 ✓ Summons	[RGU]
18 ✓	Hostile witness	449	[TU]	21 Dying deposition	452 [TU]
19	Session Courts	449	[TU]	22 Subpoena	448 [TU]
20	Cognisable offence		[TU]		

### Give precise answers

1 ✓	A legal inquiry into the cause of death is called	[KU Feb 23]	3 ✓ Hostile witness	[KU, RGU, TU]
2 ✓	Perjury	[KU, RGU, TU]	4 ✓ Types of witnesses	453 [RGU, TU]

## MEDICAL LAW AND ETHICS

Short Essays			
1 Define Infamous Conduct. Mention briefly a list of Professional misconduct. Write a note on the punishments and disciplinary action for the same.	465, V16 [KU]	4 Define Infamous Conduct. Explain with suitable examples. Mention how State Medical Council takes disciplinary action for Infamous Conduct.	[RGU]
2 Discuss consent in medical practice. Write briefly on consumer protection act.	[RGU,TU]	5 Define and classify medical negligence with suitable examples. What precautions should a doctor take to prevent a charge of medical negligence against him/her?	[RGU,TU]
3 Define Medical negligence. Explain the various ingredients of medical negligence. Add a note on contributory negligence			[RGU]
Short answers			
1 Differentiate between Civil negligence and criminal negligence	470 [KU Feb 23]	18 Functions of state medical council	V15 [KU,RGU,TU]
2 Functions of Indian medical council	V19 [KU,TU]	19 Ingredients of medical negligence	[KU]
3 Privileged communication	[KU,RGU,TU]	20 Infamous conduct	[KU,RGU,TU]
4 Professional negligence	468 [KU]	21 Vicarious liability	471 [KU,RGU,TU]
5 Medical maloccurrence	472 + V13 [KU]	22 Informed consent	[KU, RGU]
6 Criminal negligence	[KU]	23 Contributory negligence	471 + V12 [KU]
7 Duties of a registered medical practitioner	[KU]	24 Death certificate	[RGU]
8 Consumer protection act	478 [KU]	25 Criminal professional negligence	[RGU]
9 Section 92 IPC	[RGU]	26 The transplantation of Human organ Act 1994	[RGU]
10 National Medical Commission and its functions.	[RGU]	27 Consumer Protection Act- COPRA act with recent amendments	[RGU]
11 Doctrine of Res ipsa loquitur	[RGU,TU]	28 Professional Death sentence	[RGU]
12 Professional secrecy	[RGU]	29 Euthanasia	487 [RGU,TU]
13 Locoparentis	[RGU]	30 Therapeutic misadventure	[RGU,TU]
14 Penal erasure	[TU]	31 Dichotomy	[RGU,TU]
15 Hippocratic oath	[RGU]	32 Professional death sentence	[TU]
16 Professional misconduct	[TU]	33 Malingering	[TU]
17 Composite Negligence	[TU]	34 Medical Etiquette	[TU]
18 Novus actus Intervenue	[TU]	35 Warning notice	[TU]
19 Describe in brief the various types of medical certificates and medico legal reports required to be issued by a doctor in medical practice			

[RGU]

Give precise answers

1 Define medical etiquette

[KU Feb 23]

## FORENSIC PSYCHIATRY

Short essays

1	Criminal responsibility of a mentally ill person	438	[KU Feb 23]	2	Define and classify Insanity. What is Delusion? Describe the various types of delusions	[RGU,TU]
2	Explain the term "Feigned Insanity". Mention four salient features to differentiate between true Insanity from Feigned Insanity. Add a note on civil and Criminal responsibility of an Insane					[RGU,TU]

Short answers

1	Define illusion. Enumerate the different kinds of illusions	427	optical, auditory, tactile, cognitive, physiological	[KU Feb 23]	13	Procedure in admission of an insane person in a mental asylum	437 V 197 [KU,RGU]
2	Differentiate between true and feigned insanity	433	[KU]	14	Lucid interval and its Medicolegal importance		[RGU,TU]
3	Mc Naughton's rule	438	[KU,TU]	15	Responsibilities of mentally ill person		[RGU]
4	Feigned insanity	433	[KU,TU]	16	Various types of Hallucinations		[RGU]
5	Delusion	426	[KU,RGU,TU]	17	Restraint of mentally ill patient		[RGU]
6	Criminal responsibility in mentally ill person		[KU]	18	Illusion	427	[RGU]
7	Testamentary capacity	437	[KU]	19	Somnambulism	440	[RGU,TU]
8	Hallucination	427	[KU,RGU,TU]	20	Kleptomania		[TU]
9	Impulse	427	[KU,RGU,TU]	21	Psychopathic Personality		[TU]
10	Mental health Act (1987)	434	[RGU]	22	Hebephrenia		[TU]
11	Fratricide		[TU]	23	Obsession	428	[TU]
12	Holograph						

Give precise answers

1 Define Mc Naughton's rule

[KU,TU] 2 Define Lucid interval

[KU,RGU,TU]

FOENSIC MEDICINE

## FORENSIC LABORATORY INVESTIGATIONS IN MEDICOLEGAL PRACTICE

### Short essays

What is Locard's Principle of Exchange. Describe the different tests to detect blood stains. *384, 378*

[KU Feb 23]

### Short answers

1 ✓ Takayama test	<i>378</i>	[KU]	7 ✓ Microchemical tests for blood	[RGU]
2 ✓ Precipitin test	<i>379</i>	[KU, RGU, TU]	8 ✓ Chemical examination for seminal fluids	<i>382</i> [TU]
3 ✓ Benzidine test		[KU]	9 ✓ Test for blood stains	[TU]
4 ✓ Locards principle of exchange		[RGU, TU]	10 ✓ Techmann's test	[TU]
5 Blood groups and medico legal importance	<i>380</i>	[RGU]	11 ✓ Spectroscopic examination of blood stains	<i>378</i> [TU]
6 Covering		[RGU]		

## EMERGING TECHNIQUES IN FORENSIC MEDICINE

### Short answers

1 Narcoanalysis	[RGU]	4	Viropsy	[TU]
2 Truth serum drugs	[RGU, TU]	5	Virtual autopsy	[TU]
3 Applications of radiology in forensic medicine	[RGU, TU]			

## OTHERS

### Short answers

1 Brain stem reflex and its Medicolegal importance	[RGU]	2	Hazards of blood transfusion	[RGU]
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## TOXICOLOGY

### GENERAL TOXICOLOGY

Short essays					
1 ✓ Describe the procedure of stomach wash with a neat labelled diagram. Add a note on antidotes. <i>501, 502</i>					[TU]
Short answers					
1 ✓ Ideal suicidal poisons	500	[KU,TU]	8 ✓ Antidotes	502	[KU,TU]
2 ✓ Stomach wash tube	501	[KU]	9 ✓ Legal duties of the doctor in a case of suspected poisoning [RGU,TU]	503	[RGU]
3 ✓ Importance & Contraindications for gastric lavage	501	[KU]	10 ✓ Chelating agents	503	[RGU]
4 ✓ Draw and label Stomach wash tube		[KU]	11 ✓ Preservation and dispatch of viscera for chemical analysis		[RGU]
5 ✓ Classification of antidotes with examples		[RGU]	12 ✓ Pencillamine		[TU]
6 ✓ Universal Antidote		[RGU]	13 ✓ Demulcents		[TU]
7 ✓ Classification of Poisons. [RGU]					
Give precise answers					
1 ✓ Antidotes		[KU,TU]	3 ✓ Universal Antidote		[RGU]
2 ✓ Chelating agents		[RGU]			

## CHEMICAL TOXICOLOGY

Long essays					
1 A 17-year-old was brought to the emergency in a semi-conscious state, after he had consumed an insecticide ' <u>MALATHION</u> '. Blue-green stains were present on the front of his shirt. <u>Kerosene like odour</u> could be perceived around him. He was declared dead an hour later, after he failed to respond to the resuscitative measures.					
<ul style="list-style-type: none"> <li>• What kind of compound is malathion. What are the signs and symptoms of malathion poisoning.</li> <li>• How do you manage and treat this case.</li> <li>• Mention the preservatives used.</li> </ul>					<ul style="list-style-type: none"> <li>• What are the samples to be collected for chemical analysis before death and at autopsy.</li> <li>• What is the medico legal importance</li> </ul> <span style="float: right;">[KU Feb 23]</span>
2 A 30 years old female was brought to casualty with history of poisoning. On examination following observations are noted. There was fine froth around mouth and nostrils, <u>smell of kerosene</u> like substance and pupils were constricted. Answer the following		3	A farmer Suddenly collapsed while spraying in the paddy field and brought to casualty. On examination he was unconscious, there was tachycardia, excessive sweating and salivation. An unusual <u>offensive smell</u> was emanating from his clothes. Answer the following <ul style="list-style-type: none"> <li>• What is the probable diagnosis</li> <li>• How do you manage</li> </ul>		

	•What material objects you preserve during autopsy to diagnose poisoning [KU]		•Post mortem findings, if the patient dies •What are the samples to be collected during the postmortem examination and how will you preserve each. [KU]
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Diagnosis :OP POISONING

559

#### Short essays

1 ✓ Chronic mercury poisoning.	534	[KU Feb 23]	6 Signs and symptoms of corrosive poisons , complications and treatment[RGU]
2 ✓ •Define 'Drunkenness'. •Explain, how the state of drunkenness renders the driving of a vehicle dangerous. •What is Widmark's formula	549	[KU]	7 Define Poison. What are the characters of Ideal Homicidal poisoning. Describe the duties of a Doctor when a poisoning case was admitted in the casualty [TU]
3 Explain the mechanism of action of cyanide on human body. Describe the signs, symptoms,treatment and postmortem appearances of acute Cyanide poisoning	[RGU,TU]	8	Classify poison. Describe the signs, symptoms, complications, treatment and post mortem appearances of sulfuric acid [TU]
4 Define poisoning. Write in detail about signs, symptoms and Post mortem changes of arsenic poisoning	[TU]	9	Describe the signs, symptoms, treatment and autopsy findings in a case of chronic mercury poisoning [TU]
5 Describe the Signs, symptoms, Treatment and Autopsy findings in a case of Chronic Lead poisoning	529	[TU]	10 Clinical manifestations and management of Organo phosphorus compound poisoning [RGU]

#### Short answers

1 Vitriolage	513	[KU,RGU,TU]	18 Management of methanol poisoning	555	[KU,RGU]
2 ✓ Plumbism	530	[KU,RGU]	19 Findings in chronic lead poisoning		[KU,RGU]
3 ✓ Differentiate between Arsenic poisoning and cholera	526	[KU,RGU]	20 ✓ Burtonian line	531	[KU,TU]
4 ✓ Carboluria	519	[KU,RGU]	21 Treatment of a case of cyanide poisoning		[KU]
5 Mercuria lentis	534	[KU]	22 Hatters shakes [RGU]		
6 Marking nut		[RGU]	23 Hydrargyrim		[RGU]
7 Chelating agents		[RGU]	24 Autopsy findings in Sulphuric acid and carbolic acid poisoning		[RGU]
8 Clinical features and antidotes for Oxalic acid poisoning		[RGU]	25 Hydrochloric acid poisoning	515	[RGU]
9 Chronic mercurial poisoning		[RGU]	26 Nitric acid poisoning	514	[RGU]
10 Acute arsenic poisoning		[RGU]	27 Carbon monoxide poisoning		[RGU]
11 Rodenticides		[RGU]	28 Hydrargyrim		[TU]

12	Phossy jaw	[TU]	29	Micky Finn	[TU]
13	Post mortem appearance of copper sulphate poisoning	[TU]	30	Xanthoproteic reaction	[TU]
14	Oxaluria	[TU]	31	Carbolism	[TU]
15	Classify agricultural poisons	[TU]	32	Hydrocyanic acid poisoning	[TU]
16	Cardiac poisons	[RGU,TU]	33	Aconite	[RGU,TU]
17	Hippus	[RGU,TU]	34	Abrus precatorius	[TU]

**Give precise answers**

1	Blood alcohol levels	[KU]	5	Mees line	[TU]
2	Burtonian line	[KU,TU]	6	Name two conditions which will cause constriction of pupils	[TU]
3	Define Vitriolage	[KU,RGU,TU]	7	Rain drop appearance	[TU]
4	Phossy jaw	[TU]	8	Cardiac poisons	[RGU,TU]

## PHARMACEUTICAL TOXICOLOGY

**Short Essays**

1	Describe the signs, symptoms and management in a case of Barbiturate poisoning with coma	[TU]
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**Short answers**

1	Designer drugs	[RGU]	3	Morphine poisoning	[RGU]
2	Paracetamol poisoning	[RGU]	4	Aspirin poisoning	[RGU]

## BIOTOXICOLOGY

**Long essays**

1	A 25 years old male was brought to hospital with history of snake bite. The person has seen the snake and it had a <u>hood on head</u> . There were two bite marks noticed in right ankle with swelling and ptosis were observed in both eyes. Answer the following: •What is the most possible snake in this case. •How will you manage a case of snake bite. •How will you identify a poisonous snake <b>638</b>	<b>633</b> [KU]	2	A 20 years old male was bitten on the foot by a snake while he was working in fields. He killed the snake and brought it to casualty along with him. It had a <u>triangular head</u> and <u>black diamond shaped patches on the back</u> . There was swelling and blood oozing from the site of bite. Answer the following: •Identify the snake•What is the nature of its venom <b>638</b> •Mention the first aid management that can be given in such a bite	
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	<b>Snake :COBRA</b>		•What is the specific management to be given in this case [KU]
		<b>Snake :VIPER</b>	
1	<b>Short essay</b>		
1	Classify Irritants with examples. Enumerate the differences between poisonous poisonous snake. Add a note on management of a poisonous snake bite. [RGU]		
1	Treatment of snake bite poisoning <b>642</b>	<b>Short answers</b>	
2	Draw and label Hood and mouth parts of a cobra <b>638</b>	[KU] 6	Management of viper bite [RGU,TU]
3	Scorpions	[KU] 7	Polyvalent antisnake venom [RGU]
4	Snake venom	[RGU] 8	Differentiate between a poisonous and non- poisonous snake [TU]
5	Difference between Russell viper and cobra	[TU] 9	Ophitoxaemia [TU]
5		[TU] 10	Plant Penicillin Poisoning [TU]
1	<b>Give precise answers</b>		
1	Components of Polyvalent antisnake venom	[RGU]	

## FOOD POISONING

1	Botulism	<b>Short answers</b>	
		[RGU] 2	Lathyrism [RGU,TU]

## SOCIOMEDICAL TOXICOLOGY

1	A 40 years old man was found on a highway and brought to emergency department with <u>fever</u> , <u>rashes</u> throughout the body and <u>runs away from bed repeatedly</u> . On examination, he has <u>tachycardia</u> , exaggerated <u>deep tendon reflexes</u> , <u>hallucinations of sight and hearing</u> , <u>delirium</u> . After 2 hours he slipped into <u>coma</u> and died. Answer the following: •What was the probable condition in this case with reasons •Post mortem findings	<b>Long essays</b>	
		•How do you manage •Medico legal aspects	[KU]
	<b>Diagnosis:DATURA POISONING</b> <b>591</b>	<b>Short essay</b>	

1	Classify poisons and write briefly about barbiturate poisoning. [RGU] 499	608	2	Describe the manifestations, treatment and medicolegal importance of datura poisoning [RGU]
3	Explain the factors modifying the action of a poison. Give an account of clinical manifestations and treatment of a case opium poisoning [RGU]	604		

#### Short answers

1 ✓	What is body packer syndrome and body stuffers syndrome.	14	Drug automatism [RGU]
2	Mention any two signs seen on radiological examination of such cases	15	Pethidine [RGU]
3	615 [KU Feb 23] <i>mid triangle, Rosette sign</i>	16	Mushroom poisoning [TU]
4 ✓	Charas 595 [KU,TU]	17	Cannabis Indica [RGU]
5	Drugs of abuse and dependence 612 [KU,RGU]	18	Difference between drug addiction and drug habituation [RGU]
6 ✓	Magnans symptom 602 [KU,TU]	19	Drug dependence [RGU]
7 ✓	Manifestations in a case of datura poisoning [KU]	20	Hallucinogens [RGU]
8 ✓	Differentiate between Strychnine poisoning and tetanus 628 [KU,RGU]	21	Ideal roadside poison [RGU]
9	Cocaine poisoning [RGU]	22	Opium poisoning [RGU]
10	Cocainism [RGU]	23	Bhang [TU]
11	Strychnine poisoning 622 [RGU]	24	Signs and Symptoms of consumption of Cannabis [TU]
12	Run amok [TU]	25	Differentiate drug addiction from drug habituation [TU]
13 ✓	Body packer syndrome [TU]	26	Lysergic acid diethylamide (LSD) [TU]

#### Give precise answers

1 ✓	Magnans symptom [KU,TU]	3	Define Ideal roadside poison [RGU]
2	Define Hallucinogens [RGU]		Inability to stay off alcohol is called [KU Feb 23]

AUD - Alcohol Use disorder

## ENVIRONMENTAL TOXICOLOGY

#### Short essays

1	Enumerate the Irrespirable gases. Discuss the Pharmacological Actions, Signs and Symptoms, Diagnosis, Treatment and Post mortem appearances of Carbon Monoxide Poisoning.	[TU]
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#### Short answers

1	SUI [TU]	3	War gases [TU]
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