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	FORENSIC SCIENCE					
Name & Signature of the Invigilato	r PAPER – II	OMR Answer She	et No. :		270054	
	CODE-27	Roll No. :				
•••••	•	(in figures as in l	Hall Ticket)		,	
		Roll Number in v	ords :			

Time : 2 Hours]	No.	of Printed Pages	: 16		[Maximum Marks : 200	
	Instru	ctions for the	Candidates			
1. Write your Roll Number in the space provided on the top of this page. 2. This paper consists of one hundred (100) multiple choice type of questions. All questions are compulsory. 3. At the commencement of examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and compulsorily examine it as below: (i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page. Do not accept a booklet without sticker seal and do not accept an open booklet. (ii) Tally the number of pages and number of questions in the booklet with the information printed on the cover page. Faulty booklets due to pages/questions missing or duplicate or not in serial order or any other discrepancy should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given. (iii) After this verification is over, the Test Booklet Number should be entered on the OMR Answer Sheet Number should be entered on this Test Booklet. 4. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the oval as indicated below on the correct response against each item. Example: (A)						
9. Use only Blue/Black Ball point pen. 10. Use of any calculator or any electronic devices or log table etc., are prohibited. 11. There shall be no negative marking. પરીક્ષાથીઓ માટે સ્થનાઓ 1. આ પાનાની ટોચ પર દર્શાવેલી જગ્યામાં તમારો રોલ નંબર લખો.						
1. આ પાનાની ટોચ પર દર્શાવેલી જગ્યા		પરી ક્ષાર્થીઓ માટે સ્ ચન્	ાઓ			
			જેયાત છે.			
3. પરીક્ષાની શરૂઆતમાં આપને પ્રશ્નપુસ્તિ	કા આપવામાં આવશે. પ્રશ	યમ પાંચ (૫) મિનિટ દ	રમ્યાન તમારે પ્રશા	પુસ્તિકા ખોલી અ ં	તે ફરજિયાતપણે નીચે મુજબ પરીક્ષણ	
 પરીક્ષાની શરૂઆતમાં આપને પ્રશ્નપુસ્તિકા આપવામાં આવશે. પ્રથમ પાંચ (પ) મિનિટ દરમ્યાન તમારે પ્રશ્નપુસ્તિકા ખોલી અને ફરજિયાતપણે નીચે મુજબ પરીક્ષણ કરવું: પ્રશ્નમુસ્તિકાનો વપરાશ કરવા માટે આ કવર પૃષ્ઠની ધાર પર આપેલ સીલ સ્ટીકર કાડી નાખો. કોઈપણ સંજોગોમાં સીલ સ્ટીકર લગરની કે ખુલ્લી પૃશ્નપુસ્તિકા સ્વીકારશે નહીં. પ્રશ્નપુસ્તિકા સ્વીકારશે નહીં. કવર પૃષ્ઠ પર છપાયેલ નિર્દેશાનુસાર પ્રશ્નપુસ્તિકાના પ્રશ્ને, પૃષ્ઠો અને સંખ્યાને બરાબર ચકાસી લો. ખામીયુક્ત પ્રશ્નપુસ્તિકા કે જેમાં પૃશ્નો / પૃષ્ઠો ઓછાં ક્ષેય, બે વાર છપાયા ક્ષેય. અનુકમમાં અથવા અન્ય કોઈ કરક કેય અર્થાત કોઈપણ સંજોગોમાં ખામીયુક્ત પ્રશ્નપુસ્તિકા સ્વીકારશે નહીં. અને આપોયુક્ત પ્રશ્નપુસ્તિકા તે હી. આ ખામે આવશે મહીં. એ આપોયુક્ત પ્રશ્નપુસ્તિકા લે હાલવામાં આવશે નહીં કે કોઈ વધારાનો સમયગાળો આપવામાં આવશે નહીં. પ્રશ્નીશી, પૃશ્નપુસ્તિકા બદલવામાં આવશે નહીં કે કોઈ વધારાનો સમયગાળો આપવામાં આવશે નહીં. પ્રશ્નેશ મારે ચાર જવાબ વિકલ્પ (A), (B), (C) અને (D) આપવામાં આવેલ છે. તમારે સાચા જવાબના ઓવલ (oval)ને નીચે આપેલ ઉદાહરણ મુજબ પેનશી શરીને સંપૂર્ણ કાર્ણ કર્ણ કરવાનું રહેશે. અપ્ત પ્રશ્નાનકાના પ્રશ્નોના જવાબ અલગાથી આપવામાં આવેલ OMR જવાબ પત્રકમાં પેપર-!!લખેલ વિભાગમાં જ અંકિત કરવા. જો આપ OMR જવાબ પત્રકમાં આપે સાચે ઓવલ (oval)સિવાય અન્ય સાંગે જવાબ છે. આ પ્રશ્નપુસ્તિકાના પ્રશ્નોના જવાબ અલગાથી આપવામાં આવેલ OMR જવાબ પત્રક કરવામાં આવશે નહીં. કો સાં (Rough work) પ્રશ્નપુસ્તિકાના અંતમ કોઈપણ સ્થાને આપનું નામ. રોલ નંબર કોન નંબર અથવા એવું કોઈ વિકરે જેનાથી તમારી ઓળખ થઇ શકે, સ્થીત અથવા અલ્ય કોઈપણ સ્થાને આપનું નામ. રોલ નંબર ફોન નંબર અથવા એવું કોઈ પણ સંજોઓમાં તે પરીક્ષા નાખવો કે સફેદ સાહેનો ઉપયોગ કરી લદલશે તો આપને પરીક્ષા ખાબ પત્રક કરવામાં આવશે. પરીક્ષા પૂર્ણ શયા બાદ અર્થ કોઈપણ લાબ પત્રક જે તે નિરીક્ષકને કરજીયાન સોપો દેવું અને કોઈ પણ સંજોઓમાં તે પરીક્ષા ખંડની બહાર લઇ જવું નહી. પરીક્ષા પૂર્ણ અર્થ હોઈ તે કરાના પ્રચ્ના કરાનો ઉપયોગ કરવાની મનાઈ છે. માત્ર કર્યા અર્થ ઈલ્લેક્ટ્રોનિક કરાનો ઉપયોગ						
(iii) આ ચકાસણા સમાપ્ત શાય પછી,	પ્રશ્રપાસ્તકાનો નંબર OM	1R જવાબ પત્રક પર ૯	ખવી અને OMR [.] -	જવાબ પત્રકનો •	ાંબર પ્રશ્નપુસ્તિકા પર લખવો.	
4. પ્રત્યેક પ્રશ્ન માટે યાર જવાબ વિકલ્પ (A), (B), (C) અને (D) આપવામાં આવેલ છે. તમારે સાચા જવાબના ઓવલ (oval)ને નીચે આપેલ ઉદાહરણ મુજબ પેનથી ભરીને સંપૂર્ણ કાળું કરવાનું રહેશે. ઉદાહરણ : (A) (C) (D) કે જ્યાં (B) સાચો જવાબ છે.						
 આ પ્રશ્નપુસ્તિકાના પ્રશ્નોના જવાબ અલ આપેલ ઓવલ (oval)સિવાય અન્ય સ 6. કાર્યું કામ (Rough work) પ્રશ્નપુસ્તિક 7. જો આપ OMR જવાબ પત્રક નિયત ક શઇ શકે, અંકિત કરશો. અથવા અલક કે મહેર કરતી. જેવાન નવા અલક કે મહેર કરતી. 	ગથી આપવામાં આવેલ C થાને જવાબ અંકિત કરશો મના અંતિમ પૃષ્ઠ પર કરવું કચ્ચા સિવાય અન્ય કોઈપા આપાનો પ્રયોગ કરો, અને	MR જવાબ પત્રકમાં પે તો તે જવાબનું મૃલ્લાંકન j. ણ સ્થાને, આપનું નામ, ત્રા અન્ય કોઈ અનુધિત આપ્રેસ્ટાન્ટેર	પર-IIલખેલ વિભા ત કરવામાં આવશે રોલ નંબર, ફોન નં સાધનોનો ઉપયોગ	ગમાં જ અંકિત ક નહીં. ાંબર અથવા એવું કરો, જેમકે અંકિ	રવા. જો આપ OMR જવાબ પત્રકમાં કોઈ ચિક્રકે જેનાથી તમારી ઓળખ ત કરી દીધેલ જવાબ ભૂંસી નાખવો	
ક તકુદ તાલું ઉપયોગ કરા બદલશ 8. પરીક્ષા સમય પૂરો થઈ ગયા બાદ એર્ર જવું નહીં, પરીક્ષા પૂર્ણ થયા બાદ ઉ 9. માત્ર કાળી / ભૂરી બોલ પોઈન્ટ પેન વ	ાત આવશે પરાક્ષા માટે જિનલ OMR જવાબ પત્ર મેદવાર ઓરીજીનલ પ્રશ્નપ્ !!પરવી.	જનાન્ય કારુ કરવામાં 1ક જે તે નિરીક્ષકને ફરાં મુસ્તિકા અને OMR જવ	ખાયસ. જેયાત સોપી દેવું ત્રાબ પત્રકની ડુપ્લિં	અને કોઈ પણ સંવ ક્રેટ કોપી પોતાની	જોગોમાં તે પરીક્ષા ખંડની બક્ષર લઇ ! સાથે લઇ જઇ શકે છે.	
10. કલ્ક્યુલટર,લાગ ટબલ અને અન્ય ઇલ 11. ખોટા જવાબ માટે નકારાત્મક ગુણાંકન	દ્રાનક વત્રાના ઉપયાગ ! પુથા નથી,	કરવાના મનાઇ છે.				



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FORENSIC SCIENCE

Paper – II

1.	Ricochet of Bullet means	
	(A) Penetration of Bullet	(B) Deflection of Bullet
	(C) Unfired Bullet	(D) Tandem Bullet
2.	The function of primer is	
	(A) To propel the bullet	(B) To ignite the main charge
	(C) To provide the Lubrication	(D) To save the corrosion
3.	The Microscope that produced image	e due to emission of Secondary Electron
	(A) SEM	(B) TEM
	(C) Compound microscope	(D) Fluorescent microscope
4.	P – 300 MERMER is related with	
	(A) Brain finger printing	(B) Electrocardiograph
	(C) Electro encephalograph	(D) Voice examination
5.	The part of Microscope that focuses	the light on the object is
	(A) Iris Diaphragm	(B) Coarse focus
	(C) Abbey Condensers	(D) Body tube
6.	Which of the following is NOT a part	of optical system?
	(A) Condenser	(B) Fine adjustment
	(C) Illuminator	(D) Ocular lance
7.	Which of the following is NOT a part	of Mechanical System?
	(A) Coarse Adjustment	(B) Objective lens
	(C) Body tube	(D) Stage
8.	The striation marks can be examine	d in
	(A) Comparison microscope	(B) Compound microscope
	(C) Stereomicroscope	(D) Phase contrast microscope



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9.	The AgNO ₃ metho	od is related with		
	(A) Finger print	(B) Trace evidence	e (C) Foot print	(D) None of these
10.	Which of the follo	owing is used as pr	imer charge ?	
	(A) TNT	(B) RDX	(C) Styphnate	(D) HMX
11.	Which of the follo	owing is NOT a Rifl	ed Weapon ?	
	(A) Pistol	(B) Shotgun	(C) Machine gun	(D) Revolver
12.	Plethysmograph:	is related with		
	(A) Narco analys	is	(B) Lie detection	
	(C) Voice analysi	s	(D) None of these	
13.	DNA is a			
	(A) Enzyme	(B) Polymer	(C) Protein	(D) Polypeptide
14.	Which of the follo Multiplex STR Ki	-	PG is labeled with 6-F	'AM in GlobalFiler
	(A) Blue	(B) Green	(C) Yellow	(D) Purple
15.	Approx. DNA con	tent in a sperm cel	ll is	
	(A) 0.03 ng	(B) 0.003 ng	(C) 0.3 ng	(D) 3 ng
16.	In PCIA DNA extr hydrophilic natu		ich reagent is used to	reduce the
	(A) Isoamyl Alcol	hol	(B) Isopropyl Alcohol	l
	(C) Sodium Aceta	ate	(D) Ethanol	
17.	Which of the follo	owing is NOT requi	red for DNA amplificat	tion ?
	(A) Primer		(B) ddNTPs	
	(C) dNTPs		(D) Taq. Polymerase	
18.	DNA replication t	-		
	(A) S phase	(B) Metaphase	(C) Anaphase	(D) Telophase
19.	Which enzyme is	known as molecul	ar scissors?	
	(A) Endonucleas	e	(B) Ligase	
	(C) Hydrogenase		(D) Lipase	



À.				
20.	What is the function	on of sigma unit	of bacterial RNA poly	merase?
	(A) Enables specifi	c binding of RN	A polymerase to gene	promoters
	(B) Contains the ca	atalytic activity	of polymerase	
	(C) Remains part of	of polymerase th	roughout the transcri	ption
	(D) Recognizes tran	nscription termi	nation sites in the DN	A
21.	Which of the follow glucose levels are l	_	Lac Operon when lacto	ose levels are high and
	(A) cAMP levels de	crease, triggerin	g binding of CAP to R	NA polymerase
	(B) cAMP activates	CAP which bin	ds to the Lac promote:	r
	(C) cAMP activates	CAP which bin	ds to the Lac repressiv	ve protein
	(D) CAP binds to the	ne ribosome to p	prevent translation	
22.	The end product o	f purine metabo	olism is	
	(A) Hypoxanthine		(B) Xanthine	
	(C) Uric Acid		(D) Oxalo-acidic aci	d
23.	Which of the follow	wing is NOT a P	CR enhancing additive	?
	(A) Triton X	B) Gp32	(C) BSA	(D) Haemoglobin
24.	Random Amplified	Polymorphic Dl	NA does NOT use	
	i. Restriction enz	yme		
	ii. PCR			
	iii. DNA polymeras	se		
	iv. Radio-labelled	probe		
	(A) (i) only		(B) (i) and (ii)	
	(C) (ii) and (iii)		(D) (i) and (iv)	
25.	When the expressi gene, it is known a	_	is suppressed by the	effect of a non-allelic
	(A) Incomplete don	ninance	(B) Pseudo domina	nce
	(C) Heterosis		(D) Epistasis	
26.	The tertiary structu	ure of protein is	maintained by	
	(A) Hydrophobic b	onds	(B) Electrostatic bo	nds
	(C) Van der Waals	Forces	(D) All of the above	



27.	27. The mechanism of intake of DNA Fragments from the surrounding med by a cell is called as			rrounding medium		
	(A) Transformation	1	(B) Transduction			
	(C) Both (A) and (B		(D) Conjugation			
28.	The phenomena wh	ere multiple codo	ns decode the same ar	mino acid is called as		
	(A) Ambiguity	•	(B) Degeneracy			
	(C) Universality		(D) Missense effect			
29 .	Which molecular m	narker does NOT	use amplification of I	ONA through PCR ?		
	(A) RAPD (I	B) STS	(C) VNTR	(D) RFLP		
30.	Which rule explains equal in DNA mole	-	rines and pyrimidines	s bases should remain		
	(A) Watson and Cr	ick's rule	(B) Friedrich Miesch	ier's rule		
	(C) Duke and Davi	dson's rule	(D) Chargaff's rule			
31.	Operon system con	nsists of				
	(A) Operator and s	tructural genes	(B) Operator, regula	tor, repressor		
	(C) Promoter		(D) None of these			
32.	Which of the follow	ring is a heat tole	rable DNA polymeras	e ?		
	(A) Pfu		(B) Vent			
	(C) Taq		(D) All of the above			
33.	Full form of DMOR	T is				
	(A) Disaster Mortuary Operational Response Team					
	(B) Disaster Management Operational Response Team					
	(C) Disaster Mortuary Operational Rapid Team					
	(D) Disaster Manag	gement Operation	al Rapid Team			
34.	Vacuum Metal Dep	Vacuum Metal Deposition utilises vacuum-coating technology for the				
	evaporation of metals and the deposition of thin metal films. Thin layers of what metal is used for this process?					
	(A) Gold and Lead		(B) Gold and Alumin	num		
	(C) Gold and Silver	r	(D) Gold and Zinc			



35. In order to accelerate the development of superglue treated prints, one following is commonly used?			ted prints, one of the		
	(A) Portable heate	er	(B) Hair dryer		
	(C) Alcohol lamp		(D) All of the above		
36.	The first Scientist of latent prints or	-	e use of DFO for the flu	uorescent detection	
	(A) Pounds	(B) German	(C) Menzel	(D) Herod	
37.	 When fingerprinting the dead and rigor mortis (stiffening of the muscles) set in and the fingers are tightly clenched, the fingers may be (A) forcible straightened by "breaking the rigor" (B) immersed in liquid detergent to gently "loosen the rigor" (C) immersed in alcohol to gently "loosen the rigor" (D) None of the above 				
38.	other than sweat,	are commonly referries ofs	ridges are wet, usually erred to as wet prints. T before and at (B) solid lines (D) broken lines	he friction ridges tend	
39.		lands and branchings refer to major 2 nd level ridge path devia the friction ridges known as			
	(A) ending ridges	and bifurcations	(B) ending ridges an	ıd islands	
	(C) islands and bi	furcations	(D) dots and bifurca	tions	
40.	Thermoplastic po	wders must be ap	oplied to a surface with	ı	
	(A) An atomizer		(B) A brush		
	(C) Cotton wads		(D) A magnetic wand	d	
41.	. To take fingerprints in Mummified Dead Bodies, to rehydrate the skin v solution is used?				
	(A) Sodium hydro	oxide	(B) Potassium hydro	oxide	
	(C) Sodium carbo	nate	(D) All of the above		
42.	NCR acronym in	context of exami	nation of document sta	ands for ?	
	(A) No carbon rec		(B) No cursive requi		
	(C) No copying re	-	(D) No copy required	d	



43.	Grabber marks may be found in which of the following?				
	(A) Typewritten document	(B) Photocopied document			
	(C) Carbon copied document	(D) Printed document			
44.	It refers to the widening of the ink more obvious increase in the widt	strokes due to the added pressure of the h of the strokes			
	(A) Shading	(B) Retouching or patching			
	(C) Script	(D) Tremors			
45.	•	e, "the forger has trouble matching the paper of date it was supposed to have been written." or in the time and place.			
	(A) Collected standard	(B) Obliteration			
	(C) Anachronism	(D) Alteration			
46.	Which of the following is a primary	y goal of forensic medicine ?			
	(A) Diagnosis and treatment of dis	seases			
	(B) Determining the cause of deat	h			
	(C) Preventing crimes				
	(D) Providing medical care to victing	ms			
47.	In forensic medicine, what does th	ne term "PMI" stands for ?			
	(A) Post-Mortem Interval	(B) Personal Medical Identification			
	(C) Pathological Mortality Index	(D) Post-Mortem Inspection			
48.	Which post-mortem examination is the cause of death and to gather e	nvolves the dissection of a body to determine evidence for legal proceedings?			
	(A) Clinical autopsy				
	(B) Virtual autopsy				
	(C) Forensic autopsy/ medico lega	al autopsy			
	(D) Histological autopsy				
49.	Rigor mortis is a post-mortem phe	enomenon that occurs due to			
	(A) Cooling of the body after death	1			
	(B) Accumulation of blood in depe	endent body parts			
	(C) Post-mortem muscle contraction	ons			
	(D) Stiffening of muscles after dea	th			



50.	The study of insects in a forensic context to estimate the post-mortem interval is known as			
	(A) Forensic botany	(B) Forensic entomology		
	(C) Forensic toxicology	(D) Forensic odontology		
51.	Which of the following is NOT a co skeletal remains in forensic anthrop	ommon method of determining the age of bology?		
	(A) Dental records	(B) Radiocarbon dating		
	(C) Epiphyseal fusion	(D) DNA analysis		
52 .	The examination of firearms and a known as	mmunition in a forensic investigation is		
	(A) Ballistics (B) Toxicology	(C) Serology (D) Odontology		
53.	Which of the following is an example determine the position of a body at	le of a Livor mortis pattern that can help the time of death?		
	(A) Uniform lividity	(B) Antemortem lividity		
	(C) Post-mortem hypostasis	(D) Gravitational lividity		
54.	- ·	nce collected from a crime scene is essential s the recommended method for preserving or hair?		
	(A) Placing it in a plastic bag	(B) Storing it in direct sunlight		
	(C) Air-drying the evidence	(D) Keeping it in a paper bag		
55.	Forensic DNA analysis typically for	focuses on which type of DNA sequence to		
	establish individual identity?			
	(A) Mitochondrial DNA	(B) Ribosomal DNA		
	(C) Introns	(D) Exons		
56 .	Which of the following is a method examining the stages of decomposition	od used to estimate the time of death by sition in a body?		
	(A) Algor mortis	(B) Rigor mortis		
	(C) Livor mortis	(D) Tache noire		
57 .	Forensic odontology primarily involv	es the examination of		
	(A) Insects	(B) Bloodstains		
	(C) Teeth	(D) Hair		



58. The science that deals with the identification of an individual based unique dental records is known as		
	(A) Odontology	(B) Entomology
	(C) Serology	(D) Botany
59.	What is the primary purpose of a ra	pe kit in forensic medicine ?
	(A) Collecting and preserving physic	cal evidence from a crime scene
	(B) Storing blood and tissue sample	s for DNA analysis
	(C) Conducting toxicological tests	
	(D) Identifying the cause of death in	a homicide case
60.		e process of identifying the deceased by ures with antemortem records, such as
	(A) Autopsy	(B) Algor mortis
	(C) Post-mortem reconstruction	(D) Rigor mortis
61.	In forensic toxicology, which of the investigating cases involving drug or	following is NOT typically tested for when verdose or poisoning?
	(A) Alcohol	(B) Heavy metals
	(C) Antibiotics	(D) Enzymes
62.	The process of identifying an individential friction ridges on their fingertips and	dual by analyzing the unique patterns of d palms is known as
	(A) DNA profiling	(B) Entomology
	(C) Serology	(D) Fingerprint analysis
63.	What is the term for the study of hand investigations?	dwriting and document analysis in forensic
	(A) Graphology	(B) Handwriting profiling
	(C) Documentology	(D) Questioned document examination
64.	In forensic medicine, what is the pri	mary purpose of serological testing?
	(A) Determining the time of death	
	(B) Identifying drugs in the bloodstre	eam
	(C) Analyzing body fluids for the pre	sence of antigens and antibodies
	(D) Examining trace evidence such a	as hair and fibers



When assessing a gunshot wound, what is the name for the small circular or oval abrasion around the entrance wound, caused by the bullet brushing against the skin?					
(A) Powder tatto	00	(B) Gutter wo	and		
(C) Stellate wou	nd	(D) Exit wound	d		
Forensic toxicol	ogy primarily de	als with the analys	is of		
(A) Gunshot wo	unds				
(B) Bloodstains					
(C) Poisons and	chemicals in bio	ological specimens			
(D) Fingerprint	patterns				
	•	nple of a common po	ost-mortem specimen use	d	
(A) Hair	(B) Saliva	(C) Urine	(D) Dental record	s	
Toxicology testir	ng is often perfor	med in cases invol	ving		
(A) Autopsy of a	gunshot victim				
(B) Identification	n of victims thro	ugh dental records			
(C) Suspicious f	ires and explosi	ons			
(D) Suspected d	rug overdoses				
The main object	ive of post-morte	em toxicology is to			
(A) Determine the	he time of death				
(B) Identify the	type of firearm u	ised			
(C) Detect the presence of drugs or poisons in the body of the victim					
(D) Establish th	e cause of death	through skeletal a	nalysis		
In toxicology, th	e abbreviation "l	BAC" stands for			
(A) Blood Alcoho	ol Content	(B) Body Asse	ssment Concentration		
(C) Brain Analys	sis Criteria	(D) Base Acidi	ty Count		
time of flight T Tables, then the	in seconds, for maximum heigh	range X calculated	by using Ingalls' Ballist	ic	
(A) H in feet = T	^(2)	(B) H in feet =	(2T)^(2)		
	or oval abrasion against the skin (A) Powder tatto (C) Stellate would be stellate wo	or oval abrasion around the entagainst the skin? (A) Powder tattoo (C) Stellate wound Forensic toxicology primarily detagate (A) Gunshot wounds (B) Bloodstains (C) Poisons and chemicals in bid (D) Fingerprint patterns Which of the following is an examin toxicology analysis? (A) Hair (B) Saliva Toxicology testing is often perform (A) Autopsy of a gunshot victim (B) Identification of victims through (C) Suspicious fires and explosion (D) Suspected drug overdoses The main objective of post-morter (A) Determine the time of death (B) Identify the type of firearm usual (C) Detect the presence of drugs (D) Establish the cause of death (B) Blood Alcohol Content (C) Brain Analysis Criteria For given muzzle-velocity of a butime of flight T in seconds, for the seconds of the second of the seconds of the second	or oval abrasion around the entrance wound, causagainst the skin? (A) Powder tattoo (B) Gutter wound (C) Stellate wound (D) Exit wound Forensic toxicology primarily deals with the analysi (A) Gunshot wounds (B) Bloodstains (C) Poisons and chemicals in biological specimens (D) Fingerprint patterns Which of the following is an example of a common point toxicology analysis? (A) Hair (B) Saliva (C) Urine Toxicology testing is often performed in cases involuted (A) Autopsy of a gunshot victim (B) Identification of victims through dental records (C) Suspicious fires and explosions (D) Suspected drug overdoses The main objective of post-mortem toxicology is to (A) Determine the time of death (B) Identify the type of firearm used (C) Detect the presence of drugs or poisons in the language of the following relations? (E) Brain Analysis Criteria (D) Base Acidit for given muzzle-velocity of a bullet, the range X (fitime of flight T in seconds, for range X calculated Tables, then the maximum height H, of trajectory for of the following relations?	or oval abrasion around the entrance wound, caused by the bullet brushin against the skin? (A) Powder tattoo (B) Gutter wound (C) Stellate wound (D) Exit wound Forensic toxicology primarily deals with the analysis of (A) Gunshot wounds (B) Bloodstains (C) Poisons and chemicals in biological specimens (D) Fingerprint patterns Which of the following is an example of a common post-mortem specimen use in toxicology analysis? (A) Hair (B) Saliva (C) Urine (D) Dental record Toxicology testing is often performed in cases involving (A) Autopsy of a gunshot victim (B) Identification of victims through dental records (C) Suspicious fires and explosions (D) Suspected drug overdoses The main objective of post-mortem toxicology is to (A) Determine the time of death (B) Identify the type of firearm used (C) Detect the presence of drugs or poisons in the body of the victim (D) Establish the cause of death through skeletal analysis In toxicology, the abbreviation "BAC" stands for (A) Blood Alcohol Content (B) Body Assessment Concentration (C) Brain Analysis Criteria (D) Base Acidity Count For given muzzle-velocity of a bullet, the range X (ft.), ballistic coefficient, the time of flight T in seconds, for range X calculated by using Ingalls' Ballist Tables, then the maximum height H, of trajectory for range 'X' is given by whice of the following relations?	

(D) H in feet = $20T^{(2)}$

(C) H in feet = $12T^{(2)}$



72. Let S = rate of spin imparted to the bullet by the rifling when the bullet leaves the muzzle, u = muzzle velocity of bullet, d = pitch of rifling; 'S', 'u' and 'd' are connected by which of the following relations?

(A) S=d/u

(B) S = u/d

(C) S=dxu

(D) $S = u^{2}/d$

- **73.** A high velocity cartridge has been designated as 7.62×51 mm cartridge. In relation to this cartridge, which of the following statements is correct?
 - (A) First number is crosssectional diameter of cylindrical portion of bullet and the second number is the length of chamber of the firearm from which it is fired
 - (B) First number is the caliber of the firearm from which it is fired and the second number is the length of the cartridge
 - (C) Second number is the caliber of the firearm from which it is fired and the first number is the length of the cartridge case
 - (D) First number is the crosssectional diameter of cylindrical portion of the bullet whereas the second number represents the length of the cartridge
- **74.** Which of the following is the major factor affecting the rate of burning of propellants is
 - (A) Pressure of propellant gases under which burning takes place
 - (B) Whether the primer is Boxer or Berdan
 - (C) Shape of base of bullet
 - (D) Shape of nose of bullet
- **75.** The shape of propellant grains is maintained during its burning or the law of burning of propellant grain by

(A) Resal

(B) Chugh

(C) Jones

(D) Piobert

- **76.** Which of the following gives the variation in bullet velocity with bullet travel along the bore?
 - (A) Velocity of bullet rises, reaches a maximum value and then falls to muzzle velocity
 - (B) Velocity of bullet continues to rise at a constant rate
 - (C) Initially the rate of rise of velocity is fast and then, after some travel, it slows down
 - (D) Initially the rate of rise of velocity is slow and then, after some travel, it becomes fast



77 .	The phenomena of sheared primer causes which of the following marks?				
	(A) Firing pin ma	arks	(B) Breech face marks		
	(C) Ejector mark	s	(D) Chamber marks		
78.		ic studies, the reta which of the follow	rdation of bullet with ing relations?	angle of yaw, say 'a'	
	(A) $1+(a^{2})/169$)	(B) (1+a^(4))/169		
	(C) 1+(a/169)		(D) 1+(a^(3)/169)		
79 .		India, the first Cer ndia was establishe	ntral Forensic Science ed ?	e laboratory of MHA,	
	(A) Chandigarh	(B) Hyderabad	(C) Calcutta	(D) New Delhi	
80.	Hardest tissue in	human body is			
	(A) Tooth	(B) Femur	(C) Skull	(D) Mandible	
81.	Transitional phas	se in hair growth c	ycle is		
	(A) Anagen	(B) Catagen	(C) Telogen	(D) Phylogeny	
82.	 Scale pattern on hair helps to (A) Differentiate male and female hairs (B) Differentiate human and animal hairs (C) Indicates site of hair (D) Differentiate pubic hair from body hair 				
83.	Study of pollen g				
	(A) Palynology	(B) Dendrology	(C) Anthology	(D) Agrostology	
84.	-	nination of cotton f ed ribbon like feati			
		lindrical, hollow, th			
	(C) Net like thickenings				
	(D) Distinct length wise striations				
85.	On the basis of d	iatoms which is the	e best suited for diagr	nosis of ante-mortem	
	(A) Vitreous hun	nor	(B) Lung content		
	(C) Stomach con	tent	(D) Femur		



(A) 1962

	(C) 1975	(D) 1977	
87.	Which of the following is True about striae present in the interior surface of barrel of a firearm?		
	(A) These are never present		
	(B) These are class characteristics		
	(C) These striae never change as the	e firearm is fired repeatedly	
	(D) These get initially produced by to cutting of rifling	the tools used for boring of barrel and for	
88.	Acidified aqueous solution of which of the following is generally used to restore erased punched identification marks on firearms?		
	(A) Sodium chloride	(B) Barium chloride	
	(C) Cupric chloride	(D) Ferric chloride	
89.	The most important tool available for the firearms examiner in linking of fired bullets and fired cartridge cases with the suspected firearm is (A) Polarising Light microscope (B) Mylar film and a high voltage electrode (C) Comparison microscope (D) Digital video comparator		
90.	Which of these are individual characteristic marks on fired bullets?		
	(A) Chamber marks	(B) Striation marks	
	(C) Extractor marks	(D) Ejector marks	
91.	The velocity with which a bullet travels inside a target is called		
	(A) Penetrating velocity	(B) Striking velocity	
	(C) Cavitation velocity	(D) Terminal velocity	
92.	Which of the following is the major factor affecting the trajectory of a projectile in air?		
	(A) Magnus force	(B) Poisson effect	
	(C) Coriolis effect	(D) Air-resistance	

86. Wildlife Protection Act in India came into force in the year

(B) 1972



93.	3. On which of the following bullets, the effect of air resistance is least		
	(A) Round-nose bullet	(B) Flat-nose bullet	
	(C) Flat- base hollow-point bullet	(D) Boat-tailed bullet	
94.	Which of the following technique is used to prevent altering of data on suspendives ?		
	(A) Encryption	(B) Write blocking	
	(C) Imaging	(D) Cloning	
95.	5. To verify the integrity of the original Hard Disk, we use		
	(A) Password	(B) Hash value	
	(C) Cryptography	(D) Block chain	
96.	What is the full form of NIC used in computers?		
	(A) National Informatics Centre	(B) Network Interface Card	
	(C) Neural Intelligence Card	(D) Network Information Centre	
	(c) Neural Intelligence Card	(b) Network information centre	
97.	7. "Laser discs and compact discs" are classified as		
	(A) Fixed head discs	(B) Optical discs	
	(C) Bubbled discs	(D) Blocked discs	
98	The fibres of a writing paper do NOT	Contain	
<i>7</i> 0.	The fibres of a writing paper do NOT contain (A) Chemical and Mechanical wood pulp		
	(B) Bagasse / Esparto	paip	
	(C) Cotton		
	(D) Nylon fibre		
	(D) Nyion nore		
99.	The quality of a paper also depends upon		
	(A) Treatment by sodium carbonate		
	(B) Fillers, binders, whitener and br	ighteners	
	(C) Security features		
	(D) Storage conditions		
100	A charred document becomes completely black at a temperature of		
	(A) 90 degree Celsius	(B) 280 degree Celsius	
	(C) 350 degree Celsius	(D) 400 degree Celsius	
	(c) doo degree coloido	(2) 408.00 00.000	



Space for Rough Work