SET-"X"

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

(MPH/PHD/URS-EE-2020)

FORENSIC SCIENCE

a Used for Jumbling.

Sr. No.



Time: 1% Ho	ours (Total Questi	ons : 100	Max. Marks: 100
Roll No.	- ALC 4	(in figure)		(in words)
Name:			Father's Name :	· · · · · · · · · · · · · · · · · · ·
Mother's Name	:		Date of Examination	on :

(Signature of the candidate)

(Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

All questions are compulsory.

The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.

Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by

the candidate.

4. Question Booklet along with answer key of all the A.B.C and D code will be got uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examination in writing/through E-Mail within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.

5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers

MUST NOT be ticked in the Question book-let.

6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.

Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-

Sheet.

8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

uestion No.	Questions			
1.	Who among the following is connected to critical criminology?			
	(1) William J. Chambliss (2) Richard A. Cloward			
	(3) R. E. Park (4) E. H. Southerland			
2.	Which of the following records the movement of evidence?			
* :	(1) Chain of custody (2) Chain of command			
	(3) Chain of packing (4) Chain of crime			
3.	Dying declaration is to be preferably recorded by:			
	(1) Magistrate (2) Doctor			
	(3) Jury member (4) Police			
4.	Police inquest is conducted under section :			
	(1) 174 IPC (2) 174 CrPC			
,	(3) 176 IPC (4) 176 CrPC			
5.	Locard's Exchange Principle is for :			
	(1) Detecting toxicity (2) Knowing time since death			
	(3) Detecting crime (4) Estimating the age			
6.	(3) Detecting crime (4) Estimating the age Cadaveric spasm indicates:			
6.				
6.	Cadaveric spasm indicates:			
6.	Cadaveric spasm indicates: (1) Homicide			

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A
(1)

Question No.	Questions
7.	"Tache Noire Sclerotiques" is a post-mortem feature seen in:
	(1) Mouth (2) Nose
	(3) Ears (4) Eyes
8.	Which of the following are examples of unnatural sexual offence :
* .	(i) Sodomy (ii) Incest (iii) Buccal coitus (iv) Bestiality
	(1) i, iii, iv (2) i, ii, iii
	(3) iv, ii, i (4) i, ii, iv
9.	To ensure integrity, validate your tools and verify your evidence with
	(1) Watermarks (2) Digital certificate
	(3) Steganography (4) Hashing algorithms
10.	Human trafficking is a form of :
	(1) Organised crime
* .	(2) Love jihad
	(3) Hate crime
- CONTRACTOR MANAGEMENT	(4) Forgery
11./	Which of the following is a feature of genuine signatures :
****	(1) Pen strokes with tapering ends
	(2) Evidence of touching
	(3) Unnatural pen lifts
	(4) Pen strokes with blunt ends
- Andrews Charles	
**	

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (2)

Question No. Questions		
12.	The most commonly used material in the production of paper is:	
	(1) Sisal	
	(2) Cotton	
	(3) Wood from coniferous trees	
# .	(4) Wood from deciduous trees	
13.	Which of the following is not a counterfeiting measure:	
	(1) a dandy roll (2) a hologram patch	
	(3) a water mark (4) an iridescent stripe	
14.	Segments of writing obscured by correction fluid are known as:	
	(1) Corrections (2) Erasures	
	(3) Embellishments (4) Obliterations	
15.	ESDA is not used to :	
	(1) date inks	
	(2) visualise indented writing	
	(3) determine sequence of writing impressions	
	4) examine torn pages of paper for matching	
16.	Which of the following method is used to determine the age of an ink by	
l t	racking the degradation of certain dyes:	
в.	1) LDMS (2) HPLC	
(3) TLC (4) GC	

uestion	Questions
No. 17.	In handwriting comparison the crossing in 't' and the dots in 'i' and 'j' are known as: (1) Loop signs (2) Connective signs (3) Shoulder signs (4) Diacritic signs
18.	Which of the following is a sign of forgery: (1) Pen lifts (2) Retouching (3) Connecting strokes (4) All of the above
19.	The Fingerprint Bureau was first established in which of the following country? (1) India (2) USA (3) England (4) France
26.	Fingerprints can be permanently changed by: (1) Scleroderma (2) Eczema (3) Leprosy (4) Psoriasis
21	Beer Lambert law shows the relation between: (1) Energy absorption and reflected radiation (2) Energy absorption and concentration (3) Reflected radiation and concentration (4) Scattered radiation and concentration

Question No.	Questions
22.	Which of the following cannot be used as an absorbent in Column absorption chromatography: (1) Potassium permanganate (2) Silica gel (3) Magnesium oxide (4) Activated alumina
23.	Mass spectrometer is used to determine: (1) Properties of samples (2) Relative mass of atoms (3) Composition of sample (4) Element concentration in sample
24.	Which of the following is not correct about Absorption spectroscopy: (1) Reflection is kept maximum (2) Scattering is kept maximum (3) Intensity of radiation indicates concentration (4) It involves transmission
25.	In Chromatography, the stationary phase can be supported on a: (1) Liquid only (2) Solid only (3) Liquid or gas (4) Solid or liquid
26.	Mass spectroscopy was invented by : (1) Aston (2) Nikola Tesla (3) Goldstein (4) J. J. Thompson

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A

Question No.	Questions				
27.	Which of the following was NOT true about HPLC:				
	(1) It has high sensitivity				
	(2) It is performed in columns				
	(3) There is no need to vaporise the samples				
	(4) It needs high pressure for separation				
28.	Chromatography is a physical method used to separate and analyse :				
	(1) Complex mixtures (2) Metals				
	(3) Simple mixtures (4) Viscous mixtures				
29.	NMR spectroscopy is used for determining structure in which of th following:				
***************************************	(1) Liquids (2) Gases				
	(3) Radioactive materials (4) Insoluble compounds				
30	The most suitable solvent system for TLC of inks is :				
	(1) Amyl alcohol: Acetic acid: Pyridine (6:1:2)				
	(2) Ethanol: Acetic acid: Acetone (4:5:1)				
:	(3) Amyl alcohol: Acetic acid: Chloroform (6:1:2)				
	(4) N-butanol: Pyridine: Water (3:1:1.5)				
31.	Forensic Palynology deals with :				
	(1) Dust (2) Diatoms				
1					

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A
(6)

Question No.	Questions
32.	For examination of diatoms, sample should be taken from:
•	(1) Buccal cavity (2) Stomach
	(3) Lungs (4) Bone marrow
33.	In Wildlife forensic, animals are identified by :
	(1) Pug marks (2) Photography
	(3) Trapping (4) Poaching
34.	Lifting of footprints on snow can be done by:
	(1) Wax casting (2) Tracing
	(3) Sulphur casting (4) Plaster of Paris cast
35.	Which of the following is NOT the component of Kastle-Meyer test:
	(3) Phenolphthalein (2) Potassium hydroxide (3) Phenolphthalein (4) Zinc dust
36.	Presence of menstrual blood stain is confirmed by :
	(1) Restriction enzymes
	(2) Isozyme markers
	(3) Fibrin Degradation Product
	(4) Benzidine test
37.	Seminal fluid is secreted by prostate gland, seminal vesicles and :
((1) Thyroid gland (2) Adrenal gland
	3) Pineal gland (4) Cowper's gland

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A

uestion No.	Q	Questions		
38.	Lanugo hair are :			
	(1) Thin and soft			
	(2) Medullated			
	(3) Having complex scale p	pattern		
** ;	(4) Pigmented			
89.	Which of the following is add	lded to harden Plaster of Paris cast of footpri		
	(1) Sodium sulphate	(2) Talcum powder		
	(3) Sodium chloride	(4) Sodium carbonate		
40.	Scales are found on which o	of the following fibres :		
	(1) Silk	(2) Wool		
	(3) Cotton	(4) Linen		
41.	ABO grouping is based on :	•		
***	(1) Nuclear chromatin	(2) Red cell enzyme		
	(3) Plasma proteins	(4) Red cell surface antigens		
42.	Sex can be established by e	examination of WBC for the presence of :		
· .	(1) Ribosomes	(2) Plasma membrane		
,	(3) Drum-stick	(4) Golgi bodies		
43.	Confirmatory test for human origin of blood stain is :			
·	(1) Takayama test	(2) Teichmann's test		
	(3) Benzidine test	(4) Precipitin test		

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (8)

⊋uestio No.	Questions
44.	Minisatellites are: (1) short non-coding repetitive sequences in DNA (2) 10-40 bp short sequences within the genes (3) short coding repetitive sequences in DNA (4) short exons
45.	DNA profiling to show similarity between different animal species wireference to some specific protein coding DNA sequence is called: (1) Animal blot (2) Zoo blot (3) Phylogenetic blot (4) Dot blot
46.	DNA Fingerprinting technique was developed by: (1) James Watson (2) Francis Crick (3) Lalji Singh (4) Alec Jeffreys
47.	Blood grouping in old dried blood stains is done by: (1) Hemin crystal test (2) Absorption elution test (3) Benzidine test (4) Acid elution test
	Which of the following is NOT a test for blood: (1) Benzidine test (2) Teichmann's test (3) Acid phosphatase test (4) Hemochromogen test
	Enucleated biconcave RBC in blood stains indicates that it belongs to a: 1) Bird (2) Camel 3) Amphibian (4) Human

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A

estion No.	Questions
	Which of the following method is used to identify an aspermic male involved in sexual offence case: (1) RFLP (2) Y-STR (3) Y-body (4) DNA barcoding
51.	Toxic action of metallic poisons involve: (1) binding with lipids (2) binding with amino acids, proteins and polypeptides (3) binding with sugars (4) binding with cholesterol
52.	Which of the following is known as ecstasy: (1) 3, 4 Methylenedioxymethamphetamine (2) 3, 4 Methylenedioxyamphetamine (3) Amphetamine (4) Methamphetamine
53.	Which of the following toxins comes from castor oil plant: (1) Ricin (2) Digitanin (3) Aetropin (4) Paraffin
54.	The method used for the isolation of sulphuric acid from the charred shis: (1) Infusion with water (2) Infusion with ethanol (3) Distillation (4) Dialysis

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (10)

Question No.	Questions			
55.	A drug that induces alterations in mood and perception is known as:			
	(1) hallucinogen (2) stimulant			
·	(3) seductive (4) depressant			
56.	Toxicity level of Datura plant based on increasing level is:	· · · · · · · · · · · · · · · · · · ·		
+	(1) Leaf, Root, Fruit, Seed (2) Seed, Leaf, Root, Fruit			
	(3) Root, Seed, Fruit, Leaf (4) Fruit, Root, Leaf, Seed			
57.	Which preservative is recommended for the preservation of blo			
	in case of Carbon monoxide poisoning:	ou sam		
	(1) Sodium chloride (2) Sodium carbonate			
	(3) Sodium citrate (4) No preservative			
58.	Free Sulphuric acid is rarely found in stomach content in acid	maian.		
	cases because:	horsom		
- ·	(1) It may be neutralised by alkalies given as antidotes			
	(2) It may combine chemically with tissues			
	(3) It may be vomitted out			
	(4) All the above			
59.	LSD is derived from:			
] ((1) Claviceps purpurea			
	(2) Cannabis species			
	(3) Papaver somniferum			
	(4) Calotropis species			
·	HD/URS-EE-2020 (Forensic Science) Code-A			

estion No.	Questions
60:	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood (3) Metal (4) Leather
61	Who coined the term Forensic Ballistic? (1) J. Thompson (2) Charles Daly (3) Calvin Goddard (4) Martin Marz
62.	In ballistics, Ratchet mechanism is associated with: (1) Revolver (2) Rifled firearm (3) Semi-automatic firearm (4) None of the above
63.	In "5.6 × 57 mmR" term, the 'R' stands for which type of the cartricase? (1) Rebated (2) Rimless (3) Rimmed (4) Rough
64.	Smokeless propellant version of Express cartridge is called: (1) Paper Express (2) Nitro Express (3) Blast Express (4) Smokeless Express
65	At a crime scene, a very old cartridge of early 1900s was found he designation 0.32-0.30. If 0.32 is the caliber, what does 0.30 signify? (1) Length of carried case (2) Length of bullet (3) Weight of bullet (4) Weight of black powder

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (12)

Question No.	Ques	stions				
66.	66. What is caliber in ballistic?					
	(1) Internal diameter of the ba	arrel				
	(2) Diameter of the bullet					
	(3) External diameter of the b	barrel				
	(4) Diameter of the cartridge	case				
67.	The bore of 12 bore gun is:					
The state of the s	(1) 0.731	(2) 0.723				
	(3) 0.727	(4) 0.729				
68.	Arrange the following firearms	s in the proper chronological order :				
	(a) Flint lock	(b) Wheel lock				
	(c) Match lock	(d) Percussion lock				
	(1) c, a, b, d	(2) a, d, c, b				
	(3) b, c, d, a	(4) d, b, a, c				
69.	Which of the following is N ammunition:	VOT an advantage of Aluminium cased				
	(1) Less effective accuracy	(2) Less robust than brass				
	(3) Cost-effective	(4) For shot gun ammunition use only				
70.	What is the ammunition loading	ng mechanism of a match lock pistol?				
	(1) Top-lift load	(2) Muzzle load				
	(3) Breach load	(4) None of the above				
		· • · · · · · · · · · · · · · · · · · ·				

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (13)

Question No.	Questions				
71.	Origin of the bones for facial reproduction requires which of the follow				
•	forensic examination:				
	(1) Serological (2) Bio-chemical				
	(3) Anthropological (4) Odontological				
72.	Height of the body can be deduced from the length of humerus, wh				
	(1) 20 percent of height (2) 35 percent of height				
	(3) 10 percent of height (4) 15 percent of height				
73.	Ischiopubic index is used to determine :				
	(1) Race (2) Age				
	(3) Stature (4) Sex				
74.	Medial end of clavicle fuses at the age of :				
	(1) 16-17 years (2) 30-40 years				
	(3) 18-22 years (4) 10-15 years				
75.	The single best criterion to distinguish the female from male pelvis is				
	(1) shape of acetabulum				
	(2) shape of greater sciatic notch				
	(3) shape of ischial tuberosities				
	(4) shape of foramen				

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (14)

Questic No.	Questions
76.	Xiphoid process unites with sternum at the age of: (1) 40 years (2) 60 years (3) 30 years (4) 20 years
77.	Closure of all skull sutures indicate age more than: (1) 70 years (2) 40 years (3) 50 years (4) 60 years
78.	Coronal suture completely fuses by the age of: (1) 50 years (2) 30 years (3) 40 years (4) 16 years
79.	Which of the following adult bone is most useful in sex establishment: (1) Clavicle (2) Pelvis (3) Femur (4) Humerus
	Attainment of 16 years of age is diagnosed by X-ray of: (1) Elbow (2) Ankle (3) Knee (4) Wrist
1	Which of the following is used to determine the time of death: 1) MR spectroscopy (2) CT scan 3) Photomicrography (4) 3-D Surface scanning
2. T. (1) (3)	he first permanent tooth to erupt is : (2) Canine

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A

Question No.	Questions
83.	A girl has 8 temporary teeth and 20 permanent teeth. Her age is likely t
	be: (1) 12 years (2) 10 years (3) 16 years (4) 18 years
84.	For determination of age, the most useful secondary change in tooth is (1) Root transparency (2) Root resorption (3) Attrition (4) Secondary dentin deposition
85.	Cusp of Carabelli is found on: (1) Bicuspids (2) Canines (3) Tricuspids (4) Incisors
86.	According to ISO 9001, inspection and testing comes under who management responsibility? (1) Servicing (2) Non-confirming product control (3) Document control (4) Process control
***************************************	7. Ontology is: (1) classification of internet based documents (2) an indexing method (3) documentation service (4) cataloguing of internet based documents (5) Code-A

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (16)

estion	Questions
No. 88.	Which of the following is the first step in the research process: (1) Searching for solutions to the problem
	(2) Identification of problem (3) Review of literature (4) Searching sampling methods
89.	During research process 'Formulation of Hypothesis' is followed by: (1) Selection of research tools (2) Collection of data (3) Statement of objectives
	(4) Analysis of data Bibliometry is: (1) Library service (2) Information management tool (3) Function of library network (4) Literature service
	The skid marks on the road in a vehicular accident may give an indication of: (1) Weight of the vehicle (2) Make of the vehicle (3) Speed of the vehicle (4) Length of the vehicle

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A

Question No.	Qu	estions			
92.	When the temperature of a liquid is raised, its refractive index will :				
	(1) decrease	(2) increase			
	(3) remain unchanged	(4) disappear			
93.	3. Light having pulsating waves in unison is called:				
	(1) Polychromatic	(2) Polaroid			
	(3) Laser	(4) Monochromatic			
94.	In order for photographs to be	admissible in court, they must be ruled			
	(1) fair and accurate	(2) black and white			
	(3) digital and coloured	(4) none of the above			
95.	What type of scale is required	l for measuring bite marks :			
	(1) Ruler	(2) Coins			
	(3) Round scale	(4) ABFO			
96.	Reports and logs generated	by forensic tools are typically in plain			
	format, a word processor for	nat or format.			
	(1) TXT	(2) HTML			
	(3) PDF	(4) PS			
97.	Paraben, a leading mobile for	ensic software, provides many tools inclu			
	which can be used	to acquire data from different phone mo			
* .	(1) Data Pilot	(2) MOBI Ledit			
######################################	(3) Device Seizure	(4) Bit Pim			

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (18)

Question No.	Questions
98.	Log files and
99.	A bootable forensic CD can be created by
100.	Put the following Forensic Psychology events of breakthroughs in chronological order from earliest to most recent: (a) Eye witness testing (b) Development of Polygraph (c) DNA profiling (d) Development of Stanford-Binet IQ test
	(1) a, d, b, c (2) d, c, b, a (3) a, d, c, b (4) b, c, a, d

MPH/PHD/URS-EE-2020 (Forensic Science) Code-A (19)

SET-"X"

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

(MPH/PHD/URS-EE-2020)

FORENSIC SCIENCE

Sr. No. 1006

(in words)

Code

Roll No.



Time: 14 Hours

Total Questions: 100

(in figure)

Max.	Marks	:	100
------	-------	---	-----

Name: Father's Name: Date of Examination:

(Signature of the candidate)

(Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

1. All questions are compulsory.

- 2. The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A,B,C and D code will be got uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examination in writing/through E-Mail within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
- 5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers MUST NOT be ticked in the Question book-let.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-Sheet.
- 8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Questions
J .	Origin of the bones for facial reproduction requires which of the following
	forensic examination:
	(1) Serological (2) Bio-chemical
	(3) Anthropological (4) Odontological
2.	Height of the body can be deduced from the length of humerus, where
	humerus is :
<i>i</i>	(1) 20 percent of height (2) 35 percent of height
·	(3) 10 percent of height (4) 15 percent of height
3.	Ischiopubic index is used to determine :
	(1) Race (2) Age
	(3) Stature (4) Sex
4.	Medial end of clavicle fuses at the age of :
	(1) 16-17 years (2) 30-40 years
	(3) 18-22 years (4) 10-15 years
5.	The single best criterion to distinguish the female from male pelvis is
	(1) shape of acetabulum
	(2) shape of greater sciatic notch
	(3) shape of ischial tuberosities
— типольной помень на помень н	(4) shape of foramen

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B

Question No.		Que	stio	ons		
6.	Xiphoid process unites with sternum at the age of:					
	(1)	40 years	(2)	60 years	•	
	(3)	30 years	(4)	20 years		
7.	Clos	sure of all skull sutures ind	icat	e age more than :		
	(1)	70 years	(2)	40 years		
	(3)	50 years	(4)	60 years		
8.	Cor	onal suture completely fus	es by	y the age of :		
	(1)	50 years	(2)	30 years		
	(3)	40 years	(4)	16 years		
9.	Wh	ich of the following adult bo	ne i	is most useful in sex establishm	ent	
\$	(1)	Clavicle	(2)	Pelvis		
	(3)	Femur	(4)	Humerus		
10.	Attainment of 16 years of age is diagnosed by X-ray of :					
	(1)	Elbow	(2)	Ankle		
	(3)	Knee	(4)	Wrist		
11.	Tox	ic action of metallic poisons	s inv	volve:		
	(1)	binding with lipids				
	(2)	binding with amino acids,	prof	teins and polypeptides		
	(3)	binding with sugars				
	(4)	binding with cholesterol				

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B

Questio No.		
12.	Which of the following is known as ecstasy:	
	(1) 3, 4 Methylenedioxymethamphetamine	
	(2) 3, 4 Methylenedioxyamphetamine	
•	(3) Amphetamine	
	(4) Methamphetamine	
13.	Which of the following toxins comes from castor oil plant:	
	(1) Ricin (2) Digitanin	
	(3) Aetropin (4) Paraffin	
14.	The method used for the isolation of sulphuric acid from the charred shi is:	
	(1) Infusion with water (2) Infusion with ethanol	
	(3) Distillation (4) Dialysis	
15.	A drug that induces alterations in mood and perception is known as:	
	(1) hallucinogen (2) stimulant	
	(3) seductive (4) depressant	
16.	Toxicity level of Datura plant based on increasing level is:	
l	(1) Leaf, Root, Fruit, Seed (2) Seed, Leaf, Root, Fruit	
	(3) Root, Seed, Fruit, Leaf (4) Fruit, Root, Leaf, Seed	
17.	Which preservative is recommended for the preservation of bland	
j	n case of Carbon monoxide poisoning:	
	1) Sodium chloride (2) Sodium carbonate	
	3) Sodium citrate (4) No preservative	

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B
(3)

estion No.	Questions					
18.	Free Sulphuric acid is rarely found in stomach content in acid poi					
	cases because:					
	(1) It may be neutralised by alkalies given as antidotes					
	(2) It may combine chemically with tissues					
	(3) It may be vomitted out					
	(4) All the above					
19.	LSD is derived from:					
****	(1) Claviceps purpurea (2) Cannabis species					
	(3) Papaver somniferum (4) Calotropis species					
20.	Chemical etching method is used for restoration of erased marks					
AI CF	(1) Plastic (2) Wood					
	(3) Metal (4) Leather					
21.	Forensic Palynology deals with:					
7	(1) Dust (2) Diatoms					
	(3) Pollen and spores (4) Fossils					
22.	For examination of diatoms, sample should be taken from:					
	(1) Buccal cavity (2) Stomach					
	(3) Lungs (4) Bone marrow					
23.	In Wildlife forensic, animals are identified by :					
	(1) Pug marks (2) Photography					
	(3) Trapping (4) Poaching					
MPH	/PHD/URS-EE-2020 (Forensic Science) Code-B					

Question No.	Questions
24.	Lifting of footprints on snow can be done by:
	(1) Wax casting (2) Tracing
	(3) Sulphur casting (4) Plaster of Paris cast
25.	Which of the following is NOT the component of Kastle-Meyer test:
 	(1) Glacial acetic acid (2) Potassium hydroxide
	(3) Phenolphthalein (4) Zinc dust
26.	Presence of menstrual blood stain is confirmed by:
	(1) Restriction enzymes
	(2) Isozyme markers
	(3) Fibrin Degradation Product
	(4) Benzidine test
27.	Seminal fluid is secreted by prostate gland, seminal vesicles and :
	(1) Thyroid gland (2) Adrenal gland
	(3) Pineal gland (4) Cowper's gland
28.	Lanugo hair are :
·	(1) Thin and soft
	(2) Medullated
	(3) Having complex scale pattern
	(4) Pigmented

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B
(5)

Questic No.	Questions						
29.	Which of the following is added to harden Plaster of Paris cast of foo						
	(1) Sodium sulphate (2) Talcum powder						
***************************************	(3) Sodium chloride (4) Sodium carbonate						
30.	Scales are found on which of the following fibres:						
	(1) Silk (2) Wool						
	(3) Cotton (4) Linen						
31.	Which of the following is a feature of genuine signatures :						
V	(1) Pen strokes with tapering ends						
	(2) Evidence of touching						
	(3) Unnatural pen lifts						
	(4) Pen strokes with blunt ends						
32,	The most commonly used material in the production of paper is:						
	(1) Sisal						
	(2) Cotton						
	(3) Wood from coniferous trees						
	(4) Wood from deciduous trees						
33.	Which of the following is not a counterfeiting measure:						
	(1) a dandy roll						
	(2) a hologram patch						
	(3) a water mark						
	(4) an iridescent stripe						

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B

No.		Questions					
34.	Segments of writing obscured by correction fluid are known as:						
	(1) Corrections	(2) Erasur					
	(3) Embellishmer	nts (4) Obliter:	ations	· · .			
35.	ESDA is not used	to:					
	(1) date inks						
	(2) visualise inder	nted writing					
	(3) determine sequ	uence of writing impressi	ions				
	(4) examine torn p	pages of paper for matchi	ing				
36.	Which of the follow	ing method is used to de	termine the age of	an ink by			
	viic degrad	ation of certain dyes :					
	tracking the degrad (1) LDMS (3) TLC	ation of certain dyes : (2) HPLC (4) GC					
37.	(1) LDMS (3) TLC	(2) HPLC					
ŀ	(1) LDMS (3) TLC In handwriting comp	(2) HPLC (4) GC parison the crossing in 't'	and the dots in 'i'				
	(1) LDMS (3) TLC In handwriting companions:	(2) HPLC (4) GC parison the crossing in 't'	and the dots in 'i' : ve signs				
	(1) LDMS (3) TLC In handwriting completown as: (1) Loop signs (3) Shoulder signs	(2) HPLC (4) GC parison the crossing in 't' (2) Connective (4) Diacritic s	and the dots in 'i' : ve signs				
18.	(1) LDMS (3) TLC In handwriting completown as: (1) Loop signs (3) Shoulder signs	(2) HPLC (4) GC parison the crossing in 't' (2) Connective	and the dots in 'i' : ve signs				

1PH/PHD/URS-EE-2020 (Forensic Science) Code-B

Question No.	Questions	
39.	The Fingerprint Bureau was first established in country?	which of the fol
	(1) India (2) USA	
·	(3) England (4) France	
40.	Fingerprints can be permanently changed by:	**************************************
	(1) Scleroderma (2) Eczema	
	(3) Leprosy (4) Psoriasis	
<i>4</i> 1.	The skid marks on the road in a vehicular accident a	nay give an ind
	(1) Weight of the vehicle (2) Make of the veh	icle
	(3) Speed of the vehicle (4) Length of the ve	hicle
42.	When the temperature of a liquid is raised, its refra	ctive index will
	(1) decrease (2) increase	
	(3) remain unchanged (4) disappear	
43.	Light having pulsating waves in unison is called:	***************************************
**************************************	(1) Polychromatic (2) Polaroid	v•, •••
	(3) Laser (4) Monochromatic	<i>i</i> ,
44.	In order for photographs to be admissible in court, tl	ney must be rul
·	(1) fair and accurate (2) black and white	· .
	(3) digital and coloured (4) none of the abov	e

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B

Question No.			Questi	ons		
45.	What type of scale is required for measuring bite marks:					
	(1)	Ruler	(2)	Coins		
	(3)	Round scale	(4)	ABFO		
46.	Rep	orts and logs ge	nerated by fo	rensic tool	s are typical	ly in plain text
	form	nat, a word proce	essor format o	X **********	format.	
	(1)	TXT	(2)	HTML		
	(8)	PDF	(4)	PS		
47.	Para	aben, a leading m	obile forensic	software, p	rovides many	tools including
	****	which can	be used to ac	quire data	from differen	t phone models
		Data Pilot		MOBI Lec		
	(3)	Device Seizure	(4)	Bit Pim		
48.	Log	files and	files pro	vide usefu	l information	to an e-mail
NEW TOWNS AND ADDRESS AND ADDR	inve	stigator.		v m		
actornomonoscolor	(1)	scripts	(2)	.rts		· PRESENTED
	(3)	batch	(4)	configurat	ion	· · ·
49.	A bo	otable forensic C	D can be crea	ited by	and	perform a live
	acqui	isition.			•	
T. C.	(1)	Neon	(2)	Inquisitor		The state of the s
	(3)	Helix	(4)	DTDD		· ************************************
1						·

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B
(9)

Question No.	Questions					
50.	Put the following Forensic Psychology events of breakthrochronological order from earliest to most recent:					
	(a)	Eye witness testing	(b)	Development of Polygraph		
	(c)	DNA profiling	(d)	Development of Stanford-Bin		
	(1)	a, d, b, c	(2)	d, c, b, a		
	(3)	a, d, c, b	(4)	b, c, a, d		
51.	Who	coined the term Foren	sic Ball	istic ?		
	(1)	J. Thompson	(2)	Charles Daly		
	(3)	Calvin Goddard	(4)	Martin Marz		
52.	In ballistics, Ratchet mechanism is associated with:					
	(1)			Rifled firearm		
	(3)	Semi-automatic firear	m (4)	None of the above		
53.	In "5.6 × 57 mmR" term, the 'R' stands for which type of the					
L'anticher de la constant de la cons	case	e?				
	(1)	Rebated	(2)	Rimless		
Service .	(3)	Rimmed	(4)	Rough		
54.	Smokeless propellant version of Express cartridge is called :					
	(1)	Paper Express	•			
	(2)	Nitro Express				
- CERTAIN TO SEE	(3)	Blast Express				
	(4)	Smokeless Express				

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B (10)

Questio No.	Questions
55.	At a crime scene, a very old cartridge of early 1900s was found havin designation 0.32-0.30. If 0.32 is the caliber, what does 0.30 signify? (1) Length of carried case (2) Length of bullet (3) Weight of bullet (4) Weight of black powder
56.	What is caliber in ballistic? (1) Internal diameter of the barrel (2) Diameter of the bullet (3) External diameter of the barrel (4) Diameter of the cartridge case
57.	The bore of 12 bore gun is: (1) 0.731 (2) 0.723 (3) 0.727 (4) 0.729
58.	Arrange the following firearms in the proper chronological order: (a) Flint lock (b) Wheel lock (c) Match lock (d) Percussion lock (1) c, a, b, d (2) a, d, c, b
	(3) b, c, d, a (4) d, b, a, c Which of the following is NOT an advantage of Aluminium cased ammunition: (1) Less effective accuracy (2) Less robust than brass
<u> </u>	(3) Cost-effective (4) For shot gun ammunition use only HD/URS-EE-2020 (Forensic Science) Code-B (11)

Questions					
What is the ammunition loading mechanism of a match lock pistol					
(1) Top-lift load	(2)	Muzzle load			
(3) Breach load	(4)	None of the above			
Which of the following is used	to d	etermine the time of death :			
(1) MR spectroscopy	(2)	CT scan			
(3) Photomicrography	(4)	3-D Surface scanning			
The first permanent tooth to	erupi	is:			
(1) Incisor	(2)	Canine			
(3) Molar	(4)	Premolar			
A girl has 8 temporary teeth and 20 permanent teeth. Her age is l					
(1) 12 years	(2)	10 years			
(3) 16 years	(4)	18 years			
For determination of age, the most useful secondary change in too					
(1) Root transparency	(2)	Root resorption			
(3) Attrition	(4)	Secondary dentin deposition			
Cusp of Carabelli is found on	*	Minima Managara (a a sa a a sa a sa a sa a sa a sa a			
(1) Bicuspids	(2)	Canines			
(3) Tricuspids	(4)	Incisors			
	What is the ammunition loadi (1) Top-lift load (3) Breach load Which of the following is used (1) MR spectroscopy (3) Photomicrography The first permanent tooth to (1) Incisor (3) Molar A girl has 8 temporary teeth a be: (1) 12 years (3) 16 years For determination of age, the (1) Root transparency (3) Attrition Cusp of Carabelli is found on (1) Bicuspids	What is the ammunition loading m (1) Top-lift load (2) (3) Breach load (4) Which of the following is used to de (1) MR spectroscopy (2) (3) Photomicrography (4) The first permanent tooth to erupte (1) Incisor (2) (3) Molar (4) A girl has 8 temporary teeth and 2 be: (1) 12 years (2) (3) 16 years (4) For determination of age, the most (1) Root transparency (2) (3) Attrition (4) Cusp of Carabelli is found on: (1) Bicuspids (2)			

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B (12)

uestion No.	Questions
66.	According to ISO 9001, inspection and testing comes under which
	management responsibility?
	(1) Servicing
* .	(2) Non-confirming product control
	(3) Document control
	(4) Process control
67.	Ontology is:
	(1) classification of internet based documents
	(2) an indexing method
	(3) documentation service
	(4) cataloguing of internet based documents
68.	Which of the following is the first step in the research process:
	(1) Searching for solutions to the problem
	(2) Identification of problem
	(3) Review of literature
	(4) Searching sampling methods
69.	During research process 'Formulation of Hypothesis' is followed by :
	(1) Selection of research tools
	(2) Collection of data
	(3) Statement of objectives
Į.	(4) Analysis of data

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B (13)

Question No.	Questions					
70.	Bibliometry is:					
	(1) Library service					
:	(2) Information management tool					
	(3) Function of library network					
	(4) Literature service					
71./	ABO grouping is based on :					
	(1) Nuclear chromatin (2) Red cell enzyme					
	(3) Plasma proteins (4) Red cell surface antigens					
72.	Sex can be established by examination of WBC for the presence of :					
	(1) Ribosomes (2) Plasma membrane					
	(3) Drum-stick (4) Golgi bodies					
73.	Confirmatory test for human origin of blood stain is:					
: 770	(1) Takayama test (2) Teichmann's test					
	(3) Benzidine test (4) Precipitin test					
74.	Minisatellites are:					
	(1) short non-coding repetitive sequences in DNA					
	(2) 10-40 bp short sequences within the genes					
	(3) short coding repetitive sequences in DNA					
Annie de la constante de la co						
	(4) short exons					
DH/D						

MPH/PHD/URS-EE-2020 (Forensic Science) Code-B

Question	Questions						
75.	DNA profiling to show similarity between different animal species with reference to some specific protein coding DNA sequence is called:						
	(1) Animal blot (2) Zoo blot						
	(3) Phylogenetic blot (4) Dot blot						
76.	DNA Fingerprinting technique was developed by:						
	(1) James Watson (2) Francis Crick						
	(3) Lalji Singh (4) Alec Jeffreys						
77.	Blood grouping in old dried blood stains is done by:						
	(1) Hemin crystal test (2) Absorption elution test						
	(3) Benzidine test (4) Acid elution test						
78.	Which of the following is NOT a test for blood:						
	(1) Benzidine test (2) Teichmann's test						
	(3) Acid phosphatase test (4) Hemochromogen test						
79.	Enucleated biconcave RBC in blood stains indicates that it belongs to a:						
	(1) Bird (2) Camel						
	(3) Amphibian (4) Human						
80,	Which of the following method is used to identify an aspermic male involved						
	in sexual offence case:						
	(1) RFLP (2) Y-STR						
	(3) Y-body (4) DNA barcoding						
2H/D	HD/IRS_EE_2020 (Forencie Calama) O. V. S.						

PH/PHD/URS-EE-2020 (Forensic Science) Code-B
(15)

Question No.	Questions
81.	Beer Lambert law shows the relation between:
	(1) Energy absorption and reflected radiation
	(2) Energy absorption and concentration
	(3) Reflected radiation and concentration
	(4) Scattered radiation and concentration
82.	Which of the following cannot be used as an absorbent in Column at
	chromatography:
	(1) Potassium permanganate (2) Silica gel
	(3) Magnesium oxide (4) Activated alumina
83.	Mass spectrometer is used to determine:
	(1) Properties of samples (2) Relative mass of atoms
	(3) Composition of sample (4) Element concentration in san
84.	Which of the following is not correct about Absorption spectrosco
	(1) Reflection is kept maximum
	(2) Scattering is kept maximum
	(3) Intensity of radiation indicates concentration
	(4) It involves transmission
85.	In Chromatography, the stationary phase can be supported on a
	(1) Liquid only (2) Solid only
	(3) Liquid or gas (4) Solid or liquid

Question No.		Questions
86.	Mass spectroscopy was inv	vented by :
	(1) Aston	(2) Nikola Tesla
	(3) Goldstein	(4) J. J. Thompson
87.	Which of the following was	NOT true about HPLC:
	(1) It has high sensitivity	
	(2) It is performed in colu	ımns
	(3) There is no need to var	porise the samples
	(4) It needs high pressure	· ·
88.	Chromatography is a physic	ical method used to separate and analyse :
	(1) Complex mixtures	(2) Metals
	(3) Simple mixtures	(4) Viscous mixtures
89.	NMR spectroscopy is used following:	d for determining structure in which of the
	(1) Liquids	(2) Gases
	(3) Radioactive materials	, ,
90.	The most suitable solvent sy	ystem for TLC of inks is :
	(1) Amyl alcohol: Acetic ac	
	(2) Ethanol: Acetic acid: A	Acetone (4:5:1)
	(3) Amyl alcohol: Acetic ac	cid : Chloroform (6 : 1 : 2)
	(4) N-butanol: Pyridine: V	Water (3:1:1.5)

Questior No.	Questions		
,91.	Who among the following is connected to critical criminology? (1) William J. Chambliss (2) Richard A. Cloward (3) R. E. Park (4) E. H. Southerland		
92.	Which of the following records the movement of evidence? (1) Chain of custody (2) Chain of command (3) Chain of packing (4) Chain of crime		
93.	Dying declaration is to be preferably recorded by: (1) Magistrate (2) Doctor (3) Jury member (4) Police		
94.	Police inquest is conducted under section: (1) 174 IPC (2) 174 CrPC (3) 176 IPC (4) 176 CrPC		
95.	Locard's Exchange Principle is for: (1) Detecting toxicity (2) Knowing time since death (3) Detecting crime (4) Estimating the age		
THACAMAL THAN AND AND AND AND AND AND AND AND AND A	Cadaveric spasm indicates: (1) Homicide (2) Suicide (3) Last act of a person before death (4) Natural death		

Questio No.	Questions
97.	"Tache Noire Sclerotiques" is a post-mortem feature seen in : (1) Mouth (2) Nose (3) Ears (4) Eyes
98.	Which of the following are examples of unnatural sexual offence: (i) Sodomy (ii) Incest (iii) Buccal coitus (iv) Bestiality (1) i, iii, iv (2) i, ii, iii (3) iv, ii, i (4) i, ii, iv
99.	To ensure integrity, validate your tools and verify your evidence with: (1) Watermarks (2) Digital certificate (3) Steganography (4) Hashing algorithms
100.	Human trafficking is a form of: 1) Organised crime (2) Love jihad 3) Hate crime (4) Forgery
AMERICAN STATEMENT S	

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

(MPH/PHD/URS-EE-2020)

FORENSIC SCIENCE

weel for Jumbling

10003Sr. No.



Time: 1¼ Hours	Total Questi	ons:100	Max. Marks : 100
Roll No.	(in figure)	<u>yr</u>	(in words)
Name :		Father's Name :_	
Mother's Name :		Date of Examinat	ion :

(Signature of the candidate)

(Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- All questions are compulsory.
- The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- Question Booklet along with answer key of all the A,B,C and D code will be got uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examination in writing/through E-Mail within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
- The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers MUST NOT be ticked in the Question book-let.
- There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-Sheet.
- BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Questions
1,	ABO grouping is based on :
	(1) Nuclear chromatin (2) Red cell enzyrce
THE THE PROPERTY OF THE PROPER	(3) Plasma proteins (4) Red cell surface antigens
2.	Sex can be established by examination of WBC for the presence of:
	(1) Ribosomes (2) Plasma membrane
	(3) Drum-stick (4) Golgi bodies
3.	Confirmatory test for human origin of blood stain is :
, Andrews	(1) Takayama test (2) Teichmann's test
TANKANANANANANANANANANANANANANANANANANAN	(3) Benzidine test (4) Precipitin test
4.	Minisatellites are :
	(1) short non-coding repetitive sequences in DNA
	(2) 10-40 bp short sequences within the genes
	(3) short coding repetitive sequences in DNA
	(4) short exens
5.	DNA profiling to show similarity between different animal species with reference to some specific protein coding DNA sequence is called:
	(1) Animal blot (2) Zoo blot
	(3) Phylogenetic blot (4) Dot blot
6.	DNA Fingerprinting technique was developed by :
	(1) James Watson (2) Francis Crick
THE COMPANY AND A COMPANY AND	(3) Lalji Singh (4) Alec Jeffreys

Question No.	Questions
7.	Blood grouping in old dried blood stains is done by:
	(1) Hemin crystal test (2) Absorption elution test
	(3) Benzidine test (4) Acid elution test
8.	Which of the following is NOT a test for blood:
	(1) Benzidine test (2) Teichmann's test
	(3) Acid phosphatase test (4) Hemochromogen test
9.	Enucleated biconcave RBC in blood stains indicates that it belongs to a :
	(1) Bird (2) Camel
	(3) Amphibian (4) Human
10.	Which of the following method is used to identify an aspermic male involved
	in sexual offence case :
	(1) RFLP (2) Y-STR
	(3) Y-body (4) DNA barcoding
11.	
n.	Beer Lambert law shows the relation between:
n.	Beer Lambert law shows the relation between: (1) Energy abscrption and reflected radiation
n.	(1) Energy abscrption and reflected radiation
n.	(1) Energy absorption and reflected radiation (2) Energy absorption and concentration
m.	 (1) Energy absorption and reflected radiation (2) Energy absorption and concentration (3) Reflected radiation and concentration
11.	(1) Energy absorption and reflected radiation (2) Energy absorption and concentration

Question No.	Questions
12.	Which of the following cannot be used as an absorbent in Column absorption
	chromatography:
·	(1) Potassium permanganate (2) Silica gel
·	(3) Magnesium oxide (4) Activated alumina
13.	Mass spectrometer is used to determine:
	(1) Properties of samples (2) Relative mass of atoms
	(3) Composition of sample (4) Element concentration in sample
14.	Which of the following is not correct about Absorption spectroscopy:
	(1) Reflection is kept maximum
:	(2) Scattering is kept maximum
, "	
	(4) It involves transmission
15.	In Chromatography, the stationary phase can be supported on a :
	(1) Liquid only (2) Solid only
	(3) Liquid or gas (4) Solid or liquid
16.	Mass spectroscopy was invented by:
	(1) Aston
-	(2) Nikola Tesla
	(3) Goldstein
	(4) J. J. Thompson
	(a) o.o. zaompous

Question No.	Questions		
17.	Which of the following was NOT true about HPLC:		
	(1) It has high sensitivity		
	(2) It is performed in columns		
	(3) There is no need to vaporise the samples		
	(4) It needs high pressure for separation		
18.	Chromatography is a physical method used to separate and analyse :		
	(1) Complex mixtures (2) Metals		
	(3) Simple mixtures (4) Viscous mixtures		
19.	NMR spectroscopy is used for determining structure in which of the		
	(1) Liquids (2) Gases		
	(3) Radioactive materials (4) Insoluble compounds		
20.	The most suitable solvent system for TLC of inks is:		
	(1) Amyl alcohol: Acetic acid: Pyridine (6:1:2)		
	(2) Ethanol: Acetic acid: Acetone (4:5:1)		
	(3) Amyl alcohol: Acetic acid: Chloroform (6:1:2)		
	(4) N-butanol: Pyridine: Water (3:1:1.5)		
√21 .	Who among the following is connected to critical criminology?		
COMPANSOR CONTRACTOR C	(1) William J. Chambliss (2) Richard A. Cloward		
	(3) R. E. Park (4) E. H. Southerland		

Question No.	Questions
22.	Which of the following records the movement of evidence? (1) Chain of custody (2) Chain of command (3) Chain of packing (4) Chain of crime
23.	Dying declaration is to be preferably recorded by: (1) Magistrate (2) Doctor (3) Jury member (4) Police
	Police inquest is conducted under section: (1) 174 IPC (2) 174 CrPC (3) 176 IPC (4) 176 CrPC
	Locard's Exchange Principle is for: (1) Detecting toxicity (2) Knowing time since death (3) Detecting crime (4) Estimating the age
	Cadaveric spasm indicates: 1) Homicide 2) Suicide 3) Last act of a person before death
27. ["] (1 (3)	Cache Noire Sclerotiques" is a post-mortem feature seen in : (2) Nose (4) Eyes

Question No.	Questions			
28.	Which of the following are examples of unnatural sexual offence:			
	(i) Sodomy (ii) Incest (iii) Buccal coitus (iv) B	estiality		
	(1) i, iii, iv (2) i, ii, iii			
	(3) iv, ii, i (4) i, ii, iv			
29.	To ensure integrity, validate your tools and verify your evi	dence with :		
	(1) Watermarks (2) Digital certificate	· .		
	(3) Steganography (4) Hashing algorithms	:		
30.	. Human trafficking is a form of :			
	(1) Organised crime (2) Love jihad			
Λ.	(3) Hate crime (4) Forgery			
-81.	. Which of the following is used to determine the time of dea	th:		
	(1) MR spectroscopy (2) CT scan			
> .	(3) Photomicrography (4) 3-D Surface scanning			
32.	. The first permanent tooth to erupt is:			
	(1) Incisor (2) Canine			
	(3) Molar (4) Premolar			
33.	. A girl has 8 temporary teeth and 20 permanent teeth. Her	age is likely		
	be:			
	(1) 12 years (2) 10 years			
	(3) 16 years (4) 18 years			
		······································		

Question No.	Questions	
34.	For determination of age, the most useful secondary change in tooth is (1) Root transparency (2) Root resorption (3) Attrition (4) Secondary dentin deposition	
35.	Cusp of Carabelli is found on :	
	(1) Bicuspids (2) Canines	
	(3) Tricuspids (4) Incisors	
36.	According to ISO 9001, inspection and testing comes under which management responsibility? (1) Servicing (2) Non-confirming product control	
	(2) Non-confirming product control (3) Document control	
	(4) Process control	
37.	Ontology is:	
	(1) classification of internet based documents	
	(2) an indexing method	
	(3) documentation service	
	(4) cataloguing of internet based documents	
38.	Which of the following is the first step in the research process:	
	(1) Searching for solutions to the problem	
	(2) Identification of problem	
	(3) Review of literature	
	(4) Searching sampling methods	
·		

Question No.	Questions
39.	During research process 'Formulation of Hypothesis' is followed by:
	(1) Selection of research tools
	(2) Collection of data
	(3) Statement of objectives
	(4) Analysis of data
.40.	Bibliometry is:
	(1) Library service
	(2) Information management tool
	(3) Function of library network
	(4) Literature service
AI.	Who coined the term Forensic Ballistic?
	(1) J. Thompson (2) Charles Daly
	(3) Calvin Goddard (4) Martin Marz
42.	In ballistics, Ratchet mechanism is associated with:
	(1) Revolver (2) Rifled firearm
	(3) Semi-automatic firearm (4) None of the above
43.	In "5.6 × 57 mmR" term, the 'R' stands for which type of the cartridge
	case?
	(1) Rebated (2) Rimless
	(3) Rimmed (4) Rough

Question No.	Questions
44.	Smokeless propellant version of Express cartridge is called:
	(1) Paper Express (2) Nitro Express
	(3) Blast Express (4) Smokeless Express
45.	At a crime scene, a very old cartridge of early 1900s was found having
	designation 0.32-0.30. If 0.32 is the caliber, what does 0.30 signify?
	(1) Length of carried case (2) Length of bullet
	(3) Weight of bullet (4) Weight of black powder
46.	What is caliber in ballistic?
	(1) Internal diameter of the barrel
	(2) Diameter of the bullet
	(3) External diameter of the barrel
	(4) Diameter of the cartridge case
47.	The bore of 12 bore gun is:
	(1) 0.731 (2) 0.723
	(3) 0.727 (4) 0.729
48.	Arrange the following firearms in the proper chronological order:
	(a) Flint lock (b) Wheel lock
	(c) Match lock (d) Percussion lock
	(1) c, a, b, d (2) a, d, c, b
	(3) b, c, d, a (4) d, b, a, c

Question No.	Que	estic	ns
49.	Which of the following is A ammunition:	TO	an advantage of Aluminium ca
	(1) Less effective accuracy	(2)	Less robust than brass
	(3) Cost-effective	(4)	For shot gun ammunition use only
50.	What is the ammunition loadi	ng m	echanism of a match lock pistol?
a de la composición della comp	(1) Top-lift load	(2)	Muzzle load
	(3) Breach load	(4)	None of the above
51.	Forensic Palynology deals witl	1:	
	(1) Dust	(2)	Diatoms
	(3) Pollen and spores	(4)	Fossils
52.	For examination of diatoms, s	ampl	e should be taken from :
	(1) Buccal cavity	(2)	Stomach
	(3) Lungs	(4)	Bone marrow
53.	In Wildlife forensic, animals a	re id	entified by :
	(1) Pug marks	(2)	Photography
	(3) Trapping	(4)	Poaching
54.	Lifting of footprints on snow c	an b	e done by :
	(1) Wax casting	(2)	Tracing
	(3) Sulphur casting	(4)	Plaster of Paris cast
	· · · · · · · · · · · · · · · · · · ·		

Question No.	Questions
55.	Which of the following is NOT the component of Kastle-Meyer test:
	(1) Glacial acetic acid (2) Potassium hydroxide
	(3) Phenolphthalein (4) Zinc dust
56.	Presence of menstrual blood stain is confirmed by :
	(1) Restriction enzymes
	(2) Isozyme markers
	(3) Fibrin Degradation Product
	(4) Benzidine test
57.	Seminal fluid is secreted by prostate gland, seminal vesicles and:
	(1) Thyroid gland (2) Adrenal gland
	(3) Pineal gland (4) Cowper's gland
58.	Lanugo hair are:
	(1) Thin and soft
	(2) Medullated
	(3) Having complex scale pattern
	(4) Pigmented
59.	Which of the following is added to harden Plaster of Paris cast of footprints
	(1) Sodium sulphate
	(2) Talcum powder
	(3) Sodium chloride
	(4) Sodium carbonate
# # * * * * * * * * * * * * * * * * * *	UNTIDE ET 2000 /T

Question No.	Q	uestic	DNS
60.	Scales are found on which of	the fo	ollowing fibres :
	(1) Silk	(2)	Wool
,	(3) Cotton	(4)	Linen
-61 .	Origin of the bones for facial forensic examination :	repro	duction requires which of the followi
	(1) Serological	(2)	Bio-chemical
	(3) Anthropological	(4)	Odontological
62.	Height of the body can be of humerus is:	leduce	d from the length of humerus, who
	(1) 20 percent of height	(2)	35 percent of height
	(3) 10 percent of height	(4)	15 percent of height
63.	Ischiopubic index is used to	detern	ine :
	(1) Race	(2)	Age
	(3) Stature	(4)	Sex
64.	Medial end of clavicle fuses a	at the	age of:
	(1) 16-17 years	(2)	30-40 years
	(3) 18-22 years	(4)	10-15 years
65.	The single best criterion to d	istingu	uish the female from male pelvis is
	(1) shape of acetabulum		
	(2) shape of greater sciatic	notch	
, www.	(3) shape of ischial tuberosi	:	
	(4) shape of foramen		
	IID/IIDC EN 2000 (E		

Question No.			Questic	ns		
66.	Xiphoid 1	process uni	tes with sterm	ım at the ag	e of :	NO. R. C. P. P. C. P. C. P.
	(1) 40 y	ears	(2)	60 years		•
	(3) 30 y	ears	(4)	20 years		
67.	Closure c	of all skull s	sutures indicat	e age more t	han :	
		ears		40 years		
	(3) 50 ye	ears	(4)	60 years		A Company
68.	Coronal s	uture com	pletely fuses by	the age of:		
	(1) 50 ye	ears	(2)	30 years		
	(3) 40 ye	ears	(4)	16 years		
69.	Which of	the followi	ng adult bone is	most usefu	l in sex esta	ablishment :
	(1) Clavi			Pelvis		•
	(3) Fem	ur	(4)	Humerus		
70.	Attainme	nt of 16 yea	ars of age is dia	gnosed by X	-ray of :	
	(1) Elboy			Ankle		
	(3) Knee	r y	(4)	Wrist	•	
71	The skid r	narks on th	e road in a veh	icular accide	ent may oiv	e en indication
	of:		. *		, b.	o an maiospioi
	(1) Weig	ht of the ve	hicle			
	(2) Make	of the veh	icle			
	(3) Speed	of the vel	icle			
	•	th of the ve				
,	. ,					

Question No.		Questions
72.	When the temperature of	a liquid is raised, its refractive index will
	(1) decrease	(2) increase
	(3) remain unchanged	(4) disappear
73.	Light having pulsating wa	ves in unison is called :
	(1) Polychromatic	(2) Polaroid
	(3) Laser	(4) Monochromatic
74.	In order for photographs to	be admissible in court, they must be rule
,	(1) fair and accurate	(2) black and white
	(3) digital and coloured	(4) none of the above
75.	What type of scale is requi	red for measuring bite marks :
	(1) Ruler	(2) Coins
	(3) Round scale	(4) ABFO
76.	Reports and logs generate	ed by forensic tools are typically in plain
·	format, a word processor i	ormat or format.
	(1) TXT	(2) HTML
	(3) PDF	(4) PS
77.		orensic software, provides many tools incl ed to acquire data from different phone m
	(1) Data Pilot	(2) MOBI Ledit
	(3) Device Seizure	(4) Bit Pim

stigator. scripts (2) batch (4) ootable forensic CD can be creasition. Neon (2) Helix (4) the following Forensic Psymological order from earliest t Eye witness testing (b)	configuration eated by and perform a live Inquisitor DTDD chology events of breakthroughs in
batch (4) cotable forensic CD can be creatisition. Neon (2) Helix (4) the following Forensic Psychological order from earliest t Eye witness testing (b)	configuration eated by
Dotable forensic CD can be creatisition. Neon (2) Helix (4) the following Forensic Psychological order from earliest to Eye witness testing (b)	Inquisitor DTDD chology events of breakthroughs in o most recent :
Helix (2) the following Forensic Psychological order from earliest t Eye witness testing (b)	Inquisitor DTDD chology events of breakthroughs in o most recent :
Neon (2) Helix (4) the following Forensic Psynological order from earliest t Eye witness testing (b)	DTDD chology events of breakthroughs in o most recent :
Helix (4) the following Forensic Psychological order from earliest t Eye witness testing (b)	DTDD chology events of breakthroughs in o most recent :
the following Forensic Psychological order from earliest t Eye witness testing (b)	chology events of breakthroughs in o most recent :
nological order from earliest t Eye witness testing (b)	o most recent :
Table	
DNA profiling (d)	Development of Stanford-Binet IQ test
	d, c, b, a
•	b, c, a, d
ch of the following is a feature	of genuine signatures :
Pen strokes with tapering end	s
Evidence of touching	
Unnatural pen lifts	
Pen strokes with blunt ends	
	ch of the following is a feature Pen strokes with tapering end Evidence of touching Unnatural pen lifts

Question No.	Questions
82.	The most commonly used material in the production of paper is:
	(1) Sisal
	(2) Cotton
	(3) Wood from coniferous trees
	(4) Wood from deciduous trees
83.	Which of the following is not a counterfeiting measure :
	(1) a dandy roll (2) a hologram patch
4	(3) a water mark (4) an iridescent stripe
84.	Segments of writing obscured by correction fluid are known as:
	(1) Corrections (2) Erasures
	(3) Embellishments (4) Obliterations
85.	ESDA is not used to:
	(1) date inks
	(2) visualise indented writing
	(3) determine sequence of writing impressions
72	(4) examine torn pages of paper for matching
86.	Which of the following method is used to determine the age of an in
	tracking the degradation of certain dyes:
	(1) LDMS (2) HPLC
	(3) TLC (4) GC

Question No.	Questions
87.	In handwriting comparison the crossing in 't' and the dots in 'i' and 'j' are
	known as:
	(1) Loop signs (2) Connective signs
	(3) Shoulder signs (4) Diacritic signs
88.	Which of the following is a sign of forgery:
	(1) Pen lifts (2) Retouching
	(3) Connecting strokes (4) All of the above
89.	The Fingerprint Bureau was first established in which of the following
	country?
	(1) India (2) USA
	(3) England (4) France
90.	Fingerprints can be permanently changed by:
·	(1) Scleroderma (2) Eczema
	(3) Leprosy (4) Psoriasis
91	Toxic action of metallic poisons involve :
; ;	(1) binding with lipids
	(2) binding with amino acids, proteins and polypeptides
PATAMENTAL	(3) binding with sugars
ensulativa entern	(4) binding with cholesterol

Question No.		Qı	testic)ns
92.	Which	n of the following is kno	wn as	ecstasy:
:·	(1) 3	, 4 Methylenedioxymetl	namp]	hetamine
· .	(2) 3	, 4 Methylenedioxyamp	hetan	nine
	(3) A	Amphetamine		
	(4) N	lethamphetamine		
93.	Which	n of the following toxins	come	es from castor oil plant :
	(1) F	licin	(2)	Digitanin
	(3) A	etropin	(4)	Paraffin
94.	The n	ethod used for the isola	tion (of sulphuric acid from the charre
	is:	**************************************		
	(1) I	nfusion with water	(2)	Infusion with ethanol
	(3) I	Distillation	(4)	Dialysis
95.	A dru	g that induces alteratio	ns in	mood and perception is known as
	(1) h	allucinogen	(2)	stimulant
	(3) s	eductive	(4)	depressant
96.	Toxici	ty level of Datura plant	base	d on increasing level is :
	(1) L	eaf, Root, Fruit, Seed	(2)	Seed, Leaf, Root, Fruit
·	(3) F	loot, Seed, Fruit, Leaf	(4)	Fruit, Root, Leaf, Seed
97.	Which	preservative is recomi	nende	ed for the preservation of blood s
	in cas	e of Carbon monoxide p	oison	ing:
	(1) S	odium chloride	(2)	Sodium carbonate
·	(3) S	odium citrate	(4)	No preservative

}uestion No.	Questions
98.	Free Sulphuric acid is rarely found in stomach content in acid poisonicases because:
	arrance given as anudotes
	(2) It may combine chemically with tissues
	(3) It may be vomitted out
	(4) All the above
99.	LSD is derived from:
	(1) Claviceps purpurea (2) Cannabis species
	(0) 7
100.	Chemical etching method is used for restoration of erased marks on :
100.	Chemical etching method is used for restoration of erased marks on :
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood
100.	Chemical etching method is used for restoration of erased marks on: (1) Plastic (2) Wood

SET-"X"

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

(ICPH/PHD/URS-EE-2020)

FORENSIC SCIENCE

. . . 10004



code Da used for	Jumbling St.	NO. <u>*VV</u> *
Cime: 14 Hours Total Quest	ions : 100 Max. N	Marks: 100
Roll No(in figure)		_ (in words)
Name :	Father's Name:	·
Mother's Name :	Date of Examination:	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
•		
Signature of the candidate)	(Signature of the	Invigilator)
CANDIDATES MUST READ THE INSTRUCTIONS BEFORE STARTING 1. All questions are compulsory. 2. The candidates must return the answer-sheet to the Invigilator concern failing which a case of use of unfair-in against him / her, in addition to lodging answer-sheet of such a candidate will a Sheet is provided to the candidate so the candidate. 4. Question Booklet along with answer known uploaded on the university website after In case there is any discrepancy in the may be brought to the notice of the Company of the	Question book-let as we need before leaving the Examineans / mis-behaviour will be gof an FIR with the police. not be evaluated. he examination system, cark hat a copy of OMR Sheet may be a copy of OMR Sheet may be a conduct of Entrance I Question Booklet/Answer K troller of Examination in wright the same on the Universal will be considered. If the question book-let it is book-let. Each correct answer will be a incorrect answer will be a incorrect answer. PEN of good quality in the Correct answer.	ell as OMR ination Hall, be registered. Further the conless OMR ay be kept by de will be got Examination. Key, the same iting/through sity Website. OMR Answerself. Answerself. Answerself. Answerself. COMPLETE GETC. WILL

Questions
Which of the following is a feature of genuine signatures :
(1) Pen strokes with tapering ends
(2) Evidence of touching
(3) Unnatural pen lifts
(4) Pen strokes with blunt ends
The most commonly used material in the production of paper is:
(1) Sisal
(2) Cotton
(3) Wood from coniferous trees
(4) Wood from deciduous trees
Which of the following is not a counterfeiting measure :
(1) a dandy roll (2) a hologram patch
(3) a water mark (4) an iridescent stripe
Segments of writing obscured by correction fluid are known as:
(1) Corrections (2) Erasures
(3) Embellishments (4) Obliterations
ESDA is not used to :
(1) date inks
(2) visualise indented writing
(3) determine sequence of writing impressions
(4) examine torn pages of paper for matching

uestion No.	Questions
6.	Which of the following method is used to determine the age of an intracking the degradation of certain dyes: (1) LDMS (2) HPLC (3) TLC (4) GC
7.	In handwriting comparison the crossing in 't' and the dots in 'i' and 'j' known as: (1) Loop signs (2) Connective signs (3) Shoulder signs (4) Discritic signs
8.	Which of the following is a sign of forgery: (1) Pen lifts (2) Retouching (3) Connecting strokes (4) All of the above
	The Fingerprint Bureau was first established in which of the followicountry? (1) India (2) USA (3) England (4) France
(Fingerprints can be permanently changed by: 1) Scleroderma (2) Eczema 3) Leprosy (4) Psoriasis

Question No.	Qu	estions
11.	The skid marks on the road in a vehicular accident may give an indication	
	of:	
	(1) Weight of the vehicle	(2) Make of the vehicle
	(3) Speed of the vehicle	(4) Length of the vehicle
12.	When the temperature of a liq	uid is raised, its refractive index will :
	(1) decrease	(2) increase
·	(3) remain unchanged	(4) disappear
13.	Light having pulsating waves in unison is called:	
	(1) Polychromatic	(2) Polaroid
	(3) Laser	(4) Monochromatic
14.	In order for photographs to be	admissible in court, they must be ruled as:
	(1) fair and accurate	(2) black and white
	(3) digital and coloured	(4) none of the above
15.	What type of scale is required	for measuring bite marks :
	(1) Ruler	(2) Coins
	(3) Round scale	(4) ABFO
16.	Reports and logs generated by	y forensic tools are typically in plain text
	format, a word processor form	
	(1) TXT	(2) HTML
	(3) PDF	(4) PS

Question No.	Questions
17.	Paraben, a leading mobile forensic software, provides many tools incl
18.	Log files and files provide useful information to an einvestigator.
	(1) scripts (2) .rts
	(3) batch (4) configuration
19.	A bootable forensic CD can be created by and perform acquisition.
	(1) Neon (2) Inquisitor
	(3) Helix (4) DTDD
20.	Put the following Forensic Psychology events of breakthrough chronological order from earliest to most recent:
	(a) Eye witness testing (b) Development of Polygraph
	(c) DNA profiling (d) Development of Stanford-Binet IC
	(1) a, d, b, c (2) d, c, b, a
	(3) a, d, c, b (4) b, c, a, d
21.	Origin of the bones for facial reproduction requires which of the follow
	forensic examination:
	(1) Serological (2) Bio-chemical
ALL THE PROPERTY OF THE PROPER	(3) Anthropological (4) Odontological

Question No.	Questions
22.	Height of the body can be deduced from the length of humerus, where humerus is:
	(1) 20 percent of height (2) 35 percent of height
	(3) 10 percent of height (4) 15 percent of height
23,	Ischiopubic index is used to determine :
	(1) Race (2) Age
	(3) Stature (4) Sex
24.	Medial end of clavicle fuses at the age of :
. : [(1) 16-17 years (2) 30-40 years
	(3) 18-22 years (4) 10-15 years
25.	The single best criterion to distinguish the female from male pelvis is
	(1) shape of acetabulum
	(2) shape of greater sciatic notch
	(3) shape of ischial tuberosities
	(4) shape of foramen
26.	Xiphoid process unites with sternum at the age of:
	(1) 40 years (2) 60 years
	(3) 30 years (4) 20 years
27.	Closure of all skull sutures indicate age more than:
NOTICE STREET	(1) 70 years (2) 40 years
S. Mariana Company	(3) 50 years (4) 60 years
·	

Coronal suture completely fuses by the age of:		
(1) 50 years (2) 30 years		
(3) 40 years (4) 16 years		
Which of the following adult bone is most useful in sex establishme		
(1) Clavicle (2) Pelvis		
(3) Femur (4) Humerus		
Attainment of 16 years of age is diagnosed by X-ray of:		
(1) Elbow (2) Ankle		
(3) Knee (4) Wrist		
Toxic action of metallic poisons involve :		
(1) binding with lipids		
(2) binding with amino acids, proteins and polypeptides		
(3) binding with sugars		
(4) binding with cholesterol		
Which of the following is known as ecstasy:		
(1) 3, 4 Methylenedioxymethamphetamine		
(2) 3, 4 Methylenedioxyamphetamine		
(3) Amphetamine		
(4) Methamphetamine		
Which of the following toxins comes from castor oil plant:		
(1) Ricin (2) Digitanin		
(3) Aetropin (4) Paraffin		

Question No.	Questions
34.	The method used for the isolation of sulphuric acid from the charred shirt is:
	(1) Infusion with water (2) Infusion with ethanol
	(3) Distillation (4) Dialysis
35.	A drug that induces alterations in mood and perception is known as: (1) hallucinogen (2) stimulant
	(3) seductive (4) depressant
36.	Toxicity level of Datura plant based on increasing level is:
·	(1) Leaf, Root, Fruit, Seed (2) Seed, Leaf, Root, Fruit
	(3) Root, Seed, Fruit, Leaf (4) Fruit, Root, Leaf, Seed
37.	Which preservative is recommended for the preservation of blood sample in case of Carbon monoxide poisoning:
	(1) Sodium chloride (2) Sodium carbonate
	(3) Sodium citrate (4) No preservative
38.	Free Sulphuric acid is rarely found in stomach content in acid poisoning cases because:
	(1) It may be neutralised by alkalies given as antidotes
	(2) It may combine chemically with tissues
	(3) It may be vomitted out
	(4) All the above
•	

uestion No.	Questions
39.	LSD is derived from:
	(1) Claviceps purpurea (2) Cannabis species
,	(3) Papaver somniferum (4) Calotropis species
40.	Chemical etching method is used for restoration of erased marks
	(1) Plastic (2) Wood
	(3) Metal (4) Leather
41.	Forensic Palynology deals with :
	(1) Dust (2) Diatoms
	(3) Pollen and spores (4) Fossils
42.	For examination of diatoms, sample should be taken from:
	(1) Buccal cavity (2) Stomach
	(3) Lungs (4) Bone marrow
43.	In Wildlife forensic, animals are identified by:
	(1) Pug marks (2) Photography
	(3) Trapping (4) Poaching
44.	Lifting of footprints on snow can be done by:
	(1) Wax casting (2) Tracing
	(3) Sulphur casting (4) Plaster of Paris cast
45.	Which of the following is NOT the component of Kastle-Meyer test
	(1) Glacial acetic acid (2) Potassium hydroxide
	(3) Phenolphthalein (4) Zinc dust

uestion No.	Questions
46.	Presence of menstrual blood stain is confirmed by: (1) Restriction enzymes (2) Isozyme markers (3) Fibrin Degradation Product (4) Benzidine test Seminal fluid is secreted by prostate gland, seminal vesicles and: (1) Thyroid gland (2) Adrenal gland (3) Pineal gland (4) Cowper's gland
48.	(3) Pineal gland (4) Cowper's gland Lanugo hair are: (1) Thin and soft (2) Medullated (3) Having complex scale pattern (4) Pigmented
49.	Which of the following is added to harden Plaster of Paris cast of footpring (1) Sodium sulphate (2) Talcum powder (3) Sodium chloride (4) Sodium carbonate
50.	Scales are found on which of the following fibres: (1) Silk (2) Wool (3) Cotton (4) Linen

uestion No.	Questions
51.	Beer Lambert law shows the relation between: (1) Energy absorption and reflected radiation (2) Energy absorption and concentration (3) Reflected radiation and concentration (4) Scattered radiation and concentration
52.	Which of the following cannot be used as an absorbent in Column absorption chromatography: (1) Potassium permanganate (2) Silica gel (3) Magnesium oxide (4) Activated alumina
53.	Mass spectrometer is used to determine: (1) Properties of samples (2) Relative mass of atoms (3) Composition of sample (4) Element concentration in sample
54.	Which of the following is not correct about Absorption spectroscopy: (1) Reflection is kept maximum (2) Scattering is kept maximum (3) Intensity of radiation indicates concentration (4) It involves transmission
55	In Chromatography, the stationary phase can be supported on a: (1) Liquid only (2) Solid only (3) Liquid or gas (4) Solid or liquid

Question No.	Questions
56.	Mass spectroscopy was invented by :
	(1) Aston (2) Nikola Tesla
	(3) Goldstein (4) J. J. Thompson
57.	Which of the following was NOT true about HPLC:
	(1) It has high sensitivity
	(2) It is performed in columns
	(3) There is no need to vaporise the samples
	(4) It needs high pressure for separation
58.	Chromatography is a physical method used to separate and analyse :
	(1) Complex mixtures (2) Metals
	(3) Simple mixtures (4) Viscous mixtures
59.	NMR spectroscopy is used for determining structure in which of the
	following:
	(1) Liquids (2) Gases
	(3) Radioactive materials (4) Insoluble compounds
60.	The most suitable solvent system for TLC of inks is:
	(1) Amyl alcohol : Acetic acid : Pyridine (6 : 1 : 2)
general section of the section of th	(2) Ethanol: Acetic acid: Acetone (4:5:1)
	(3) Amyl alcohol: Acetic acid: Chloroform (6:1:2)
THE PERSON NAMED IN COLUMN NAM	(4) N-butanol: Pyridine: Water (3:1:1.5)

uestion No.	Questions
	ABO grouping is based on: (1) Nuclear chromatin (2) Red cell enzyme (3) Plasma proteins (4) Red cell surface antigens
62.	Sex can be established by examination of WBC for the presence of (1) Ribosomes (2) Plasma membrane (3) Drum-stick (4) Golgi bodies
63.	Confirmatory test for human origin of blood stain is: (1) Takayama test (2) Teichmann's test (3) Benzidine test (4) Precipitin test
64.	Minisatellites are: (1) short non-coding repetitive sequences in DNA (2) 10-40 bp short sequences within the genes (3) short coding repetitive sequences in DNA (4) short exons
65	reference to some specific protein coding DIVA sequence (1) Animal blot (2) Zoo blot (3) Phylogenetic blot (4) Dot blot
6	DNA Fingerprinting technique was developed by: (1) James Watson (2) Francis Crick (3) Lalji Singh (4) Alec Jeffreys

estion	Questions
1	Blood grouping in old dried blood stains is done by: (1) Hemin crystal test (2) Absorption elution test (3) Benzidine test (4) Acid elution test
68.	Which of the following is NOT a test for blood: (1) Benzidine test (2) Teichmann's test (3) Acid phosphatase test (4) Hemochromogen test.
69.	Enucleated biconcave RBC in blood stains indicates that it belongs to a: (1) Bird (2) Camel (3) Amphibian (4) Human
70.	Which of the following method is used to identify an aspermic male involve in sexual offence case: (1) RFLP (2) Y-STR (3) Y-body (4) DNA barcoding
71.	(2) Charles Daly
	(3) Calvin Goddard (4) Martin Marz In ballistics, Ratchet mechanism is associated with:

Question No.	Questions				
73.	In " 5.6×57 mmR" term, the 'R' stands for which type of the case?				
	(1) Rebated (2) Rimless				
	(3) Rimmed (4) Rough				
74.	Smokeless propellant version of Express cartridge is called:				
	(1) Paper Express (2) Nitro Express				
	(3) Blast Express (4) Smokeless Express				
75.	At a crime scene, a very old cartridge of early 1900s was found I designation 0.32-0.30. If 0.32 is the caliber, what does 0.30 signify?				
	 Length of carried case Length of bullet Weight of bullet Weight of black powder 				
76.	(1) Length of carried case(2) Length of bullet(3) Weight of bullet				
	 (1) Length of carried case (2) Length of bullet (3) Weight of bullet (4) Weight of black powder What is caliber in ballistic? 				
	 Length of carried case Length of bullet Weight of bullet Weight of black powder What is caliber in ballistic? Internal diameter of the barrel 				
	 (1) Length of carried case (2) Length of bullet (3) Weight of bullet (4) Weight of black powder What is caliber in ballistic? (1) Internal diameter of the barrel (2) Diameter of the bullet 				
	 (1) Length of carried case (2) Length of bullet (3) Weight of bullet (4) Weight of black powder What is caliber in ballistic? (1) Internal diameter of the barrel (2) Diameter of the bullet (3) External diameter of the barrel 				
77.	 Length of carried case Length of bullet Weight of bullet Weight of black powder What is caliber in ballistic? Internal diameter of the barrel Diameter of the bullet External diameter of the barrel Diameter of the cartridge case 				

the state of the s					
Arrange the following firearms in the proper chronological order :					
(a) Flint lock	(b) Wheel lock				
(c) Match lock	(d) Percussion lock				
(1) c, a, b, d	(2) a, d, c, b				
(0) 0, 0, 4, 4	(4) d, b, a, c				
Which of the following is NOT an advantage of Aluminium cased					
(1) Less effective accuracy					
(3) Cost-effective	(4) For shot gun ammu	inition use only			
(1) Top-lift load	(2) Muzzle load	and the second s			
Who among the following is co (1) William J. Chambliss (3) R. E. Park	(2) Richard A. Clowar	d			
Which of the following record	s the movement of evide	nce ?			
(1) Chain of custody		1.			
(3) Chain of packing	(4) Chain of crime				
Dying declaration is to be preferably recorded by:					
	(2) Doctor				
(3) Jury member	(4) Police	*			
	(a) Flint lock (c) Match lock (1) c, a, b, d (3) b, c, d, a Which of the following is N ammunition: (1) Less effective accuracy (3) Cost-effective What is the ammunition loadin (1) Top-lift load (3) Breach load Who among the following is condition (1) William J. Chambliss (3) R. E. Park Which of the following record (1) Chain of custody (3) Chain of packing Dying declaration is to be presented.	(a) Flint lock (b) Wheel lock (c) Match lock (d) Percussion lock (1) c, a, b, d (2) a, d, c, b (3) b, c, d, a (4) d, b, a, c Which of the following is NOT an advantage of A ammunition: (1) Less effective accuracy (2) Less robust than be defective accuracy (3) Cost-effective (4) For shot gun ammunition loading mechanism of a match defective accuracy (3) Breach load (4) None of the above Who among the following is connected to critical crimical defection among the following is connected to critical crimical defection among the following records the movement of evided among the following records the movement of evided defection among declaration is to be preferably recorded by: (1) Magistrate (2) Doctor (4) Police			

Questions
Police inquest is conducted under section :
(1) 174 IPC (2) 174 CrPC
(3) 176 IPC (4) 176 CrPC
Locard's Exchange Principle is for :
(1) Detecting toxicity (2) Knowing time since death
(3) Detecting crime (4) Estimating the age
Cadaveric spasm indicates:
(1) Homicide
(2) Suicide
(3) Last act of a person before death
(4) Natural death
"Tache Noire Sclerotiques" is a post-mortem feature seen in :
(1) Mouth (2) Nose
(3) Ears (4) Eyes
Which of the following are examples of unnatural sexual offence:
(i) Sodomy (ii) Incest (iii) Buccal coitus (iv) Bestiality
(1) i, iii, iv (2) i, ii, iii
(3) iv, ii, i (4) i, ii, iv
To ensure integrity, validate your tools and verify your evidence w.
(1) Watermarks (2) Digital certificate
(3) Steganography (4) Hashing algorithms

Question No.	Questions					
90.	Human trafficking is a form of :					
	(1) Organised crime					
	(2) Love jihad					
·	(3) Hate crime					
	(4) Forgery					
91.	Which of the following is used to determine the time of death:					
	(1) MR spectroscopy (2) CT scan					
	(3) Photomicrography (4) 3-D Surface scanning					
92.	The first permanent tooth to erupt is:					
	(1) Incisor (2) Canine					
	(3) Molar (4) Premolar					
93.	A girl has 8 temporary teeth and 20 permanent teeth. Her age is likely to be:					
	(1) 12 years (2) 10 years					
	(3) 16 years (4) 18 years					
94.	For determination of age, the most useful secondary change in tooth is					
	(1) Root transparency (2) Root resorption					
	(3) Attrition (4) Secondary dentin deposition					
95.	Cusp of Carabelli is found on :					
	(1) Bicuspids (2) Canines					
	(3) Tricuspids (4) Incisors					

	Question No.	
- Time		Questions
and the second s	96.	According to ISO 9001, inspection and testing comes u management responsibility? (1) Servicing
		The control of the co
1		(3) Document control
		(4) Process control
*	97.	Ontology is :
		1) classification of internet based documents
*		2) an indexing method
	(8	3) documentation service
	(4	cataloguing service
		cataloguing of internet based documents
	98. W	hich of the following is the first -t.
\ .	(1)	hich of the following is the first step in the research process: Searching for solutions to the problem
	(2)	to the problem
	(3)	Review of literature
		arching sampling methods
		Cess Formulation
.]		cess 'Formulation of Hypothesis' is followed b:
ļ .	ľ	The state of the s
-	(6	
89	le Tok	es es
-	(1)	
	(3)	Ste
MPH	/PHD/(URS (Forensic Science) Code-D
		(18)
······································		No. of the control of

100. Bibliometry is: (1) Library service (2) Information management tool (3) Function of library network (4) Literature service						
(1) Library service (2) Information management tool (3) Function of library network (4) Literature service	Questions Bibliometry is:					
(2) Information management tool (3) Function of library network (4) Literature service						
(3) Function of library network (4) Literature service	× .					
(4) Literature service	 ₹					
	·					
	•					

Answer Keys of the exam Ph.D/URS-EE-2020 (Forensic Science) held on : 29-12-2020 Q. No. A B C D 1 2 3 4 1 2 1 1 3 3 3 1 4 4 1

2020						
Q. No.	Α	В	С	D		
1	2	3	4	1		
2	1	1	3	3		
3	1	4	4	1		
4	2	3	1	4		
5	3	2	2	1		
6	3	1	4	2		
7	4	4	2	3		
8	1	1	3	4		
9	4	2	4	1		
10	1	1	2	3		
11	1	2	2	3		
12	3	1	1	1		
13	1	1	2	3		
14	4	2	1	1		
15	1	1	4	4		
16	2	1	4	2		
17	3	4	3	3		
18	4	4	1	4		
	1	1				
19	3		1 4	3 1		
20	2	3				
21		3	2	3		
22	1	4	1	1		
23	2	1	1	4		
24	1	3	2	3		
25	4	1	3	2		
26	4	3	3	1		
27	3	4	4	4		
28	1	1	1	1		
29	1	4	4	2		
30	4	2	1	1		
31	3	1	1	2		
32	4	3	3	1		
33	1	1	2	1		
34	3	4	1	2		
35	1	1	3	1		
36	3	2	4	1		
37	4	3	1	4		
38	1	4	2	4		
39	4	1	1	1		
40	2	3	2	3		
41	4	3	3	3		
42	3	1	1	4		
43	4	3	3	1		
44	1	1	2	3		
45	2	4	4	1		
46	4	2	1	3		
L		1	1			

				1
47	2	3	4	4
48	3	4	1	1
49	4	3	2	4
50	2	1	2	2
51	2	3	3	2
52	1	1	4	1
53	1	3	1	2
54	2	2	3	1
55	1	4	1	4
56	1	1	3	4
57	4	4	4	3
58	4	1	1	1
59	1	2	4	1
60	3	2	2	4
61	3	1	3	4
62	1	3	1	3
63	3	2	4	4
64	2	1	3	1
65	4	3	2	2
66	1	4	1	4
67	4	1	4	2
68	1	2	1	3
69	2	1	2	4
70	2	2	1	2
71	3	4	3	3
72	1	3	1	1
73	4	4	3	3
74	3	1	1	2
75	2	2	4	4
76	1	4	2	1
77	4	2	3	4
78	1	3	4	1
79	2	4	3	2
80	1	2	1	2
81	1	2	1	2
82	3	1	3	1
83	2	2	1	1
84	1	1	4	2
85	3	4	1	3
86	4	4	2	3
87	1	3	3	4
88	2	1	4	1
89	1	1	1	4
90	2	4	3	1
91	3	2	2	1
92	1	1	1	3
93	3	1	1	2
	1	2	2	1
94	4	3	1	3
95				
96	2	3	1	4
97	3	4	4	1

98	4	1	4	2
99	3	4	1	1
100	1	1	3	2