

Used for jumbling (by)

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

(MPH/PHD/URS-EE-2019)

FORENSIC SCIENCE

Sr. No. 10005

Code

A

SET-"X"

Time : 1¼ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Father's Name : _____

Mother'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 / misbehaviour 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
1.	<p>The Locard's principle of exchange states that</p> <p>(1) When two things come in contact, sometimes they exchange traces</p> <p>(2) When two things come in contact, they mutually exchange traces</p> <p>(3) Both (1) and (2)</p> <p>(4) None of the above</p>
2.	<p>The functions of Forensic Science are to establish</p> <p>(1) Body of crime (2) Method of commission of crime</p> <p>(3) Linkage or de-linkage (4) All of the above</p>
3.	<p>The chain of custody means</p> <p>(1) Maintaining a record of evidence from scene of crime to the court room</p> <p>(2) Maintaining a record of evidence from scene of crime to the forensic science laboratory</p> <p>(3) Maintaining a record of evidence from scene of crime to police station</p> <p>(4) None of the above</p>
4.	<p>Criminology has many meanings but the most commonly accepted is the specific of crime and criminals.</p> <p>(1) Social understanding</p> <p>(2) Sociological understanding</p> <p>(3) Similitude misunderstanding</p> <p>(4) Scientific understanding</p>

Question No.	Questions
5.	<p>The first scientific system of personal identification was developed by</p> <p>(1) Alphonse Bertillon (2) Albert Osborn</p> <p>(3) Karl Landsteiner (4) None of the above</p>
6.	<p>In Crime Scene Reconstruction, the correct order of stages is as under</p> <p>(1) Data collection, Conjecture, Hypothesis formulation, Testing and theory formulation</p> <p>(2) Data collection, Hypothesis formulation, Conjecture, Testing and theory formulation</p> <p>(3) Hypothesis formulation, Data collection, Conjecture, Testing and theory formulation</p> <p>(4) Hypothesis formulation, Data collection, Testing, Conjecture and theory formulation</p>
7.	<p>Human trafficking is a form of</p> <p>(1) Hate crime (2) Organised crime</p> <p>(3) Violent crime (4) Property crime</p>
8.	<p>The scientific report issued by Director Central Forensic Science Laboratory is admissible under section</p> <p>(1) IEA 45 (2) CrPC 293</p> <p>(3) IEA 51 (4) CrPC 292</p>
9.	<p>The Section 45 of IEA deals with</p> <p>(1) Expert Evidence (2) Scientific Expert</p> <p>(3) Crime Investigation (4) None of the above</p>

Question No.	Questions
10.	Blood stain pattern analysis at crime scene reveals (1) Directionality (2) Angle of impact (3) Relative position of victim and assailant at the time of blows (4) All the above
11.	The number of minutes required for establishing match in two finger prints in India are (1) 16 (2) 12 (3) 10 (4) 8
12.	The word FACTS stands for (1) Forensic aptitude and capacity test system (2) Fingerprint analysis and criminal tracking system (3) Both the above (4) None of the above
13.	The science of poroscopy was established by (1) Dr. Edmond Locard (2) Dr. Henry Faulds (3) Sir Francis Galton (4) Sir William Herschel
14.	The first fingerprint bureau was established in (1) India (2) UK (3) USA (4) China

Question No.	Questions
15.	<p>A research paper on Fingerprint science was published in the "Nature" journal first by</p> <p>(1) Dr. Alec Jeffery (2) Sir Francis Galton (3) Dr. Henry Faulds (4) Sir Edmond Henry</p>
16.	<p>The two signatures authored by one person are identified on the basis of</p> <p>(1) Class Characteristics (2) Individual Characteristics (3) Both (1) and (2) (4) None of the above</p>
17.	<p>The ESDA is an instrument used to detect</p> <p>(1) Physical erasures (2) Indented writings (3) Chemical erasures (4) All the above</p>
18.	<p>When two signatures are placed over each other, if they completely superimpose, it means</p> <p>(1) Perfect signature (2) Forgery (3) Similarity (4) None of the above</p>
19.	<p>The charred documents are preserved by spraying</p> <p>(1) Ethyl alcohol (2) Polyvinyl acetate (3) Benzidine solution (4) All the above</p>
20.	<p>The speed of writing is determined by</p> <p>(1) Commencement of stroke (2) Finish of stroke (3) Linkage between letters (4) All the above</p>

Question No.	Questions
21.	UV-V is spectroscopy is a technique for (1) Quantitative analysis (2) Qualitaitve analysis (3) Both (1) and (2) (4) None of the above
22.	Mass spectrometry is associated with (1) Determination of mass substance (2) Determination of mass of compound (3) Determination of mass of element (4) All of the above
23.	Which of the following is used in electron microscope (1) Electron beams (2) Magnetic fields (3) Light waves (4) Electron beams and magnetic fields
24.	In Gas-liquid phase chromatography, the stationary phase is composed of and the mobile phase is made of (1) Solid, liquid (2) Liquid, liquid (3) Liquid, gas (4) Solid, gas
25.	Which one of the following pairs is correct in terms of wavelength for the different types of IR spectrometer (1) Near IR : 0.8 – 2.5 mm (2) Mid IR : 0.8 – 2.5 mm (3) Far IR : 2.5 – 50 mm (4) Mid IR : 50 – 100 mm

Question No.	Questions
26.	Raman spectroscopy used for analysis of physical evidences is based on (1) Diffraction (2) Fluorescence (3) Absorption (4) Light scattering
27.	In reversed-phase HPLC (1) A hydrophobic stationary phase is combined with a polar mobile phase (2) A hydrophilic stationary phase is combined with a polar mobile phase (3) A hydrophobic stationary phase is combined with a non-polar mobile phase (4) A hydrophilic stationary phase is combined with a non-polar mobile phase
28.	Lead levels in drinking water could be determined by using (1) HPLC (2) AAS (3) GC-MS (4) CZE
29.	Which one of the following detectors have high sensitivity to all organic compounds (1) ECD (2) TCD (3) FID (4) NPD
30.	X-ray diffraction is a technique to study (1) Composition of metal (2) Composition of element (3) Structure of crystal (4) None of the above

Question No.	Questions
31.	<p>O-tolidine is a screening test for detection of stains of</p> <p>(1) Blood (2) Saliva</p> <p>(3) Urine (4) Sweat</p>
32.	<p>The correct order in the growth phase of hair is</p> <p>(1) Anagen, Telogen, Catagen</p> <p>(2) Catagen, Telogen, Anagen</p> <p>(3) Anagen, Catagen, Telogen</p> <p>(4) None of the above</p>
33.	<p>The larvae of flies are known as</p> <p>(1) Grubs (2) Maggots</p> <p>(3) Nymph (4) None of the above</p>
34.	<p>P-30 antigen is a specific test for detection of body fluid in the</p> <p>(1) Menstrual blood (2) Semen</p> <p>(3) Saliva (4) None of the above</p>
35.	<p>Imbricate pattern in structure of hair is associated with</p> <p>(1) Cuticle (2) Cortex</p> <p>(3) Medulla (4) None of the above</p>
36.	<p>Diatoms in wet drowning can be detected in</p> <p>(1) Femur bone (2) Sternum</p> <p>(3) Brain Tissue (4) All of the above</p>

Question No.	Questions
37.	<p>When intact insect sample is not available at crime scene, then larvae shells/eggs can be used to identify the insect species by</p> <p>(1) CO-1 of mRNA (2) CO-2 of mtDNA (3) CO-2 of mRNA (4) CO-1 of mtDNA</p>
38.	<p>The confirmatory test for detection of blood is</p> <p>(1) Acid phosphatase Test (2) Takayama Test (3) Gees Test (4) None of the above</p>
39.	<p>Which of the following is the correct order of life cycle of a blow fly</p> <p>(1) Egg, 1st, 2nd, 3rd-larva, pupa, adult (2) Egg, pupa, 1st, 2nd, 3rd-larva, adult (3) Larva, egg, pupa, adult (4) Adult, 1st, 2nd, 3rd-larva, egg</p>
40.	<p>In life cycle of insect, the term direct metamorphosis is referred to when it is</p> <p>(1) Egg to Larva (2) Egg to Pupa (3) Egg to Adult (4) None of the above</p>

Question No.	Questions
41.	<p>The species of origin of blood stain is determined by the technique of</p> <p>(1) Gel diffusion</p> <p>(2) Ring method</p> <p>(3) Cross over electrophoresis</p> <p>(4) All of the above</p>
42.	<p>The serology is defined as</p> <p>(1) Study of antigen and antibody reaction</p> <p>(2) Study of serum</p> <p>(3) Study of blood grouping/typing</p> <p>(4) All of the above</p>
43.	<p>Non-secretor is a person who does not secrete ABH substances in</p> <p>(1) Saliva</p> <p>(2) Semen</p> <p>(3) Sweat</p> <p>(4) All of the above</p>
44.	<p>In absorption-elution technique, washing with n-chilled saline is given so that</p> <p>(1) All absorbed antibodies are not removed</p> <p>(2) All absorbed antibodies are removed</p> <p>(3) All unabsorbed antibodies are removed</p> <p>(4) None of the above</p>

Question No.	Questions
45.	Anti-H Lectin is derived from the seeds of (1) Ulex europeaus (2) Cedrus deodara (3) Pinus roxburghii (4) None of the above
46.	Which one is correct order in DNA profiling (1) Extraction, Quantitation, PCR, Capillary electrophoresis, Analysis (2) Extraction, PCR, Quantitation, Analysis, Capillary electrophoresis (3) Analysis, Quantitation, Extraction, PCR, Capillary electrophoresis (4) PCR, Quantitation, Capillary electrophoresis, Extraction, Analysis
47.	SWGDAM stands for (1) Scientific Working Group on DNA Analysis Method (2) Scientific Working Group on DNA Method (3) Special Working Group on DNA Method (4) None of the above
48.	Dr. Jeffery first described smaller version of VNTR called STR which contains a core repeat region that ranges in size from (1) 6 – 100 bp (2) 1– 6 bp (3) 500bp to 30kb (4) None of the above
49.	In DNA marker, D16S539 'S' stands for (1) Sequencing (2) Single Copy Sequence (3) Single Sequence (4) None of the above

Question No.	Questions																																			
50.	<p>The concept of DNA Barcoding was first given by</p> <p>(1) Bruce Budawle (2) Paul Herbert</p> <p>(3) Wang EHK (4) None of the above</p>																																			
51.	<p>The flash point analysis is used to detect the following</p> <p>(1) Vegetable poisons (2) Petroleum products</p> <p>(3) Copper sulphate (4) Explosives</p>																																			
52.	<p>Match the following :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;">List I</td> <td style="width: 50%; vertical-align: top;">List II</td> </tr> <tr> <td>A. Marquis test</td> <td>1. Arsenic</td> </tr> <tr> <td>B. Reinsch's test</td> <td>2. Hashish</td> </tr> <tr> <td>C. Alkaline Beam test</td> <td>3. Morphine</td> </tr> <tr> <td>D. Vitali's test</td> <td>4. Dhatura</td> </tr> </table> <table style="width: 100%; border: none; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">A</th> <th style="width: 20%;">B</th> <th style="width: 20%;">C</th> <th style="width: 20%;">D</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>4</td> <td>1</td> <td>3</td> <td>2</td> </tr> <tr> <td>(2)</td> <td>2</td> <td>1</td> <td>4</td> <td>3</td> </tr> <tr> <td>(3)</td> <td>4</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>(4)</td> <td>3</td> <td>1</td> <td>2</td> <td>4</td> </tr> </tbody> </table>	List I	List II	A. Marquis test	1. Arsenic	B. Reinsch's test	2. Hashish	C. Alkaline Beam test	3. Morphine	D. Vitali's test	4. Dhatura		A	B	C	D	(1)	4	1	3	2	(2)	2	1	4	3	(3)	4	1	2	3	(4)	3	1	2	4
List I	List II																																			
A. Marquis test	1. Arsenic																																			
B. Reinsch's test	2. Hashish																																			
C. Alkaline Beam test	3. Morphine																																			
D. Vitali's test	4. Dhatura																																			
	A	B	C	D																																
(1)	4	1	3	2																																
(2)	2	1	4	3																																
(3)	4	1	2	3																																
(4)	3	1	2	4																																
53.	<p>Blue color of PDS Kerosene is due to the presence of which dye</p> <p>(1) Anthracene</p> <p>(2) Anthraquinone</p> <p>(3) Phenyl azo-naphthol</p> <p>(4) Dialkylamino anthraquinone</p>																																			

Question No.	Questions
54.	<p>In case of carbon monoxide poisoning, which preservative is recommended for the preservation of blood samples</p> <p>(1) Sodium fluoride (2) Sodium chloride (3) Sodium carbonate (4) No preservative</p>
55.	<p>Which of the following is a hepatotoxic poison</p> <p>(1) Alcohol (2) Morphine (3) Atropine (4) Amphetamine</p>
56.	<p>Phosphene gas in aluminium phosphide poisoning is liberated in</p> <p>(1) Lungs (2) Liver (3) Stomach (4) Kidney</p>
57.	<p>In Hooch tragedy cases, the best antidote is</p> <p>(1) Water (2) Asprin (3) Ethyl alcohol (4) Paracetamol</p>
58.	<p>In India, the permissible Blood Alcohol Concentration (BAC) under The Motor Vehicle Act, is</p> <p>(1) 30mg of alcohol/100ml blood (2) 40mg of alcohol/100ml blood (3) 50mg of alcohol/100ml blood (4) 60mg of alcohol/100ml blood</p>

Question No.	Questions
59.	<p>The term Ophotoxemia refers to</p> <p>(1) Organophosphorus poisoning</p> <p>(2) Heavy metal poisoning</p> <p>(3) Snake venom poisoning</p> <p>(4) Alcohol poisoning</p>
60.	<p>What is the active component in Blue Rocket poisoning</p> <p>(1) Nicotinum (2) Acotinum</p> <p>(3) Ricin (4) Digitalin</p>
61.	<p>Which of the following is not a component of a shot gun cartridge</p> <p>(1) Wads (2) Propellant</p> <p>(3) Primer cap (4) Bullet</p>
62.	<p>To connect a fired cartridge case from an automatic firearm, which of the following marks are not useful</p> <p>(1) Breech face marks (2) Rifling marks</p> <p>(3) Extraction marks (4) Chamber marks</p>
63.	<p>An I.E.D. concealed in a suitcase can best be detected</p> <p>(1) By breaking the suit case</p> <p>(2) Infra red rays</p> <p>(3) Hard X-rays</p> <p>(4) Under Ultraviolet</p>

Question No.	Questions
64.	<p>The composition of black powder is</p> <p>(1) Potassium nitrate, charcoal and sulphur</p> <p>(2) Potassium nitrate, nitroglycerin and charcoal</p> <p>(3) Potassium nitrate, nitroglycerin, charcoal and sulphur</p> <p>(4) None of the above</p>
65.	<p>Speed of pellets in a 12 bore shot gun is greatest when the barrel is</p> <p>(1) Full choke (2) Improved cylinder</p> <p>(3) True cylinder (4) Jug Choke</p>
66.	<p>Calibre of a rifled fire arm is a measure of the</p> <p>(1) Diameter of the bore across the lands</p> <p>(2) Diameter of the bore across the grooves</p> <p>(3) Barrel length</p> <p>(4) None of the above</p>
67.	<p>Abbe's refractometer is used to calculate</p> <p>(1) Density (2) Refractive Index</p> <p>(3) Wavelength (4) Frequency</p>
68.	<p>The measurement of intensity of Fluorescent X-ray provides a simple and way of analysis.</p> <p>(1) Destructive, Quantitative (2) Non-destructive, Quantitative</p> <p>(3) Destructive, Qualitative (4) Non-destructive, Qualitative</p>

Question No.	Questions
69.	<p>The most important tool available to the forensic firearm examiner in the identification of firearms is</p> <p>(1) Digitizing video camera (2) Comparison microscope (3) LASER illumination (4) Bullet Puller</p>
70.	<p>Gun Powder residues around a bullet hole on dark coloured cloth can be made visible under</p> <p>(1) Soft-X-rays (2) Ultraviolet rays (3) Infra Red rays (4) Hard X-rays</p>
71.	<p>Physical anthropology involves study of which of the following topics</p> <p>(1) Non-human primates (2) Mechanism of evolution (3) Human variation (4) All the above</p>
72.	<p>Osteometry deals with</p> <p>(1) Ossification of bones (2) Measurement of ribs (3) Measurement of long bones (4) None of the above</p>
73.	<p>If the blood group of mother is A and father is B, the blood group of children will be</p> <p>(1) A (2) B (3) AB, O (4) All of the above</p>

Question No.	Questions
74.	<p>The exoskeleton in man is rudimentary and representative example is</p> <p>(1) Nails (2) Enamels of teeth</p> <p>(3) Both (1) and (2) (4) None of the above</p>
75.	<p>An individual ABO blood type is normally determined by</p> <p>(1) Genetic inheritance and environmental influences during life</p> <p>(2) Environmental influences alone</p> <p>(3) The inheritance of 1 of 3 possible alleles (A, B or O) from each parent</p> <p>(4) Genetic Inheritance</p>
76.	<p>In somatoscopic technique, Luschan's colour chart is meant for</p> <p>(1) Hair (2) Skin</p> <p>(3) Eye (4) None of the above</p>
77.	<p>An allele is</p> <p>(1) Another word for a gene (2) A homozygous genotype</p> <p>(3) A heterozygous genotype (4) One of several possible form of gene</p>
78.	<p>Which one is not an example of axial skeleton of man</p> <p>(1) Vertebral column (2) Skull</p> <p>(3) Radius (4) Ribs</p>
79.	<p>When measurements are confined to human head and face, the term is</p> <p>(1) Cephalometry (2) Craniometry</p> <p>(3) Somatometry (4) All of the above</p>

Question No.	Questions
80.	Which one is not an example of appendicular skeleton (1) Cranium (2) Pelvic girdle (3) Tarsus (4) Patella
81.	Tatting is caused on the body of victim because of (1) Deposition of un-burnt/semi-burnt gun powder particles (2) Impregnation of un-burnt/semi-burnt gun powder particles (3) Deposition of burnt gun powder particles (4) All the above
82.	The incised injuries are caused by a weapon in the nature of (1) Sharp edge knife (2) Heavy stick (3) AK-47 (4) All the above
83.	In case of firearm injuries, the inverted margins are associated with (1) Exit wound (2) Entry wound (3) Both (1) and (2) (4) None of the above
84.	The sequence of eruption of milk teeth in a human baby is (1) 2112 (2) 2102 (3) 2111 (4) 2122
85.	Pentacusps are found in which human tooth (1) Incisors (2) Canine (3) Premolar (4) Molar

Question No.	Questions
86.	<p>The laboratory shall have facilities and environment conditions which is covered under section of ISO/IEC 17025:2017</p> <p>(1) 5.1 (2) 6.1 (3) 7.3 (4) 6.3</p>
87.	<p>The NABL activities shall be undertaken impartially in order to safe guard impartiality which is covered under section of ISO/IEC 17025:2017</p> <p>(1) 3.1 & 4.1 (2) 5.1 & 6.1 (3) 7.1 & 8.1 (4) None of the above</p>
88.	<p>The Median of data set 5, 6, 11 & 59 is</p> <p>(1) 8.5 (2) 9.5 (3) 10.5 (4) None of the above</p>
89.	<p>The population census carried out by Government of India can be an example of</p> <p>(1) Exploratory research (2) Casual research (3) Descriptive research (4) All of the above</p>
90.	<p>Which of the following can be a source of primary data in research</p> <p>(1) Survey (2) Experiment (3) Survey and Experiment (4) Survey and Reference</p>
91.	<p>Tool marks left on the wooden surface by the carpenter plane fall in the category</p> <p>(1) Compression marks (2) File marks (3) Scrape marks (4) Repetitive cut marks</p>

Question No.	Questions
92.	Tensile testing of the iron rod can be determined by using (1) EDXRF (2) UTM (3) Comparison microscope (4) NAA
93.	The speed of vehicle from skid marks can be determined by using the formula (1) $V_2 = V_1 \sqrt{S_2/S_1}$ (2) $V_1 = V_2 \sqrt{S_2/S_1}$ (3) $V_1 = V_2 \sqrt{S_1/S_2}$ (4) None of the above
94.	The photomicrography is defined as (1) Photograph taken through a microscope to show enlarged image of small area (2) Photograph taken to show magnified image of an object (3) Photograph taken to show microorganisms (4) None of the above
95.	A fluorescent dye was used in a lab method which can be photographed by using (1) X-Rays (2) U.V. Rays (3) I.R-Rays (4) None of the above
96.	Universal Forensic extraction device is used to extract data from (1) Computer (2) Cell phone (3) DVR (4) All the above

Question No.	Questions
97.	Hash value of digital data is used to ascertain (1) Integrity (2) Identity (3) Both (1) and (2) (4) None of the above
98.	Deleted data from cell phone can be extracted by (1) Logical Extraction (2) Physical Extraction (3) Both (1) and (2) (4) None of the above
99.	BEOS stands for (1) Biological Exponential Oxygen Saturation Curve (2) Biological Electric Oscillation Signature (3) Brain Electrical Oscillation Signature (4) All of the above
100.	Which of the following drug is administrated as truth serum in Narco Analysis test (1) Sodium benzoate (2) Sodium thiosulphate (3) Sodium pentothal (4) All the above

Used for jumbling

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

(MPH/PHD/URS-EE-2019)

FORENSIC SCIENCE

Sr. No. 10010

Code

B

SET-"X"

Time : 1¼ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Father's Name : _____

Mother'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 / misbehaviour 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
6. /	<p>The two signatures authored by one person are identified on the basis of</p> <p>(1) Class Characteristics (2) Individual Characteristics</p> <p>(3) Both (1) and (2) (4) None of the above</p>
7. /	<p>The ESDA is an instrument used to detect</p> <p>(1) Physical erasures (2) Indented writings</p> <p>(3) Chemical erasures (4) All the above</p>
8. /	<p>When two signatures are placed over each other, if they completely superimpose, it means</p> <p>(1) Perfect signature (2) Forgery</p> <p>(3) Similarity (4) None of the above</p>
9. /	<p>The charred documents are preserved by spraying</p> <p>(1) Ethyl alcohol (2) Polyvinyl acetate</p> <p>(3) Benzidine solution (4) All the above</p>
10. /	<p>The speed of writing is determined by</p> <p>(1) Commencement of stroke (2) Finish of stroke</p> <p>(3) Linkage between letters (4) All the above</p>
11. ✓	<p>Tool marks left on the wooden surface by the carpenter plane fall in the category</p> <p>(1) Compression marks (2) File marks</p> <p>(3) Scrape marks (4) Repetitive cut marks</p>

Question No.	Questions
12.	<p>Tensile testing of the iron rod can be determined by using</p> <p>(1) EDXRF (2) UTM</p> <p>(3) Comparison microscope (4) NAA</p>
13.	<p>The speed of vehicle from skid marks can be determined by using the formula</p> <p>(1) $V_2 = V_1 \sqrt{S_2/S_1}$ (2) $V_1 = V_2 \sqrt{S_2/S_1}$</p> <p>(3) $V_1 = V_2 \sqrt{S_1/S_2}$ (4) None of the above</p>
14.	<p>The photomicrography is defined as</p> <p>(1) Photograph taken through a microscope to show enlarged image of small area</p> <p>(2) Photograph taken to show magnified image of an object</p> <p>(3) Photograph taken to show microorganisms</p> <p>(4) None of the above</p>
15.	<p>A fluorescent dye was used in a lab method which can be photographed by using</p> <p>(1) X-Rays (2) U.V. Rays</p> <p>(3) I.R.-Rays (4) None of the above</p>
16.	<p>Universal Forensic extraction device is used to extract data from</p> <p>(1) Computer (2) Cell phone</p> <p>(3) DVR (4) All the above</p>

Question No.	Questions
17.	<p>Hash value of digital data is used to ascertain</p> <p>(1) Integrity (2) Identity</p> <p>(3) Both (1) and (2) (4) None of the above</p>
18.	<p>Deleted data from cell phone can be extracted by</p> <p>(1) Logical Extraction (2) Physical Extraction</p> <p>(3) Both (1) and (2) (4) None of the above</p>
19.	<p>BEOS stands for</p> <p>(1) Biological Exponential Oxygen Saturation Curve</p> <p>(2) Biological Electric Oscillation Signature</p> <p>(3) Brain Electrical Oscillation Signature</p> <p>(4) All of the above</p>
20.	<p>Which of the following drug is administrated as truth serum in Narco Analysis test</p> <p>(1) Sodium benzoate (2) Sodium thiosulphate</p> <p>(3) Sodium pentothal (4) All the above</p>
21.	<p>Physical anthropology involves study of which of the following topics</p> <p>(1) Non-human primates</p> <p>(2) Mechanism of evolution</p> <p>(3) Human variation</p> <p>(4) All the above</p>

Question No.	Questions
22. ✓	Osteometry deals with (1) Ossification of bones (2) Measurement of ribs (3) Measurement of long bones (4) None of the above
23. ✓	If the blood group of mother is A and father is B, the blood group of children will be (1) A (2) B (3) AB, O (4) All of the above
24. ✓	The exoskeleton in man is rudimentary and representative example is (1) Nails (2) Enamels of teeth (3) Both (1) and (2) (4) None of the above
25. ✓	An individual ABO blood type is normally determined by (1) Genetic inheritance and environmental influences during life (2) Environmental influences alone (3) The inheritance of 1 of 3 possible alleles (A, B or O) from each parent (4) Genetic Inheritance
26. ✓	In somatoscopic technique, Luschan's colour chart is meant for (1) Hair (2) Skin (3) Eye (4) None of the above

Question No.	Questions
27. /	<p>An allele is</p> <p>(1) Another word for a gene (2) A homozygous genotype (3) A heterozygous genotype (4) One of several possible form of gene</p>
28. /	<p>Which one is not an example of axial skeleton of man</p> <p>(1) Vertebral column (2) Skull (3) Radius (4) Ribs</p>
29. /	<p>When measurements are confined to human head and face, the term is</p> <p>(1) Cephalometry (2) Craniometry (3) Somatometry (4) All of the above</p>
30. /	<p>Which one is not an example of appendicular skeleton</p> <p>(1) Cranium (2) Pelvic girdle (3) Tarsus (4) Patella</p>
31. /	<p>The flash point analysis is used to detect the following</p> <p>(1) Vegetable poisons (2) Petroleum products (3) Copper sulphate (4) Explosives</p>

Question No.	Questions																																			
32.	<p>Match the following :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">List I</td> <td style="width: 50%; text-align: center;">List II</td> </tr> <tr> <td>A. Marquis test</td> <td>1. Arsenic</td> </tr> <tr> <td>B. Reinsch's test</td> <td>2. Hashish</td> </tr> <tr> <td>C. Alkaline Beam test</td> <td>3. Morphine</td> </tr> <tr> <td>D. Vitali's test</td> <td>4. Dhatura</td> </tr> </table> <table style="width: 100%; border: none; margin-top: 10px;"> <tr> <td style="width: 25%;"></td> <td style="width: 12.5%; text-align: center;">A</td> <td style="width: 12.5%; text-align: center;">B</td> <td style="width: 12.5%; text-align: center;">C</td> <td style="width: 12.5%; text-align: center;">D</td> </tr> <tr> <td>(1)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> <tr> <td>(2)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(3)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(4)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> </table>	List I	List II	A. Marquis test	1. Arsenic	B. Reinsch's test	2. Hashish	C. Alkaline Beam test	3. Morphine	D. Vitali's test	4. Dhatura		A	B	C	D	(1)	4	1	3	2	(2)	2	1	4	3	(3)	4	1	2	3	(4)	3	1	2	4
List I	List II																																			
A. Marquis test	1. Arsenic																																			
B. Reinsch's test	2. Hashish																																			
C. Alkaline Beam test	3. Morphine																																			
D. Vitali's test	4. Dhatura																																			
	A	B	C	D																																
(1)	4	1	3	2																																
(2)	2	1	4	3																																
(3)	4	1	2	3																																
(4)	3	1	2	4																																
33.	<p>Blue color of PDS Kerosene is due to the presence of which dye</p> <table style="width: 100%; border: none;"> <tr> <td>(1) Anthracene</td> <td>(2) Anthraquinone</td> </tr> <tr> <td>(3) Phenyl azo-naphthol</td> <td>(4) Dialkylamino anthraquinone</td> </tr> </table>	(1) Anthracene	(2) Anthraquinone	(3) Phenyl azo-naphthol	(4) Dialkylamino anthraquinone																															
(1) Anthracene	(2) Anthraquinone																																			
(3) Phenyl azo-naphthol	(4) Dialkylamino anthraquinone																																			
34.	<p>In case of carbon monoxide poisoning, which preservative is recommended for the preservation of blood samples</p> <table style="width: 100%; border: none;"> <tr> <td>(1) Sodium fluoride</td> <td>(2) Sodium chloride</td> </tr> <tr> <td>(3) Sodium carbonate</td> <td>(4) No preservative</td> </tr> </table>	(1) Sodium fluoride	(2) Sodium chloride	(3) Sodium carbonate	(4) No preservative																															
(1) Sodium fluoride	(2) Sodium chloride																																			
(3) Sodium carbonate	(4) No preservative																																			
35.	<p>Which of the following is a hepatotoxic poison</p> <table style="width: 100%; border: none;"> <tr> <td>(1) Alcohol</td> <td>(2) Morphine</td> </tr> <tr> <td>(3) Atropine</td> <td>(4) Amphetamine</td> </tr> </table>	(1) Alcohol	(2) Morphine	(3) Atropine	(4) Amphetamine																															
(1) Alcohol	(2) Morphine																																			
(3) Atropine	(4) Amphetamine																																			

Question No.	Questions
36. /	Phosphene gas in aluminium phosphide poisoning is liberated in (1) Lungs (2) Liver (3) Stomach (4) Kidney
37. /	In Hooch tragedy cases, the best antidote is (1) Water (2) Asprin (3) Ethyl alcohol (4) Paracetamol
38. /	In India, the permissible Blood Alcohol Concentration (BAC) under The Motor Vehicle Act, is (1) 30mg of alcohol/100ml blood (2) 40mg of alcohol/100ml blood (3) 50mg of alcohol/100ml blood (4) 60mg of alcohol/100ml blood
39. /	The term Ophotoxemia refers to (1) Organophosphorus poisoning (2) Heavy metal poisoning (3) Snake venom poisoning (4) Alcohol poisoning
40. /	What is the active component in Blue Rocket poisoning (1) Nicotinum (2) Acotinum (3) Ricin (4) Digitalin

Question No.	Questions
41. ✓	<p>O-tolidine is a screening test for detection of stains of</p> <p>(1) Blood (2) Saliva</p> <p>(3) Urine (4) Sweat</p>
42.	<p>The correct order in the growth phase of hair is</p> <p>(1) Anagen, Telogen, Catagen</p> <p>(2) Catagen, Telogen, Anagen</p> <p>(3) Anagen, Catagen, Telogen</p> <p>(4) None of the above</p>
43. ✓	<p>The larvae of flies are known as</p> <p>(1) Grubs (2) Maggots</p> <p>(3) Nymph (4) None of the above</p>
44. ✓	<p>P-30 antigen is a specific test for detection of body fluid in the</p> <p>(1) Menstrual blood (2) Semen</p> <p>(3) Saliva (4) None of the above</p>
45. ✓	<p>Imbricate pattern in structure of hair is associated with</p> <p>(1) Cuticle (2) Cortex</p> <p>(3) Medulla (4) None of the above</p>
46. ✓	<p>Diatoms in wet drowning can be detected in</p> <p>(1) Femur bone (2) Sternum</p> <p>(3) Brain Tissue (4) All of the above</p>

Question No.	Questions
47. ✓	<p>When intact insect sample is not available at crime scene, then larvae shells/eggs can be used to identify the insect species by</p> <p>(1) CO-1 of mRNA (2) CO-2 of mtDNA (3) CO-2 of mRNA (4) CO-1 of mtDNA</p>
48. ✓	<p>The confirmatory test for detection of blood is</p> <p>(1) Acid phosphatase Test (2) Takayama Test (3) Gees Test (4) None of the above</p>
49. ✓	<p>Which of the following is the correct order of life cycle of a blow fly</p> <p>(1) Egg, 1st, 2nd, 3rd-larva, pupa, adult (2) Egg, pupa, 1st, 2nd, 3rd-larva, adult (3) Larva, egg, pupa, adult (4) Adult, 1st, 2nd, 3rd-larva, egg</p>
50. ✓	<p>In life cycle of insect, the term direct metamorphosis is referred to when it is</p> <p>(1) Egg to Larva (2) Egg to Pupa (3) Egg to Adult (4) None of the above</p>

Question No.	Questions
51.	UV-V is spectroscopy is a technique for (1) Quantitative analysis (2) Qualitative analysis (3) Both (1) and (2) (4) None of the above
52.	Mass spectrometry is associated with (1) Determination of mass substance (2) Determination of mass of compound (3) Determination of mass of element (4) All of the above
53.	Which of the following is used in electron microscope (1) Electron beams (2) Magnetic fields (3) Light waves (4) Electron beams and magnetic fields
54.	In Gas-liquid phase chromatography, the stationary phase is composed of and the mobile phase is made of (1) Solid, liquid (2) Liquid, liquid (3) Liquid, gas (4) Solid, gas
55.	Which one of the following pairs is correct in terms of wavelength for the different types of IR spectrometer (1) Near IR : 0.8 – 2.5 mm (2) Mid IR : 0.8 – 2.5 mm (3) Far IR : 2.5 – 50 mm (4) Mid IR : 50 – 100 mm

Question No.	Questions
56.	Raman spectroscopy used for analysis of physical evidences is based on (1) Diffraction (2) Fluorescence (3) Absorption (4) Light scattering
57.	In reversed-phase HPLC (1) A hydrophobic stationary phase is combined with a polar mobile phase (2) A hydrophilic stationary phase is combined with a polar mobile phase (3) A hydrophobic stationary phase is combined with a non-polar mobile phase (4) A hydrophilic stationary phase is combined with a non-polar mobile phase
58.	Lead levels in drinking water could be determined by using (1) HPLC (2) AAS (3) GC-MS (4) CZE
59.	Which one of the following detectors have high sensitivity to all organic compounds (1) ECD (2) TCD (3) FID (4) NPD
60.	X-ray diffraction is a technique to study (1) Composition of metal (2) Composition of element (3) Structure of crystal (4) None of the above

Question No.	Questions				
61.	<p>The species of origin of blood stain is determined by the technique of</p> <ol style="list-style-type: none"> (1) Gel diffusion (2) Ring method (3) Cross over electrophoresis (4) All of the above 				
62.	<p>The serology is defined as</p> <ol style="list-style-type: none"> (1) Study of antigen and antibody reaction (2) Study of serum (3) Study of blood grouping/typing (4) All of the above 				
63.	<p>Non-secretor is a person who does not secrete ABH substances in</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">(1) Saliva</td> <td style="width: 50%;">(2) Semen</td> </tr> <tr> <td>(3) Sweat</td> <td>(4) All of the above</td> </tr> </table>	(1) Saliva	(2) Semen	(3) Sweat	(4) All of the above
(1) Saliva	(2) Semen				
(3) Sweat	(4) All of the above				
64.	<p>In absorption-elution technique, washing with n-chilled saline is given so that</p> <ol style="list-style-type: none"> (1) All absorbed antibodies are not removed (2) All absorbed antibodies are removed (3) All unabsorbed antibodies are removed (4) None of the above 				

Question No.	Questions
65.	<p>Anti-H Lectin is derived from the seeds of</p> <p>(1) Ulex europeaus (2) Cedrus deodara</p> <p>(3) Pinus roxburghii (4) None of the above</p>
66.	<p>Which one is correct order in DNA profiling</p> <p>(1) Extraction, Quantitation, PCR, Capillary electrophoresis, Analysis</p> <p>(2) Extraction, PCR, Quantitation, Analysis, Capillary electrophoresis</p> <p>(3) Analysis, Quantitation, Extraction, PCR, Capillary electrophoresis</p> <p>(4) PCR, Quantitation, Capillary electrophoresis, Extraction, Analysis</p>
67.	<p>SWGAM stands for</p> <p>(1) Scientific Working Group on DNA Analysis Method</p> <p>(2) Scientific Working Group on DNA Method</p> <p>(3) Special Working Group on DNA Method</p> <p>(4) None of the above</p>
68.	<p>Dr. Jeffery first described smaller version of VNTR called STR which contains a core repeat region that ranges in size from</p> <p>(1) 6 – 100 bp (2) 1– 6 bp</p> <p>(3) 500bp to 30kb (4) None of the above</p>
69.	<p>In DNA marker, D16S539 'S' stands for</p> <p>(1) Sequencing (2) Single Copy Sequence</p> <p>(3) Single Sequence (4) None of the above</p>

Question No.	Questions
70.	<p>The concept of DNA Barcoding was first given by</p> <p>(1) Bruce Budawle (2) Paul Herbert</p> <p>(3) Wang EHK (4) None of the above</p>
71.	<p>Which of the following is not a component of a shot gun cartridge</p> <p>(1) Wads (2) Propellant</p> <p>(3) Primer cap (4) Bullet</p>
72.	<p>To connect a fired cartridge case from an automatic firearm, which of the following marks are not useful</p> <p>(1) Breech face marks (2) Rifling marks</p> <p>(3) Extraction marks (4) Chamber marks</p>
73.	<p>An I.E.D. concealed in a suitcase can best be detected</p> <p>(1) By breaking the suit case</p> <p>(2) Infra red rays</p> <p>(3) Hard X-rays</p> <p>(4) Under Ultraviolet</p>
74.	<p>The composition of black powder is</p> <p>(1) Potassium nitrate, charcoal and sulphur</p> <p>(2) Potassium nitrate, nitroglycerin and charcoal</p> <p>(3) Potassium nitrate, nitroglycerin, charcoal and sulphur</p> <p>(4) None of the above</p>

Question No.	Questions
75.	Speed of pellets in a 12 bore shot gun is greatest when the barrel is (1) Full choke (2) Improved cylinder (3) True cylinder (4) Jug Choke
76.	Calibre of a rifled fire arm is a measure of the (1) Diameter of the bore across the lands (2) Diameter of the bore across the grooves (3) Barrel length (4) None of the above
77.	Abbe's refractometer is used to calculate (1) Density (2) Refractive Index (3) Wavelength (4) Frequency
78.	The measurement of intensity of Fluorescent X-ray provides a simple and way of analysis. (1) Destructive, Quantitative (2) Non-destructive, Quantitative (3) Destructive, Qualitative (4) Non-destructive, Qualitative
79.	The most important tool available to the forensic firearm examiner in the identification of firearms is (1) Digitizing video camera (2) Comparison microscope (3) LASER illumination (4) Bullet Puller
80.	Gun Powder residues around a bullet hole on dark coloured cloth can be made visible under (1) Soft-X-rays (2) Ultraviolet rays (3) Infra Red rays (4) Hard X-rays

Question No.	Questions
81.	<p>The Locard's principle of exchange states that</p> <p>(1) When two things come in contact, sometimes they exchange traces</p> <p>(2) When two things come in contact, they mutually exchange traces</p> <p>(3) Both (1) and (2)</p> <p>(4) None of the above</p>
82.	<p>The functions of Forensic Science are to establish</p> <p>(1) Body of crime (2) Method of commission of crime</p> <p>(3) Linkage or de-linkage (4) All of the above</p>
83.	<p>The chain of custody means</p> <p>(1) Maintaining a record of evidence from scene of crime to the court room</p> <p>(2) Maintaining a record of evidence from scene of crime to the forensic science laboratory</p> <p>(3) Maintaining a record of evidence from scene of crime to police station</p> <p>(4) None of the above</p>
84.	<p>Criminology has many meanings but the most commonly accepted is the specific of crime and criminals.</p> <p>(1) Social understanding</p> <p>(2) Sociological understanding</p> <p>(3) Similitude misunderstanding</p> <p>(4) Scientific understanding</p>

Question No.	Questions
85.	<p>The first scientific system of personal identification was developed by</p> <p>(1) Alphonse Bertillon (2) Albert Osborn</p> <p>(3) Karl Landsteiner (4) None of the above</p>
86.	<p>In Crime Scene Reconstruction, the correct order of stages is as under</p> <p>(1) Data collection, Conjecture, Hypothesis formulation, Testing and theory formulation</p> <p>(2) Data collection, Hypothesis formulation, Conjecture, Testing and theory formulation</p> <p>(3) Hypothesis formulation, Data collection, Conjecture, Testing and theory formulation</p> <p>(4) Hypothesis formulation, Data collection, Testing, Conjecture and theory formulation</p>
87.	<p>Human trafficking is a form of</p> <p>(1) Hate crime (2) Organised crime</p> <p>(3) Violent crime (4) Property crime</p>
88.	<p>The scientific report issued by Director Central Forensic Science Laboratory is admissible under section</p> <p>(1) IEA 45 (2) CrPC 293</p> <p>(3) IEA 51 (4) CrPC 292</p>
89.	<p>The Section 45 of IEA deals with</p> <p>(1) Expert Evidence (2) Scientific Expert</p> <p>(3) Crime Investigation (4) None of the above</p>

Question No.	Questions
90.	Blood stain pattern analysis at crime scene reveals (1) Directionality (2) Angle of impact (3) Relative position of victim and assailant at the time of blows (4) All the above
91.	Tatting is caused on the body of victim because of (1) Deposition of un-burnt/semi-burnt gun powder particles (2) Impregnation of un-burnt/semi-burnt gun powder particles (3) Deposition of burnt gun powder particles (4) All the above
92.	The incised injuries are caused by a weapon in the nature of (1) Sharp edge knife (2) Heavy stick (3) AK-47 (4) All the above
93.	In case of firearm injuries, the inverted margins are associated with (1) Exit wound (2) Entry wound (3) Both (1) and (2) (4) None of the above
94.	The sequence of eruption of milk teeth in a human baby is (1) 2112 (2) 2102 (3) 2111 (4) 2122

Question No.	Questions
95.	Pentacusps are found in which human tooth (1) Incisors (2) Canine (3) Premolar (4) Molar
96.	The laboratory shall have facilities and environment conditions which is covered under section of ISO/IEC 17025:2017 (1) 5.1 (2) 6.1 (3) 7.3 (4) 6.3
97.	The NABL activities shall be undertaken impartially in order to safe guard impartiality which is covered under section of ISO/IEC 17025:2017 (1) 3.1 & 4.1 (2) 5.1 & 6.1 (3) 7.1 & 8.1 (4) None of the above
98.	The Median of data set 5, 6, 11 & 59 is (1) 8.5 (2) 9.5 (3) 10.5 (4) None of the above
99.	The population census carried out by Government of India can be an example of (1) Exploratory research (2) Casual research (3) Descriptive research (4) All of the above
100.	Which of the following can be a source of primary data in research (1) Survey (2) Experiment (3) Survey and Experiment (4) Survey and Reference

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

(MPH/PHD/URS-EE-2019)

FORENSIC SCIENCE

Code

C

Time : 1¼ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____

(in figure)

Sr. No. _____

10007

SET-“X”

Name : _____

Father's Name : _____

Mother'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 / misbehaviour 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				
1.	<p>The species of origin of blood stain is determined by the technique of</p> <ol style="list-style-type: none">(1) Gel diffusion(2) Ring method(3) Cross over electrophoresis(4) All of the above				
2.	<p>The serology is defined as</p> <ol style="list-style-type: none">(1) Study of antigen and antibody reaction(2) Study of serum(3) Study of blood grouping/typing(4) All of the above				
3.	<p>Non-secretor is a person who does not secrete ABH substances in</p> <table border="0" style="width: 100%;"><tr><td style="width: 50%;">(1) Saliva</td><td style="width: 50%;">(2) Semen</td></tr><tr><td>(3) Sweat</td><td>(4) All of the above</td></tr></table>	(1) Saliva	(2) Semen	(3) Sweat	(4) All of the above
(1) Saliva	(2) Semen				
(3) Sweat	(4) All of the above				
4.	<p>In absorption-elution technique, washing with n-chilled saline is given so that</p> <ol style="list-style-type: none">(1) All absorbed antibodies are not removed(2) All absorbed antibodies are removed(3) All unabsorbed antibodies are removed(4) None of the above				

Question No.	Questions
5.	Anti-H Lectin is derived from the seeds of (1) <i>Ulex europaeus</i> (2) <i>Cedrus deodara</i> (3) <i>Pinus roxburghii</i> (4) None of the above
6.	Which one is correct order in DNA profiling (1) Extraction, Quantitation, PCR, Capillary electrophoresis, Analysis (2) Extraction, PCR, Quantitation, Analysis, Capillary electrophoresis (3) Analysis, Quantitation, Extraction, PCR, Capillary electrophoresis (4) PCR, Quantitation, Capillary electrophoresis, Extraction, Analysis
7.	SWGDAM stands for (1) Scientific Working Group on DNA Analysis Method (2) Scientific Working Group on DNA Method (3) Special Working Group on DNA Method (4) None of the above
8.	Dr. Jeffery first described smaller version of VNTR called STR which contains a core repeat region that ranges in size from (1) 6 – 100 bp (2) 1– 6 bp (3) 500bp to 30kb (4) None of the above
9.	In DNA marker, D16S539 'S' stands for (1) Sequencing (2) Single Copy Sequence (3) Single Sequence (4) None of the above

Question No.	Questions
10.	<p>The concept of DNA Barcoding was first given by</p> <p>(1) Bruce Budawle (2) Paul Herbert</p> <p>(3) Wang EHK (4) None of the above</p>
11.	<p>UV-V is spectroscopy is a technique for</p> <p>(1) Quantitative analysis (2) Qualitaitve analysis</p> <p>(3) Both (1) and (2) (4) None of the above</p>
12.	<p>Mass spectrometry is associated with</p> <p>(1) Determination of mass substance</p> <p>(2) Determination of mass of compound</p> <p>(3) Determination of mass of element</p> <p>(4) All of the above</p>
13.	<p>Which of the following is used in electron microscope</p> <p>(1) Electron beams (2) Magnetic fields</p> <p>(3) Light waves (4) Electron beams and magnetic fields</p>
14.	<p>In Gas-liquid phase chromatography, the stationary phase is composed of and the mobile phase is made of</p> <p>(1) Solid, liquid</p> <p>(2) Liquid, liquid</p> <p>(3) Liquid, gas</p> <p>(4) Solid, gas</p>

Question No.	Questions
15.	<p>Which one of the following pairs is correct in terms of wavelength for the different types of IR spectrometer</p> <p>(1) Near IR : 0.8 – 2.5 mm (2) Mid IR : 0.8 – 2.5 mm</p> <p>(3) Far IR : 2.5 – 50 mm (4) Mid IR : 50 – 100 mm</p>
16.	<p>Raman spectroscopy used for analysis of physical evidences is based on</p> <p>(1) Diffraction (2) Fluorescence</p> <p>(3) Absorption (4) Light scattering</p>
17.	<p>In reversed-phase HPLC</p> <p>(1) A hydrophobic stationary phase is combined with a polar mobile phase</p> <p>(2) A hydrophilic stationary phase is combined with a polar mobile phase</p> <p>(3) A hydrophobic stationary phase is combined with a non-polar mobile phase</p> <p>(4) A hydrophilic stationary phase is combined with a non-polar mobile phase</p>
18.	<p>Lead levels in drinking water could be determined by using</p> <p>(1) HPLC (2) AAS</p> <p>(3) GC-MS (4) CZE</p>
19.	<p>Which one of the following detectors have high sensitivity to all organic compounds</p> <p>(1) ECD (2) TCD</p> <p>(3) FID (4) NPD</p>

Question No.	Questions
20.	<p>X-ray diffraction is a technique to study</p> <p>(1) Composition of metal</p> <p>(2) Composition of element</p> <p>(3) Structure of crystal</p> <p>(4) None of the above</p>
21.	<p>The Locard's principle of exchange states that</p> <p>(1) When two things come in contact, sometimes they exchange traces</p> <p>(2) When two things come in contact, they mutually exchange traces</p> <p>(3) Both (1) and (2)</p> <p>(4) None of the above</p>
22.	<p>The functions of Forensic Science are to establish</p> <p>(1) Body of crime (2) Method of commission of crime</p> <p>(3) Linkage or de-linkage (4) All of the above</p>
23.	<p>The chain of custody means</p> <p>(1) Maintaining a record of evidence from scene of crime to the court room</p> <p>(2) Maintaining a record of evidence from scene of crime to the forensic science laboratory</p> <p>(3) Maintaining a record of evidence from scene of crime to police station</p> <p>(4) None of the above</p>

Question No.	Questions
24.	<p>Criminology has many meanings but the most commonly accepted is the specific of crime and criminals.</p> <p>(1) Social understanding (2) Sociological understanding (3) Similitude misunderstanding (4) Scientific understanding</p>
25.	<p>The first scientific system of personal identification was developed by</p> <p>(1) Alphonse Bertillon (2) Albert Osborn (3) Karl Landsteiner (4) None of the above</p>
26.	<p>In Crime Scene Reconstruction, the correct order of stages is as under</p> <p>(1) Data collection, Conjecture, Hypothesis formulation, Testing and theory formulation (2) Data collection, Hypothesis formulation, Conjecture, Testing and theory formulation (3) Hypothesis formulation, Data collection, Conjecture, Testing and theory formulation (4) Hypothesis formulation, Data collection, Testing, Conjecture and theory formulation</p>
27.	<p>Human trafficking is a form of</p> <p>(1) Hate crime (2) Organised crime (3) Violent crime (4) Property crime</p>

Question No.	Questions
28.	<p>The scientific report issued by Director Central Forensic Science Laboratory is admissible under section</p> <p>(1) IEA 45 (2) CrPC 293 (3) IEA 51 (4) CrPC 292</p>
29.	<p>The Section 45 of IEA deals with</p> <p>(1) Expert Evidence (2) Scientific Expert (3) Crime Investigation (4) None of the above</p>
30.	<p>Blood stain pattern analysis at crime scene reveals</p> <p>(1) Directionality (2) Angle of impact (3) Relative position of victim and assailant at the time of blows (4) All the above</p>
31.	<p>Tool marks left on the wooden surface by the carpenter plane fall in the category</p> <p>(1) Compression marks (2) File marks (3) Scrape marks (4) Repetitive cut marks</p>
32.	<p>Tensile testing of the iron rod can be determined by using</p> <p>(1) EDXRF (2) UTM (3) Comparison microscope (4) NAA</p>
33.	<p>The speed of vehicle from skid marks can be determined by using the formula</p> <p>(1) $V_2 = V_1 \sqrt{S_2/S_1}$ (2) $V_1 = V_2 \sqrt{S_2/S_1}$ (3) $V_1 = V_2 \sqrt{S_1/S_2}$ (4) None of the above</p>

Question No.	Questions
34.	<p>The photomicrography is defined as</p> <p>(1) Photograph taken through a microscope to show enlarged image of small area</p> <p>(2) Photograph taken to show magnified image of an object</p> <p>(3) Photograph taken to show microorganisms</p> <p>(4) None of the above</p>
35.	<p>A fluorescent dye was used in a lab method which can be photographed by using</p> <p>(1) X-Rays</p> <p>(2) U.V. Rays</p> <p>(3) I.R-Rays</p> <p>(4) None of the above</p>
36.	<p>Universal Forensic extraction device is used to extract data from</p> <p>(1) Computer</p> <p>(2) Cell phone</p> <p>(3) DVR</p> <p>(4) All the above</p>
37.	<p>Hash value of digital data is used to ascertain</p> <p>(1) Integrity</p> <p>(2) Identity</p> <p>(3) Both (1) and (2)</p> <p>(4) None of the above</p>
38.	<p>Deleted data from cell phone can be extracted by</p> <p>(1) Logical Extraction</p> <p>(2) Physical Extraction</p> <p>(3) Both (1) and (2)</p> <p>(4) None of the above</p>

Question No.	Questions
39.	BEOS stands for (1) Biological Exponential Oxygen Saturation Curve (2) Biological Electric Oscillation Signature (3) Brain Electrical Oscillation Signature (4) All of the above
40.	Which of the following drug is administrated as truth serum in Narco Analysis test (1) Sodium benzoate (2) Sodium thiosulphate (3) Sodium pentothal (4) All the above
41.	Which of the following is not a component of a shot gun cartridge (1) Wads (2) Propellant (3) Primer cap (4) Bullet
42.	To connect a fired cartridge case from an automatic firearm, which of the following marks are not useful (1) Breech face marks (2) Rifling marks (3) Extraction marks (4) Chamber marks
43.	An I.E.D. concealed in a suitcase can best be detected (1) By breaking the suit case (2) Infra red rays (3) Hard X-rays (4) Under Ultraviolet

Question No.	Questions
44.	<p>The composition of black powder is</p> <p>(1) Potassium nitrate, charcoal and sulphur</p> <p>(2) Potassium nitrate, nitroglycerin and charcoal</p> <p>(3) Potassium nitrate, nitroglycerin, charcoal and sulphur</p> <p>(4) None of the above</p>
45.	<p>Speed of pellets in a 12 bore shot gun is greatest when the barrel is</p> <p>(1) Full choke (2) Improved cylinder</p> <p>(3) True cylinder (4) Jug Choke</p>
46.	<p>Calibre of a rifled fire arm is a measure of the</p> <p>(1) Diameter of the bore across the lands</p> <p>(2) Diameter of the bore across the grooves</p> <p>(3) Barrel length</p> <p>(4) None of the above</p>
47.	<p>Abbe's refractometer is used to calculate</p> <p>(1) Density (2) Refractive Index</p> <p>(3) Wavelength (4) Frequency</p>
48.	<p>The measurement of intensity of Fluorescent X-ray provides a simple and way of analysis.</p> <p>(1) Destructive, Quantitative (2) Non-destructive, Quantitative</p> <p>(3) Destructive, Qualitative (4) Non-destructive, Qualitative</p>

Question No.	Questions
49.	<p>The most important tool available to the forensic firearm examiner in the identification of firearms is</p> <p>(1) Digitizing video camera (2) Comparison microscope (3) LASER illumination (4) Bullet Puller</p>
50.	<p>Gun Powder residues around a bullet hole on dark coloured cloth can be made visible under</p> <p>(1) Soft-X-rays (2) Ultraviolet rays (3) Infra Red rays (4) Hard X-rays</p>
51.	<p>O-tolidine is a screening test for detection of stains of</p> <p>(1) Blood (2) Saliva (3) Urine (4) Sweat</p>
52.	<p>The correct order in the growth phase of hair is</p> <p>(1) Anagen, Telogen, Catagen (2) Catagen, Telogen, Anagen (3) Anagen, Catagen, Telogen (4) None of the above</p>
53.	<p>The larvae of flies are known as</p> <p>(1) Grubs (2) Maggots (3) Nymph (4) None of the above</p>

Question No.	Questions
54.	P-30 antigen is a specific test for detection of body fluid in the (1) Menstrual blood (2) Semen (3) Saliva (4) None of the above
55.	Imbricate pattern in structure of hair is associated with (1) Cuticle (2) Cortex (3) Medulla (4) None of the above
56.	Diatoms in wet drowning can be detected in (1) Femur bone (2) Sternum (3) Brain Tissue (4) All of the above
57.	When intact insect sample is not available at crime scene, then larvae shells/eggs can be used to identify the insect species by (1) CO-1 of mRNA (2) CO-2 of mtDNA (3) CO-2 of mRNA (4) CO-1 of mtDNA
58.	The confirmatory test for detection of blood is (1) Acid phosphatase Test (2) Takayama Test (3) Gees Test (4) None of the above
59.	Which of the following is the correct order of life cycle of a blow fly (1) Egg, 1 st , 2 nd , 3 rd -larva, pupa, adult (2) Egg, pupa, 1 st , 2 nd , 3 rd larva, adult (3) Larva, egg, pupa, adult (4) Adult, 1 st , 2 nd , 3 rd -larva, egg

Question No.	Questions
60.	<p>In life cycle of insect, the term direct metamorphosis is referred to when it is</p> <p>(1) Egg to Larva (2) Egg to Pupa (3) Egg to Adult (4) None of the above</p>
61.	<p>Physical anthropology involves study of which of the following topics</p> <p>(1) Non-human primates (2) Mechanism of evolution (3) Human variation (4) All the above</p>
62.	<p>Osteometry deals with</p> <p>(1) Ossification of bones (2) Measurement of ribs (3) Measurement of long bones (4) None of the above</p>
63.	<p>If the blood group of mother is A and father is B, the blood group of children will be</p> <p>(1) A (2) B (3) AB, O (4) All of the above</p>
64.	<p>The exoskeleton in man is rudimentary and representative example is</p> <p>(1) Nails (2) Enamels of teeth (3) Both (1) and (2) (4) None of the above</p>

Question No.	Questions
65.	<p>An individual ABO blood type is normally determined by</p> <p>(1) Genetic inheritance and environmental influences during life (2) Environmental influences alone (3) The inheritance of 1 of 3 possible alleles (A, B or O) from each parent (4) Genetic Inheritance</p>
66.	<p>In somatoscopic technique, Luschan's colour chart is meant for</p> <p>(1) Hair (2) Skin (3) Eye (4) None of the above</p>
67.	<p>An allele is</p> <p>(1) Another word for a gene (2) A homozygous genotype (3) A heterozygous genotype (4) One of several possible form of gene</p>
68.	<p>Which one is not an example of axial skeleton of man</p> <p>(1) Vertebral column (2) Skull (3) Radius (4) Ribs</p>
69.	<p>When measurements are confined to human head and face, the term is</p> <p>(1) Cephalometry (2) Craniometry (3) Somatometry (4) All of the above</p>
70.	<p>Which one is not an example of appendicular skeleton</p> <p>(1) Cranium (2) Pelvic girdle (3) Tarsus (4) Patella</p>

Question No.	Questions
71.	Tatting is caused on the body of victim because of (1) Deposition of un-burnt/semi-burnt gun powder particles (2) Impregnation of un-burnt/semi-burnt gun powder particles (3) Deposition of burnt gun powder particles (4) All the above
72.	The incised injuries are caused by a weapon in the nature of (1) Sharp edge knife (2) Heavy stick (3) AK-47 (4) All the above
73.	In case of firearm injuries, the inverted margins are associated with (1) Exit wound (2) Entry wound (3) Both (1) and (2) (4) None of the above
74.	The sequence of eruption of milk teeth in a human baby is (1) 2112 (2) 2102 (3) 2111 (4) 2122
75.	Pentacusps are found in which human tooth (1) Incisors (2) Canine (3) Premolar (4) Molar
76.	The laboratory shall have facilities and environment conditions which is covered under section of ISO/IEC 17025:2017 (1) 5.1 (2) 6.1 (3) 7.3 (4) 6.3

Question No.	Questions
77.	<p>The NABL activities shall be undertaken impartially in order to safe guard impartiality which is covered under section of ISO/IEC 17025:2017</p> <p>(1) 3.1 & 4.1 (2) 5.1 & 6.1 (3) 7.1 & 8.1 (4) None of the above</p>
78.	<p>The Median of data set 5, 6, 11 & 59 is</p> <p>(1) 8.5 (2) 9.5 (3) 10.5 (4) None of the above</p>
79.	<p>The population census carried out by Government of India can be an example of</p> <p>(1) Exploratory research (2) Casual research (3) Descriptive research (4) All of the above</p>
80.	<p>Which of the following can be a source of primary data in research</p> <p>(1) Survey (2) Experiment (3) Survey and Experiment (4) Survey and Reference</p>
81.	<p>The number of minutes required for establishing match in two finger prints in India are</p> <p>(1) 16 (2) 12 (3) 10 (4) 8</p>
82.	<p>The word FACTS stands for</p> <p>(1) Forensic aptitude and capacity test system (2) Fingerprint analysis and criminal tracking system (3) Both the above (4) None of the above</p>

Question No.	Questions
83.	<p>The science of poroscopy was established by</p> <p>(1) Dr. Edmond Locard (2) Dr. Henry Faulds (3) Sir Francis Galton (4) Sir William Herschel</p>
84.	<p>The first fingerprint bureau was established in</p> <p>(1) India (2) UK (3) USA (4) China</p>
85.	<p>A research paper on Fingerprint science was published in the "Nature" journal first by</p> <p>(1) Dr. Alec Jeffery (2) Sir Francis Galton (3) Dr. Henry Faulds (4) Sir Edmond Henry</p>
86.	<p>The two signatures authored by one person are identified on the basis of</p> <p>(1) Class Characteristics (2) Individual Characteristics (3) Both (1) and (2) (4) None of the above</p>
87.	<p>The ESDA is an instrument used to detect</p> <p>(1) Physical erasures (2) Indented writings (3) Chemical erasures (4) All the above</p>
88.	<p>When two signatures are placed over each other, if they completely superimpose, it means</p> <p>(1) Perfect signature (2) Forgery (3) Similarity (4) None of the above</p>

Question No.	Questions																																			
89.	The charred documents are preserved by spraying (1) Ethyl alcohol (2) Polyvinyl acetate (3) Benzidine solution (4) All the above																																			
90.	The speed of writing is determined by (1) Commencement of stroke (2) Finish of stroke (3) Linkage between letters (4) All the above																																			
91.	The flash point analysis is used to detect the following (1) Vegetable poisons (2) Petroleum products (3) Copper sulphate (4) Explosives																																			
92.	Match the following : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">List I</td> <td style="width: 50%; text-align: center;">List II</td> </tr> <tr> <td>A. Marquis test</td> <td>1. Arsenic</td> </tr> <tr> <td>B. Reinsch's test</td> <td>2. Hashish</td> </tr> <tr> <td>C. Alkaline Beam test</td> <td>3. Morphine</td> </tr> <tr> <td>D. Vitali's test</td> <td>4. Dhatura</td> </tr> </table> <table style="width: 100%; border: none; margin-top: 10px;"> <tr> <td style="width: 25%;"></td> <td style="width: 12.5%; text-align: center;">A</td> <td style="width: 12.5%; text-align: center;">B</td> <td style="width: 12.5%; text-align: center;">C</td> <td style="width: 12.5%; text-align: center;">D</td> </tr> <tr> <td>(1)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> <tr> <td>(2)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(3)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(4)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> </table>	List I	List II	A. Marquis test	1. Arsenic	B. Reinsch's test	2. Hashish	C. Alkaline Beam test	3. Morphine	D. Vitali's test	4. Dhatura		A	B	C	D	(1)	4	1	3	2	(2)	2	1	4	3	(3)	4	1	2	3	(4)	3	1	2	4
List I	List II																																			
A. Marquis test	1. Arsenic																																			
B. Reinsch's test	2. Hashish																																			
C. Alkaline Beam test	3. Morphine																																			
D. Vitali's test	4. Dhatura																																			
	A	B	C	D																																
(1)	4	1	3	2																																
(2)	2	1	4	3																																
(3)	4	1	2	3																																
(4)	3	1	2	4																																

Question No.	Questions
93.	Blue color of PDS Kerosene is due to the presence of which dye (1) Anthracene (2) Anthraquinone (3) Phenyl azo-naphthol (4) Dialkylamino anthraquinone
94.	In case of carbon monoxide poisoning, which preservative is recommended for the preservation of blood samples (1) Sodium fluoride (2) Sodium chloride (3) Sodium carbonate (4) No preservative
95.	Which of the following is a hepatotoxic poison (1) Alcohol (2) Morphine (3) Atropine (4) Amphetamine
96.	Phosphene gas in aluminium phosphide poisoning is liberated in (1) Lungs (2) Liver (3) Stomach (4) Kidney
97.	In Hooch tragedy cases, the best antidote is (1) Water (2) Asprin (3) Ethyl alcohol (4) Paracetamol

Question No.	Questions
98.	<p>In India, the permissible Blood Alcohol Concentration (BAC) under The Motor Vehicle Act, is</p> <ul style="list-style-type: none">(1) 30mg of alcohol/100ml blood(2) 40mg of alcohol/100ml blood(3) 50mg of alcohol/100ml blood(4) 60mg of alcohol/100ml blood
99.	<p>The term Ophotoxemia refers to</p> <ul style="list-style-type: none">(1) Organophosphorus poisoning(2) Heavy metal poisoning(3) Snake venom poisoning(4) Alcohol poisoning
100.	<p>What is the active component in Blue Rocket poisoning</p> <ul style="list-style-type: none">(1) Nicotinum(2) Acotinum(3) Ricin(4) Digitalin

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

(MPH/PHD/URS-EE-2019)

FORENSIC SCIENCE

Code

D

Time : 1¼ Hours

Total Questions : 100

Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Father's Name : _____

Mother's Name : _____ Date of Examination : _____

Sr. No. _____

10008

SET-“X”

(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 / misbehaviour 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
1.	Physical anthropology involves study of which of the following topics (1) Non-human primates (2) Mechanism of evolution (3) Human variation (4) All the above
2.	Osteometry deals with (1) Ossification of bones (2) Measurement of ribs (3) Measurement of long bones (4) None of the above
3.	If the blood group of mother is A and father is B, the blood group of children will be (1) A (2) B (3) AB, O (4) All of the above
4.	The exoskeleton in man is rudimentary and representative example is (1) Nails (2) Enamels of teeth (3) Both (1) and (2) (4) None of the above
5.	An individual ABO blood type is normally determined by (1) Genetic inheritance and environmental influences during life (2) Environmental influences alone (3) The inheritance of 1 of 3 possible alleles (A, B or O) from each parent (4) Genetic Inheritance

Question No.	Questions
6. ✓	<p>In somatoscopic technique, Luschan's colour chart is meant for</p> <p>(1) Hair (2) Skin (3) Eye (4) None of the above</p>
7. ✓	<p>An allele is</p> <p>(1) Another word for a gene (2) A homozygous genotype (3) A heterozygous genotype (4) One of several possible form of gene</p>
8. ✓	<p>Which one is not an example of axial skeleton of man</p> <p>(1) Vertebral column (2) Skull (3) Radius (4) Ribs</p>
9. ✓	<p>When measurements are confined to human head and face, the term is</p> <p>(1) Cephalometry (2) Craniometry (3) Somatometry (4) All of the above</p>
10. ✓	<p>Which one is not an example of appendicular skeleton</p> <p>(1) Cranium (2) Pelvic girdle (3) Tarsus (4) Patella</p>
11. ✓	<p>The flash point analysis is used to detect the following</p> <p>(1) Vegetable poisons (2) Petroleum products (3) Copper sulphate (4) Explosives</p>

Question No.	Questions																																			
12.	<p>Match the following :</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">List I</td> <td style="text-align: center;">List II</td> </tr> <tr> <td>A. Marquis test</td> <td>1. Arsenic</td> </tr> <tr> <td>B. Reinsch's test</td> <td>2. Hashish</td> </tr> <tr> <td>C. Alkaline Beam test</td> <td>3. Morphine</td> </tr> <tr> <td>D. Vitali's test</td> <td>4. Dhatura</td> </tr> </table> <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 25%;"></td> <td style="width: 12.5%; text-align: center;">A</td> <td style="width: 12.5%; text-align: center;">B</td> <td style="width: 12.5%; text-align: center;">C</td> <td style="width: 12.5%; text-align: center;">D</td> </tr> <tr> <td>(1)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> <tr> <td>(2)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(3)</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td>(4)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> </table>	List I	List II	A. Marquis test	1. Arsenic	B. Reinsch's test	2. Hashish	C. Alkaline Beam test	3. Morphine	D. Vitali's test	4. Dhatura		A	B	C	D	(1)	4	1	3	2	(2)	2	1	4	3	(3)	4	1	2	3	(4)	3	1	2	4
List I	List II																																			
A. Marquis test	1. Arsenic																																			
B. Reinsch's test	2. Hashish																																			
C. Alkaline Beam test	3. Morphine																																			
D. Vitali's test	4. Dhatura																																			
	A	B	C	D																																
(1)	4	1	3	2																																
(2)	2	1	4	3																																
(3)	4	1	2	3																																
(4)	3	1	2	4																																
13.	<p>Blue color of PDS Kerosene is due to the presence of which dye</p> <table border="0" style="width: 100%;"> <tr> <td>(1) Anthracene</td> <td>(2) Anthraquinone</td> </tr> <tr> <td>(3) Phenyl azo-naphthol</td> <td>(4) Dialkylamino anthraquinone</td> </tr> </table>	(1) Anthracene	(2) Anthraquinone	(3) Phenyl azo-naphthol	(4) Dialkylamino anthraquinone																															
(1) Anthracene	(2) Anthraquinone																																			
(3) Phenyl azo-naphthol	(4) Dialkylamino anthraquinone																																			
14.	<p>In case of carbon monoxide poisoning, which preservative is recommended for the preservation of blood samples</p> <table border="0" style="width: 100%;"> <tr> <td>(1) Sodium fluoride</td> <td>(2) Sodium chloride</td> </tr> <tr> <td>(3) Sodium carbonate</td> <td>(4) No preservative</td> </tr> </table>	(1) Sodium fluoride	(2) Sodium chloride	(3) Sodium carbonate	(4) No preservative																															
(1) Sodium fluoride	(2) Sodium chloride																																			
(3) Sodium carbonate	(4) No preservative																																			
15.	<p>Which of the following is a hepatotoxic poison</p> <table border="0" style="width: 100%;"> <tr> <td>(1) Alcohol</td> <td>(2) Morphine</td> </tr> <tr> <td>(3) Atropine</td> <td>(4) Amphetamine</td> </tr> </table>	(1) Alcohol	(2) Morphine	(3) Atropine	(4) Amphetamine																															
(1) Alcohol	(2) Morphine																																			
(3) Atropine	(4) Amphetamine																																			

Question No.	Questions
16.	Phosphene gas in aluminium phosphide poisoning is liberated in (1) Lungs (2) Liver (3) Stomach (4) Kidney
17.	In Hooch tragedy cases, the best antidote is (1) Water (2) Aspirin (3) Ethyl alcohol (4) Paracetamol
18.	In India, the permissible Blood Alcohol Concentration (BAC) under The Motor Vehicle Act, is (1) 30mg of alcohol/100ml blood (2) 40mg of alcohol/100ml blood (3) 50mg of alcohol/100ml blood (4) 60mg of alcohol/100ml blood
19.	The term Ophotoxemia refers to (1) Organophosphorus poisoning (2) Heavy metal poisoning (3) Snake venom poisoning (4) Alcohol poisoning
20.	What is the active component in Blue Rocket poisoning (1) Nicotinum (2) Acotinum (3) Ricin (4) Digitalin

Question No.	Questions
21. ✓	<p>O-tolidine is a screening test for detection of stains of</p> <p>(1) Blood (2) Saliva</p> <p>(3) Urine (4) Sweat</p>
22. ✓	<p>The correct order in the growth phase of hair is</p> <p>(1) Anagen, Telogen, Catagen</p> <p>(2) Catagen, Telogen, Anagen</p> <p>(3) Anagen, Catagen, Telogen</p> <p>(4) None of the above</p>
23. ✓	<p>The larvae of flies are known as</p> <p>(1) Grubs (2) Maggots</p> <p>(3) Nymph (4) None of the above</p>
24. ✓	<p>P-30 antigen is a specific test for detection of body fluid in the</p> <p>(1) Menstrual blood (2) Semen</p> <p>(3) Saliva (4) None of the above</p>
25. ✓	<p>Imbricate pattern in structure of hair is associated with</p> <p>(1) Cuticle (2) Cortex</p> <p>(3) Medulla (4) None of the above</p>
26. ✓	<p>Diatoms in wet drowning can be detected in</p> <p>(1) Femur bone (2) Sternum</p> <p>(3) Brain Tissue (4) All of the above</p>

Question No.	Questions
27.	<p>When intact insect sample is not available at crime scene, then larvae shells/eggs can be used to identify the insect species by</p> <p>(1) CO-1 of mRNA (2) CO-2 of mtDNA (3) CO-2 of mRNA (4) CO-1 of mtDNA</p>
28.	<p>The confirmatory test for detection of blood is</p> <p>(1) Acid phosphatase Test (2) Takayama Test (3) Gees Test (4) None of the above</p>
29.	<p>Which of the following is the correct order of life cycle of a blow fly</p> <p>(1) Egg, 1st, 2nd, 3rd-larva, pupa, adult (2) Egg, pupa, 1st, 2nd, 3rd-larva, adult (3) Larva, egg, pupa, adult (4) Adult, 1st, 2nd, 3rd-larva, egg</p>
30.	<p>In life cycle of insect, the term direct metamorphosis is referred to when it is</p> <p>(1) Egg to Larva (2) Egg to Pupa (3) Egg to Adult (4) None of the above</p>

Question No.	Questions
31.	The number of minutes required for establishing match in two finger prints in India are (1) 16 (2) 12 (3) 10 (4) 8
32.	The word FACTS stands for (1) Forensic aptitude and capacity test system (2) Fingerprint analysis and criminal tracking system (3) Both the above (4) None of the above
33.	The science of poroscopy was established by (1) Dr. Edmond Locard (2) Dr. Henry Faulds (3) Sir Francis Galton (4) Sir William Herschel
34.	The first fingerprint bureau was established in (1) India (2) UK (3) USA (4) China
35.	A research paper on Fingerprint science was published in the "Nature" journal first by (1) Dr. Alec Jeffery (2) Sir Francis Galton (3) Dr. Henry Faulds (4) Sir Edmond Henry

Question No.	Questions
31.	<p>The number of minutes required for establishing match in two finger prints in India are</p> <p>(1) 16 (2) 12 (3) 10 (4) 8</p>
32.	<p>The word FACTS stands for</p> <p>(1) Forensic aptitude and capacity test system (2) Fingerprint analysis and criminal tracking system (3) Both the above (4) None of the above</p>
33.	<p>The science of poroscopy was established by</p> <p>(1) Dr. Edmond Locard (2) Dr. Henry Faulds (3) Sir Francis Galton (4) Sir William Herschel</p>
34.	<p>The first fingerprint bureau was established in</p> <p>(1) India (2) UK (3) USA (4) China</p>
35.	<p>A research paper on Fingerprint science was published in the "Nature" journal first by</p> <p>(1) Dr. Alec Jeffery (2) Sir Francis Galton (3) Dr. Henry Faulds (4) Sir Edmond Henry</p>

Question No.	Questions
36.	<p>The two signatures authored by one person are identified on the basis of</p> <p>(1) Class Characteristics (2) Individual Characteristics</p> <p>(3) Both (1) and (2) (4) None of the above</p>
37.	<p>The ESDA is an instrument used to detect</p> <p>(1) Physical erasures (2) Indented writings</p> <p>(3) Chemical erasures (4) All the above</p>
38.	<p>When two signatures are placed over each other, if they completely superimpose, it means</p> <p>(1) Perfect signature (2) Forgery</p> <p>(3) Similarity (4) None of the above</p>
39.	<p>The charred documents are preserved by spraying</p> <p>(1) Ethyl alcohol (2) Polyvinyl acetate</p> <p>(3) Benzidine solution (4) All the above</p>
40.	<p>The speed of writing is determined by</p> <p>(1) Commencement of stroke (2) Finish of stroke</p> <p>(3) Linkage between letters (4) All the above</p>
41.	<p>Tool marks left on the wooden surface by the carpenter plane fall in the category</p> <p>(1) Compression marks (2) File marks</p> <p>(3) Scrape marks (4) Repetitive cut marks</p>

Question No.	Questions
42. ✓	Tensile testing of the iron rod can be determined by using (1) EDXRF (2) UTM (3) Comparison microscope (4) NAA
43. ✓	The speed of vehicle from skid marks can be determined by using the formula (1) $V_2 = V_1 \sqrt{S_2/S_1}$ (2) $V_1 = V_2 \sqrt{S_2/S_1}$ (3) $V_1 = V_2 \sqrt{S_1/S_2}$ (4) None of the above
44. ✓	The photomicrography is defined as (1) Photograph taken through a microscope to show enlarged image of small area (2) Photograph taken to show magnified image of an object (3) Photograph taken to show microorganisms (4) None of the above
45. ✓	A fluorescent dye was used in a lab method which can be photographed by using (1) X-Rays (2) U.V. Rays (3) I.R-Rays (4) None of the above
46. ✓	Universal Forensic extraction device is used to extract data from (1) Computer (2) Cell phone (3) DVR (4) All the above

Question No.	Questions
47.	Hash value of digital data is used to ascertain (1) Integrity (2) Identity (3) Both (1) and (2) (4) None of the above
48.	Deleted data from cell phone can be extracted by (1) Logical Extraction (2) Physical Extraction (3) Both (1) and (2) (4) None of the above
49.	BEOS stands for (1) Biological Exponential Oxygen Saturation Curve (2) Biological Electric Oscillation Signature (3) Brain Electrical Oscillation Signature (4) All of the above
50.	Which of the following drug is administrated as truth serum in Narco Analysis test (1) Sodium benzoate (2) Sodium thiosulphate (3) Sodium pentothal (4) All the above
51.	Which of the following is not a component of a shot gun cartridge (1) Wads (2) Propellant (3) Primer cap (4) Bullet
52.	To connect a fired cartridge case from an automatic firearm, which of the following marks are not useful (1) Breech face marks (2) Rifling marks (3) Extraction marks (4) Chamber marks

Question No.	Questions
53. ✓	<p>An I.E.D. concealed in a suitcase can best be detected</p> <p>(1) By breaking the suit case (2) Infra red rays</p> <p>(3) Hard X-rays (4) Under Ultraviolet</p>
54. ✓	<p>The composition of black powder is</p> <p>(1) Potassium nitrate, charcoal and sulphur</p> <p>(2) Potassium nitrate, nitroglycerin and charcoal</p> <p>(3) Potassium nitrate, nitroglycerin, charcoal and sulphur</p> <p>(4) None of the above</p>
55. ✓	<p>Speed of pellets in a 12 bore shot gun is greatest when the barrel is</p> <p>(1) Full choke (2) Improved cylinder</p> <p>(3) True cylinder (4) Jug Choke</p>
56. ✓	<p>Calibre of a rifled fire arm is a measure of the</p> <p>(1) Diameter of the bore across the lands</p> <p>(2) Diameter of the bore across the grooves</p> <p>(3) Barrel length</p> <p>(4) None of the above</p>
57. ✓	<p>Abbe's refractometer is used to calculate</p> <p>(1) Density (2) Refractive Index</p> <p>(3) Wavelength (4) Frequency</p>

Question No.	Questions
58. ✓	<p>The measurement of intensity of Fluorescent X-ray provides a simple and way of analysis.</p> <p>(1) Destructive, Quantitative (2) Non-destructive, Quantitative (3) Destructive, Qualitative (4) Non-destructive, Qualitative</p>
59. ✓	<p>The most important tool available to the forensic firearm examiner in the identification of firearms is</p> <p>(1) Digitizing video camera (2) Comparison microscope (3) LASER illumination (4) Bullet Puller</p>
60. ✓	<p>Gun Powder residues around a bullet hole on dark coloured cloth can be made visible under</p> <p>(1) Soft-X-rays (2) Ultraviolet rays (3) Infra Red rays (4) Hard X-rays</p>
61. ✓	<p>Tattooing is caused on the body of victim because of</p> <p>(1) Deposition of un-burnt/semi-burnt gun powder particles (2) Impregnation of un-burnt/semi-burnt gun powder particles (3) Deposition of burnt gun powder particles (4) All the above</p>
62. ✓	<p>The incised injuries are caused by a weapon in the nature of</p> <p>(1) Sharp edge knife (2) Heavy stick (3) AK-47 (4) All the above</p>

Question No.	Questions
63.	In case of firearm injuries, the inverted margins are associated with (1) Exit wound (2) Entry wound (3) Both (1) and (2) (4) None of the above
64.	The sequence of eruption of milk teeth in a human baby is (1) 2112 (2) 2102 (3) 2111 (4) 2122
65.	Pentacusps are found in which human tooth (1) Incisors (2) Canine (3) Premolar (4) Molar
66.	The laboratory shall have facilities and environment conditions which is covered under section of ISO/IEC 17025:2017 (1) 5.1 (2) 6.1 (3) 7.3 (4) 6.3
67.	The NABL activities shall be undertaken impartially in order to safe guard impartiality which is covered under section of ISO/IEC 17025:2017 (1) 3.1 & 4.1 (2) 5.1 & 6.1 (3) 7.1 & 8.1 (4) None of the above
68.	The Median of data set 5, 6, 11 & 59 is (1) 8.5 (2) 9.5 (3) 10.5 (4) None of the above

Question No.	Questions
69. ✓	<p>The population census carried out by Government of India can be an example of</p> <p>(1) Exploratory research (2) Casual research (3) Descriptive research (4) All of the above</p>
70. ✓	<p>Which of the following can be a source of primary data in research</p> <p>(1) Survey (2) Experiment (3) Survey and Experiment (4) Survey and Reference</p>
71. ✓	<p>The species of origin of blood stain is determined by the technique of</p> <p>(1) Gel diffusion (2) Ring method (3) Cross over electrophoresis (4) All of the above</p>
72. ✓	<p>The serology is defined as</p> <p>(1) Study of antigen and antibody reaction (2) Study of serum (3) Study of blood grouping/typing (4) All of the above</p>
73. ✓	<p>Non-secretor is a person who does not secrete ABH substances in</p> <p>(1) Saliva (2) Semen (3) Sweat (4) All of the above</p>

Question No.	Questions
74.	<p>In absorption-elution technique, washing with n-chilled saline is given so that</p> <ol style="list-style-type: none"> (1) All absorbed antibodies are not removed (2) All absorbed antibodies are removed (3) All unabsorbed antibodies are removed (4) None of the above
75.	<p>Anti-H Lectin is derived from the seeds of</p> <ol style="list-style-type: none"> (1) Ulex europeaus (2) Cedrus deodara (3) Pinus roxburghii (4) None of the above
76.	<p>Which one is correct order in DNA profiling</p> <ol style="list-style-type: none"> (1) Extraction, Quantitation, PCR, Capillary electrophoresis, Analysis (2) Extraction, PCR, Quantitation, Analysis, Capillary electrophoresis (3) Analysis, Quantitation, Extraction, PCR, Capillary electrophoresis (4) PCR, Quantitation, Capillary electrophoresis, Extraction, Analysis
77.	<p>SWGAM stands for</p> <ol style="list-style-type: none"> (1) Scientific Working Group on DNA Analysis Method (2) Scientific Working Group on DNA Method (3) Special Working Group on DNA Method (4) None of the above

Question No.	Questions
78. ✓	<p>Dr. Jeffery first described smaller version of VNTR called STR which contains a core repeat region that ranges in size from</p> <p>(1) 6 – 100 bp (2) 1– 6 bp</p> <p>(3) 500bp to 30kb (4) None of the above</p>
79. ✓	<p>In DNA marker, D16S539 'S' stands for</p> <p>(1) Sequencing (2) Single Copy Sequence</p> <p>(3) Single Sequence (4) None of the above</p>
80. ✓	<p>The concept of DNA Barcoding was first given by</p> <p>(1) Bruce Budawle (2) Paul Herbert</p> <p>(3) Wang EHK (4) None of the above</p>
81. ✓	<p>UV-V is spectroscopy is a technique for</p> <p>(1) Quantitative analysis (2) Qualitative analysis</p> <p>(3) Both (1) and (2) (4) None of the above</p>
82. ✓	<p>Mass spectrometry is associated with</p> <p>(1) Determination of mass substance</p> <p>(2) Determination of mass of compound</p> <p>(3) Determination of mass of element</p> <p>(4) All of the above</p>
83. ✓	<p>Which of the following is used in electron microscope</p> <p>(1) Electron beams (2) Magnetic fields</p> <p>(3) Light waves (4) Electron beams and magnetic fields</p>

Question No.	Questions
84.	<p>In Gas-liquid phase chromatography, the stationary phase is composed of and the mobile phase is made of</p> <p>(1) Solid, liquid (2) Liquid, liquid</p> <p>(3) Liquid, gas (4) Solid, gas</p>
85.	<p>Which one of the following pairs is correct in terms of wavelength for the different types of IR spectrometer</p> <p>(1) Near IR : 0.8 – 2.5 mm</p> <p>(2) Mid IR : 0.8 – 2.5 mm</p> <p>(3) Far IR : 2.5 – 50 mm</p> <p>(4) Mid IR : 50 – 100 mm</p>
86.	<p>Raman spectroscopy used for analysis of physical evidences is based on</p> <p>(1) Diffraction (2) Fluorescence</p> <p>(3) Absorption (4) Light scattering</p>
87.	<p>In reversed-phase HPLC</p> <p>(1) A hydrophobic stationary phase is combined with a polar mobile phase</p> <p>(2) A hydrophilic stationary phase is combined with a polar mobile phase</p> <p>(3) A hydrophobic stationary phase is combined with a non-polar mobile phase</p> <p>(4) A hydrophilic stationary phase is combined with a non-polar mobile phase</p>

Question No.	Questions
88. ✓	Lead levels in drinking water could be determined by using (1) HPLC (2) AAS (3) GC-MS (4) CZE
89. ✓	Which one of the following detectors have high sensitivity to all organic compounds (1) ECD (2) TCD (3) FID (4) NPD
90. ✓	X-ray diffraction is a technique to study (1) Composition of metal (2) Composition of element (3) Structure of crystal (4) None of the above
91. ✓	The Locard's principle of exchange states that (1) When two things come in contact, sometimes they exchange traces (2) When two things come in contact, they mutually exchange traces (3) Both (1) and (2) (4) None of the above
92. ✓	The functions of Forensic Science are to establish (1) Body of crime (2) Method of commission of crime (3) Linkage or de-linkage (4) All of the above

Question No.	Questions				
93. ✓	<p>The chain of custody means</p> <ol style="list-style-type: none"> (1) Maintaining a record of evidence from scene of crime to the court room (2) Maintaining a record of evidence from scene of crime to the forensic science laboratory (3) Maintaining a record of evidence from scene of crime to police station (4) None of the above 				
94. ✓	<p>Criminology has many meanings but the most commonly accepted is the specific of crime and criminals.</p> <ol style="list-style-type: none"> (1) Social understanding (2) Sociological understanding (3) Similitude misunderstanding (4) Scientific understanding 				
95. ✓	<p>The first scientific system of personal identification was developed by</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">(1) Alphonse Bertillon</td> <td style="width: 50%;">(2) Albert Osborn</td> </tr> <tr> <td>(3) Karl Landsteiner</td> <td>(4) None of the above</td> </tr> </table>	(1) Alphonse Bertillon	(2) Albert Osborn	(3) Karl Landsteiner	(4) None of the above
(1) Alphonse Bertillon	(2) Albert Osborn				
(3) Karl Landsteiner	(4) None of the above				
96. ✓	<p>In Crime Scene Reconstruction, the correct order of stages is as under</p> <ol style="list-style-type: none"> (1) Data collection, Conjecture, Hypothesis formulation, Testing and theory formulation (2) Data collection, Hypothesis formulation, Conjecture, Testing and theory formulation (3) Hypothesis formulation, Data collection, Conjecture, Testing and theory formulation (4) Hypothesis formulation, Data collection, Testing, Conjecture and theory formulation 				

Question No.	Questions
97. ✓	Human trafficking is a form of (1) Hate crime (2) Organised crime (3) Violent crime (4) Property crime
98. ✓	The scientific report issued by Director Central Forensic Science Laboratory is admissible under section (1) IEA 45 (2) CrPC 293 (3) IEA 51 (4) CrPC 292
99. ✓	The Section 45 of IEA deals with (1) Expert Evidence (2) Scientific Expert (3) Crime Investigation (4) None of the above
100. ✓	Blood stain pattern analysis at crime scene reveals (1) Directionality (2) Angle of impact (3) Relative position of victim and assailant at the time of blows (4) All the above

MPH / PH.D / URS - EE - 2019 (FORENSIC SCIENCE)

Answer Key of Entrance Exam -/Ph.D/URS-EE-2019				
Question No.	CODE-A	CODE-B	CODE-C	CODE-D
1	2	4	4	4
2	4	2	1	3
3	1	1	4	4
4	4	1	1	3
5	1	3	1	3
6	1	3	1	2
7	2	2	1	4
8	2	2	2	3
9	1	2	2	1
10	4	4	2	1
11	4	1	3	2
12	2	2	3	4
13	1	3	4	3
14	1	1	3	1
15	3	2	1	1
16	3	2	4	3
17	2	1	1	3
18	2	2	2	1
19	2	3	3	3
20	4	3	3	2
21	3	4	2	1
22	3	3	4	3
23	4	4	1	2
24	3	3	4	2
25	1	3	1	1
26	4	2	1	4
27	1	4	2	4
28	2	3	2	2
29	3	1	1	1
30	3	1	4	3
31	1	2	1	4
32	3	4	2	2
33	2	3	3	1
34	2	1	1	1
35	1	1	2	3
36	4	3	2	3
37	4	3	1	2
38	2	1	2	2
39	1	3	3	2
40	3	2	3	4
41	4	1	4	1
42	1	3	2	2
43	4	2	3	3
44	1	2	1	1

Mukesh
 (Mukesh Tomwar)
 Ph 8901502537

Sapna
 (Dr. Sapna Shaema)

Rajendra
 (Dr. Rajendra Kumar)

Neelkamal
 (Dr. Neelkamal)

MPH/PHD/URS-EE-2019 (FORENSIC SCIENCE)

45	1	1	3	2
46	1	4	1	2
47	1	4	2	1
48	2	2	2	2
49	2	1	2	3
50	2	3	3	3
51	2	3	1	4
52	4	3	3	2
53	3	4	2	3
54	1	3	2	1
55	1	1	1	3
56	3	4	4	1
57	3	1	4	2
58	1	2	2	2
59	3	3	1	2
60	2	3	3	3
61	4	4	4	2
62	2	1	3	1
63	3	4	4	2
64	1	1	3	2
65	3	1	3	4
66	1	1	2	4
67	2	1	4	1
68	2	2	3	1
69	2	2	1	3
70	3	2	1	3
71	4	4	2	4
72	3	2	1	1
73	4	3	2	4
74	3	1	2	1
75	3	3	4	1
76	2	1	4	1
77	4	2	1	1
78	3	2	1	2
79	1	2	3	2
80	1	3	3	2
81	2	2	4	3
82	1	4	2	3
83	2	1	1	4
84	2	4	1	3
85	4	1	3	1
86	4	1	3	4
87	1	2	2	1
88	1	2	2	2
89	3	1	2	3
90	3	4	4	3
91	1	2	2	2

Mukher

(Mukher Tamwar)

Sya 19/11/2019

(Dr. Sapna Shaema)

(Dr. Neelkamal)

(Dr. Rajwinda Singh) 19/11/19

NUPH / PHD / URS - EE - 2019 (FORENSIC SCIENCE)

92	2	1	4	4
93	3	2	3	1
94	1	2	1	4
95	2	4	1	1
96	2	4	3	1
97	1	1	3	2
98	2	1	1	2
99	3	3	3	1
100	3	3	2	4

Mukesh

(Mukesh Tomwar)

Sapna

19/11/2019

(Dr. Sapna Shema)

Neel Kumar
(Dr. Neel Kumar)

Rajwinda Singh
(Dr. Rajwinda Singh)