(Set–"X")

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

(M.Phil/Ph.D/URS–EE–2018)

Code **A**

Subject : FORENSIC SCIENCE

Sr. No. 100005

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 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)

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1.	Criminalistics can be defined as which of the following : (1) Application of Forensic Science to criminal investigation (2) Application of criminology to criminal investigation (3) Application of social sciences to criminal investigation (4) Application of social sciences to criminal investigation
2.	The word 'Forensic' word has been derived from : (1) Latin word Forensis (2) Greek word Forensis (3) French word (4) Roman word Forensis
3.	The principle global site of South Asia for opium production that constitute Golden Crescent are the following except : (1) Iran (2) Thailand (3) Pakistan (4) Afghanistan
4.	The "Journal of Forensic Sciences" is published by which of the following Academy ? (1) Indian Academy of Forensic Sciences India (2) American Academy of Forensic Science, USA (3) British Academy of Forensic Sciences, UK (4) European Academy of Forensic Sciences

Question No.	Questions
5.	The first Serologist to the Government of India Department was established in : (1) 1910 (2) 1915 (3) 1947 (4) None of the above
6.	The first chemical examiner's laboratory was set up in India at which place among the following : (1) Mumbai (2) Madras (3) Kolkata (4) Agra
7.	The first State Forensic Science Laboratory in India was established in the year : (1) 1948 (2) 1950 (3) 1952 (4) 1948
8.	Dying Deposition is recorded by : (1) Relative of the victim (2) Medical Officer (3) Police Officer (4) Magistrate
9.	In India the second CFSL was established during the year 1965 at which place ? (1) Chandigarh (2) Kolkata (3) Hyderabad (4) Delhi

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10.	NAAC is the organisation in the country that : (1) Assesses and accredits Forensic Labs (2) Assesses and accredits Hospitals (3) Assesses and accredits private labs only (4) Assesses and accredits higher education Institutions
11.	NIA Stands for : (1) National Investigation Agency (2) National Intelligence Agency (3) National Investigation authority (4) National Interrogation Agency
12.	Among the following the first American serial Killer, Ted Bundy was convicted on the basis of : (1) DNA Profiling evidence (2) Bite marks evidence (3) Toxicological evidence (4) Latent Fingerprints
13.	The first crime laboratory was established in France by Edmond Locard in the year : (1) 1910 (2) 1912 (3) 1906 (4) 1915

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14.	According to the principles/Laws of Forensic Science which emphasizes the necessity of correct sampling and packing for the effective use of experts ? (1) Law of individuality (2) Principle of mutual exchange (3) Principle of comparison (4) Principle of Analysis
15.	Which of the following technique is most commonly used to record measurements for the crime scene sketches : (1) Triangulation (2) Baseline (3) Computer-aided design (4) Polar coordinates
16.	In case of Bank robbery as a Forensic expert which of the following method of crime scene search method will be used : (1) Spiral method (2) Zonal method (3) Strip method (4) Grid method
17.	Sinistrality means : (1) An Ambidextrous individual (2) Right handedness (3) Left handedness (4) Hypodactylic individual

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18.	Diacritical marks are : (1) Blotting of ink (2) Marks used with letter or groups of letters (3) Punctuations (4) Embellishments
19.	Among the four places in India where the bank currency notes are printed, select which of the following is not amongst them ? (1) Guntur, Andhra Pradesh (2) Salboni, West Bengal (3) Nashik, Maharashtra (4) Dewas, Madhya Pradesh
20.	The best Preservative for the charred documents is : (1) Poly vinyl chloride solution (2) Poly vinyl acetate (3) Poly vinyl carbonate (4) Formalin
21.	In the field of questioned document examination, the Instrument used and named as ESDA stands for: (1) Electrostatic device for detection of alteration (2) Electric system for detection of alteration (3) Electrostatic detection apparatus (4) Electronic state detection appliance

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22.	Which of the following method is recommended to develop latent fingerprints on human skin : (1) DFO method (2) Silver-iodine plate transfer method (3) Ninhydrin method (4) Amio black method
23.	The essentials of a fingerprint with loop pattern are : (1) A sufficient recurve, a core and a ridge count across a looping ridge (2) A sufficient recurve, a core, a ridge count (3) A sufficient recurve, a core and a delta (4) A sufficient recurve, a delta and minimum one ridge
24.	The concept of Poroscopy was given by : (1) Hans Gross (2) Galton (3) Henry (4) Edmond Locard
25.	The book entitled "The Forensic Science-the Basics" is Authored by : (1) Jay A Siegel (2) Paul Kirk (3) Osterburg and O'Hara (4) Saferstein
26.	Among the following which one form the finger ridges : (1) Minutiae present of the fingers (2) Rows of sweat pores present (3) Dots or islands present (4) Dermal cells present

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27.	In case of amputation of one finger, the following print is considered in classification : (1) Index finger of other hand (2) Thumb impression of other hand (3) Corresponding finger of the other hand (4) Next finger of the same hand
28.	Computerised fingerprints search systems match points by comparing : (1) Bifurcations present (2) Ridge endings (3) Both bifurcations and ridge endings (4) Dots present only
29.	Among the following which one does not constitute the fundamental principles of fingerprints : (1) Fingerprint is an individual (2) No two finger have identical ridge characteristics (3) Fingerprints are permanent in nature (4) Fingerprints/ characteristics follow Mendel's law of inheritance
30.	MCT detector is used in : (1) FTIR spectrometry (2) Atomic absorption spectrometry (AAS) (3) Gas-Chromatorgraphy-Mass spectrometry (GC-MS) (4) Liquid Chromatography-Mass spectrometry (LC-MS)

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31.	In case of scanning electron microscope, secondary electrons : (1) Are emitted by the nucleus of the various elements when the object is struck by a beam of X-rays (2) Are emitted when a beam of primary electrons strikes the object (3) Strike the object and then reflect off the surface (4) Strike the object releasing other electrons
32.	The "fingerprint" region of IR spectrum can be subdivided into the following except : (1) Below 500 cm-1 (2) Below 1000 cm cm-1 (3) 1350-1000 cm-1 (4) 1500-1350 cm-1
33.	The "magic angle" of NMR is at : (1) 60.8 degrees (2) 120 degrees (3) 54.7 degrees (4) 90 degrees
34.	Among the following which of the following statements is Not true ? (1) Handwriting of an individual shows natural variations (2) Alcohol consumption may cause variations in one's handwriting (3) The handwriting of an individual remains unaffected by advancing age (4) The handwriting is affected by space available for writing and may show variations

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36.	Among the following which one is the major difference between gas chromatography (GC) and High pressure liquid Chromatography (HPLC): (1) HPLC always uses at least two liquids in its stationery phase (2) GC has a liquid mobile (3) GC uses columns to hold the mobile phase, whereas HPLC does not (4) GC columns are heated whereas HPLC columns are kept at room temperature
37.	In polarized light microscope, a polarizer is placed : (1) Above the sample (2) Below the sample (3) Below the objective (4) Above the objective
38.	A dichroic mirror is an incorporation of optical accessory in : (1) Electron microscope (2) Fluorescence microscope (3) Simple microscope (4) Stereomicroscope

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39.	Among the following techniques which gives more conclusive results for gun short residue detection in shooting cases : (1) Scanning electron microscope with energy dispersive analysis (2) Inductively coupled plasma (ICP) (3) Atomic absorption spectrometry (AAS) (4) Neutron activation analysis (NAA)
40.	Among the following in which methods, Hollow cathode lamps is used as radiation source : (1) Raman spectrophotometer (2) IR spectrophotometer (3) UV-Vis spectrophotometer (4) Atomic absorption spectrophotometer
41.	Chronograph is an instrument which measures the following in Forensic Ballistics ? (1) Angle of fire of a gun (2) Trajectory of the projectile (3) Velocity of the projectile (4) Temperature inside the barrel of gun

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42.	In the analysis of striated tool marks, the spacings in between the striations change because of : (1) Nature of surface on which the tool acts (2) Angle of progression (3) Both angles of tilt and progression (4) Angle of tile
43.	Among the following which one is the most versatile detector : (1) FID (2) NIPD (3) MS detector (4) UV- detector
44.	What is the alternative test after failure of spermatozoa test for the identification of semen stains ? (1) Acid phosphatase test (2) Choline test (3) Thin layer chromatography (4) Prostate-specific antigen test
45.	Among the following which is the type of biological evidence that contains haploid cells ? (1) Saliva (2) Hair (3) Sperm (4) Blood

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46.	Males having a low sperm count suffer from a condition known as : (1) Oligospermia (2) Necrospermia (3) Tertospermia (4) Aszopermia
47.	An examination of the development stages of the insects present on the decomposed corpse may yield valuable information about : (1) The age of the deceased (2) The circumstance surrounding the death (3) The identification of the deceased (4) The poison ingested by the deceased
48.	The scientific name of Chiru is: (1) Antilope cervicapra (2) Pantholops hodgsonii (3) Capra aegagrus (4) Vulpes bengalensis
49.	Christmas Tree stain is used in the identification of : (1) Semen stains (2) Colostrum stains (3) Plant stains (4) Blood stains
50.	The offspring of two parents that are heterozygous for a given trait have a following percent chance of being homozygous for that trait : (1) 10% (2) 25% (3) 50% (4) 100%

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51.	The Azlon fibres are of the type of : (1) Regenerated fibres (2) Synthetic fibres (3) Animal fibres (4) Natural fibres
52.	The instrumental analyses most useful for identification of synthetic fibres are : (1) Infrared spectrophotometer and Pyrolysis-gas-chromatography (2) Pyrosis and atomic absorption spectrophotometry (3) Mass spectrometry and emission spectrophotometry (4) X-rays diffraction and gas chromatography
53.	Dried blood stains are typed primarily by means of : (1) Absorption elution (2) Absorption-inhibition (3) Mixed agglutination (4) Adding anti-A and anti-B antisera to the stain
54.	If a father's genotype is 'OO' and a mother's genotype is BB, their children: (1) Have a 25 percent chance of having type B blood (2) Have a 50 percent chance of having type "O" blood (3) Will all have type 'O' (4) Will all have type B blood
55.	One nanogram (ng) of DNA can be obtained from approximately : (1) 900-1000 diploid cells (2) 600-700 diploid cells (3) 300-400 diploid cells (4) 100-200 diploid cells

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56.	Among the following which is the order of steps in PCR cycling : (1) Denaturation, annealing and extension (2) Annealing, denaturation and extension (3) Extension, denaturation and anealing (4) Annealing, denaturation and extension
57.	Comparing SNP markers to STR based analysis, which of the following are true ? (1) There are many more STR Loci in the genome (2) There are many more SNP markers in the human genome than STR (3) SNP loci generally have more alleles than STR loci (4) The number of SNP loci is about the same as the number of STR loci in the genome
58.	Single-stranded DNA molecules that can bind to and be used to detect other DNA molecules are called : (1) Primers (2) Lines (3) STR (4) Probes
59.	Single nucleotide polymorphism : (1) Can be useful for degraded DNA samples (2) Can be useful for mixed samples from more than one donor (3) Can be useful for forensic identification because of high discriminating power (4) Most DNA databases of SNP profiles exists

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60.	What is the scientific/ chemical name of Meow meow's drug ? (1) Amphetamines (2) Mephedrone (3) MDMA (4) Cathinone
61.	'X' comes home unexpected and sees his wife in bed with 'Z'. He becomes furious and kills 'Z' with a knife which he finds on the shelf nearby. Which of the following crimes 'X' has committed ? (1) Death by rash and negligent act (2) Culpable homicide amounting to murder (3) Voluntary causing of grievious hurt (4) Culpable homicide not amounting to murder
62.	Which of the following can be used to extract acidic drugs from an aqueous solution ? (1) Methanol and Hydrochloric acid (2) Chloroform and acetic acid (3) Chloroform and ammonium hydroxide (4) Ethanol and Sodium hydroxide
63.	What colour Dilli-Koppanyi reagent gives with barbiturate ? (1) Reddish (2) Purple (3) Green (4) Yellow

Question No.	Questions
64.	LSD is derived from which of the following plant ? (1) Cannabis sativa (2) Papaver somniferum (3) Erthroxylum sp. (4) Claviceps purpurea
65.	Parathion is metabolized to which of the following product : (1) o-nitrophenol and ethyl phosphate (2) o-nitrophenol and methyl phosphate (3) p-nitrophenol and diethyl phosphate (4) m-nitrophenol and dimethyl phosphate
66.	The morphine content of opium is standardized in the Government opium factory located at : (1) Ghazipur (2) Ghaziabad (3) Gurgaon (4) Gwalior
67.	Select the poisonous mushroom species among the following : (1) Cantharellus cibarius (2) Amanita phalloides (3) Morchella esculenta (4) Boletus edulis
68.	Pheny-2-propanone and formamide are used for the synthesis of : (1) Lysergide (2) Methamphetamine (3) Amphetamine (4) Methylene dioxymethamphetamine

Question No.	Questions
69.	In the manufacture of glass, sodium carbonate is added to sand in order to : (1) Reduce its melting point (2) Prevent glass from dissolving in water (3) Reduce viscosity (4) Provide it greater durability
70.	Select among the following in which the slurry explosive are based on : (1) Potassium chlorate (2) Nitrocellulose (3) Nitroglycerine (4) Ammonium Nitrate
71.	A plastic explosive 'Kirkee' is essentially the following explosive : (1) 2, 4, 6 Trinitropheny methyl nitramine (2) 2, 4, 6 Trinitrophenol (3) 2, 4, 6 Trinitrotoluene (4) Cyclo Trimethylene Trinitramine
72.	Which of the following statements is correct ? (1) Two or more persons may have similar DNA (2) Monozygotic twins have identical DNA (3) Two fingers cannot have identical fingerprints (4) Monozygotic twins have identical fingerprints

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73.	.Numerous and short radial fractures in glass indicate that the hole has been caused by a : (1) Stone hurled at glass (2) A high velocity rifle bullet (3) A jacketed bullet fired from revolver (4) A lead bullet fired from revolver
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75.	A technique used to separate sperm cells and non-sperm cells for DNA analysis in rape cases is called : (1) Chelex Extraction method (2) Organic Extraction method (3) QiaAmp Extraction method (4) Differential Extraction method
76.	Select the most appropriate answer that 7.62 mm AK-47 assault rifle has the magazine capacity of : (1) 20 (2) 25 (3) 30 (4) 40
77.	Walker test of GSR is done for the identification of the presence of : (1) Metallic residue (2) Nitrate (3) Sulphur (4) Nitrite

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78.	Amatol contains which of the following ? (1) TNT and RDX (2) TNT and Tetryl (3) TNT and PETN (4) TNT and Ammonium nitrate
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80.	In sex determination from female pelvis all the characteristics are present except : (1) Sub pubic angle is 'V' shaped (2) Greater sciatic notch is wide and shallow (3) Pre-auricular sulcus is prominent (4) Ischial tuberosity if everted
81.	Among the following which is not a feature of a female skull ? (1) Roundish shaped orbits (2) Prominent glabella (3) Prominent parietal eminence (4) Prominent frontal eminence

Question No.	Questions
82.	Ashley's rule states that : (1) Total length of sternum in male is greater than 149 mm (2) Total length of sternum in female is greater than 149 mm (3) Sternal body is more than twice the manubrium in males (4) Sternal body is less than twice the manubrium in females
83.	Skull photo superimposition technique was used for the first time in which of the following cases ? (1) Ruxton murder case (2) Ted Bundy case (3) Frye case (4) Daubert case
84.	How many bones are there in appendicular skeleton of human body ? Select among the following : (1) 106 (2) 206 (3) 126 (4) 76
85.	Cusps of Carabelli are observed on : (1) Central Incisors (2) Canines (3) Bicuspids (4) Tricuspids
86.	Casper's dictum is used in relation to : (1) Mummification (2) Post mortem staining (3) Rigor mortis (4) Putrefaction

Question No.	Questions
87.	The following is not a component of Gustafson's method : (1) Attrition (2) Dentition (3) Root resorption (4) Cementum Apposition
88.	Select the appropriate period of mixed dentition that extends between: (1) 4-10 years (2) 4-12 years (3) 6-12 years (4) 8-12 years
89.	The greatest dimension of an incised wound is : (1) Length (2) Breadth (3) Depth (4) Breadth and depth are equal
90.	Post mortem staining in a dead body appears on : (1) Sides of the body (2) Upper parts of the body (3) Middle part of the body (4) Dependent parts of the body
91.	Identify the correct sequence of the closure of skull structure among the following : (1) Sagittal, Temporal, Metopic, Basal (2) Temporal, Basal, Metopic, Sagittal (3) Metopic, basal, Sagittal, Temporal (4) Basal, Temporal, Metopic, Sagittal

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92.	Dilaudid is : (1) Synthetic Cocaine (2) Synthetic Morphine (3) Synthetic Codeine (4) Synthetic THC
93.	The objective of ISO-9000 family of quality management is : (1) Customer satisfaction (2) Employee satisfaction (3) Skill enhancement (4) Environmental issues
94.	Which of the following is the first step in starting the research process : (1) Searching sources of information to locate problem (2) Survey of related literature (3) Identification of problem (4) Searching for solutions to the problem
95.	According to the analysis of digital evidence, what should be the best practice ? (1) Forensic examination of performance directly (2) Design an examination process (3) Create one or more duplicates of the original evidences (4) The documentation and data reduction steps
96.	The most popular software forensic tools include all of the following except : (1) Forensic Toolkit (2) Forensic Autopsy (3) Smart (4) Quicken

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97.	Hash value is used by the forensic experts to : (1) To authenticate text data (2) To authenticate images in the given file (3) To authenticate audio/video files (4) To authenticate digital data
98.	Among the following which is the most sensitive technique to isolate petroleum products from different substrates : (1) Solvent extraction technique (2) Solid-phase micro extraction technique (3) Solid phase extraction technique (4) Acidic or alkali steam distillation
99.	Leading questions are not allowed in the examination-in-chief except when the witness is : (1) Hostile witness (2) Paid witness (3) Expert witness (4) Ordinary witness
100.	In the FTA method for collection of biological evidence during DNA analysis: (1) The DNA is eluted off the paper (2) The DNA stays on the paper (3) Cellular materials are washed away (4) FTA paper allows to dry the stain quickly

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Code **B**

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27.	In polarized light microscope, a polarizer is placed : (1) Above the sample (2) Below the sample (3) Below the objective (4) Above the objective
28.	A dichroic mirror is an incorporation of optical accessory in : (1) Electron microscope (2) Fluorescence microscope (3) Simple microscope (4) Stereomicroscope
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30.	Among the following in which methods, Hollow cathode lamps is used as radiation source : (1) Raman spectrophotometer (2) IR spectrophotometer (3) UV-Vis spectrophotometer (4) Atomic absorption spectrophotometer
31.	NIA Stands for : (1) National Investigation Agency (2) National Intelligence Agency (3) National Investigation authority (4) National Interrogation Agency
32.	Among the following the first American serial Killer, Ted Bundy was convicted on the basis of : (1) DNA Profiling evidence (2) Bite marks evidence (3) Toxicological evidence (4) Latent Fingerprints
33.	The first crime laboratory was established in France by Edmond Locard in the year : (1) 1910 (2) 1912 (3) 1906 (4) 1915

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34.	According to the principles/Laws of Forensic Science which emphasizes the necessity of correct sampling and packing for the effective use of experts ? (1) Law of individuality (2) Principle of mutual exchange (3) Principle of comparison (4) Principle of Analysis
35.	Which of the following technique is most commonly used to record measurements for the crime scene sketches : (1) Triangulation (2) Baseline (3) Computer-aided design (4) Polar coordinates
36.	In case of Bank robbery as a Forensic expert which of the following method of crime scene search method will be used : (1) Spiral method (2) Zonal method (3) Strip method (4) Grid method
37.	Sinistrality means : (1) An Ambidextrous individual (2) Right handedness (3) Left handedness (4) Hypodactylic individual

Question No.	Questions
38.	Diacritical marks are : (1) Blotting of ink (2) Marks used with letter or groups of letters (3) Punctuations (4) Embellishments
39.	Among the four places in India where the bank currency notes are printed, select which of the following is not amongst them ? (1) Guntur, Andhra Pradesh (2) Salboni, West Bengal (3) Nashik, Maharashtra (4) Dewas, Madhya Pradesh
40.	The best Preservative for the charred documents is : (1) Poly vinyl chloride solution (2) Poly vinyl acetate (3) Poly vinyl carbonate (4) Formalin
	41. Identify the correct sequence of the closure of skull structure among the following : (1) Sagittal, Temporal, Metopic, Basal (2) Temporal, Basal, Metopic, Sagittal (3) Metopic, basal, Sagittal, Temporal (4) Basal, Temporal, Metopic, Sagittal

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42.	Dilaudid is : (1) Synthetic Cocaine (2) Synthetic Morphine (3) Synthetic Codeine (4) Synthetic THC
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51.	'X' comes home unexpected and sees his wife in bed with 'Z'. He becomes furious and kills 'Z' with a knife which he finds on the shelf nearby. Which of the following crimes 'X' has committed ? (1) Death by rash and negligent act (2) Culpable homicide amounting to murder (3) Voluntary causing of grievious hurt (4) Culpable homicide not amounting to murder
52.	Which of the following can be used to extract acidic drugs from an aqueous solution ? (1) Methanol and Hydrochloric acid (2) Chloroform and acetic acid (3) Chloroform and ammonium hydroxide (4) Ethanol and Sodium hydroxide
53.	What colour Dilli-Koppanyi reagent gives with barbiturate ? (1) Reddish (2) Purple (3) Green (4) Yellow
54.	LSD is derived from which of the following plant ? (1) Cannabis sativa (2) Papaver somniferum (3) Erthroxylum sp. (4) Claviceps purpurea

Question No.	Questions
55.	Parathion is metabolized to which of the following product : (1) o-nitrophenol and ethyl phosphate (2) o-nitrophenol and methyl phosphate (3) p-nitrophenol and diethyl phosphate (4) m-nitrophenol and dimethyl phosphate
56.	The morphine content of opium is standardized in the Government opium factory located at : (1) Ghazipur (2) Ghaziabad (3) Gurgaon (4) Gwalior
57.	Select the poisonous mushroom species among the following : (1) Cantharellus cibarius (2) Amanita phalloides (3) Morchella esculenta (4) Boletus edulis
58.	Pheny-2-propanone and formamide are used for the synthesis of : (1) Lysergide (2) Methamphetamine (3) Amphetamine (4) Methylene dioxymethamphetamine

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59.	In the manufacture of glass, sodium carbonate is added to sand in order to : (1) Reduce its melting point (2) Prevent glass from dissolving in water (3) Reduce viscosity (4) Provide it greater durability
60.	Select among the following in which the slurry explosive are based on : (1) Potassium chlorate (2) Nitrocellulose (3) Nitroglycerine (4) Ammonium Nitrate
61.	Among the following which is not a feature of a female skull ? (1) Roundish shaped orbits (2) Prominent glabella (3) Prominent parietal eminence (4) Prominent frontal eminence
62.	Ashley's rule states that : (1) Total length of sternum in male is greater than 149 mm (2) Total length of sternum in female is greater than 149 mm (3) Sternal body is more than twice the manubrium in males (4) Sternal body is less than twice the manubrium in females

Question No.	Questions
63.	Skull photo superimposition technique was used for the first time in which of the following cases ? (1) Ruxton murder case (2) Ted Bundy case (3) Frye case (4) Daubert case
64.	How many bones are there in appendicular skeleton of human body ? Select among the following : (1) 106 (2) 206 (3) 126 (4) 76
65.	Cusps of Carabelli are observed on : (1) Central Incisors (2) Canines (3) Bicuspids (4) Tricuspids
66.	Casper's dictum is used in relation to : (1) Mummification (2) Post mortem staining (3) Rigor mortis (4) Putrefaction
67.	The following is not a component of Gustafson's method : (1) Attrition (2) Dentition (3) Root resorption (4) Cementum Apposition
68.	Select the appropriate period of mixed dentition that extends between: (1) 4-10 years (2) 4-12 years (3) 6-12 years (4) 8-12 years

Question No.	Questions
69.	The greatest dimension of an incised wound is : (1) Length (2) Breadth (3) Depth (4) Breadth and depth are equal
70.	Post mortem staining in a dead body appears on : (1) Sides of the body (2) Upper parts of the body (3) Middle part of the body (4) Dependent parts of the body
71.	Chronograph is an instrument which measures the following in Forensic Ballistics ? (1) Angle of fire of a gun (2) Trajectory of the projectile (3) Velocity of the projectile (4) Temperature inside the barrel of gun
72.	In the analysis of striated tool marks, the spacings in between the striations change because of : (1) Nature of surface on which the tool acts (2) Angle of progression (3) Both angles of tilt and progression (4) Angle of tile

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76.	Males having a low sperm count suffer from a condition known as : (1) Oligospermia (2) Necrospermia (3) Tertospermia (4) Aszopermia
77.	An examination of the development stages of the insects present on the decomposed corpse may yield valuable information about : (1) The age of the deceased (2) The circumstance surrounding the death (3) The identification of the deceased (4) The poison ingested by the deceased

Question No.	Questions
78.	The scientific name of Chiru is: (1) Antilope cervicapra (2) Pantholops hodgsonii (3) Capra aegagrus (4) Vulpes bengalensis
79.	Christmas Tree stain is used in the identification of : (1) Semen stains (2) Colostrum stains (3) Plant stains (4) Blood stains
80.	The offspring of two parents that are heterozygous for a given trait have a following percent chance of being homozygous for that trait : (1) 10% (2) 25% (3) 50% (4) 100%
81.	In the field of questioned document examination, the Instrument used and named as ESDA stands for: (1) Electrostatic device for detection of alteration (2) Electric system for detection of alteration (3) Electrostatic detection apparatus (4) Electronic state detection appliance
82.	Which of the following method is recommended to develop latent fingerprints on human skin : (1) DFO method (2) Silver-iodine plate transfer method (3) Ninhydrin method (4) Amio black method

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83.	The essentials of a fingerprint with loop pattern are : (1) A sufficient recurve, a core and a ridge count across a looping ridge (2) A sufficient recurve, a core, a ridge count (3) A sufficient recurve, a core and a delta (4) A sufficient recurve, a delta and minimum one ridge
84.	The concept of Poroscopy was given by : (1) Hans Gross (2) Galton (3) Henry (4) Edmond Locard
85.	The book entitled "The Forensic Science-the Basics" is Authored by : (1) Jay A Siegel (2) Paul Kirk (3) Osterburg and O'Hara (4) Saferstein
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90.	MCT detector is used in : (1) FTIR spectrometry (2) Atomic absorption spectrometry (AAS) (3) Gas-Chromatorgraphy-Mass spectrometry (GC-MS) (4) Liquid Chromatography-Mass spectrometry (LC-MS)
91.	Criminalistics can be defined as which of the following : (1) Application of Forensic Science to criminal investigation (2) Application of criminology to criminal investigation (3) Application of social sciences to criminal investigation (4) Application of social sciences to criminal investigation

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92.	The word 'Forensic' word has been derived from : (1) Latin word Forensis (2) Greek word Forensis (3) French word (4) Roman word Forensis
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94.	The "Journal of Forensic Sciences" is published by which of the following Academy ? (1) Indian Academy of Forensic Sciences India (2) American Academy of Forensic Science, USA (3) British Academy of Forensic Sciences, UK (4) European Academy of Forensic Sciences
95.	The first Serologist to the Government of India Department was established in : (1) 1910 (2) 1915 (3) 1947 (4) None of the above
96.	The first chemical examiner's laboratory was set up in India at which place among the following : (1) Mumbai (2) Madras (3) Kolkata (4) Agra

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97.	The first State Forensic Science Laboratory in India was established in the year : (1) 1948 (2) 1950 (3) 1952 (4) 1948
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99.	In India the second CFSL was established during the year 1965 at which place ? (1) Chandigarh (2) Kolkata (3) Hyderabad (4) Delhi
100.	NAAC is the organisation in the country that : (1) Assesses and accredits Forensic Labs (2) Assesses and accredits Hospitals (3) Assesses and accredits private labs only (4) Assesses and accredits higher education Institutions

(Set–"X")

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

(M.Phil/Ph.D/URS–EE–2018)

Subject : FORENSIC SCIENCE

Code **C**

Sr. No. 100015

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 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 / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along with answer key of all the A, B, C, 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 <u>BALL POINT PEN</u> 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.

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51.	In case of scanning electron microscope, secondary electrons : (1) Are emitted by the nucleus of the various elements when the object is struck by a beam of X-rays (2) Are emitted when a beam of primary electrons strikes the object (3) Strike the object and then reflect off the surface (4) Strike the object releasing other electrons
52.	The "fingerprint" region of IR spectrum can be subdivided into the following except : (1) Below 500 cm-1 (2) Below 1000 cm cm-1 (3) 1350-1000 cm-1 (4) 1500-1350 cm-1

Question No.	Questions
53.	The "magic angle" of NMR is at : (1) 60.8 degrees (2) 120 degrees (3) 54.7 degrees (4) 90 degrees
54.	Among the following which of the following statements is Not true ? (1) Handwriting of an individual shows natural variations (2) Alcohol consumption may cause variations in one's handwriting (3) The handwriting of an individual remains unaffected by advancing age (4) The handwriting is affected by space available for writing and may show variations
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62.	Which of the following statements is correct ? (1) Two or more persons may have similar DNA (2) Monozygotic twins have identical DNA (3) Two fingers cannot have identical fingerprints (4) Monozygotic twins have identical fingerprints
63.	.Numerous and short radial fractures in glass indicate that the hole has been caused by a : (1) Stone hurled at glass (2) A high velocity rifle bullet (3) A jacketed bullet fired from revolver (4) A lead bullet fired from revolver
64.	The diameter of 8 bore shot gun is : (1) 0.615 inch (2) 0.835 inch (3) 0.729 inch (4) 0.913 inch

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65.	A technique used to separate sperm cells and non-sperm cells for DNA analysis in rape cases is called : (1) Chelex Extraction method (2) Organic Extraction method (3) QiaAmp Extraction method (4) Differential Extraction method
66.	Select the most appropriate answer that 7.62 mm AK-47 assault rifle has the magazine capacity of : (1) 20 (2) 25 (3) 30 (4) 40
67.	Walker test of GSR is done for the identification of the presence of : (1) Metallic residue (2) Nitrate (3) Sulphur (4) Nitrite
68.	Amatol contains which of the following ? (1) TNT and RDX (2) TNT and Tetryl (3) TNT and PETN (4) TNT and Ammonium nitrate
69.	Calculation of person's stature from fragmented bones is done : (1) Steele and Mc Kern's formula (2) Pearson's formula (3) Trotter and Glesser formula (4) Depertuis and Hadden's formula

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70.	In sex determination from female pelvis all the characteristics are present except : (1) Sub pubic angle is 'V' shaped (2) Greater sciatic notch is wide and shallow (3) Pre-auricular sulcus is prominent (4) Ischial tuberosity if everted
71.	Among the following which is not a feature of a female skull ? (1) Roundish shaped orbits (2) Prominent glabella (3) Prominent parietal eminence (4) Prominent frontal eminence
72.	Ashley's rule states that : (1) Total length of sternum in male is greater than 149 mm (2) Total length of sternum in female is greater than 149 mm (3) Sternal body is more than twice the manubrium in males (4) Sternal body is less than twice the manubrium in females
73.	Skull photo superimposition technique was used for the first time in which of the following cases ? (1) Ruxton murder case (2) Ted Bundy case (3) Frye case (4) Daubert case

Question No.	Questions
74.	How many bones are there in appendicular skeleton of human body ? Select among the following : (1) 106 (2) 206 (3) 126 (4) 76
75.	Cusps of Carabelli are observed on : (1) Central Incisors (2) Canines (3) Bicuspids (4) Tricuspids
76.	Casper's dictum is used in relation to : (1) Mummification (2) Post mortem staining (3) Rigor mortis (4) Putrefaction
77.	The following is not a component of Gustafson's method : (1) Attrition (2) Dentition (3) Root resorption (4) Cementum Apposition
78.	Select the appropriate period of mixed dentition that extends between: (1) 4-10 years (2) 4-12 years (3) 6-12 years (4) 8-12 years
79.	The greatest dimension of an incised wound is : (1) Length (2) Breadth (3) Depth (4) Breadth and depth are equal

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80.	Post mortem staining in a dead body appears on : (1) Sides of the body (2) Upper parts of the body (3) Middle part of the body (4) Dependent parts of the body
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83.	The first crime laboratory was established in France by Edmond Locard in the year : (1) 1910 (2) 1912 (3) 1906 (4) 1915

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84.	According to the principles/Laws of Forensic Science which emphasizes the necessity of correct sampling and packing for the effective use of experts ? (1) Law of individuality (2) Principle of mutual exchange (3) Principle of comparison (4) Principle of Analysis
85.	Which of the following technique is most commonly used to record measurements for the crime scene sketches : (1) Triangulation (2) Baseline (3) Computer-aided design (4) Polar coordinates
86.	In case of Bank robbery as a Forensic expert which of the following method of crime scene search method will be used : (1) Spiral method (2) Zonal method (3) Strip method (4) Grid method
87.	Sinistrality means : (1) An Ambidextrous individual (2) Right handedness (3) Left handedness (4) Hypodactylic individual

Question No.	Questions
88.	Diacritical marks are : (1) Blotting of ink (2) Marks used with letter or groups of letters (3) Punctuations (4) Embellishments
89.	Among the four places in India where the bank currency notes are printed, select which of the following is not amongst them ? (1) Guntur, Andhra Pradesh (2) Salboni, West Bengal (3) Nashik, Maharashtra (4) Dewas, Madhya Pradesh
90.	The best Preservative for the charred documents is : (1) Poly vinyl chloride solution (2) Poly vinyl acetate (3) Poly vinyl carbonate (4) Formalin
91.	The Azlon fibres are of the type of : (1) Regenerated fibres (2) Synthetic fibres (3) Animal fibres (4) Natural fibres

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95.	One nanogram (ng) of DNA can be obtained from approximately : (1) 900-1000 diploid cells (2) 600-700 diploid cells (3) 300-400 diploid cells (4) 100-200 diploid cells
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97.	Comparing SNP markers to STR based analysis, which of the following are true ? (1) There are many more STR Loci in the genome (2) There are many more SNP markers in the human genome than STR (3) SNP loci generally have more alleles than STR loci (4) The number of SNP loci is about the same as the number of STR loci in the genome
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(Set–"X")

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

(M.Phil/Ph.D/URS–EE–2018)

Code **D**

Subject : FORENSIC SCIENCE

Sr. No. 100024

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 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 / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along with answer key of all the A, B, C, 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.

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11.	Identify the correct sequence of the closure of skull structure among the following : (1) Sagittal, Temporal, Metopic, Basal (2) Temporal, Basal, Metopic, Sagittal (3) Metopic, basal, Sagittal, Temporal (4) Basal, Temporal, Metopic, Sagittal
12.	Dilaudid is : (1) Synthetic Cocaine (2) Synthetic Morphine (3) Synthetic Codeine (4) Synthetic THC

Question No.	Questions
13.	The objective of ISO-9000 family of quality management is : (1) Customer satisfaction (2) Employee satisfaction (3) Skill enhancement (4) Environmental issues
14.	Which of the following is the first step in starting the research process : (1) Searching sources of information to locate problem (2) Survey of related literature (3) Identification of problem (4) Searching for solutions to the problem
15.	According to the analysis of digital evidence, what should be the best practice ? (1) Forensic examination of performance directly (2) Design an examination process (3) Create one or more duplicates of the original evidences (4) The documentation and data reduction steps
16.	The most popular software forensic tools include all of the following except : (1) Forensic Toolkit (2) Forensic Autopsy (3) Smart (4) Quicken

Question No.	Questions
17.	Hash value is used by the forensic experts to : (1) To authenticate text data (2) To authenticate images in the given file (3) To authenticate audio/video files (4) To authenticate digital data
18.	Among the following which is the most sensitive technique to isolate petroleum products from different substrates : (1) Solvent extraction technique (2) Solid-phase micro extraction technique (3) Solid phase extraction technique (4) Acidic or alkali steam distillation
19.	Leading questions are not allowed in the examination-in-chief except when the witness is : (1) Hostile witness (2) Paid witness (3) Expert witness (4) Ordinary witness
20.	In the FTA method for collection of biological evidence during DNA analysis: (1) The DNA is eluted off the paper (2) The DNA stays on the paper (3) Cellular materials are washed away (4) FTA paper allows to dry the stain quickly

Question No.	Questions
21.	A plastic explosive 'Kirkee' is essentially the following explosive : (1) 2, 4, 6 Trinitropheny methyl nitramine (2) 2, 4, 6 Trinitrophenol (3) 2, 4, 6 Trinitrotoluene (4) Cyclo Trimethylene Trinitramine
22.	Which of the following statements is correct ? (1) Two or more persons may have similar DNA (2) Monozygotic twins have identical DNA (3) Two fingers cannot have identical fingerprints (4) Monozygotic twins have identical fingerprints
23.	.Numerous and short radial fractures in glass indicate that the hole has been caused by a : (1) Stone hurled at glass (2) A high velocity rifle bullet (3) A jacketed bullet fired from revolver (4) A lead bullet fired from revolver
24.	The diameter of 8 bore shot gun is : (1) 0.615 inch (2) 0.835 inch (3) 0.729 inch (4) 0.913 inch

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40.	What is the scientific/ chemical name of Meow meow's drug ? (1) Amphetamines (2) Mephedrone (3) MDMA (4) Cathinone
41.	In case of scanning electron microscope, secondary electrons : (1) Are emitted by the nucleus of the various elements when the object is struck by a beam of X-rays (2) Are emitted when a beam of primary electrons strikes the object (3) Strike the object and then reflect off the surface (4) Strike the object releasing other electrons

Question No.	Questions
42.	The "fingerprint" region of IR spectrum can be subdivided into the following except : (1) Below 500 cm-1 (2) Below 1000 cm cm-1 (3) 1350-1000 cm-1 (4) 1500-1350 cm-1
43.	The "magic angle" of NMR is at : (1) 60.8 degrees (2) 120 degrees (3) 54.7 degrees (4) 90 degrees
44.	Among the following which of the following statements is Not true ? (1) Handwriting of an individual shows natural variations (2) Alcohol consumption may cause variations in one's handwriting (3) The handwriting of an individual remains unaffected by advancing age (4) The handwriting is affected by space available for writing and may show variations
45.	In Gas chromatography the basis for separations of the components is the difference in : (1) Partition coefficient (2) Conductivity (3) Molecular weight (4) Molarity

Question No.	Questions
46.	Among the following which one is the major difference between gas chromatography (GC) and High pressure liquid Chromatography (HPLC): (1) HPLC always uses at least two liquids in its stationery phase (2) GC has a liquid mobile (3) GC uses columns to hold the mobile phase, whereas HPLC does not (4) GC columns are heated whereas HPLC columns are kept at room temperature
47.	In polarized light microscope, a polarizer is placed : (1) Above the sample (2) Below the sample (3) Below the objective (4) Above the objective
48.	A dichroic mirror is an incorporation of optical accessory in : (1) Electron microscope (2) Fluorescence microscope (3) Simple microscope (4) Stereomicroscope
49.	Among the following techniques which gives more conclusive results for gun short residue detection in shooting cases : (1) Scanning electron microscope with energy dispersive analysis (2) Inductively coupled plasma (ICP) (3) Atomic absorption spectrometry (AAS) (4) Neutron activation analysis (NAA)

Question No.	Questions
50.	Among the following in which methods, Hollow cathode lamps is used as radiation source : (1) Raman spectrophotometer (2) IR spectrophotometer (3) UV-Vis spectrophotometer (4) Atomic absorption spectrophotometer
51.	In the field of questioned document examination, the Instrument used and named as ESDA stands for: (1) Electrostatic device for detection of alteration (2) Electric system for detection of alteration (3) Electrostatic detection apparatus (4) Electronic state detection appliance
52.	Which of the following method is recommended to develop latent fingerprints on human skin : (1) DFO method (2) Silver-iodine plate transfer method (3) Ninhydrin method (4) Amio black method
53.	The essentials of a fingerprint with loop pattern are : (1) A sufficient recurve, a core and a ridge count across a looping ridge (2) A sufficient recurve, a core, a ridge count (3) A sufficient recurve, a core and a delta (4) A sufficient recurve, a delta and minimum one ridge

Question No.	Questions
54.	The concept of Poroscopy was given by : (1) Hans Gross (2) Galton (3) Henry (4) Edmond Locard
55.	The book entitled "The Forensic Science-the Basics" is Authored by : (1) Jay A Siegel (2) Paul Kirk (3) Osterburg and O'Hara (4) Saferstein
56.	Among the following which one form the finger ridges : (1) Minutiae present of the fingers (2) Rows of sweat pores present (3) Dots or islands present (4) Dermal cells present
57.	In case of amputation of one finger, the following print is considered in classification : (1) Index finger of other hand (2) Thumb impression of other hand (3) Corresponding finger of the other hand (4) Next finger of the same hand
58.	Computerised fingerprints search systems match points by comparing : (1) Bifurcations present (2) Ridge endings (3) Both bifurcations and ridge endings (4) Dots present only

Question No.	Questions
59.	Among the following which one does not constitute the fundamental principles of fingerprints : (1) Fingerprint is an individual (2) No two finger have identical ridge characteristics (3) Fingerprints are permanent in nature (4) Fingerprints/ characteristics follow Mendel's law of inheritance
60.	MCT detector is used in : (1) FTIR spectrometry (2) Atomic absorption spectrometry (AAS) (3) Gas-Chromatorgraphy-Mass spectrometry (GC-MS) (4) Liquid Chromatography-Mass spectrometry (LC-MS)
61.	Chronograph is an instrument which measures the following in Forensic Ballistics ? (1) Angle of fire of a gun (2) Trajectory of the projectile (3) Velocity of the projectile (4) Temperature inside the barrel of gun
62.	In the analysis of striated tool marks, the spacings in between the striations change because of : (1) Nature of surface on which the tool acts (2) Angle of progression (3) Both angles of tilt and progression (4) Angle of tile

Question No.	Questions
63.	Among the following which one is the most versatile detector : (1) FID (2) NIPD (3) MS detector (4) UV- detector
64.	What is the alternative test after failure of spermatozoa test for the identification of semen stains ? (1) Acid phosphatase test (2) Choline test (3) Thin layer chromatography (4) Prostate-specific antigen test
65.	Among the following which is the type of biological evidence that contains haploid cells ? (1) Saliva (2) Hair (3) Sperm (4) Blood
66.	Males having a low sperm count suffer from a condition known as : (1) Oligospermia (2) Necrospermia (3) Tertospermia (4) Aszopermia
67.	An examination of the development stages of the insects present on the decomposed corpse may yield valuable information about : (1) The age of the deceased (2) The circumstance surrounding the death (3) The identification of the deceased (4) The poison ingested by the deceased

Question No.	Questions
68.	The scientific name of Chiru is: (1) Antilope cervicapra (2) Pantholops hodgsonii (3) Capra aegagrus (4) Vulpes bengalensis
69.	Christmas Tree stain is used in the identification of : (1) Semen stains (2) Colostrum stains (3) Plant stains (4) Blood stains
70.	The offspring of two parents that are heterozygous for a given trait have a following percent chance of being homozygous for that trait : (1) 10% (2) 25% (3) 50% (4) 100%
71.	'X' comes home unexpected and sees his wife in bed with 'Z'. He becomes furious and kills 'Z' with a knife which he finds on the shelf nearby. Which of the following crimes 'X' has committed ? (1) Death by rash and negligent act (2) Culpable homicide amounting to murder (3) Voluntary causing of grievious hurt (4) Culpable homicide not amounting to murder
72.	Which of the following can be used to extract acidic drugs from an aqueous solution ? (1) Methanol and Hydrochloric acid (2) Chloroform and acetic acid (3) Chloroform and ammonium hydroxide (4) Ethanol and Sodium hydroxide

Question No.	Questions
73.	What colour Dilli-Koppanyi reagent gives with barbiturate ? (1) Reddish (2) Purple (3) Green (4) Yellow
74.	LSD is derived from which of the following plant ? (1) Cannabis sativa (2) Papaver somniferum (3) Erthroxylum sp. (4) Claviceps purpurea
75.	Parathion is metabolized to which of the following product : (1) o-nitrophenol and ethyl phosphate (2) o-nitrophenol and methyl phosphate (3) p-nitrophenol and diethyl phosphate (4) m-nitrophenol and dimethyl phosphate
76.	The morphine content of opium is standardized in the Government opium factory located at : (1) Ghazipur (2) Ghaziabad (3) Gurgaon (4) Gwalior
77.	Select the poisonous mushroom species among the following : (1) Cantharellus cibarius (2) Amanita phalloides (3) Morchella esculenta (4) Boletus edulis

Question No.	Questions
78.	Pheny-2-propanone and formamide are used for the synthesis of : (1) Lysergide (2) Methamphetamine (3) Amphetamine (4) Methylene dioxymethamphetamine
79.	In the manufacture of glass, sodium carbonate is added to sand in order to : (1) Reduce its melting point (2) Prevent glass from dissolving in water (3) Reduce viscosity (4) Provide it greater durability
80.	Select among the following in which the slurry explosive are based on : (1) Potassium chlorate (2) Nitrocellulose (3) Nitroglycerine (4) Ammonium Nitrate
81.	Criminalistics can be defined as which of the following : (1) Application of Forensic Science to criminal investigation (2) Application of criminology to criminal investigation (3) Application of social sciences to criminal investigation (4) Application of social sciences to criminal investigation

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82.	The word 'Forensic' word has been derived from : (1) Latin word Forensis (2) Greek word Forensis (3) French word (4) Roman word Forensis
83.	The principle global site of South Asia for opium production that constitute Golden Crescent are the following except : (1) Iran (2) Thailand (3) Pakistan (4) Afghanistan
84.	The "Journal of Forensic Sciences" is published by which of the following Academy ? (1) Indian Academy of Forensic Sciences India (2) American Academy of Forensic Science, USA (3) British Academy of Forensic Sciences, UK (4) European Academy of Forensic Sciences
85.	The first Serologist to the Government of India Department was established in : (1) 1910 (2) 1915 (3) 1947 (4) None of the above
86.	The first chemical examiner's laboratory was set up in India at which place among the following : (1) Mumbai (2) Madras (3) Kolkata (4) Agra

Question No.	Questions
87.	The first State Forensic Science Laboratory in India was established in the year : (1) 1948 (2) 1950 (3) 1952 (4) 1948
88.	Dying Deposition is recorded by : (1) Relative of the victim (2) Medical Officer (3) Police Officer (4) Magistrate
89.	In India the second CFSL was established during the year 1965 at which place ? (1) Chandigarh (2) Kolkata (3) Hyderabad (4) Delhi
90.	NAAC is the organisation in the country that : (1) Assesses and accredits Forensic Labs (2) Assesses and accredits Hospitals (3) Assesses and accredits private labs only (4) Assesses and accredits higher education Institutions
91.	Among the following which is not a feature of a female skull ? (1) Roundish shaped orbits (2) Prominent glabella (3) Prominent parietal eminence (4) Prominent frontal eminence

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Maharshi Dayanand University Rohtak
Department of Genetics
Answer Key for PhD/URS Entrance Test in Forensic Science (Nov, 2018)

Que. No	Set A	Set B	Set C	Set D
1.	1	1	3	1
2.	1	2	2	2
3.	2	2	4	1
4.	2	2	4	4
5.	1	4	3	4
6.	2	3	1	2
7.	3	4	4	3
8.	4	4	2	2
9.	1	1	1	1
10.	4	1	2	2
11.	1	1	3	3
12.	2	1	2	2
13.	1	1	4	1
14.	4	4	4	3
15.	4	4	1	4
16.	2	1	2	4
17.	3	2	3	4
18.	2	4	3	2
19.	1	1	4	1
20.	2	2	1	2
21.	3	2	1	1
22.	2	1	1	2
23.	4	3	2	2
24.	4	3	2	2
25.	1	1	1	4
26.	2	4	2	3
27.	3	2	3	4
28.	3	2	4	4
29.	4	1	1	1
30.	1	4	4	1
31.	2	1	3	1
32.	1	2	2	1
33.	3	1	1	1
34.	3	4	3	4

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35.	1	4	4	4
36.	4	2	4	1
37.	2	3	4	2
38.	2	2	2	4
39.	1	1	1	1
40.	4	2	2	2
41.	3	3	4	2
42.	2	2	2	1
43.	4	1	2	3
44.	4	3	4	3
45.	3	4	3	1
46.	1	4	1	4
47.	4	4	2	2
48.	2	2	3	2
49.	1	1	1	1
50.	2	2	4	4
51.	1	4	2	3
52.	1	2	1	2
53.	1	2	3	4
54.	4	4	3	4
55.	4	3	1	1
56.	1	1	4	2
57.	2	2	2	3
58.	4	3	2	3
59.	1	1	1	4
60.	2	4	4	1
61.	4	2	1	3
62.	2	1	2	2
63.	2	1	2	4
64.	4	3	2	4
65.	3	4	4	3
66.	1	4	3	1
67.	2	2	4	4
68.	3	3	4	2
69.	1	1	1	1
70.	4	4	1	2
71.	1	3	2	4
72.	2	2	1	2
73.	2	4	1	2
74.	2	4	3	4
75.	4	3	4	3

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76.	3	1	4	1
77.	4	4	2	2
78.	4	2	3	3
79.	1	1	1	1
80.	1	2	4	4
81.	2	3	1	1
82.	1	2	2	1
83.	1	4	1	2
84.	3	4	4	2
85.	4	1	4	1
86.	4	2	2	2
87.	2	3	3	3
88.	3	3	2	4
89.	1	4	1	1
90.	4	1	2	4
91.	3	1	1	2
92.	2	1	1	1
93.	1	2	1	1
94.	3	2	4	3
95.	4	1	4	4
96.	4	2	1	4
97.	4	3	2	2
98.	2	4	4	3
99.	1	1	1	1
100.	2	4	2	4

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