

used for Jumbling

11/2/2022

11/2/22

Total No. of Printed Pages : 13

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

A

SET-X

Ph.D./URS-EE-Jan-2022
SUBJECT : Forensic Science

10005

Sr. No.

Time : 1¼ Hours Max. Marks : 100 Total Questions : 100
Roll No. (in figures) _____ (in words) _____
Name _____ Father's Name _____
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(Signature of the Candidate) (Signature of the Invigilator)

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PHD/URS-EE-2022/(Forensic Sci.)(SET-X)/(A)

1. In Latin, the term "Forensic" means :
 - (1) After the forum
 - (2) Belonging to the forum
 - (3) Beside the forum
 - (4) For the forum
2. Forensic science laboratories are accredited by :
 - (1) NAAC
 - (2) NABL
 - (3) CSIR
 - (4) BARC
3. IPC is :
 - (1) Procedure for investigation
 - (2) Code for punishment
 - (3) Both (1) and (2)
 - (4) None of the above
4. The DNA evidence database is called :
 - (1) CODIS
 - (2) CODNA
 - (3) CCDNA
 - (4) CODIA
5. The fingerprint evidence database is called :
 - (1) FIA
 - (2) AFES
 - (3) AAES
 - (4) AFIS
6. Trichology is the study of :
 - (1) Hair
 - (2) Lips
 - (3) Skin
 - (4) Nails
7. Who invented the DNA fingerprinting technique ?
 - (1) Kary Mullis
 - (2) Henry Faulds
 - (3) Alec Jeffreys
 - (4) Calvin Goddard
8. The Federal Bureau of Investigation (FBI) was established in :
 - (1) 1905
 - (2) 1906
 - (3) 1907
 - (4) 1908

9. Who first devised a system of personal identification using a series of body measurements ?
- (1) Alphonse Bertillon (2) Hans Gross
(3) Edmond Locard (4) Henry Faulds
10. The comparison microscope became an indispensable tool of firearm examination through the efforts of :
- (1) Hans Gross (2) Calvin Goddard
(3) Paul Kirk (4) Edmond Locard
11. GEQD (Government Examiner of Questioned Documents) was first established at :
- (1) 1906, Calcutta (2) 1906, Shimla
(3) 1906, Delhi (4) 1906, Chandigarh
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- (1) Hacking and tracking (2) Installing anti-virus
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- (1) 464-IPC (2) 463-IPC
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- (1) Aluminium (2) Silver
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- (1) Entomology (2) Dactyloscopy
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A A

body

17. Which of the following is the most common fingerprint pattern :

- (1) Whorls (2) Loops
(3) Composites (4) Arches

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18. Iodine fuming method works best for fingerprints on :

- (1) Paper (2) Wood
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- (1) The fingerprints which are visible to the naked eye
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20. When a person tries to reproduce the writing as perfectly as possible of another person, then the writing is known as ?

- (1) Disguised writing (2) Anonymous writing
(3) Secret Writing (4) Imitated writing

21. In gas chromatography technique, which of the following carrier gases is not suitable ?

- (1) Nitrogen (2) Oxygen
(3) Helium (4) Argon

22. NMR stands for :

- (1) Nuclear Magnetic Resonance (2) Normal Magnetic Resonance
(3) Nuclei Magnetic Resonance (4) Non Magnetic Resonance

23. The first chromatographic technique was invented by :

- (1) M Tswett (2) J Martin
(3) S Syngé (4) A Doglas

24. Which of the following can not be determined by using radioimmunoassay ?

- (1) Drugs (2) Antigens
(3) Toxicants (4) Metals ions

25. The word "Chroma" means :

- (1) To write (2) To draw
(3) Pigments (4) Color

26. The specific type of protein residing in the plasma are :
(1) Antigens (2) Antibodies
(3) WBCs (4) All of the above
27. WCOT (Wall Coated Open Tubular) columns are commonly called capillary columns because :
(1) inner diameters are small
(2) inner diameters are wide
(3) wall coated with a material acting as mobile phase
(4) None of these
28. Who is known as the Father of Microscopy ?
(1) Ernest Abbe (2) Zaccharias Janssen
(3) Robert Hooke (4) Anton Van Leewenhock
29. Human eye is unable to distinguish the objects smaller than :
(1) 0.5 mm (2) 0.1 mm
(3) 5 mm (4) 16 mm
30. Blood alcohol concentration is measured in :
(1) Weight /Weight percent (2) Weight/Volume percent
(3) Volume /Volume percent (4) Volume/Weight percent
31. Blood is a :
(1) Cell (2) Muscle
(3) Connective tissue (4) Ligament
32. Nylon is obtained by :
(1) Treating wood pulp (2) Solidifying water
(3) Mixing coal, air and water (4) Mixing chemicals
33. Polyester is a repeating unit of :
(1) Beads (2) Ester
(3) Propene (4) None

34. SVSA is :
- (1) Saliva vesicle specific antigen (2) Seminal vesicle specific antigen
(3) Seminal viscous specific antigen (4) Saliva vesicle specific antibody
35. The chemical name of end product of Teichmann test is :
- (1) Ferriprotoporphyrin chloride (2) Ferroprotoporphyrin chloride
(3) Ferrous chloride (4) Pyridine ferroprotoporphyrin
36. Red blood cells are produced in :
- (1) Bone marrow (2) Spleen
(3) Liver (4) Heart
37. What is LDH (Lactate Dehydrogenase) a marker of :
- (1) Regulate amount of water in the body
(2) Cell and tissue damage in the body
(3) Overactivity
(4) Osmolarity of the urine
38. Barberio's test serves the purpose of identification of :
- (1) Choline (2) Creatinine
(3) Spermine (4) Lecithine
39. ABO blood group was discovered by :
- (1) Karl Landsteiner, 1911 (2) Leone Lattes, 1911
(3) Dacatello and Sturli, 1900 (4) Von Dungem and Hirezfeld, 1900
40. Type A blood group have which of the following set of antigen (Ag) and antibody (Ab) :
- (1) B-Ag, b-Ab (2) A-Ag, a-Ab
(3) A-Ag, b-Ab (4) A-Ag, no Ab
41. Plasma consists of :
- (1) Water (2) Proteins
(3) Blood cells (4) All of the above
42. Which of the following is used to test the presence of semen ?
- (1) Acid Phosphatase (2) TMB
(3) Luminol (4) Flurorocin

43. Nitrites in the saliva are detected by :
(1) Takayama test (2) Griess test
(3) Rhions test (4) Both (1) and (3)
44. Dried blood stain should be packed in :
(1) Paper Bag (2) Plastic Bag
(3) Glass Jar (4) None of the above
45. PSA (Prostate Specific Antigen) is a member of which peptidase family :
(1) Kallikrein (2) Flavine
(3) Spermine (4) None of the above
46. The complimentary base pairs among four nucleotides (A,T,C,G) are as :
(1) A=G AND T=C (2) A=C AND G=T
(3) A=T AND G=C (4) All of the above
47. Oligospermia is a condition of :
(1) Absence of live spermatozoa in semen
(2) Low sperm count
(3) Presence of live spermatozoa in semen
(4) No sperm in seminal fluid
48. Phadebas test is a common presumptive test of based on detection of.....
(1) Semen, Acid Phosphatase (2) Semen, PSA
(3) Saliva, α -amylase (4) Urine, Creatinine
49. The red coloured compound formed during Jaffe's test is :
(1) Creatinine Picrate (2) Ammonia
(3) Urea (4) None of the above
50. If the blood groups of both parents are O and AB, then the possible blood group of child will be
(1) A, B (2) O, A
(3) A, B, AB (4) O, A, B, AB.
51. When alcohol is burned, the flame is of which colour among the following ?
(1) Red (2) Yellow-orange
(3) Blue (4) Blue -orange

A

52. What is not considered a part of fire triangle ?
(1) Heat (2) Oxygen
(3) Combustion (4) Fuel
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(3) Phenyl-azo-2-naphthol (4) Anthraquinone
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(1) Oxidation (2) Reduction
(3) Pyrolysis (4) None of the mentioned
56. The material obtained after poppy straw has been subjected to a process for the concentration of its alkaloids is called :
(1) Poppy straw (2) Poppy straw concentrate
(3) Both (1) and (2) (4) None of these
57. Cannabis resin is also known as :
(1) Bhang (2) Ganja
(3) Charas (4) Cocaine
58. Which day is marked as International Day against Drug Abuse and Illicit drug trends by UNODC (The United Nations Office on Drugs and Crime) ?
(1) 9, December (2) 26, June
(3) 26, December (4) 9, June
59. Theme for International Day against Drug abuse and Illicit Trafficking 2020 was ?
(1) Better Knowledge for Better Care
(2) Justice and Health are two sides of the same coin when it comes to addressing drug problems
(3) Listen First - Listening to children and youth is the first step to help them grow healthy and safe
(4) None of these

60. Which drug is most commonly used by sportsmen for doping ?
(1) Insulin (2) Cannabinoids
(3) Anabolic steroids (4) Opioids
61. Alfred Nobel discovered :
(1) Dynamite (2) GSR
(3) RDX (4) Black Powder
62. TNT stands for and a type of :
(1) Tri nitro toluene, Primary High Explosive
(2) Tri nitro toluene, Secondary High Explosive
(3) Tetra Nitro Toluene, Low Explosive
(4) Tri nitrite toluene, Primary Explosive
63. The Modified Griess test is specific for determination of in gun powder residue.
(1) Nitrate (2) Nitrite
(3) Antimony (4) Barium
64. The barrel and breech block are locked together for the full distance of the recoil stroke in which of the following actions :
(1) Short recoil (2) Long recoil
(3) Pump action (4) Slide action
65. Rifling marks on fired bullet are of following type :
(1) Integrated marks (2) Striation marks
(3) Cut marks (4) Compression marks
66. Gun cotton is another name of :
(1) Nitroglycerine (2) Nitrocellulose
(3) Gun Powder (4) GSR
67. $C = w/id^2$ is used to calculate the :
(1) The Ballistic Coefficient (2) Muzzle velocity
(3) Range (4) Angle of fall
68. Zip gun is a :
(1) Improvised firearm (2) 12 bore gun
(3) Automatic gun (4) AK-47

69. PETN+ RDX is a composition of which of the following military explosive :

- (1) Semetex (2) Octol
(3) Pentilite (4) Tetrytol

70. Which of the following is *not* a high explosive :

- (1) TNT (2) RDX
(3) Amatol (4) Nitrocellulose

71. The study of the measurements of cranium is called :

- (1) Mandibulometry (2) Craniometry
(3) Somatoscopy (4) All of the above

72. The number of bones in vertebral column is :

- (1) 23 (2) 24
(3) 25 (4) 26

73. Karl Pearson's formula is used for estimation of :

- (1) Cephalic index (2) Stature
(3) Age (4) Race

74. Which of the following are bone destroying cells ?

- (1) Osteoblasts (2) Osteoclasts
(3) Osteocytes (4) None of these

75. The quantitative measurements of human body is :

- (1) Anthropometry (2) Anthroposcopy
(3) Osteology (4) Osteometry

76. Most useful bone for sex estimation :

- (1) Skull (2) Femur
(3) Pelvis (4) Tibia

77. Odontometry is the :

- (1) Measurements of skull (2) Measurements of teeth
(3) Measurements of bone (4) None of these

78. Physical anthropology is also known as :

- (1) Biological Anthropology (2) Forensic Anthropology
(3) Archaeology (4) Cultural Anthropology

79. Teeth are harder than bone and are the last part of the body to be broken down or destroyed. Which component of the teeth is the hardest substance in the human body ?
- (1) Dentine (2) Cementum
(3) Enamel (4) Plaque
80. Linea aspera is located on :
- (1) Skull (2) Pelvis
(3) Femur (4) Ribs
81. Cadaveric spasm is seen in :
- (1) Hands (2) Brain
(3) Legs (4) Neck muscles
82. Section 176 of CrPc is related to :
- (1) Police inquest (2) Magistrate inquest
(3) Coroner inquest (4) Summons
83. Green colour of contusion is due to :
- (1) Biliverdin (2) Hemosiderin
(3) Hematoidin (4) De-oxyhemoglobin
84. Hypothermia is the :
- (1) Exposure to cold temperature
(2) Exposure to hot temperature
(3) Exposure to moderate temperature
(4) Exposure to non uniform temperature
85. Tache noire refers to :
- (1) Maggots growth
(2) Marbling
(3) Reddish brown discoloration arranged across the sclera
(4) Cooling of body
86. Which of the following is a series of standards dealing with quality management systems ?
- (1) ISO 9000 (2) ISO 9001
(3) ISO 9002 (4) ISO 9003

87. For preservation of shoeprint/tire marks on soft earth, the best way is :
- (1) with an electrostatic device
 - (2) photography and casting
 - (3) rough/ finished sketch
 - (4) using a high voltage electrode
88. Charred documents should be packed in :
- (1) Plastic envelope
 - (2) Paper bag
 - (3) Zip-lock bag
 - (4) In a cardboard box with cotton under sample/evidence
89. Hostile witness is the one who :
- (1) A log of everyone who has entered a crime scene
 - (2) Threatens the judge.
 - (3) Threatens the prosecutor.
 - (4) Offers adverse testimony to the calling party during direct examination
90. Which of the following is *not* a method used in Forensic Science ?
- (1) Rejection of results that do not support the hypothesis under the tests.
 - (2) Comparison between the items generated in the laboratory and those found at the crime scene.
 - (3) Comparison between the items found at a crime scene with those held on a database.
 - (4) Rejection of the hypothesis under test if it is refuted by the results of experimentation
91. Chemical etching is a method for restoration of erased marks on :
- | | |
|-------------|-------------|
| (1) Wood | (2) Metal |
| (3) Plastic | (4) Leather |
92. Which hair growth phase is known as the resting phase ?
- | | |
|-------------------|-------------------|
| (1) Catagen Phase | (2) Anagen Phase |
| (3) Telogen Phase | (4) None of these |
93. 'Mohair' is obtained from :
- | | |
|------------------|-------------------|
| (1) Angora Goat | (2) Angora Rabbit |
| (3) Asiatic Goat | (4) Alpaca |

94. 3R rule defines :
- (1) Radial cracks are at right angles to the rear (side opposite the impact).
 - (2) Radial crack forms a right angle on the side of impact.
 - (3) Series of broken circles originate from the opposite side of radial fractures.
 - (4) Rib lines tangent to one side of glass and perpendicular to side that breaks first.
95. The study of 'soil' is called :
- (1) Pedology
 - (2) Edhaphology
 - (3) Phycology
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96. Polygraph test means :
- (1) Lie detection test
 - (2) Hypnosis
 - (3) Doping
 - (4) PCR test
97. Narco is derived from the Greek word '*narke*' which means :
- (1) Anesthesia
 - (2) Asphyxia
 - (3) Smothering
 - (4) Choking
98. P-300 test is another name of :
- (1) Brain mapping
 - (2) Narco analysis
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99. The volatile memory of the computer is known as :
- (1) RAM
 - (2) ROM
 - (3) CPU
 - (4) None of these
100. What is the name of the IT law that India is having in the Indian Legislature ?
- (1) India's Technology Act (IT) ,2000
 - (2) India's Digital Information Technology Act, 2000
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used for Jumbling

11/2/2022
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Total No. of Printed Pages : 13

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

C

SET-X

Ph.D./URS-EE-Jan-2022
SUBJECT : Forensic Science

10003

Time : 1¼ Hours Max. Marks : 100 Total Questions : 100
Roll No. (in figures) _____ (in words) _____
Name _____ Father's Name _____
Mother's Name _____ Date of Examination _____

Sr. No.

(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 booklet 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 booklet itself. Answers **must not** be ticked in the question booklet.
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 booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.**

PHD/URS-EE-2022/(Forensic Sci.)(SET-X)/(C)

C

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32. Which hair growth phase is known as the resting phase ?
(1) Catagen Phase (2) Anagen Phase
(3) Telogen Phase (4) None of these
33. 'Mohair' is obtained from :
(1) Angora Goat (2) Angora Rabbit
(3) Asiatic Goat (4) Alpaca
34. 3R rule defines :
(1) Radial cracks are at right angles to the rear (side opposite the impact).
(2) Radial crack forms a right angle on the side of impact.
(3) Series of broken circles originate from the opposite side of radial fractures.
(4) Rib lines tangent to one side of glass and perpendicular to side that breaks first.

35. The study of 'soil' is called :
- (1) Pedology (2) Edhaphology
(3) Phycology (4) Palynology
36. Polygraph test means :
- (1) Lie detection test (2) Hypnosis
(3) Doping (4) PCR test
37. Narco is derived from the Greek word 'narke' which means :
- (1) Anesthesia (2) Asphyxia
(3) Smothering (4) Choking
38. P-300 test is another name of :
- (1) Brain mapping (2) Narco analysis
(3) PSA test (4) Hypnosis
39. The volatile memory of the computer is known as :
- (1) RAM (2) ROM
(3) CPU (4) None of these
40. What is the name of the IT law that India is having in the Indian Legislature ?
- (1) India's Technology Act (IT) ,2000
(2) India's Digital Information Technology Act, 2000
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61. The study of the measurements of cranium is called :

- (1) Mandibulometry (2) Craniometry
(3) Somatoscopy (4) All of the above

62. The number of bones in vertebral column is :

- (1) 23 (2) 24
(3) 25 (4) 26

63. Karl Pearson's formula is used for estimation of :

- (1) Cephalic index (2) Stature
(3) Age (4) Race

64. Which of the following are bone destroying cells ?

- (1) Osteoblasts (2) Osteoclasts
(3) Osteocytes (4) None of these

65. The quantitative measurements of human body is :

- (1) Anthropometry (2) Anthroposcopy
(3) Osteology (4) Osteometry

66. Most useful bone for sex estimation :

- (1) Skull (2) Femur
(3) Pelvis (4) Tibia

67. Odontometry is the :

- (1) Measurements of skull (2) Measurements of teeth
(3) Measurements of bone (4) None of these

68. Physical anthropology is also known as :

- (1) Biological Anthropology (2) Forensic Anthropology
(3) Archaeology (4) Cultural Anthropology

69. Teeth are harder than bone and are the last part of the body to be broken down destroyed. Which component of the teeth is the hardest substance in the human body

- (1) Dentine (2) Cementum
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 - (2) 1906, Shimla
 - (3) 1906, Delhi
 - (4) 1906, Chandigarh
82. Which of the following is *not* a type of cyber-crime ?
- (1) Hacking and tracking
 - (2) Installing anti-virus
 - (3) Data theft
 - (4) Forgery
83. Forgery has been defined in the section :
- (1) 464-IPC
 - (2) 463-IPC
 - (3) 462-IPC
 - (4) 127-IEA
84. The security thread of currency notes is made up of :
- (1) Aluminium
 - (2) Silver
 - (3) Gold
 - (4) Copper

C

85. In handwriting examination, a short initial or terminal stroke is :
 (1) Embellishment (2) Hiatus
 (3) Spur (4) Connecting stroke
86. The study of fingerprints is known as :
 (1) Entomology (2) Dactyloscopy
 (3) Onychology (4) Palynology
87. Which of the following is the most common fingerprint pattern :
 (1) Whorls (2) Loops
 (3) Composites (4) Arches
88. Iodine fuming method works best for fingerprints on :
 (1) Paper (2) Wood
 (3) Plastic (4) Foot
89. Latent fingerprints are :
 (1) The fingerprints which are visible to the naked eye
 (2) The fingerprints which are not visible to the naked eye
 (3) The fingerprints made with the ink
 (4) The fingerprints on pliable surfaces
90. When a person tries to reproduce the writing as perfectly as possible of another person, then the writing is known as ?
 (1) Disguised writing (2) Anonymous writing
 (3) Secret Writing (4) Imitated writing
91. When alcohol is burned, the flame is of which colour among the following ?
 (1) Red (2) Yellow-orange
 (3) Blue (4) Blue -orange
92. What is not considered a part of fire triangle ?
 (1) Heat (2) Oxygen
 (3) Combustion (4) Fuel
93. The lowest temperature at which a liquid fuel produces enough vapor to burn is the ?
 (1) Flame temperature (2) Flash point
 (3) Ignition temperature (4) Origin point

94. Which of the following is used to color motor gasoline ?
- (1) Eosine (2) Erythrosine
(3) Phenyl-azo-2-naphthol (4) Anthraquinone
95. The chemical breakdown of a solid material to gaseous products is called :
- (1) Oxidation (2) Reduction
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96. The material obtained after poppy straw has been subjected to a process for the concentration of its alkaloids is called :
- (1) Poppy straw (2) Poppy straw concentrate
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98. Which day is marked as International Day against Drug Abuse and Illicit drug trends by UNODC (The United Nations Office on Drugs and Crime) ?
- (1) 9, December (2) 26, June
(3) 26, December (4) 9, June
99. Theme for International Day against Drug abuse and Illicit Trafficking 2020 was ?
- (1) Better Knowledge for Better Care
(2) Justice and Health are two sides of the same coin when it comes to addressing drug problems
(3) Listen First - Listening to children and youth is the first step to help them grow healthy and safe :
(4) None of these
100. Which drug is most commonly used by sportsmen for doping ?
- (1) Insulin (2) Cannabinoids
(3) Anabolic steroids (4) Opioids

used for Jumbling

11/2/2022

11/2/2022

Total No. of Printed Pages : 13

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

D

SET-X

Ph.D./URS-EE-Jan-2022

SUBJECT : Forensic Science

10004

Sr. No.

Time : 1¼ Hours

Max. Marks : 100

Total Questions : 100

Roll No. (in figures) _____ (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 booklet 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 booklet itself. Answers **must not** be ticked in the question booklet.
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 booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.**

PHD/URS-EE-2022/(Forensic Sci.)(SET-X)/(D)

1. The study of the measurements of cranium is called :
 - (1) Mandibulometry
 - (2) Craniometry
 - (3) Somatoscopy
 - (4) All of the above
2. The number of bones in vertebral column is :
 - (1) 23
 - (2) 24
 - (3) 25
 - (4) 26
3. Karl Pearson's formula is used for estimation of :
 - (1) Cephalic index
 - (2) Stature
 - (3) Age
 - (4) Race
4. Which of the following are bone destroying cells ?
 - (1) Osteoblasts
 - (2) Osteoclasts
 - (3) Osteocytes
 - (4) None of these
5. The quantitative measurements of human body is :
 - (1) Anthropometry
 - (2) Anthroposcopy
 - (3) Osteology
 - (4) Osteometry
6. Most useful bone for sex estimation :
 - (1) Skull
 - (2) Femur
 - (3) Pelvis
 - (4) Tibia
7. Odontometry is the :
 - (1) Measurements of skull
 - (2) Measurements of teeth
 - (3) Measurements of bone
 - (4) None of these
8. Physical anthropology is also known as :
 - (1) Biological Anthropology
 - (2) Forensic Anthropology
 - (3) Archaeology
 - (4) Cultural Anthropology
9. Teeth are harder than bone and are the last part of the body to be broken down or destroyed. Which component of the teeth is the hardest substance in the human body ?
 - (1) Dentine
 - (2) Cementum
 - (3) Enamel
 - (4) Plaque

10. Linea aspera is located on :
(1) Skull (2) Pelvis
(3) Femur (4) Ribs
11. When alcohol is burned, the flame is of which colour among the following ?
(1) Red (2) Yellow-orange
(3) Blue (4) Blue -orange
12. What is not considered a part of fire triangle ?
(1) Heat (2) Oxygen
(3) Combustion (4) Fuel
13. The lowest temperature at which a liquid fuel produces enough vapor to burn is the ?
(1) Flame temperature (2) Flash point
(3) Ignition temperature (4) Origin point
14. Which of the following is used to color motor gasoline ?
(1) Eosine (2) Erythrosine
(3) Phenyl-azo-2- naphthol (4) Anthraquinone
15. The chemical breakdown of a solid material to gaseous products is called :
(1) Oxidation (2) Reduction
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- (1) Better Knowledge for Better Care
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 - (3) Listen First - Listening to children and youth is the first step to help them grow healthy and safe
 - (4) None of these
20. Which drug is most commonly used by sportsmen for doping ?
- (1) Insulin
 - (2) Cannabinoids
 - (3) Anabolic steroids
 - (4) Opioids
21. Blood is a :
- (1) Cell
 - (2) Muscle
 - (3) Connective tissue
 - (4) Ligament
22. Nylon is obtained by :
- (1) Treating wood pulp
 - (2) Solidifying water
 - (3) Mixing coal, air and water
 - (4) Mixing chemicals
23. Polyester is a repeating unit of :
- (1) Beads
 - (2) Ester
 - (3) Propene
 - (4) None
24. SVSA is :
- (1) Saliva vesicle specific antigen
 - (2) Seminal vesicle specific antigen
 - (3) Seminal viscous specific antigen
 - (4) Saliva vesicle specific antibody
25. The chemical name of end product of Teichmann test is :
- (1) Ferriprotoporphyrin chloride
 - (2) Ferroprotoporphyrin chloride
 - (3) Ferrous chloride
 - (4) Pyridine ferroprotoporphyrin
26. Red blood cells are produced in :
- (1) Bone marrow
 - (2) Spleen
 - (3) Liver
 - (4) Heart

27. What is LDH (Lactate Dehydrogenase) a marker of :
 (1) Regulate amount of water in the body
 (2) Cell and tissue damage in the body
 (3) Overactivity
 (4) Osmolarity of the urine
28. Barberio's test serves the purpose of identification of :
 (1) Choline
 (2) Creatinine
 (3) Spermine
 (4) Lecithine
29. ABO blood group was discovered by :
 (1) Karl Landsteiner, 1911
 (2) Leone Lattes, 1911
 (3) Dacatello and Sturli, 1900
 (4) Von Dungem and Hirezfeld, 1900
30. Type A blood group have which of the following set of antigen (Ag) and antibody (Ab) :
 (1) B-Ag, b-Ab
 (2) A-Ag, a-Ab
 (3) A-Ag, b-Ab
 (4) A-Ag, no Ab
31. GEQD (Government Examiner of Questioned Documents) was first established at :
 (1) 1906, Calcutta
 (2) 1906, Shimla
 (3) 1906, Delhi
 (4) 1906, Chandigarh
32. Which of the following is **not** a type of cyber-crime ?
 (1) Hacking and tracking
 (2) Installing anti-virus
 (3) Data theft
 (4) Forgery
33. Forgery has been defined in the section :
 (1) 464-IPC
 (2) 463-IPC
 (3) 462-IPC
 (4) 127-IEA
34. The security thread of currency notes is made up of :
 (1) Aluminium
 (2) Silver
 (3) Gold
 (4) Copper
35. In handwriting examination, a short initial or terminal stroke is :
 (1) Embellishment
 (2) Hiatus
 (3) Spur
 (4) Connecting stroke

D

36. The study of fingerprints is known as :
- | | |
|----------------|------------------|
| (1) Entomology | (2) Dactyloscopy |
| (3) Onychology | (4) Palynology |
37. Which of the following is the most common fingerprint pattern :
- | | |
|----------------|------------|
| (1) Whorls | (2) Loops |
| (3) Composites | (4) Arches |
38. Iodine fuming method works best for fingerprints on :
- | | |
|-------------|----------|
| (1) Paper | (2) Wood |
| (3) Plastic | (4) Foot |
39. Latent fingerprints are :
- (1) The fingerprints which are visible to the naked eye
 - (2) The fingerprints which are not visible to the naked eye
 - (3) The fingerprints made with the ink
 - (4) The fingerprints on pliable surfaces
40. When a person tries to reproduce the writing as perfectly as possible of another person, then the writing is known as ?
- | | |
|-----------------------|-----------------------|
| (1) Disguised writing | (2) Anonymous writing |
| (3) Secret Writing | (4) Imitated writing |
41. Chemical etching is a method for restoration of erased marks on :
- | | |
|-------------|-------------|
| (1) Wood | (2) Metal |
| (3) Plastic | (4) Leather |
42. Which hair growth phase is known as the resting phase ?
- | | |
|-------------------|-------------------|
| (1) Catagen Phase | (2) Anagen Phase |
| (3) Telogen Phase | (4) None of these |
43. 'Mohair' is obtained from :
- | | |
|------------------|-------------------|
| (1) Angora Goat | (2) Angora Rabbit |
| (3) Asiatic Goat | (4) Alpaca |

44. 3R rule defines :
- (1) Radial cracks are at right angles to the rear (side opposite the impact).
 - (2) Radial crack forms a right angle on the side of impact.
 - (3) Series of broken circles originate from the opposite side of radial fractures.
 - (4) Rib lines tangent to one side of glass and perpendicular to side that breaks first.
45. The study of 'soil' is called :
- | | |
|---------------|-----------------|
| (1) Pedology | (2) Edhaphology |
| (3) Phycology | (4) Palynology |
46. Polygraph test means :
- | | |
|------------------------|--------------|
| (1) Lie detection test | (2) Hypnosis |
| (3) Doping | (4) PCR test |
47. Narco is derived from the Greek word '*narke*' which means :
- | | |
|----------------|--------------|
| (1) Anesthesia | (2) Asphyxia |
| (3) Smothering | (4) Choking |
48. P-300 test is another name of :
- | | |
|-------------------|--------------------|
| (1) Brain mapping | (2) Narco analysis |
| (3) PSA test | (4) Hypnosis |
49. The volatile memory of the computer is known as :
- | | |
|---------|-------------------|
| (1) RAM | (2) ROM |
| (3) CPU | (4) None of these |
50. What is the name of the IT law that India is having in the Indian Legislature ?
- (1) India's Technology Act (IT) ,2000
 - (2) India's Digital Information Technology Act, 2000
 - (3) India's Information Technology (IT) Act, 2000
 - (4) The Technology Act, 2000.
51. Alfred Nobel discovered :
- | | |
|--------------|------------------|
| (1) Dynamite | (2) GSR |
| (3) RDX | (4) Black Powder |

52. TNT stands for and a type of :
- (1) Tri nitro toluene, Primary High Explosive
 - (2) Tri nitro toluene, Secondary High Explosive
 - (3) Tetra Nitro Toluene, Low Explosive
 - (4) Tri nitrite toluene, Primary Explosive
53. The Modified Griess test is specific for determination of in gun powder residue.
- (1) Nitrate
 - (2) Nitrite
 - (3) Antimony
 - (4) Barium
54. The barrel and breech block are locked together for the full distance of the recoil stroke in which of the following actions :
- (1) Short recoil
 - (2) Long recoil
 - (3) Pump action
 - (4) Slide action
55. Rifling marks on fired bullet are of following type :
- (1) Integrated marks
 - (2) Striation marks
 - (3) Cut marks
 - (4) Compression marks
56. Gun cotton is another name of :
- (1) Nitroglycerine
 - (2) Nitrocellulose
 - (3) Gun Powder
 - (4) GSR
57. $C = w/id^2$ is used to calculate the :
- (1) The Ballistic Coefficient
 - (2) Muzzle velocity
 - (3) Range
 - (4) Angle of fall
58. Zip gun is a :
- (1) Improvised firearm
 - (2) 12 bore gun
 - (3) Automatic gun
 - (4) AK-47
59. PETN+ RDX is a composition of which of the following military explosive :
- (1) Semetex
 - (2) Octol
 - (3) Pentilite
 - (4) Tetrytol
60. Which of the following is *not* a high explosive :
- (1) TNT
 - (2) RDX
 - (3) Amatol
 - (4) Nitrocellulose

61. Cadaveric spasm is seen in :
- (1) Hands
 - (2) Brain
 - (3) Legs
 - (4) Neck muscles
62. Section 176 of CrPc is related to :
- (1) Police inquest
 - (2) Magistrate inquest
 - (3) Coroner inquest
 - (4) Summons
63. Green colour of contusion is due to :
- (1) Biliverdin
 - (2) Hemosiderin
 - (3) Hematoidin
 - (4) De-oxyhemoglobin
64. Hypothermia is the :
- (1) Exposure to cold temperature
 - (2) Exposure to hot temperature
 - (3) Exposure to moderate temperature
 - (4) Exposure to non uniform temperature
65. Tache noire refers to :
- (1) Maggots growth
 - (2) Marbling
 - (3) Reddish brown discoloration arranged across the sclera
 - (4) Cooling of body
66. Which of the following is a series of standards dealing with quality management systems ?
- (1) ISO 9000
 - (2) ISO 9001
 - (3) ISO 9002
 - (4) ISO 9003
67. For preservation of shoeprint/tire marks on soft earth, the best way is :
- (1) with an electrostatic device
 - (2) photography and casting
 - (3) rough/ finished sketch
 - (4) using a high voltage electrode

68. Charred documents should be packed in :
- (1) Plastic envelope
 - (2) Paper bag
 - (3) Zip-lock bag
 - (4) In a cardboard box with cotton under sample/evidence
69. Hostile witness is the one who :
- (1) A log of everyone who has entered a crime scene
 - (2) Threatens the judge.
 - (3) Threatens the prosecutor.
 - (4) Offers adverse testimony to the calling party during direct examination
70. Which of the following is *not* a method used in Forensic Science ?
- (1) Rejection of results that do not support the hypothesis under the tests.
 - (2) Comparison between the items generated in the laboratory and those found at the crime scene.
 - (3) Comparison between the items found at a crime scene with those held on a database.
 - (4) Rejection of the hypothesis under test if it is refuted by the results of experimentation
71. Plasma consists of :
- | | |
|-----------------|----------------------|
| (1) Water | (2) Proteins |
| (3) Blood cells | (4) All of the above |
72. Which of the following is used to test the presence of semen ?
- | | |
|----------------------|----------------|
| (1) Acid Phosphatase | (2) TMB |
| (3) Luminol | (4) Flurorocin |
73. Nitrites in the saliva are detected by :
- | | |
|-------------------|----------------------|
| (1) Takayama test | (2) Griess test |
| (3) Rhions test | (4) Both (1) and (3) |
74. Dried blood stain should be packed in :
- | | |
|---------------|-----------------------|
| (1) Paper Bag | (2) Plastic Bag |
| (3) Glass Jar | (4) None of the above |
75. PSA (Prostate Specific Antigen) is a member of which peptidase family :
- | | |
|----------------|-----------------------|
| (1) Kallikrein | (2) Flavine |
| (3) Spermine | (4) None of the above |

76. The complimentary base pairs among four nucleotides (A,T,C,G) are as :
- (1) A=G AND T=C (2) A=C AND G=T
(3) A=T AND G=C (4) All of the above
77. Oligospermia is a condition of :
- (1) Absence of live spermatozoa in semen
(2) Low sperm count
(3) Presence of live spermatozoa in semen
(4) No sperm in seminal fluid
78. Phadebas test is a common presumptive test of based on detection of.....
- (1) Semen, Acid Phosphatase (2) Semen, PSA
(3) Saliva, α -amylase (4) Urine, Creatinine
79. The red coloured compound formed during Jaffe's test is :
- (1) Creatinine Picrate (2) Ammonia
(3) Urea (4) None of the above
80. If the blood groups of both parents are O and AB, then the possible blood group of child will be
- (1) A, B (2) O, A
(3) A, B, AB (4) O, A, B, AB.
81. In gas chromatography technique, which of the following carrier gases is not suitable ?
- (1) Nitrogen (2) Oxygen
(3) Helium (4) Argon
82. NMR stands for : : :
- (1) Nuclear Magnetic Resonance (2) Normal Magnetic Resonance
(3) Nuclei Magnetic Resonance (4) Non Magnetic Resonance
83. The first chromatographic technique was invented by :
- (1) M Tswett (2) J Martin
(3) S Syngé (4) A Doglas
84. Which of the following can not be determined by using radioimmunoassay ?
- (1) Drugs (2) Antigens
(3) Toxicants (4) Metals ions

85. The word "Chroma" means :
- (1) To write (2) To draw
(3) Pigments (4) Color
86. The specific type of protein residing in the plasma are :
- (1) Antigens (2) Antibodies
(3) WBCs (4) All of the above
87. WCOT (Wall Coated Open Tubular) columns are commonly called capillary columns because :
- (1) inner diameters are small
(2) inner diameters are wide
(3) wall coated with a material acting as mobile phase
(4) None of these
88. Who is known as the Father of Microscopy ?
- (1) Ernest Abbe (2) Zaccharias Janssen
(3) Robert Hooke (4) Anton Van Leewenhock
89. Human eye is unable to distinguish the objects smaller than :
- (1) 0.5 mm (2) 0.1 mm
(3) 5 mm (4) 16 mm
90. Blood alcohol concentration is measured in :
- (1) Weight /Weight percent (2) Weight/Volume percent
(3) Volume /Volume percent (4) Volume/Weight percent
91. In Latin, the term "Forensic" means :
- ✓ (1) After the forum (2) Belonging to the forum
(3) Beside the forum (4) For the forum
92. Forensic science laboratories are accredited by :
- (1) NAAC (2) NABL
(3) CSIR (4) BARC
93. IPC is :
- (1) Procedure for investigation (2) Code for punishment
(3) Both (1) and (2) (4) None of the above

94. The DNA evidence database is called :
(1) CODIS (2) CODNA
(3) CCDNA (4) CODIA
95. The fingerprint evidence database is called :
(1) FIA (2) AFES
(3) AAES (4) AFIS
96. Trichology is the study of :
(1) Hair (2) Lips
(3) Skin (4) Nails
97. Who invented the DNA fingerprinting technique ?
(1) Kary Mullis (2) Henry Faulds
(3) Alec Jeffreys (4) Calvin Goddard
98. The Federal Bureau of Investigation (FBI) was established in :
(1) 1905 (2) 1906
(3) 1907 (4) 1908
99. Who first devised a system of personal identification using a series of body measurements ?
(1) Alphonse Bertillon (2) Hans Gross
(3) Edmond Locard (4) Henry Faulds
- ✓ 100. The comparison microscope became an indispensable tool of firearm examination through the efforts of :
(1) Hans Gross (2) Calvin Goddard
(3) Paul Kirk (4) Edmond Locard

Answer key of Entrance test of PHD/URS Forensic Science 2021-22 (Supernumerary seat)

Sr. No.	Booklet Code A	Booklet Code B	Booklet Code C	Booklet Code D
1	2	2	4	2
2	2	2	1	4
3	2	1	2	2
4	1	4	1	2
5	4	3	1	1
6	1	2	3	3
7	3	2	2	2
8	1	1	3	1
9	1	2	1	3
10	2	4	1	3
11	2	2	2	4
12	2	3	1	3
13	1	1	1	2
14	4	1	4	3
15	3	1	4	3
16	2	1	2	2
17	2	1	1	3
18	1	1	4	2
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26	2	3	1	1
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28	4	1	1	3
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33	2	2	1	1
34	2	3	1	4
35	1	3	1	3
36	1	2	1	2
37	2	3	1	2
38	3	2	1	1
39	1	1	1	2
40	3	3	3	4
41	4	3	1	2
42	1	3	2	3
43	2	2	2	1
44	1	2	2	1
45	1	1	2	1
46	3	1	2	1
47	2	2	1	1
48	3	3	1	1
49	1	1	1	1

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50	1	3	4	3
51	4	2	3	1
52	3	1	3	2
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94	1	1	3	4
95	1	3	3	1
96	1	1	2	3
97	1	2	3	1
98	1	4	2	1
99	1	4	1	2
100	3	1	3	

 11/02/2022

 11/2/2022

