

SSA - NDPS / FN - Examination

1. Which of the following words is plural?

- A Index
- B Analysis
- C Criteria
- D Crisis

2. The ratio of the volume of a cube to that of sphere which can fit inside the cube

- A 3 : 4
- B 21 : 11
- C 4 : 3
- D 0.4729166666666665

3. Find the missing sequence in the letter series: B, FH, LNP,?

- A TUVW
- B TVXZ
- C TWXZ
- D SUWY

4. While sending a blood stained cloth to the CFSL for its examination, it should be sent by one of the following methods:

- A Dried in shade and put in an airtight container
- B Dried in shade and put in a paper envelope
- C Dried in sunlight and put in a vial having alcohol
- D Put as such in a vial having water

5. Which one of the following is the grammatically correct sentence:
- A He is strong to too carry the weight
 - B He is enough strong to carry the weight
 - C He is strong enough to carry the weight
 - D He is too strong to carry the weight
6. An inquiry into the cause of death of a person which is apparently not due to natural causes is called?
- A Inquest
 - B Judicial Inquiry
 - C Police Inquiry
 - D Homicidal Inquiry
7. If 05 scholars utilize 18 pencils in 09 days, how long at the same rate will 98 pencils last for 15 scholars of alike IQ?
- A 14 days
 - B 18 days
 - C 22 days
 - D 16 days
8. The word 'Forensic' of Forensic Science came from the Latin word "forensis" which means one of the following:
- A Disgraceful offence
 - B In the open public court forum
 - C Manner of death of a person
 - D Fore knowledge of the cause of death
9. Milk: Cream; Choose the correct (alike) pair from the following?
- A College: Students
 - B Clay: Pottery
 - C Passenger: Bus
 - D Fruit: Glucose

- 10.** Prime Minister Sir inaugurated the (NACIN) new campus at Palasamudram, Andhra Pradesh. Declaring it a premier institute. The 'NACIN' stands for which one of the following?
- A National Academic Council for Custom Intelligence Network
 - B National Advisory Council for Industrial Networking
 - C National Academy of Customs, Indirect taxes & Narcotics
 - D Naval Academic Centre for Indian Nauticals
- 11.** The population of a residential colony was 3600 three years back, It's 4800 right now. What will be the population three years down the line? [Rate of growth of the population has been constant over the years and has been compounded annually.]
- A 6000
 - B 6400
 - C 7200
 - D 9600
- 12.** Can blood group be determined from saliva stains present on a cigarette butt?
- A Yes
 - B No
 - C Yes, but only in 20% of all people
 - D Yes, in 80% of all people
- 13.** When did the Bharatiya Nayaya (second) Sanhita Bill, 2023 received the assent of the Hon'ble President of India
- A 15th August, 2023
 - B 30th October, 2023
 - C 15th August, 2023
 - D 25th December, 2023
- 14.** What is the name of the highest national award of Guyana, recently conferred on Prime Minister Narendra Modi on November 19, 2024, in Georgetown, conferred by President Dr. Mohamed Irfaan Ali. ?
- A The Order of Excellence
 - B The Order of Valor
 - C The Crown Jewel Honor
 - D The Grand Cross of the Order

15. The first systematic method for the identification of suspects and criminals by 11 body measurements was developed by which one of the following:

- A Clivin Goddard
- B Alphonse Bertillon
- C Hans Gross
- D Sir Fransis Galton

16. What is the theme of this year's Governing Council Meeting of NITI Aayog, recently chaired by Prime Minister Narendra Modi at the Rashtrapati Bhavan Cultural Centre, New Delhi?

- A Viksit Bharat@2047
- B Make in India
- C Digital India@2034
- D Viksit Samaj@2056

17. Important aspect(s) of any criminal law?

- A Its ability to protect individual rights
- B Maintain law and order
- C Deliver justice effectively
- D All of the above

18. Out of 20 suspects, 04 people carried out the murder. One person is drawn at random from the lot [one after the other] for the LVA, EDS and Narco-test. According to forensic statistics:
i) What is the probability that the first person drawn from the lot is culprit ii) Suppose this first person examined is innocent and is not replaced back; What is the probability of the second person to be innocent? Which one of the following options is correct?

- A $1/5$ (i) & $15/19$ (ii)
- B $5/1$ (i) & $19/15$ (ii)
- C $15/19$ (i) & $1/5$ (ii)
- D None of the above

19. Ethical professionalism in the crime scene examination?

- A Maintaining neutrality
- B Ensuring evidence integrity
- C Ensuring chain of custody
- D All of the above

20. Two times a two digit number is 9 times the number obtained by reversing the digits and the sum of the digits is 9. The number is which one of the following?

- A 72
- B 54
- C 63
- D 81

21. Which one of the followings is not correctly matched in respect to Bharatiya Nayaya Sanhita, 2023

- A Defamation - 356
- B Extortion - 302
- C Criminal breach of trust - 316
- D Receiving stolen property - 317

22. Pioneer Forensic Scientist- Dr. Edmond Locard's exchange principle "Every contact leaves trace" does not holds that:

- A There is a conscious exchange of trace evidence at Crime scene
- B There is a unconscious exchange of trace evidence at Crime scene
- C The exchange of evidence will serve as silent witness
- D The exchange is across the live materials only

23. In the midnight a serial killer stabs three persons directly in their abdomen and leave X mark on the the back; such a manner of killing in forensic investigative term is known as:

- A Signature delicti
- B Corpus delicti
- C Modus operandi
- D Both Signature and Corpus delicti

24. If somebody drinks Nitric acid and dies, the inside stomach wall on postmortem is found to be which colour?

- A Red
- B Yellow
- C Green
- D Black

25. International day against drug abuse is observed annually on?

- A 45683
- B 45834
- C 45864
- D 45987

26. CFSL Division: Examination : Choose the correct amongst the four options

- A Physics: Psychotropic substance
- B Biology: Bullet match
- C Chemistry: Hookah Molases
- D Toxicology: Paternity

27. When a person dies a suspicious death, the doctor conducts an autopsy to know the reasons for his death. It's derived from the Greek word 'Autopsia' Which of the following is the literal meaning of 'Autopsia'?

- A Dissection
- B Seeing with one's eyes
- C Medical examination
- D Experiment

28. Reports of certain Government scientific experts may be used as evidence in any inquiry, trial or other proceedings under Cr.P.C. The section 329 Bhartiya Nagrik Suraksha Sanhita does not apply to one of the following:

- A The Director, Deputy Director or Assistant Director of a Central Forensic Science Laboratory or a State Forensic Science Laboratory
- B The Director, Haffkine Institute, Bombay
- C Assistant Public Prosecutors for the purpose of conducting any case in the Courts of Magistrates
- D Any Chemical Examiner or Assistant Chemical Examiner to Government

29. Which of the following is the foremost concern for a police investigator when arrive at the scene of assault and murder:

- A Interview the witness and record their statements
- B To arrest the likely suspects mingled in the public
- C To ensure own safety and of the victims
- D Without wasting the time, immediately start collecting the evidences

- 30.** Proper sequence to investigate a crime is which one of the following?
- A Interview of witness, photography of crime scene, collection and dispatch of physical evidence to CFSL, protection of crime scene
 - B Photography of crime scene, protection of crime scene, interview of witness, collection and dispatch of physical evidence to CFSL
 - C Protection of crime scene, photography of crime scene, collection and dispatch of physical evidence to CFSL, interview of witness
 - D Protection of crime scene, interview of witness, photography of crime scene, collection and dispatch of physical evidence to CFSL
- 31.** Forensic examination of hair can reveal that the victim was administered poison. Which of the following poisons is the easiest to detect in hair?
- A Datura
 - B Carbon monoxide
 - C Snake Venom
 - D Arsenic
- 32.** 'Truth Serum' also known as "Devil's breath" is a powerful drug. It is used for Lie detection and consists of one of the following chemical:
- A Ketamine
 - B Scopolamine
 - C Ether
 - D Chloroform
- 33.** Of the following, which one is helpful for doctors to determine if a lady was burnt when she was alive?
- A Look for the nature of burns
 - B Look for the extent of burns
 - C Look for soot in the windpipe
 - D Examining her burnt clothing
- 34.** Which one of the following is chosen for the Alcohol detoxification?
- A Cannabis
 - B Barbiturates
 - C Benzodiazepines
 - D Methanol

35. A hacker in a foreign country attacks the Indian bank's server, can the hacker be punished under Bharatiya Nayaya Sanhita?

- A No, because India's laws don't apply outside the country
- B No, unless the foreign country agrees to prosecute
- C Yes, cyber crimes affecting Indian systems are covered
- D Yes, only when the Indian government files an International complaint

36. What issue did Alphonse Bertillon face when trying to identify the suspect in the theft of the famous Monalisa painting stolen from the Louvre Museum in Paris in the year 1911?

- A The suspect has no previous fingerprint records
- B Can't differentiate between twin brothers fingerprints
- C The fingerprint left on the glass covering were from left hand
- D The suspect didn't left any fingerprint

37. Of the following, DNA can be best isolated from :

- A Hair strand with root
- B Hair strand without root
- C Pus cells
- D Sweat

38. Which of the following alkaloids is found in castor seeds?

- A Cocaine
- B Nicotine
- C Caffeine
- D Ricinine

39. The following(s) show signs of 'Death'?

- A Cessation of breathing and no pulse
- B Livor Mortis
- C Rigor Mortis
- D All of the above

- 40.** In a Narcotic Bureau raid, a clandestine unlicensed unit was caught with unaccounted presence of bulk chemicals [100 kg of Anthranilic acid, 100 liters of Acetic anhydride, and 125 kg of N-Acetylanthranilic acid, the NCB sought the help of CFSL. Which one of the following' illicit manufacturing is suspected forensically?
- A MDMA
 - B Methaqualone
 - C LSD
 - D Fentanyl
- 41.** Discovery of pulled hairs on the body of victim of assault can be used to determine the followings:
- A Race and Sex of the person
 - B DNA for persons comparison
 - C Identity of the attacker
 - D All of the above
- 42.** Depressants drugs produce which of the following symptoms?
- A Confusion and increased heart rate and breathing
 - B Confusion and slow heart rate and breathing
 - C No Confusion and slow heart rate and breathing
 - D No Confusion and increased heart rate and breathing
- 43.** In all exhumation cases, generally a doctor collects about two kg of soil around the coffin. Why?
- A To know the variety of worms present
 - B To collect the bones of previously buried persons
 - C To establish or exclude poisons
 - D For religious purposes
- 44.** Which one of the followings is not related to the MS detector system:
- A EM [electron multipliers]
 - B D2 Deuterium arc-discharge lamp
 - C FC [faraday cups]
 - D PMT [photomultiplier tubes]

45. All of the following are methods of documenting scenes of crime, except?

- A Photography
- B Sketching
- C Videography
- D Voice recognition

46. In crime scene examination at what point, the 'how' becomes more important than 'who' a. Investigative lead b.

- A Investigative lead
- B Identification of suspects
- C Identification of uncommon clues
- D Reconstruction of a crime scene

47. A CFSL team was called to the scene of hanging, where one of the scientists found some suspicious looking stains. He scraped a little bit of it on a glass slide and added ammonia drops to it. Why?

- A To preserve the stain
- B To exclude the possibility of it being animal blood
- C To exclude the possibility of it being a vegetable stain
- D Only to impress the investigation officer

48. In carbon monoxide poisoning, which of the following discolouration (post-mortem staining) appears on superficial layers of the skin of deceased?

- A Cherry Red
- B Yellow
- C Green
- D Black spots

49. Read assertion and the reason given below; then choose the correct option amongst given below: Assertion [A] : The primary crime scene represent the place of original or the initial criminal activity Reason [R] : The primary crime scene is more important than any secondary crime scene

- A Both [A] and [R] are correct
- B A] is correct, but [R] is wrong
- C [A] is wrong, but [R] is correct
- D Both [A] and [R] are wrong

50. Who can use ISO 9000 international standard on Quality management?

- A Private organizations
- B Government organizations
- C Organizations of any size or type
- D NGO non-profitable organizations

51. Hills and valleys on the friction ridge skin are termed as which one of the following option:

- A Hills [Furrows], Valleys [Ridges]
- B Hills [Ridges], Valleys [Furrows]
- C Hills [Grooves], Valleys [Depressions]
- D Hills [Peaks], Valleys [Troughs]

52. Which of the following falls in the category of Narcotic?

- A Opium derivatives
- B Yellow oleander seeds extract
- C Castor oil seeds extract
- D Pink oleander seeds extract

53. ELSD is used as an HPLC detector, especially to detect compounds that do not absorb UV light, which one of the following is the correct full form of ELSD?

- A Electronic laser scanning detector
- B Electronic light sensing detector
- C Electronic lithium silicon detector
- D Evaporative light scattering detector

54. Angel dust is the street name of which of the following drugs of abuse?

- A Diacetylmorphine
- B LSD
- C MDMA
- D Phencyclidine

55. Which one of the following compositions is of Mandelin reagent?

- A 5% Selenious acid (H_2SeO_3) in Conc. H_2SO_4
- B 0.5% Ammonium vanadate (NH_4VO_3) in Conc. H_2SO_4
- C 0.5% Ammonium molybdate tetrahydrate ($(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$)
- D 10% p-Dimethylaminobenzaldehyde in Conc. H_2SO_4

56. Which of the following is not hallucinogenic?

- A Cannabis
- B LSD
- C MDMA
- D Antibiotic

57. IR spectrum of the exhibits: peaks indicating primary and secondary amines corresponding to the presence of N-H stretching in which one of the following IR regions?

- A 1650-1850 cm^{-1} region
- B 1760-1690 cm^{-1} region
- C 1680-1640 cm^{-1} region
- D 3300-3500 cm^{-1} region

58. Which of the following drugs is not obtained from plants?

- A Cocaine
- B THC
- C Morphine
- D MDMA

59. Lysergide [LSD] is obtained from which of the followings:

- A Bacterium
- B Lichen
- C Fungus
- D Alga

60. Choose the correct option of the four options: Narcotic Drug/Psychotropic Substance : Punishment for contravention under which section of NDPS Act 1985?

- A** Cocaine (Coca leaves) : Section 16
- B** Opium(Raw) : Section 20
- C** Cannabis (Charas) : Section 21
- D** Psychotropic Substances (MDMA) : Section 18

61. Chasing the Dragon refers to smoking of which one of the following?

- A** Diacetylmorphine
- B** Nicotine
- C** MDMA
- D** LSD

62. Hash oil is obtained from which of the followings:

- A** Nutmeg
- B** Hemp
- C** Cocoa
- D** Castor

63. $C_{17}H_{21}NO_4$ molecule on its break down in MS gives the product ions on its fragment loss i.e. [-OCH₃:272, -C₆H₅CO:198, -C₆H₅CO₂:182, -C₆H₅CO₂H:181, -C₈H₉O₂:166, -C₁₂H₁₃NO₃:100, -CH₃:288, -C₂H₅:274, -C₉H₈O₂:155, -C₁₂H₁₃O₄:82], it represent the breakdown pattern of which one of the following molecule?

- A** Cocaine m/z 303
- B** Codeine m/z 300
- C** Morphine m/z 286
- D** Monoacetylmorphine m/z 328

64. Regression analysis is best suited for forensic examination of which of the following?

- A** Stature determination from skeletal remains
- B** Determination of sex from skeletal remains
- C** Forensic dating
- D** All of the above

65. What does the QA and QC stands for?

- A Quality adjustment and Quality competition
- B Quality control and Quality queuing
- C Quality assurance and Quality control
- D Quality competition and Quality adjustment

66. The corpus delicti evidence in the case is

- A Blood
- B Paint chips
- C Broken headlight glass
- D Dead body

67. The approximate time of death can be best determined by?

- A Broken wrist watch
- B Skid marks
- C Splashing of blood
- D Extent of cooling of body

68. From the following statements I-IV select the correct elution order in reverse phase chromatography on the C18 column? I. The most polar compounds elute first and the most nonpolar compounds elute last II. The most non polar compounds elute first and the most polar compounds elute last III. The hydrophilic compounds elute first and the hydrophobic compounds elute last IV. The hydrophobic compounds elute first and the hydrophilic compounds elute last

- A Options I and IV are correct
- B Options II and IV are correct
- C Options I and III are correct
- D Options II and IV are correct

69. The vehicle's speed can be best determined by?

- A Blood splashes
- B Bumper marks
- C Skid marks
- D Heap of soil

70. Which of the following alkaloids is found in poppy pods?

- A** Morphine
- B** Nicotine
- C** Atropine
- D** All of the above

71. Which one of the followings is the universal detector to use in the Gas Chromatography instrument:

- A** FID
- B** NPD
- C** ECD
- D** TCD

72. Which one of the following drugs is 100 times more potent than Morphine?

- A** Meperidine
- B** Pethidine
- C** Fentanyl
- D** Pentazocine

73. UV-Vis spectrum of LSD exhibits which one of the following peak combinations?

- A** 220 and 315 nm
- B** 180 and 254 nm
- C** 180 and 200 nm
- D** 200 and 245 nm

74. Iodometric titrimetric [iodine tincture and hydrogen per-oxide has roles in which of the following drug manufacturing processes?

- A** Steroid
- B** Morphine
- C** Methamphetamine
- D** Ephedrine

- 75.** Simon reagents form Awe complex with secondary amines (like methamphetamine), which one of the following is the colour of the Awe complex so formed with Methamphetamine?
- A Maroon
 - B Pink
 - C Blue
 - D Brown
- 76.** Which of the following chemical tests can best distinguish between Bhang, Charas and Ganja?
- A Fast blue-B test
 - B Duquenois levine test
 - C p-Aminophenol in ethanolic KOH test
 - D Marquis test
- 77.** Slow respiration, slow pulse and construction of pupils occurs in which one of the following drug(s) addiction?
- A Cocaine and MDMA
 - B Charas and Ganja
 - C Opium and Morphine
 - D Nicotine and caffeine
- 78.** To obtain 'Opium' which of the following plants are to be grown?
- A Piper nigrum
 - B Nicotina album
 - C Datura stramonium
 - D Papaver somniferum
- 79.** Triple quadrupole mass detector is meant for which one of the following instruments?
- A Scanning Electron Microscope
 - B FTIR Fourier transform infrared spectroscopy
 - C LC MS MS Liquid chromatography mass spectrometry/ mass spectrometry
 - D HPLC High performance liquid chromatography

- 80.** Which one of the following is the key difference between ISO/IEC 9001 and the ISO/IEC 17025:2017?
- A** ISO/IEC 9001 can be applied to any organization while the ISO/IEC 17025:2017 applies to testing and calibrating laboratories
 - B** ISO/IEC 9001 can be applied to only public organization while the ISO/IEC 17025:2017 applies to private organization
 - C** ISO/IEC 9001 can be applied to private organization while the ISO/IEC 17025:2017 applies to only public organization
 - D** ISO/IEC 9001 and ISO/IEC 17025:2017 both are same
- 81.** Which one of the following tells the difference between internal standard and the reference standard in NDPS examinations?
- A** Internal standards are routine reference standards; whereas reference standards are official standards by a regulatory body
 - B** Internal standards are for instrument calibration; whereas reference standards are to ensure quality and identity of NDPS
 - C** Both a and b are correct
 - D** Both a and b are wrong
- 82.** NIST 23 EI library contains 394054 spectra of how many compounds?
- A** 247100
 - B** 147100
 - C** 347100
 - D** 447100
- 83.** PT and ILPT participation are one of the QMS requisites of a forensic science laboratory; which of the following goals is achieved?
- A** Outsourcing
 - B** Subcontracting
 - C** Internal auditing
 - D** Ensure competence of persons & test reports
- 84.** Periodic Internal Audits as per NABL 161 are meant for following objectives, except one of the following?
- A** To ensure accreditation requirements
 - B** To maintain continual improvement
 - C** Corrective and preventive actions
 - D** Fault finding mechanism for removing slow performers

85. Management review meetings as per NABL 161 are meant for following objectives, except one of the following?

- A Evaluate management system
- B Free legal aid
- C Ensure continual improvement
- D Review performance

86. Which one of the following is not a method validation key parameter?

- A Cost effectiveness
- B Accuracy
- C Precision
- D Specificity

87. Traces of phenolphthalein on laced currency notes in a trap can be best detected by which of the following?

- A Physical examination
- B UV-Visible Spectroscopic analysis
- C Ion chromatography
- D Electrophoresis

88. Which one of the following buffers is the most chosen for the DNA extraction [to solubilize DNA while protecting it from enzymatic lysis] ?

- A Tris-EDTA
- B EDTA
- C MOPS
- D ACES

89. GHB Gamma Hydroxybutyric Acid prescribed as Xyrem is also known as which one of the following names?

- A Bath salt
- B Fakka
- C Date rape drug
- D Pinky-U4

- 90.** Which of the following is the major point of change from ISO/IEC 17025:2005 to SO/IEC 17025:2017?
- A Involvement of outsourcing in QMS
 - B Involvement of subcontracting in in QMS
 - C Involvement of risk instead of preventive actions in QMS
 - D Involvement of co-competitors in in QMS
- 91.** Which of the following drugs will stay in the blood of an average person the longest?
- A Amphetamine
 - B Barbiturate
 - C Benzodiazepine
 - D Cannabis
- 92.** Which one of the following is a challenge of forensic statistics?
- A Likelihood
 - B Developing realistic model
 - C Communicating complex information to the non statisticians
 - D All of the above
- 93.** XTC, Adam, Ecstasy and E are the street names of which one of the following drugs?
- A Diacetyl morphine
 - B Pheneramins
 - C MDMA
 - D Cocaine
- 94.** Which one of the following is the composition of Froehde' reagents
- A 50mg 5% w/v sodium molybdate in 10 ml H₂SO₄
 - B 1% w/v selenious acid in 10 ml H₂SO₄
 - C 1:19: Isopropyl amine in Ethanol
 - D 1% w/v sodium nitroprusside

95. In one raid a clandestine laboratory was seized with the chemicals labelled as NPP, ANPP along with brown sugar like material; this clandestine laboratory might be manufacturing one of the following drugs?

- A Ketamine
- B Cocaine
- C Fentanyl
- D Amphetamine

96. Which one of the following reagents does not yield microcrystals with mescaline?

- A Gold bromide
- B Lead Iodide
- C Platinic Iodide
- D Picric acid

97. Digital evidentiary chain of custody? Choose the correct option

- A It's a process of tracking of digital evidences since its seizure to the time it's presented in the court
- B It's a process of documentation of digital evidences since its seizure to the time it's presented in the court
- C Both a and b are correct
- D Both a and b are wrong

98. Organic synthesis of dronabinol requires which one of the following as base material?

- A Morphine
- B Codeine
- C Cannabidiol
- D Nicotine

99. Which of the following is the test of inferential statistics?

- A Paired T test
- B ANOVA
- C Chi-square test
- D All of the above

100. Miaow [Mephedrone] is the designer drug [synthetic derivative] of which one of the following?

A Morphine

B Fentanyl

C Cocaine

D Cathinone