



Ph.D. COMMON ENTRANCE TEST JANUARY 2024

SUBJECT – FORENSIC SCIENCE

PART B

Roll No:

Duration: 60 minutes

Maximum Marks: 50

Instructions:

1. This entrance test question paper is not to be taken out of the examination hall
2. Question paper consists of Section A and Section B
3. Section A consists of 30 MCQs carrying 1 Mark each. Write the Alphabet of the correct answer in the space given.
4. Section B consists of Descriptive questions carrying 5 marks each. Restrict your answer to 500 words. Additional plain sheets have been attached to the question paper to answer Section B

SECTION – A

Answer the following questions by writing the Alphabet of the correct answer in the Box given:

30 X 1 = 30

1. What is the principle of circumstantial facts in Forensic Science?
 - A. Facts can be misleading
 - B. Every contact leaves a trace
 - C. Facts can be trusted
 - D. Facts and eyewitness testimony are equally important
2. What is the significance of chain of custody in Forensic investigation?
 - A. Documents the chronological history of evidence
 - B. ensure the safety of Forensic experts
 - C. establishes the suspect's guilt
 - D. Determines the motive behind a crime
3. The study helps to identify the post-mortem interval and precise time of infliction of wounds on the corpse is known as _____.
 - A. Forensic toxicology
 - B. Forensic pathology
 - C. Forensic odontology
 - D. Forensic entomology
4. A negligible amount of evidence left at the crime scene is used to link a suspect to the crime scene is known as _____.
 - A. Exculpatory evidence
 - B. Inculpatory evidence
 - C. Associative evidence
 - D. Trace evidence

5. Memories which are based on implicit learning is called _____.
A. Procedural memory
B. Semantic memory
C. Episodic memory
D. Systematic memory
6. The level of mind 'Id' consists of _____.
A. Conscious mind
B. unconscious mind
C. Subconscious mind
D. Preconscious mind
7. Routine Activity Theory emphasizes three elements converge for a crime: a motivated offender, a suitable target and _____.
A. Visibility
B. Tactics
C. Absence of a capable guardian
D. Victim
8. The truth serum is associated with _____.
A. BEOS
B. A lie detector
C. Drug use
D. Narco analysis
9. Insanity defence is _____.
A. Legal concept
B. Medical concept
C. Illegal concept
D. Defense concept
10. Transient morphological feature of friction ridge skin is _____.
A. Sweat pores
B. Ridges
C. Creases
D. Blisters
11. A type of print pattern that has two deltas and at least one friction ridge that makes one complete circuit is a _____.
A. Central pocket whorl
B. Double loop whorl
C. plain whorl
D. Accidental whorl
12. The purpose of taking postmortem fingerprints is _____.
A. To determine the cause of death
B. To identify the age of the deceased
C. To identify the race of the deceased
D. None of these

- 13 The final stage of death is _____.
- A. Livor mortis
 - B. Algor mortis
 - C. Rigor mortis
 - D. Pallor Mortis
-
- 14 The component of fingerprint residue which reacts with ninhydrin is _____.
- A. Oil
 - B. Urea
 - C. Amines
 - D. Lactic acid
-
- 15 Multiple footprints in a scene can determine _____.
- A. Height
 - B. Gait
 - C. Race
 - D. Age
-
- 16 A person was found dead in a storage room. In autopsy, Cherry red was found in internal organs and black foreign particles in the lungs. Which compound is responsible for the death?
- A. Cyanide
 - B. CO
 - C. Arsenic
 - D. CO₂
-
- 17 The dose level at which a toxic effect is first encountered is known as _____.
- A. Threshold dose
 - B. Sub-threshold dose
 - C. Toxic dose
 - D. Effective dose
-
- 18 The best antidote for Sodium Hydroxide crystal toxication is _____.
- A. Dil. Sodium Carbonate
 - B. EDTA
 - C. Dil. Hydrochloric acid
 - D. Milk
-
- 19 The program that converts the assembly language into machine code is _____.
- A. Assembler
 - B. Linker
 - C. Loader
 - D. Compiler
-
- 20 What is Cipher in Cryptography?
- A. algorithm for performing encryption and decryption
 - B. Encrypted messages
 - C. both algorithms for performing encryption and decryption
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- D. Decrypted messages
- 21 Radial fractures are caused due to _____.
- A. Stretching
 - B. Compression
 - C. Force
 - D. Breaking
- 22 The Medullary Index of human hair is _____.
- A. Greater than or equal to 0.5
 - B. 0.3 to 0.5
 - C. Greater than 0.3
 - D. Less than or equal to 0.3
- 23 A commonly used technique in Forensic Chemistry to separate and analyze components in a mixture is _____.
- A. Gas Chromatography
 - B. X-ray analysis
 - C. MRI
 - D. Electrostatic dust print lifting
- 24 What is the main purpose of analyzing body fluids?
- A. Determine the time of death
 - B. Identifying the suspect
 - C. Detecting the presence of drugs or poisons
 - D. Establishing the motive of crime
- 25 The gyroscopic movement that gives stability to the bullet is known as _____.
- A. Drift
 - B. Spin
 - C. Ricochet
 - D. Recoil
- 26 The range at which the target is close enough, the bullet drop will be negligible so the shooter can aim the gun straight at the target is known as _____.
- A. Near range
 - B. Close range
 - C. Point-blank range
 - D. Distant range
- 27 The Neo-Classical School that explains the phenomenon of crime within the framework of _____.
- A. Demonism
 - B. Romanticism
 - C. Communism
 - D. Right realism

28 The victim who creates an opportunity for a crime without intention is _____.

- A. Victim precipitation
- B. Victim blaming
- C. Victim facilitation
- D. Victim proneness

29 Victim mentality is _____.

- A. Avoidance
- B. Resentment
- C. Catastrophizing
- D. All the above

30 Behaviour that violates the law of the state is called _____.

- A. Criminal behaviour
- B. Normal behaviour
- C. Abnormal behaviour
- D. Deviant behaviour

Section - B

Answer any four questions (Each question carries 5 marks)

4*5 = 20

1. Distinguish between Legal insanity and Medical insanity in the Indian Penal Code.
2. A girl was found dead in a forest. Explain the different biological evidence that can be collected from the scene of crime.
3. In a suspected poisoning case, the forensic chemist receives samples of a victim's bodily fluids for analysis. Describe the step-by-step process the chemist would follow to identify the presence of poison.
4. Write a note on deviant behaviour. Elaborate two sociological theories of deviant behaviour.
5. Critically analyse the code of ethics and ethical issues confronted by a forensic scientist.
6. Comment on the role of state of mind in Forensic Psychology.