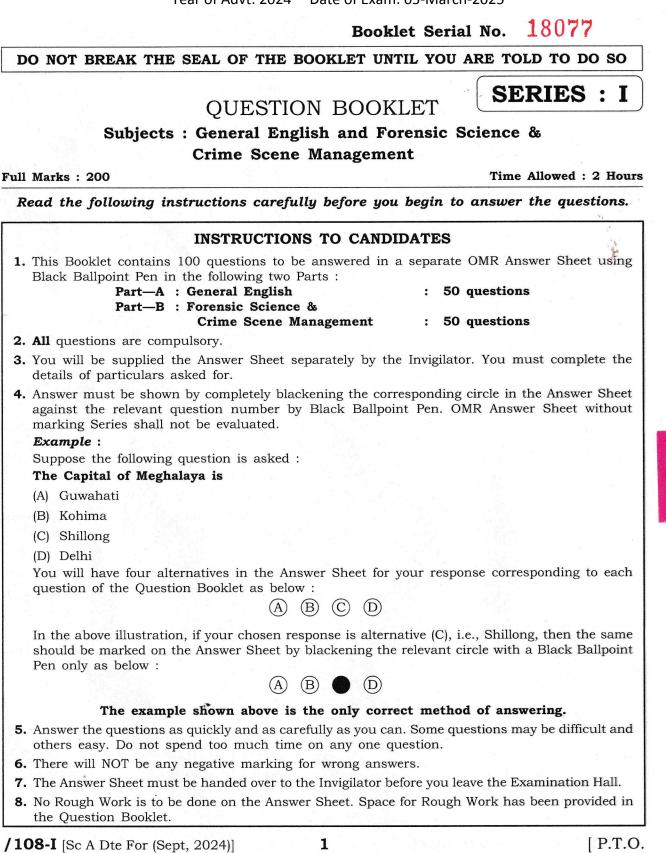
Scientific Assistant in the Mobile Forensic Crime Scene Unit under the Directorate of Forensic Science

Year of Advt: 2024 Date of Exam: 05-March-2025



SEAL

# PART-A : GENERAL ENGLISH

# (Marks: 100)

Each question carries 2 marks

#### Section-I

- 2. Gleefully
- *Directions* : Read the following passage and answer the questions below following the instructions :

Walking back home, he pondered over it. Why are they all behaving like this, as if I were a mad man?' When the word came to his mind, he stopped abruptly at the end of the road, and, cried : 'Oh! that's it, is that it?-Mad! Mad!' He shook his head gleefully as if the full truth had just dawned upon him. He now understood the looks that people threw at him. 'Oh! Oh!' he cried aloud. He laughed. He felt a curious relief at this realisation. I have been mad and didn't know it ...'. He cast his mind back. Every action of his for the last so many days seemed mad : particularly the doll-making. What sane man would make clay dolls after twenty five years of respectable service in an office?' He felt a tremendous freedom of limbs, and didn't feel it possible to walk at an ordinary pace. He wanted to fly. He swung his arms up and down and ran on with a whoop.

Directions (Q. Nos. 1-5) : Choose the appropriate antonyms of the following.

- 1. Sane
  - (A) mad
  - (B) wise
  - (C) imprudent
  - (D) unreasonable

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- (A) grisly
- (B) moodily
- (C) zestfully
- (D) cheerfully
- 3. Curious
  - (A) inquisitive
  - (B) probing
  - (C) peering
  - (D) disinterested
- 4. Aloud
  - (A) audibly
  - (B) noisiness
  - (C) soundless
  - (D) quietude
- 5. Freedom

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- (A) enslave
- (B) imprisoned
- (C) captivity
- (D) unconstrained

Directions (Q. Nos. 6-10) : Choose the appropriate synonyms of the following.

- 6. Pondered
  - (A) muse
  - (B) think
  - (C) contemplation
  - (D) meditated
- 7. Abruptly
  - (A) steadily
  - (B) sullenly
  - (C) suddenly
  - (D) fitfully
- 8. Realisation
  - (A) awareness
  - (B) knowingly
  - (C) knowledge
  - (D) dawning
- 9. Seemed
  - (A) apparent
  - (B) likely
  - (C) like
  - (D) appeared
- 10. Tremendous
  - (A) greatly
  - (B) immense
  - (C) astonishing
  - (D) inspiring

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Section-II

# Directions (Q. Nos. 11-25) : Choose the correct option to fill in the gaps.

- **11.** The \_\_\_\_\_ British team made a grand exit from the stadium.
  - (A) triumphant (B) triumphed
  - (C) triumphal (D) triumph
- The \_\_\_\_\_ of the film will be held next week.
  - (A) show (B) premier
  - (C) premiere (D) performance
- **13.** The police caught a quick \_\_\_\_\_ of the offender's expression.
  - (A) look (B) glance
  - (C) glancing (D) glimpse
- 14. Regular exercise has a \_\_\_\_\_ effect.
  - (A) benefitting
  - (B) beneficent
  - (C) beneficial
  - (D) benefitted
- **15.** Is he not a friend of \_\_\_\_?
  - (A) mine (B) yours
  - (C) his (D) theirs
- **16.** \_\_\_\_\_ drug abuse is a posing threat to society.
  - (A) Unlawful (B) Illegal
  - (C) Illicit (D) Illegitimate
- 17. They have been \_\_\_\_\_ for votes.
  - (A) canvassing
  - (B) to canvas
  - (C) canvasing
  - (D) canvassed

18.	Ι	wait	for	the	results	to	be
	declared.						

(A) hardly can

- (B) hardly can't
- (C) can hardly
- (D) can't hardly
- **19.** A cup of coffee \_\_\_\_\_ well with chocolate cookies.
  - (A) compliment
  - (B) complement
  - (C) complements
  - (D) compliments
- **20.** The heavy set man sat on a stool which \_\_\_\_\_ support him.
  - (A) barely could
  - (B) scarcely can
  - (C) hardly can
  - (D) could barely

**21.** Rice is selling \_\_\_\_\_ five rupees a kilo.

(A)	for	(B)	by	
(C)	in	(D)	at	

22. He lives \_\_\_\_ Delhi.

(A)	at	(B)	by
(C)	on	(D)	in

- **23.** Morning walk is beneficial \_\_\_\_\_ health.
  - (A) to (B) for
  - (C) with (D) by
- **24.** I find no exception \_\_\_\_\_ this rule of grammar.
  - (A) for (B) with
  - (C) at (D) to
- **25.** I have not seen her \_\_\_\_\_ January.
  - (A) by (B) in
  - (C) at (D) since

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Section—III

Directions (Q. Nos. 26-30) : Some parts of the given sentences have errors and some are correct. Find out which part of the sentences has an error. If a sentence is free from error, then (D) is the answer.

- 26. (A) One must learn
  - (B) to distinguish
  - (C) good from bad
  - (D) No error
- 27. (A) He asked me
  - (B) when could I finish
  - (C) the work
  - (D) No error
- 28. (A) No sooner
  - (B) I had spoken
  - (C) than he left
  - (D) No error
- 29. (A) Having found a piece of cheese,
  - (B) two cats went to a dog
  - (C) to divide it among them
  - (D) No error
- 30. (A) Hardly had
  - (B) he departed that
    - (C) the phone range
    - (D) No error

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#### Section—IV

Directions (Q. Nos. 31-40) : Choose the correct sentences.

- **31.** 1. I have seen him yesterday.
  - 2. I saw yesterday.
  - 3. I saw him yesterday evening.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **32.** 1. We have lived there till 1990.
  - 2. We lived there till 1990.
  - 3. We lived there till 1990 and then moved to a new place.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **33.** 1. We went to Thailand two weeks ago.
  - 2. We took a trip to Thailand two weeks ago.
  - 3. We took a pleasure trip to Thailand two weeks ago.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **34.** 1. I usually arrive at school early.
  - 2. I usually arrive at school about ten minutes to nine.

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3. I usually arrive in school about ten minutes to nine.

- (A) 1 and 2
- (B) 1 and 3
- (C) 2 and 3
- (D) 1, 2 and 3
- **35.** 1. Bread and butter are a wholesome food.
  - 2. Bread and butter is a wholesome food.
  - 3. Bread and butter is nutritious.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **36.** 1. I have not been to the theatre for several months.
  - 2. I have not been to the theatre for a long time.
  - 3. I have not been at the theatre for a long time.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3

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(D) 1, 2 and 3

- **37.** 1. The books on the shelf were mostly novels.
  - 2. The books on the shelf were all novels.
  - 3. Most of the books on the shelf were novels.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **38.** 1. There was no sound to be heard in the room.
  - 2. There was not a sound to be heard in the room.
  - 3. There was not a sound to be heard inside the room.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3
- **39.** 1. Geography is the most interesting of all the subjects I study.
  - 2. Of all the subjects I study, Geography is the most interesting.
  - 3. Geography is a most interesting subject.
  - (A) 1 and 2
  - (B) 1 and 3
  - (C) 2 and 3
  - (D) 1, 2 and 3 <sup>·</sup>

**40.** 1. The price is depended on the quality.

- 2. The price depends on the quality.
- 3. The price largely depends on the quality.
- (A) 1 and 2
- (B) 1 and 3
- (C) 2 and 3
- (D) 1, 2 and 3

# Section-V

Directions (Q. Nos. 41-50) : Choose the correct meaning for the phrases given below.

- **41.** To waste time or money on things that are not important
  - (A) to fritter away
  - (B) to be frivolous
  - (C) to be lavish
  - (D) to be a spendthrift
- **42.** To have a very strong disagreement over something
  - (A) at loggerheads
  - (B) be in conflict
  - (C) to differ

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(D) to contrast

- **43.** Simple and prepared quickly but good enough
  - (A) rough calculation
  - (B) roughly prepared
  - (C) ill-prepared for something important
  - (D) rough and ready
- **44.** To show that one is proud and able to deal with anything
  - (A) stand upright
  - (B) stand tall
  - (C) stand out
  - (D) outstanding
- **45.** To feel unhappy, because you want something you cannot have
  - (A) eat your heart out
  - (B) heart in sleeve
  - (C) heart in one's mouth
  - (D) take something to heart
- **46.** Wonderful opportunity that you are not likely to get again
  - (A) opportunity that comes only to a few
  - (B) opportunity that occurs often
  - (C) chance of a lifetime
  - (D) opportunity that is likely to happen again

- **47.** To save money for a time when you really need it
  - (A) save for children's future
  - (B) save money for future use
  - (C) save for bad weather
  - (D) save for a rainy day
- **48.** Cheerful and confident about the future
  - (A) pessimistic
  - (B) sanguine
  - (C) sane
  - (D) balanced
- **49.** To be better than others in ability, quality, fame
  - (A) bowled over
  - (B) tower over
  - (C) over and above
  - (D) over the moon
- **50.** Express a feeling, especially anger, strongly
  - (A) give full vent
  - (B) to ventilate
  - (C) to escalate
  - (D) to aggravate

# PART-B : FORENSIC SCIENCE & CRIME SCENE MANAGEMENT

### (Marks: 100)

Each question carries 2 marks

- **51.** Which of the following firearms normally **does not** have rifling in its barrel?
  - (A) Shotgun
  - (B) Revolver
  - (C) Rifle
  - (D) Pistol
- **52.** Which of the following is generally used as the propellant charge in the cartridges?
  - (A) Black powder
  - (B) Smokeless powder
  - (C) Talcum powder
  - (D) Grey powder
- **53.** Which of the following has higher recoil?
  - (A) Pistol
  - (B) Revolver
  - (C) Shotgun
  - (D) Rifle
- 54. The path followed by a fired bullet is
  - (A) linear
  - (B) circular
  - (C) parabolic
  - (D) elliptical
- **55.** Most firearms have some type of \_\_\_\_\_ designed to minimize the potential for accidental discharge.
  - (A) safety key
  - (B) barrel
  - (C) cylinder
  - (D) hammer

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- 56. Rigor mortis is first evident in
  - (A) intestine
  - (B) myocardium
  - (C) interstitial muscle
  - (D) eyelids
- **57.** The 'header' appearing at the top of a facsimile transmission indicating its origin is usually referred to
  - (A) Optical Terminal Transfer (OTT)
  - (B) Transmission Terminal Transfer (TTT)
  - (C) Transmits Terminal Identifier (TTI)
  - (D) Both (A) and (B)
- 58. Marijuana is considered to be a
  - (A) depressant
  - (B) hallucinogen
  - (C) stimulant
  - (D) narcotic
- **59.** The source of radiation used in atomic absorption spectrometry is
  - (A) RA226
  - (B) tungsten filament lamp
  - (C) hydrogen lamp
  - (D) hollow cathode lamp
- 60. Haase's rule is used to estimate
  - (A) age from crown-heel length
  - (B) age from a tooth
  - (C) charting of teeth
  - (D) blood type

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- **61.** At an arson crime scene, the physical evidences are
  - (A) in deteriorated condition
  - (B) in abundance
  - (C) not at all present
  - (D) None of the above
- 62. Linea aspera is found in
  - (A) humerus
  - (B) cranium
  - (C) femur
  - (D) tibia
- **63.** A cartridge with its primer located in the center of the base of which case?
  - (A) Firing pin
  - (B) Firing pin block
  - (C) Centerfire
  - (D) Primer
- **64.** A round that contains the gunpowder but no bullet is
  - (A) ammo
  - (B) blank
  - (C) cartridge
  - (D) slug
- **65.** Recorded digital media/cassettes should be kept away from
  - (A) magnetic material
  - (B) solutions
  - (C) light
  - (D) high voltage
- **66.** All of the following are examples of storage devices, *except* 
  - (A) hard disk drives
  - (B) printers
  - (C) floppy disk drives
  - (D) CD drives

67. RAM is

- (A) Random Access Memory
- (B) Read Access Memory
- (C) Read Active Memory
- (D) Readable and Accessible Media
- 68. A micron is related to centimeter as
  - (A) 1 micron =  $10^{-5}$  cm
  - (B) 1 micron =  $10^{-4}$  cm
  - (C) 1 micron =  $10^{-6}$  cm
  - (D) 1 micron =  $10^{-8}$  cm
- **69.** Raindrops are spherical in shape because of
  - (A) elasticity
  - (B) atmospheric pressure
  - (C) surface tension
  - (D) viscosity
- **70.** The sun continuously produces an enormous amount of energy. This is due to
  - (A) nuclear fission
  - (B) nuclear fusion
  - (C) chemical combustion
  - (D) boiling

- **71.** In an electric kettle, water becomes hot by
  - (A) conduction
  - (B) radiation
  - (C) moving particles
  - (D) convection
- **72.** The reverberation of sound in a wall results due to continued
  - (A) reflection
  - (B) interference
  - (C) diffraction
  - (D) absorption
- 73. Decibel is a
  - (A) major diatonic scale
  - (B) musical note
  - (C) measure of sound level
  - (D) musical instrument
- 74. Like magnetic poles
  - (A) attract each other
  - (B) repel each other
  - (C) neither attract nor repel
  - (D) attract or repel depending upon the conditions
- **75.** IC chips for computers are usually made of
  - (A) lead
  - (B) silicon
  - (C) chromium
  - (D) gold

**76.** If a magnet is broken into two equal pieces the pole strength of each half will be

- (A) same
- (B) doubled
- (C) halved
- (D) quartered
- **77.** The material used for fuse wire should have
  - (A) high resistivity
  - (B) high ductility
  - (C) high melting point
  - (D) low melting point
- **78.** When an injured person is found at crime scene the most immediate concern should be
  - (A) preserving the crime scene
  - (B) providing medical assistance to the victim/body
  - (C) notifying the news media
  - (D) None of the above
- 79. The crime scene sketch supplements
  - (A) notes
  - (B) plaster casts of footprints and shoeprints
  - (C) photographs
  - (D) All of the above

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- **80.** What is more important in crime scene photography?
  - (A) Keeping scale with the evidence
  - (B) Having a reference point with each photography
  - (C) Taking photograph of evidence from various range and angle
  - (D) All of the above
- **81.** The law 'Every contact leaves a trace' is also known by the name
  - (A) Locard's exchange principle
  - (B) Principle of interchange
  - (C) Both (A) and (B)
  - (D) None of the above
- **82.** Illegal way of trafficking animal is called as
  - (A) kidnapping
  - (B) poaching
  - (C) harboring
  - (D) smuggling
- 83. Who should certify that a body is dead?
  - (A) First responder
  - (B) Lead investigator
  - (C) Medical officer
  - (D) Paramedic

- **84.** Blood, semen, saliva, bullet cases, suicide note, etc., are called as
  - (A) crime scene material
  - (B) physical evidence
  - (C) prima facie
  - (D) All of the above
- **85.** Which of the following is an essential point in a proper sketch of scene of crime?
  - (A) North direction
  - (B) Scale
  - (C) Legends to be mentioned on the sketch
  - (D) All of the above
- **86.** In India, the first Central Forensic Science Laboratory was established in Kolkata, in
  - (A) 1952
  - (B) 1957
  - (C) 1954
  - (D) 1965
- **87.** In case of paternity dispute which sample of suspected father can be collected?
  - (A) Only semen
  - (B) Only hairs
  - (C) Only nail clippings
  - (D) Only blood

- **88.** If the seminal stains are on non-porous material, then they can be collected by
  - (A) cutting
  - (B) scrapping
  - (C) swabbing
  - (D) vacuuming
- 89. Dry semen stains appear
  - (A) greyish
  - (B) reddish
  - (C) bluish
  - (D) yellowish
- **90.** If the hairs are found on fixed objects, then they can be collected by
  - (A) swabbing
  - (B) lifting with hands ...
  - (C) lifting with tweezers
  - (D) scrapping
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- **91.** Evidences to look for at a sexual assault crime scene are
  - (A) hairs
  - (B) semen stains
  - (C) blood stains
  - (D) All of the above
- **92.** Collection of exhibits from crime scene must be done
  - (A) by wearing gloves
  - (B) by bare hands
  - (C) with wet hands
  - (D) None of the above
- **93.** Common writing stick of the pencil is made up of which material?
  - (A) Pigment, silica and sometime dye mix
  - (B) Clay and graphite mix

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- (C) Graphite, silica and carbon powder mix
- (D) Graphite, pigment and clay mixed with carbon hardening material

- **94.** The importance of proper packaging, preservation and sealing of parcels is
  - (A) to prevent the damage during transit
  - (B) to get the optimum results from the forensic examination
  - (C) to maintain the chain of custody and authenticate that the sample is not tampered during transit
  - (D) All of the above
- **95.** Maximum recommended time period for sample collection in case of sexual assault cases by authorized medical practitioner is
  - (A) immediately after the complaint
  - (B) within 72 hrs
  - (C) within 3 days
  - (D) within 7 days
- **96.** The device which prevents altering data on drives attached to suspect computer and also offers very fast acquisition speed is
  - (A) encrypt
  - (B) write blocker
  - (C) hash finder
  - (D) antivirus
- 97. The term 'bit' is short for
  - (A) megabyte
  - (B) binary language
  - (C) binary digit
  - (D) binary number

- 98. Which one is a volatile memory?
  - (A) ROM
  - (B) CD/DVD
  - (C) SD card
  - (D) RAM
- **99.** While making crime scene sketch, location of interest on the walls or elsewhere in the enclosed space are best shown using
  - (A) triangular method of sketching
  - (B) baseline method of sketching
  - (C) cross-projection method of sketching
  - (D) compass point method
- **100.** Which method involves searching a crime scene in a back-and-forth pattern, covering the area systematically?
  - (A) Spiral search method
  - (B) Strip search method
  - (C) Grid search method
  - (D) Quadrant search method