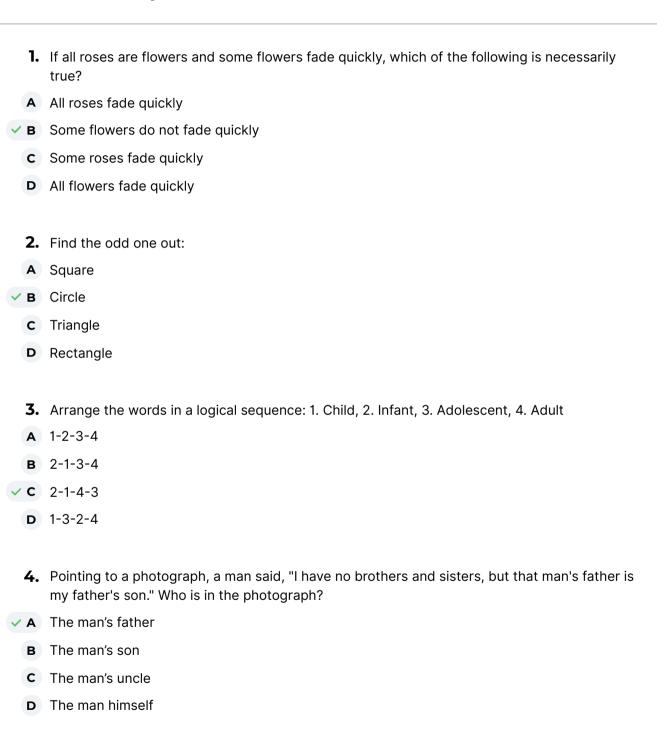
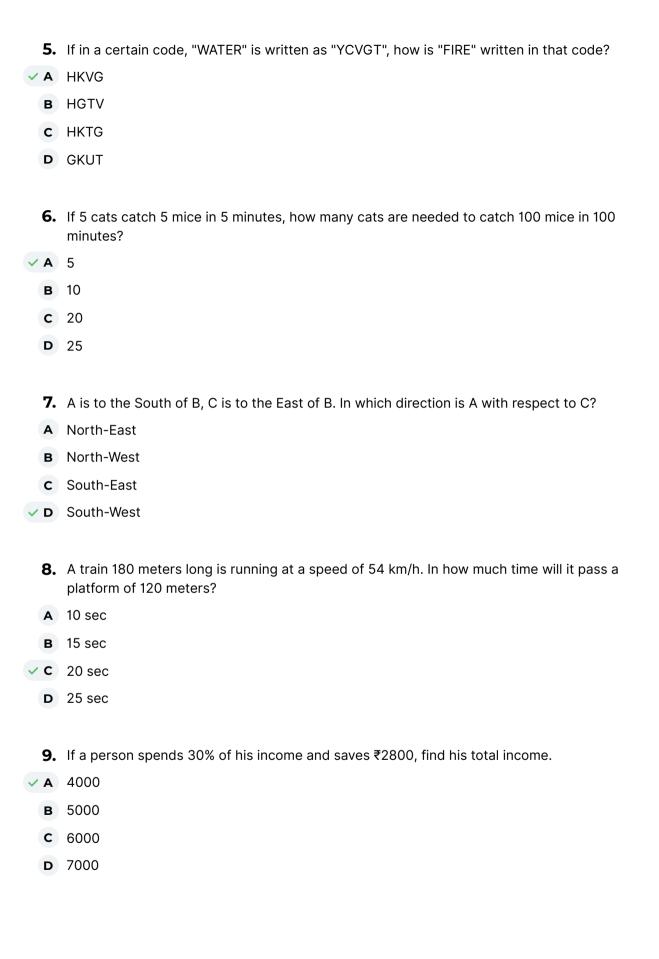
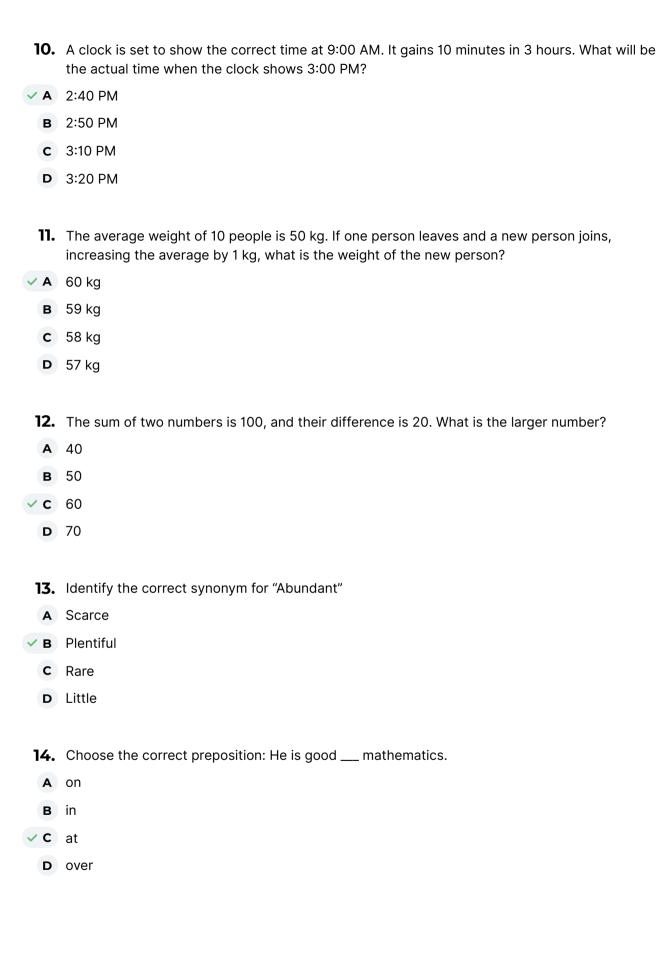


JSO -NDPS/FN - Examination







15.	Find the correctly arranged sentence: Sentence parts: 1. A great deal of research 2. has been done 3. on the impact of climate change 4. in recent years
A	1-3-2-4
✓ B	1-2-3-4
C	3-1-4-2
D	2-1-3-4
16.	Select the correct meaning of the idiom: "Burn the midnight oil"
A	Waste time
✓ B	Work late at night
C	Sleep early
D	Light a lamp
17	Identify the grammatically correct sentence:
	She don't like coffee.
	She doesn't likes coffee.
	She doesn't like coffee.
	She didn't liked coffee.
	one didn't liked contect.
18.	Find the word that fits in both blanks: "She gave me a of advice, and I found the missing of the puzzle."
A	piece
В	peace
C	part
D	section
10	
	Choose the correct option: "Neither of the two brothers present at the meeting."
	were
	was
	are
D	be

20.	Identify the sentence with the correct usage of a modal verb:
A	You should to sleep early.
В	She can plays the piano.
✓ C	We must finish the work on time.
D	He mights go to the party.
21.	Which gas is commonly used in fire extinguishers?
✓ A	Oxygen
В	Carbon dioxide
C	Nitrogen
D	Hydrogen
22.	Which vitamin is responsible for blood clotting?
Α	Vitamin A
В	Vitamin B
C	Vitamin C
✓ D	Vitamin K
23.	Which part of the human brain is responsible for balance and coordination?
Α	Cerebrum
✓ B	Cerebellum
C	Medulla oblongata
D	Hypothalamus
24.	The phenomenon where light bends as it passes from one medium to another is called:
✓ A	Reflection
В	Diffraction
C	Refraction
D	Dispersion
25.	In a DNA molecule, the nitrogenous base adenine always pairs with:
Α	Guanine
В	Cytosine
✓ C	Thymine
D	Uracil

A	DNA analysis
В	Crime scene investigation
/ C	Astronomy
D	Fingerprint analysis
27.	What does the term "chain of custody" refer to?
A	The sequence of events leading to a crime
В	The legal process of convicting a suspect
/ C	The handling and documentation of evidence from collection to court
D	The order of police ranks in forensic units
28.	Which branch forensic science is used to analyze handwriting?
A	Ballistics
/ B	Questioned Document Examination
C	Toxicology
D	Serology
29.	What is the primary function of forensic science laboratories?
A	Conduct criminal trials
В	Store weapons used in crimes
/ C	Analyze physical evidence scientifically
D	Provide legal counsel
30.	Which type of evidence includes blood, hair, and fibers?
A	Testimonial evidence
/ B	Physical evidence
C	Digital evidence
D	Psychological evidence
31.	What is the role of forensic odontologists?
/ A	Identifying dead bodies using dental records
В	Analyzing gunshot residues

c Examining bloodstains

D Studying skeletal remains

26. Which of the following is NOT a part of forensic science?

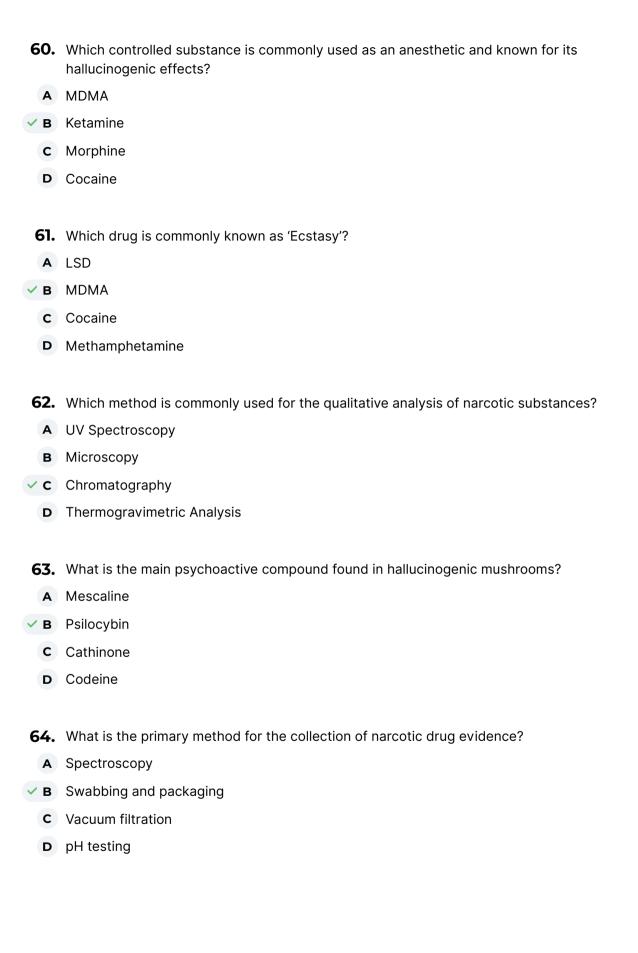
32.	What is the significance of the chain of custody in legal proceedings?
A	It ensures evidence is properly analyzed
✓ B	It prevents evidence tampering
C	It helps detectives track suspects
D	It allows media access to crime scenes
33.	Which type of forensic evidence is most useful in establishing personal identity?
	DNA analysis
	Paint analysis
D	
34.	What is the first step in crime scene processing?
	Collecting evidence
В	Documenting the scene
✓ C	Securing the crime scene
D	Interviewing witnesses
35.	Which of the following is NOT a part of crime scene documentation?
A	Sketching
В	Photography
✓ C	Eyewitness testimony
D	Note taking
36.	Which forensic technique is used to detect forged documents?
A	Electrophoresis
✓ B	Spectroscopy
C	ELISA
D	Microscopy
37.	Which factor affects the admissibility of forensic evidence in court?
Α	Media coverage
✓ B	Proper documentation and chain of custody
C	Number of suspects arrested
D	Jury preferences

38.	What does forensic toxicology primarily study?
✓ A	Drug metabolism in the body
В	Bullet trajectories
C	DNA structure
D	Fingerprint patterns
39.	Which method is most effective for detecting latent fingerprints?
A	Ballistic analysis
✓ B	Superglue fuming
C	DNA profiling
D	Blood spatter analysis
40.	Which of the following is an example of a volumetric analytical method?
Α	Chromatography
В	Spectroscopy
✓ C	Titration
D	Microscopy
41.	What does a buffer solution do?
Α	Increases the pH of a solution
✓ B	Maintains a constant pH despite adding acid or base
С	
D	Changes color when exposed to acid
	Which method is used to separate compounds based on their distribution ratio?
Α	,
✓ B	
С	Gravimetric analysis
D	Spectroscopy
/.7	Which of the following is an example of a masking agent in analytical chemistry?
43.	
В	NaCl
	HCI
	Glucose
	0.0000

44.	Which of the following extractions requires high-frequency sound waves?
Α	Heat reflux extraction
В	Solid phase extraction
✓ C	Ultrasonic extraction
D	Accelerated solvent extraction
45.	Which reagent is commonly used in organic synthesis for oxidation reactions?
✓ A	KMnO ₄
В	NaOH
C	HCI
D	NH ₃
46.	Which property does NOT affect the extraction efficiency in liquid-liquid extraction?
A	Temperature
В	Distribution coefficient
C	рН
✓ D	Color of the solution
47.	Which of the following techniques is NOT a classical analytical method?
Α	Gravimetric analysis
В	Titration
✓ C	Spectroscopy
D	Volumetric analysis
	What happens to the pKa value when temperature increases?
A	Increases
✓ B	Decreases
С	Remains constant
D	Becomes zero
49	In heat reflux extraction, what is the main advantage?
43.	Faster extraction time
✓ B	Reduced solvent loss
С	High-temperature stability
D	No need for sample preparation
	• • •

50.	Which statistical method is used to reduce dimensionality in large datasets?
A	T-test
В	Chi-square test
✓ C	Principal Component Analysis (PCA)
D	ANOVA
5 1	Which method is used to determine the end point in growimetric analysis?
	Which method is used to determine the end point in gravimetric analysis? Change in temperature
	Mass of the precipitate
	Conductivity measurement
D	
	Color change
52.	Which of the following factors affects the efficiency of masking agents in complexometric titration?
A	Temperature
✓ B	lonic strength of the solution
C	Wavelength of light
D	Boiling point of solvent
53.	Which of the following is a naturally occurring narcotic drug?
A	LSD
✓ B	Cocaine
C	Methamphetamine
D	MDMA
54.	What is the primary psychoactive component of Cannabis sativa?
Α	Morphine
В	Cocaine
✓ C	Tetrahydrocannabinol (THC)
D	Codeine

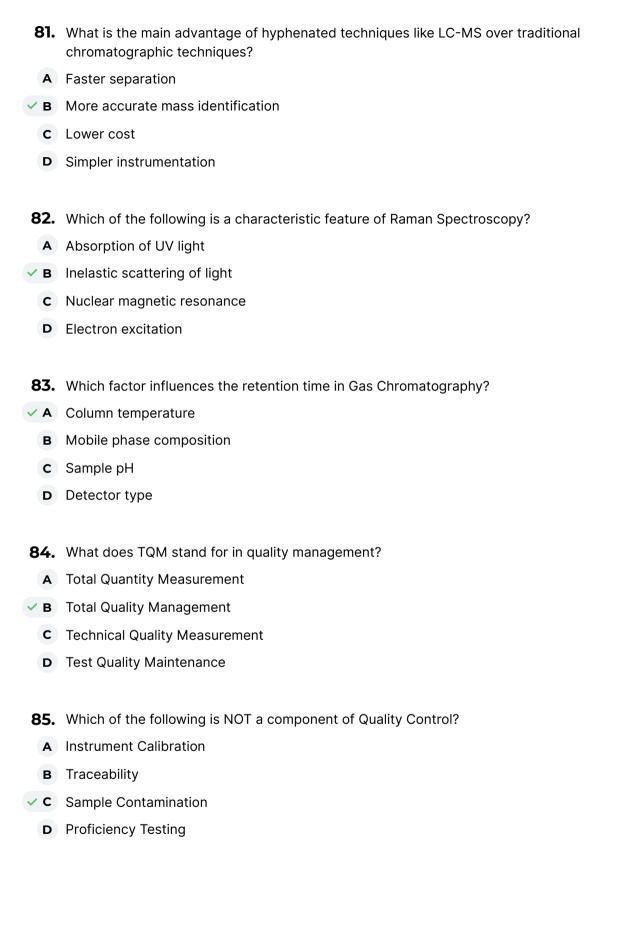
55.	Which act regulates narcotic drugs and psychotropic substances in India?
A	IPC Act 1860
✓ B	NDPS Act 1985
C	Drugs and Cosmetics Act 1940
D	Narcotics Control Act 1990
56.	Which of the following drugs is classified as a benzodiazepine?
A	Heroin
В	LSD
✓ C	Diazepam
D	Cocaine
57.	Which part of the Papaver somniferum plant is used to produce opium?
Α	Leaves
В	Flowers
✓ C	Seed capsule
D	Roots
58.	Which of the following is a designer drug?
A	Heroin
В	LSD
C	Fentanyl
✓ D	Cathinone derivatives
59.	Which analytical technique is commonly used to detect narcotic drugs in forensic samples?
✓ A	Mass Spectrometry
В	X-ray Diffraction
C	pH Titration
D	Flame Test



65.	Which drug is NOT classified under the NDPS Act 1985?
A	Heroin
В	MDMA
✓ C	Alcohol
D	Morphine
66.	What is the major challenge in clandestine laboratory investigations?
A	Lack of evidence
✓ B	Presence of toxic and explosive chemicals
C	Legal hurdles
D	Unavailability of forensic labs
67.	Which of the following is NOT a primary effect of narcotic drugs?
Α	Sedation
В	Analgesia
✓ C	Stimulation
D	Euphoria
68.	What is the function of precursors in drug synthesis?
Α	To enhance drug potency
✓ B	To act as raw materials in drug manufacturing
C	To neutralize the drug's effects
D	To improve the drug's color
69.	Which component in Gas Chromatography (GC) carries the sample through the column?
A	Stationary Phase
✓ B	Mobile Phase
C	Detector
D	Injection Port
70.	Which of the following is a hyphenated technique?
✓ A	GC-MS
В	XRD
C	Titration
D	Flame Photometry

71.	Which of the following is used as a stationary phase in Gas Chromatography?
✓ A	Liquid-coated solid support
В	Liquid mobile phase
C	Helium gas
D	Argon gasArgon gas
72.	In which type of chromatography does the separation occur based on the polarity of compounds?
A	Ion-exchange Chromatography
В	Affinity Chromatography
∨ c	Partition Chromatography
D	Paper Chromatography
73.	Which type of spectroscopy is based on molecular vibrations?
A	UV-Visible Spectroscopy
В	Raman Spectroscopy
✓ C	IR Spectroscopy
D	NMR Spectroscopy
74.	What is the role of a mass spectrometer in GC-MS?
Α	Separates components based on polarity
✓ B	lonizes and detects molecules based on their mass-to-charge ratio
C	Measures the absorbance of a sample
D	Analyzes the fluorescence of compounds
75.	Which hyphenated technique is widely used for drug analysis?
✓ A	LC-MS
В	UV-Visible Spectroscopy
C	Raman Spectroscopy
D	Thin Layer Chromatography

76.	Which of the following detectors is commonly used in Gas Chromatography (GC)?
A	UV Detector
✓ B	Flame Ionization Detector (FID)
C	Fluorescence Detector
D	Thermal Conductivity Detector (TCD)
77.	Which spectroscopy technique is based on the interaction of electromagnetic radiation with nuclear spins?
A	IR Spectroscopy
В	UV-Visible Spectroscopy
C	Raman Spectroscopy
✓ D	NMR Spectroscopy
78.	What is the role of a derivatization agent in Gas Chromatography?
✓ A	Enhances sample volatility
В	Decreases sample concentration
C	Improves sample color
D	Increases the mass of the sample
79.	Which of the following techniques is best suited for analyzing metal ions in forensic samples?
A	UV-Visible Spectroscopy
В	IR Spectroscopy
✓ C	Atomic Absorption Spectroscopy (AAS)
D	Gas Chromatography
80.	Which parameter affects the resolution in HPLC separation?
✓ A	Column length
В	Detector sensitivity
C	Injection volume
D	Temperature of the mobile phase



86.	Which of the following is essential for laboratory accreditation?
✓ A	ISO 17025
В	ISO 9001
C	ISO 45001
D	ISO 14001
87.	ISO 17025 applies specifically to which type of organizations?
A	Manufacturing Units
✓ B	Testing and Calibration Laboratories
C	Educational Institutions
D	Food Processing Units
88.	Which of the following best defines 'Traceability' in quality management?
A	The ability to trace product delivery routes
✓ B	The ability to link measurements to international standards
C	The ability to track customer satisfaction
D	The ability to monitor financial transactions
89.	Which of the following is NOT a key element of Quality Assurance?
A	Method Validation
В	Regular Audits
∨ C	Equipment Malfunction
D	Personnel Training
90.	What is the primary goal of proficiency testing in forensic laboratories?
A	Ensure employees are satisfied with their roles
✓ B	Evaluate the competency of laboratory personnel
C	Improve marketing strategies
D	Reduce financial expenditure
91.	Which of the following is an essential part of a Quality Audit?
A	Identifying new business opportunities
✓ B	Reviewing compliance with standards
C	Measuring customer feedback

92.	What does the term 'Certified Reference Material' (CRM) refer to?
A	A document certifying employee performance
✓ B	A material with a well-defined property value used for calibration
C	A manual for training employees
D	A certification awarded to forensic experts
93.	What is the purpose of a Management Review Meeting in a forensic laboratory?
Α	To analyze financial growth only
✓ B	To evaluate the effectiveness of the quality system
C	To hire new forensic analysts
D	To conduct crime scene investigations
94.	In forensic science, measurement of uncertainty is important because it:
A	Helps in reducing laboratory costs
✓ B	Assesses the reliability of test results
C	Measures employee efficiency
D	Improves court presentation skills
95.	What is the purpose of method validation in forensic laboratories?
✓ A	To verify the correctness and reliability of analytical methods
В	To document employee performance
C	To increase profit margins
D	To minimize the number of criminal cases
96.	Which aspect of quality management focuses on maintaining equipment and instruments?
Α	Human Resource Management
✓ B	Equipment Calibration and Maintenance
C	Budget Allocation
D	Legal Compliance
97.	Which of the following is a crucial aspect of forensic laboratory accreditation?
A	Following only local laws
✓ B	Ensuring test methods meet international standards
C	Reducing the number of forensic cases
D	Ignoring standard operating procedures

98.	What is the primary function of an internal quality audit?
A	To improve employee salary structure
✓ B	To identify areas of non-compliance and improvement
C	To conduct criminal investigations
D	To increase laboratory funding
99.	What is the purpose of a chi-square test in statistics?
A	To test for differences in means
В	To test for correlation between two numerical variables
C	To predict future values
✓ D	To measure relationships between categorical variables
100.	Which of the following is NOT a primary effect of narcotic drugs?
A	Sedation
✓ B	Analgesia
C	Stimulation
D	Euphoria