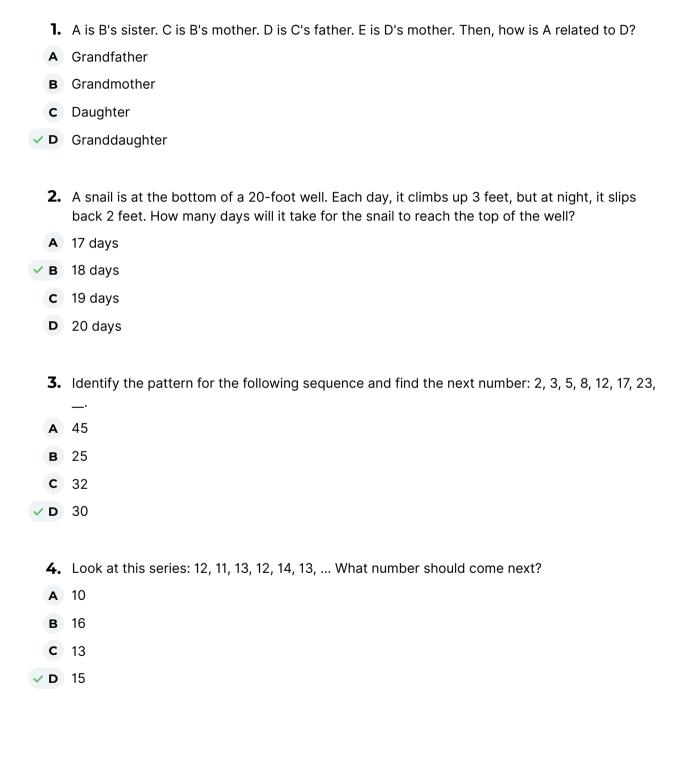


SSA - DNA Forensics - Examination



	5. Which word is the odd one out?
	A Trivial
	B Unimportant
~	c Important
	D Insignificant
	6. Which word does NOT belong with the others?
	A Wing
	B Fin
~	c Beak
	D Rudder
	7. The new employee was very and quickly learned the ropes.
	A Adept
	B Inept
~	c Ambitious
	D Reluctant
	8. Choose the word that is closest in meaning to the given word:Perspicacious
~	A Astute
	B Oblivious
	C Enthusiastic
	D Reluctant
	9. Identify the correct sentence:
	A The team are going to the championship.
~	B The team is going to the championship.
	The team been going to the championship.
	D The team goes to the championship.
1	0. Which of the following is absent in animal cell?
	A Nucleus
~	B Plastid
	C Cytoplasm
	D Mitochondria

11.	The daughter cells have the same number of chromosomes when a cell divides by?
✓ A	Mitosis
В	Meiosis
C	Direct Division
D	None of the above
12.	The suicidal bags of the cell are
A	Ribosomes
✓ B	Lysosomes
C	Phagosomes
D	Dictyosomes
13.	Which of the following are longest cells of human body?
A	Epethelial cells
В	Pancreatic cells
✓ C	Nerve cells
D	Epidermal cells
14.	A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?
Α	A
✓ B	x
C	S
D	Z
15.	Find the statement that must be true according to the given information. Vincent has a paper route. Each morning, he delivers 37 newspapers to customers in his neighborhood. It takes Vincent 50 minutes to deliver all the papers. If Vincent is sick or has other plans, his friend Thomas, who lives on the same street, will sometimes deliver the papers for him
✓ A	Vincent and Thomas live in the same neighborhood.
В	It takes Thomas more than 50 minutes to deliver the papers.
C	It is dark outside when Vincent begins his deliveries.
D	Thomas would like to have his own paper route.

16.	A fruit seller had some apples. He sells 40% apples and still has 420 apples. Originally, he had:
A	588
В	600
C	622
✓ D	700
17.	Find the correct spelling:
Α	Foreine
✓ B	Foreign
C	Fariegn
D	Forein
18.	Which among the following is spelled wrong:
A	Manual
В	Nephew
C	Athletic
✓ D	Amature
19.	Warrior is related to sword, carpenter is related to saw, farmer is related to plough. In thesame way, the author is related to
A	Book
В	Fame
C	Reader
✓ D	Pen
20.	Which vitamins deficiency is especially important to avoid during pregnancy to prevent neural tube defects?
A	Vitamin A
В	Vitamin C
✓ C	Folic Acid (Vitamin B9)
D	Vitamin K

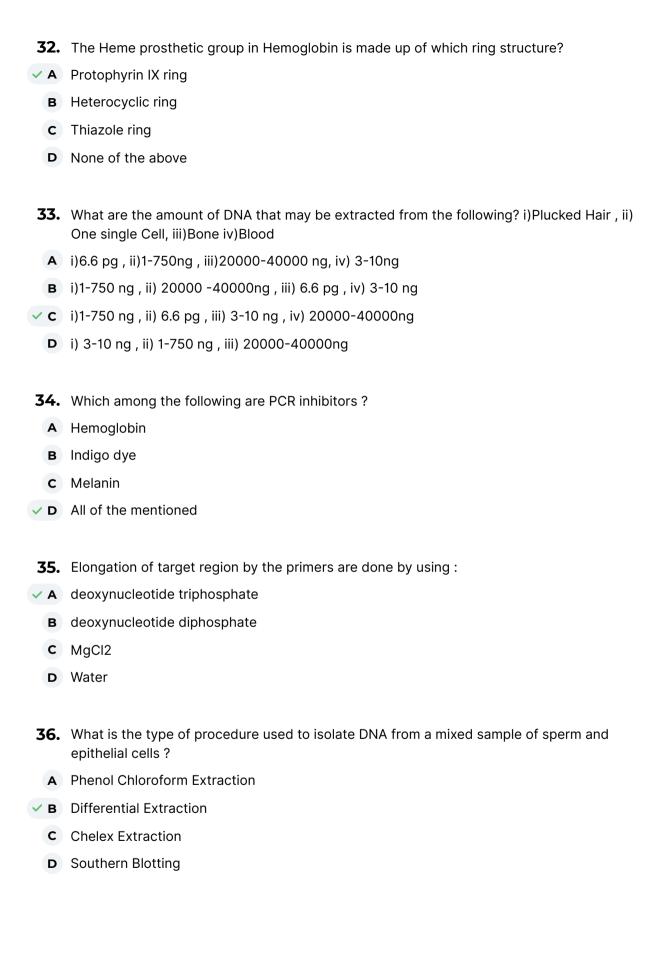
A	Protein synthesis \rightarrow DNA replication \rightarrow RNA transcription
✓ B	DNA replication \rightarrow RNA transcription \rightarrow Protein synthesis
C	RNA transcription \rightarrow Protein synthesis \rightarrow DNA replication
D	Protein breakdown \rightarrow RNA degradation \rightarrow DNA mutation
22.	What is the function of restriction enzymes in genetic engineering?
A	To synthesize DNA.
В	To join DNA fragments.
✓ C	To cut DNA at specific sequences.
D	To amplify DNA.
23.	I been hit by a car, but luckily I just managed to get out of the way.
✓ A	could have
В	can have
C	must have
D	should have
24.	If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:
Α	46 km
✓ B	50 km
C	70 km
D	80 km
25.	Complete the sentense Despite his best efforts to conceal his anger
Α	we could detect that he was very happy
В	he succeeded in camouflaging his emotions
C	he could succeed in doing it easily
✓ D	people came to know that he was annoyed

21. What is the central dogma of molecular biology?

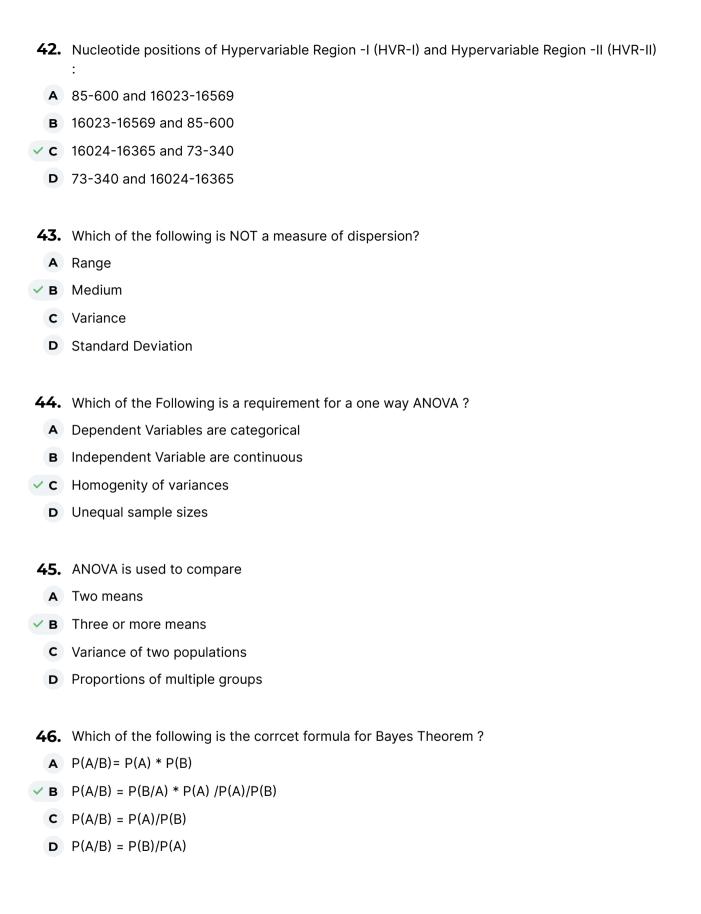
26.	An individual with blood group "O" typically has which antibodies in thier plasma?
A	Anti A antibodies
В	Anti B antibodies
∨ C	Both Anti A antibodies and Anti B antibodies
D	Neither Anti A antibodies nor Anti B antibodies
27.	Blood of type 'A' will be agglutinated by:
✓ A	Anti A Serum
В	Anti B Serum
C	Both Anti A Serum and Anti B Serum
D	Neither Anti A Serum nor Anti B Serum
28.	Which body fluid is detected using the PSA or 'p 30' test?
A	Urine
В	Saliva
C	Vaginal Secretion
✓ D	Semen
29.	Luminol is prepared by :
A	2-aminophthalhydrazine + Calcium chloride
В	2-aminophthalhydrazine + potassium chloride
C	2-aminophthalhydrazine + Sodium acetate
✓ D	2-aminophthalhydrazine + Sodium carbonate
30.	Sensitivity of Luminol to detect blood is :
A	10
В	100
C	1000
✓ D	10000
31.	Who developed the Acid Phosphatase Test?
A	Leon Lattes
В	Albert Osborn

✓ **c** Frank Lundquist

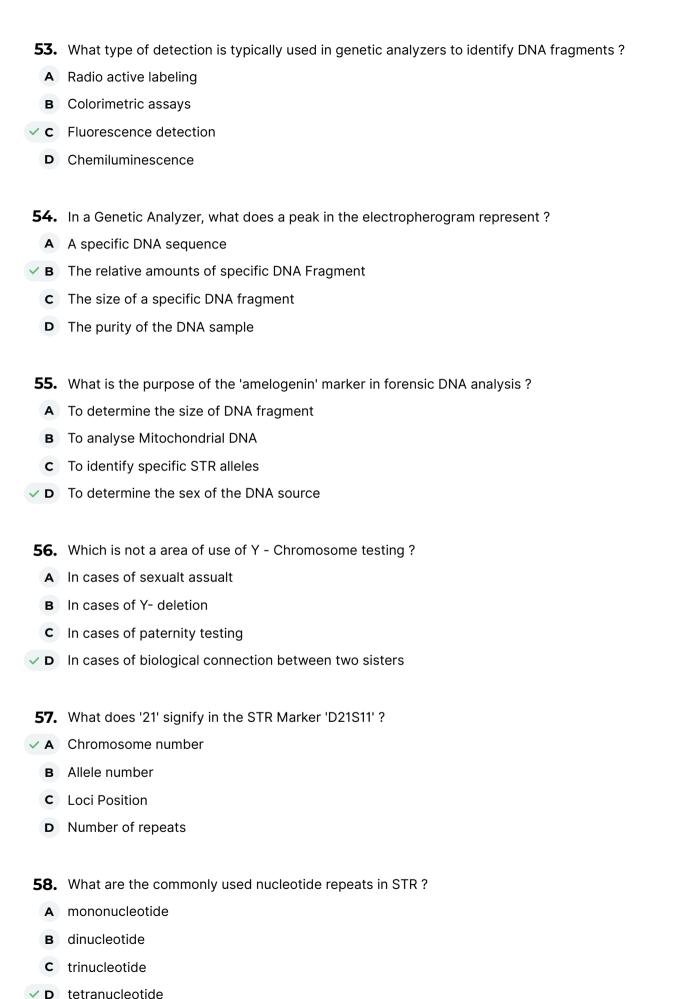
D Karl Landsteiner



37.	AmpliTaq Gold DNA polymerase is activated at what temperature?
A	72 degree celsius
В	60 degree celsius
✓ C	95 degree celsius
D	4 degree celsius
38.	How much quantity of template DNA is necessary for PCR based fragment analysis?
✓ A	1-10 ng of genomic DNA
В	10-100ng of genomic DNA
C	100-1000ng of genomic DNA
D	1000-10000ng of genomic DNA
39.	Which type of capillary gel electrophoresis is commonly used for DNA sequencing?
A	
В	Capillary isoelectric focusing (CIEF)
✓ C	
D	Micellar electrrokinetic chromatography
40.	The Innocence Project , Founded in 1992 has used evidence to :
A	Develop new DNA Fingerprinting technique
✓ B	Exonerate wrongfully convicted individuals
C	Convict more criminals using DNA analysis
D	Establish DNA databases for Forensic use
41.	Which among the following STR's are within the protein coding region?
Α	vWA
В	TH01
✓ C	Both vWA and TH01
D	None of thementioned



oscope ?

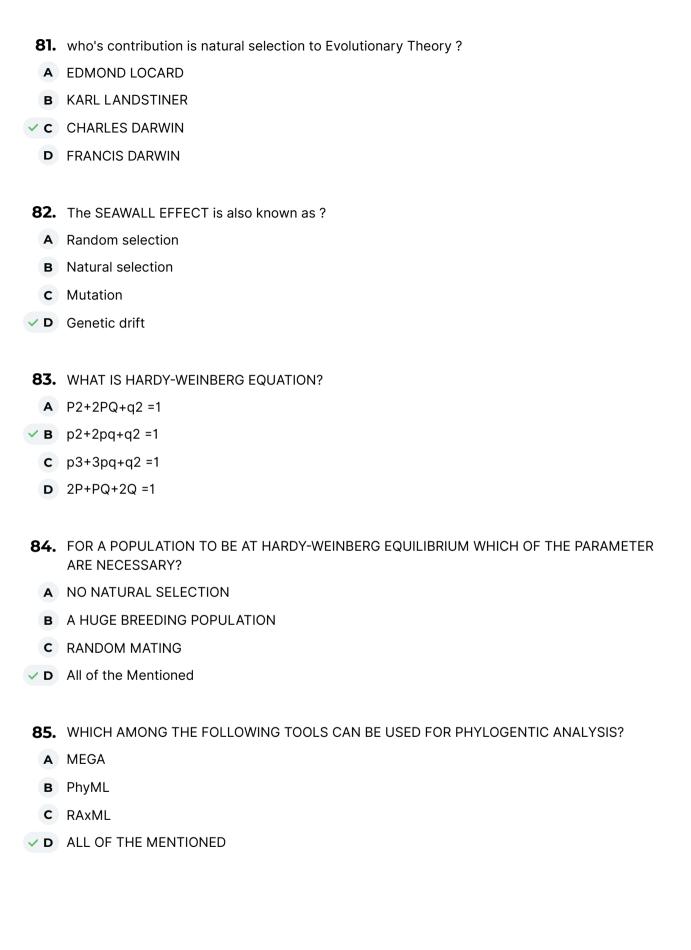


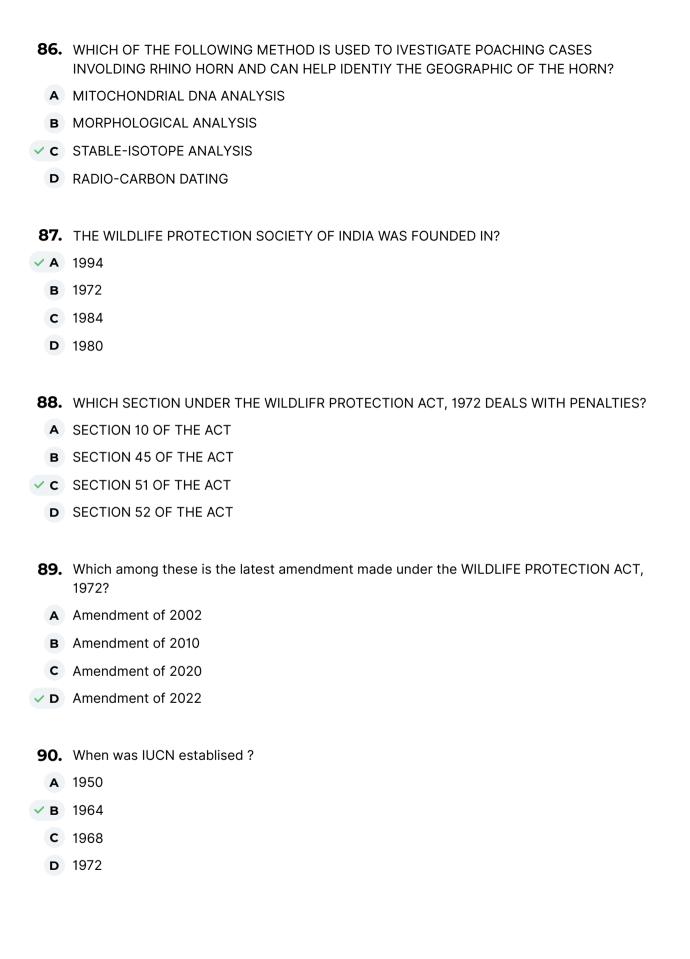
59.	Which is the repeating tetranucleotide marker in TH01?
✓ A	TCAT
В	CATT
C	TTCA
D	GCCA
60.	Under which section of BNSS deals with the admissibility of reports from a Scientific Expert ?
A	293 of BNSS
✓ B	329 of BNSS
C	176 of BNSS
D	103 OF BNSS
61.	Mitochondrial DNA is inherited :
A	Biparentally (from both the parents)
✓ B	Maternally (from the mother only)
C	Paternally (from the father only)
D	Through random assortment
62.	Which Forum serves as a board of Quality assurance and validation in Forensic DNA analysis?
A	CODIS
В	FBI
✓ C	SWGDAM
D	All of the mentioned
63.	Which of the following swquencing technology is known for its high throughput and massively parallel processing?
A	Sanger sequencing
✓ B	Next Generation Sequencing
C	Real time PCR
D	Capillary electrophoresis

64.	Which method is commonly used in Forensic DNA analysis for individual identification?
A	Single nucleotide polumorphism
В	Restriction Fragment Length Polymorphism
✓ C	Short Tandem Repeats
D	Mitochondrial DNA Sequencing
65.	Which method can be used to estimste the ethnic origin of a person?
✓ A	SNP
В	STR
C	RFLP
D	VNTR
66.	Most commonly used approaches to utilize real time PCR homogenous detection are :
A	Taq Man
В	SYBR Green
✓ C	Both Taq Man and SYBR Green
D	None of the Mentioned
67.	A nucleosome core particle consists of:
A	DNA and H1 histone
В	DNA and H2A-H2B dimer
✓ C	DNA and a histone octamer
D	DNA and a tetramer of H3 and H4
68.	The primary role of DNA Polymerase 'γ' in eukaryotes is to:
Α	Replicate nuclear DNA
В	Repair DNA damage in the nucleus
✓ C	Replicate mitochondrial DNA
D	Participate in DNA recombination
69.	The template stand of DNA during transcription is also known as:
Α	sense strand
✓ B	antisense strand
С	coding stand
D	complementary strand

70.	What is the preferred method for collecting small, dried bloodstains from a non-porous surface?
Α	Scraping the stain directly into a paper envelope.
✓ B	Swabbing the stain with a moistened sterile swab.
C	Cutting out the portion of the surface containing the stain.
D	Applying a liquid absorbent material to the stain.
71.	The first criminal case in which DNA fingerprinting was used for identification and conviction was:
A	People v. Castro (USA)
✓ B	The Colin Pitchfork case (UK)
C	State of Florida v. Tommy Lee Andrews (USA)
D	The Buck Ruxton case (UK)
72.	Which of the following amino acids has a sulfur atom in its side chain?
✓ A	Cysteine
В	Valine
C	Alanine
D	Serine
73.	Transfer RNA (tRNA) and 5S ribosomal RNA (rRNA) genes are transcribed by:
A	RNA Polymerase I
В	RNA Polymerase II
✓ C	RNA Polymerase III
D	RNA Polymerase V
74.	Dried blood evidence should be packed in a:
✓ A	Paper bag
В	Tin can
C	Glass jar
D	Plastic bag

15.	what is the purific present in kina?
✓ A	Guanine
В	Thymine
C	Uracil
D	Cytosine
76.	Forensic Quality Services International (FQS-I)accredits Forensic Laboratories to :
✓ A	ISO 17025
В	ISO 17021
C	ISO 16025
D	ISO 17000
77.	Sec.3.5 of ISO 17025 define s the term :
A	Internal Audit
✓ B	Proficiency Testing
C	External Audit
D	Calibration of Instrumentrs
78.	What does 'RFU' stands for ?
A	Refractive Fluorescence Unit
В	Relative Fragment Unit
C	Restriction Fragment Unit
✓ D	Relative Fluorescence Unit
79.	STR, SNP, InDel Are various Forms of ?
✓ A	Mutation
В	DNA Transcription
C	DNA Translation
D	None of the above
80.	Genetic drift in a population increases, when the :
A	Size of the Population Increases
✓ B	Size of the Populationreduces
C	Genotypic variations are observed
D	Phenotypic variations are observed





91.	CITES STANDS FOR?
A	CONSERVATION OF INTERNALTIONAL TRADE OF ENDANGERED SPECIES
✓ B	CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPEICES
C	CONVENTION OF INDIAN TRIBAL AND ENDANGERED SPECIES
D	NONE OF THE Mentioned
92.	WHICH OF THESE ARE A FORM OF POACHING WILDLIFE?
A	SNARE & TRAP
✓ B	ELECTROCUTION
C	SHOOTING BY GUN
D	ALL OF THE Mentioned
93.	What is the Detector used in a Genetic Analyzer?
A	Thermal Conductivity Detector (TCD)
В	Flame Ionization Detector (FID)
∨ C	Charged Couple Detector (CCD)
D	Electron Capture Detector (ECD)
94.	What is the function of Formamide in a Capillary Electrophoresis
A	Help to denature the double -stranded DNA molecule
В	Help to reduce the salt levels
C	Aid the electrokinetic injection process
✓ D	All of the Mentioned
95.	Under which section of BNS ,Murder is defined?
A	300
✓ B	101
C	302
D	103
96.	Under which section of BNS ,Rape is defined?
A	62
✓ B	63
C	64
D	65

