

Test Date : 01 Jul 2023

Test Slot : Slot 1

Subject : (Exam No. - 2) M.Sc. Forensic Science/M.Sc Forensic Biotechnology/M.Sc Toxicology

Sl. No.1

QBID:11130001

Error can be minimized by _____.

1. Taking large magnitude of physical quantity which is to be measured
2. Taking large number of readings
3. Using smallest least count instrument
4. All of the above

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1]

2[Option ID=2]

3[Option ID=3]

4[Option ID=4]

Sl. No.2

QBID:11130002

A machine does 2500 J of work in 1 minute. What is the approximate power developed by the machine?

1. 21 W
2. 42 W
3. 150 W
4. 2500 W

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=5]

2[Option ID=6]

3[Option ID=7]

4[Option ID=8]

Sl. No.3

QBID:11130003

If the displacement of a particle executing simple harmonic motion is given by

$$y = 0.03 \sin(220t + 0.64)$$

In metre, then the frequency and maximum velocity of the particle is:

1. 35 Hz, 66 m/s
2. 45 Hz, 66 m/s
3. 58 Hz, 113 m/s
4. 35 Hz, 132 m/s

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=9]

2[Option ID=10]

3[Option ID=11]

4[Option ID=12]

Sl. No.4

QBID:11130004

Which of the following quantities connected with simple harmonic motion do not vary periodically?

1. Displacement
2. Acceleration
3. Total energy
4. Velocity

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13]

2[Option ID=14]

3[Option ID=15]

4[Option ID=16]

Sl. No.5

QBID:11130005

A gardener pushes a lawn roller through a distance of 20 m. If he applies a force of 20 kg with in a direction in blind at an angle 60^0 to the ground find the work done by the gardener.

1. 1960 J
2. 1000 J
3. 0 J
4. 60 J

(1) 1

- (2) 2
- (3) 3
- (4) 4

1[Option ID=17]
2[Option ID=18]
3[Option ID=19]
4[Option ID=20]

Sl. No.6
QBID:11130006

The force of gravitation is

1. Repulsive
2. Electrostatic
3. Conservative
4. Non-conservative

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=21]
2[Option ID=22]
3[Option ID=23]
4[Option ID=24]

Sl. No.7
QBID:11130007

The weight of the body at the centre of the earth is

1. Zero
2. Infinite
3. Same as on the surface of the earth
4. None of the above

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=25]
2[Option ID=26]
3[Option ID=27]
4[Option ID=28]

Sl. No.8
QBID:11130008

With the increase in wavelength of the interfering beam, the fringe width in Young's double slit experiment

1. Decreases
2. Increases
3. Remains same
4. Either of (2) and (3) is possible

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=29]
2[Option ID=30]
3[Option ID=31]
4[Option ID=32]

Sl. No.9
QBID:11130009

Particles of light, are accepted today are called as _____

- 1. Corpuscles
- 2. Ether
- 3. Photons
- 4. Polaroids

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=33]
2[Option ID=34]
3[Option ID=35]
4[Option ID=36]

Sl. No.10
QBID:11130010

Waves that can not be polarised are _____

- 1. Radio waves
- 2. Visible light
- 3. X-rays
- 4. Sound waves

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=37]
2[Option ID=38]
3[Option ID=39]
4[Option ID=40]

Sl. No.11
QBID:11130011

Cylindrical wave front can be obtained from

- 1. Point source of light
- 2. Light source like slit
- 3. Light source like circle
- 4. Point source of light at infinity

- (1) 1

- (2) 2
- (3) 3
- (4) 4

1[Option ID=41]
2[Option ID=42]
3[Option ID=43]
4[Option ID=44]

Sl. No.12
QBID:11130012

The equation $TdS = dU - PdV$ is obtained from which law?

1. First law
2. Second law
3. Both first and second law
4. None of these

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=45]
2[Option ID=46]
3[Option ID=47]
4[Option ID=48]

Sl. No.13
QBID:11130013

Intensive property of a system in one whose value

1. depends on the mass of the system
2. does not depend on the mass of the system
3. is independent of the path followed but depends on the states
4. is dependent of the path followed but does not depend on the states

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=49]
2[Option ID=50]
3[Option ID=51]
4[Option ID=52]

Sl. No.14
QBID:11130014

A hollow metal sphere of radius 5 cm is charged such that the potential on its surface is 10 V. The potential at the centre of the sphere is

1. Zero
2. 10 V
3. The same as that at a point 5 cm away from the surface
4. The same as that at a point 25 cm away from the surface

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=53]
2[Option ID=54]
3[Option ID=55]
4[Option ID=56]

Sl. No.15
QBID:11130015

A ball whose kinetic energy is E , is projected at an angle of 45° to the horizontal. The kinetic energy of the ball at the highest point of its flight will be

- 1. E
- 2. $E/\sqrt{2}$
- 3. $E/2$
- 4. zero

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=57]
2[Option ID=58]
3[Option ID=59]
4[Option ID=60]

Sl. No.16
QBID:11130016

Which of the following is not a path function?

- 1. Heat
- 2. Work
- 3. Internal energy
- 4. None of these

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=61]
2[Option ID=62]
3[Option ID=63]
4[Option ID=64]

Sl. No.17
QBID:11130017

Which of the following is not the unit of pressure?

- 1. mm of mercury column
- 2. Pascal
- 3. Bar
- 4. dyne

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=65]
2[Option ID=66]
3[Option ID=67]
4[Option ID=68]

Sl. No.18
QBID:11130018

Quasi-static processes are always _____.

- 1. Irreversible
- 2. Reversible
- 3. Can't say
- 4. None

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=69]
2[Option ID=70]
3[Option ID=71]
4[Option ID=72]

Sl. No.19
QBID:11130019

During which of the following process does heat rejection takes place in Carnot cycle?

- 1. Adiabatic expansion
- 2. Isothermal expansion
- 3. Adiabatic compression
- 4. Isothermal compression

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=73]
2[Option ID=74]
3[Option ID=75]
4[Option ID=76]

Sl. No.20
QBID:11130020

The motion of a rocket is based on the principle of conservation of

- 1. Mass
- 2. Kinetic energy
- 3. Angular momentum
- 4. Linear momentum

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=77]
2[Option ID=78]
3[Option ID=79]
4[Option ID=80]

Sl. No.21
QBID:11130021

Two particles A and B, initially at rest, move towards each other under the mutual force of attraction. At the instant when the speed of A is v and the speed of B is $2v$, the speed of the centre of mass of the system is

- 1. $3v$
- 2. v
- 3. $1.5v$
- 4. zero

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=81]
2[Option ID=82]
3[Option ID=83]
4[Option ID=84]

Sl. No.22
QBID:11130022

The proper use of lubricants cannot reduce

- 1. Static friction
- 2. Inertia
- 3. Sliding friction
- 4. Rolling friction

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=85]
2[Option ID=86]
3[Option ID=87]
4[Option ID=88]

Sl. No.23
QBID:11130023

The force of gravity is least at

- 1. The equator
- 2. The poles
- 3. A point in between equator and any pole
- 4. None of these

- (1) 1

- (2) 2
(3) 3
(4) 4

1[Option ID=89]
2[Option ID=90]
3[Option ID=91]
4[Option ID=92]

Sl. No.24
QBID:11130024

The velocity with which a projectile must be fired so that it escapes earth's gravitational does not depend on

1. Mass of the earth
2. Mass of the projectile
3. Radius of the projectile's orbit
4. Gravitational constant

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=93]
2[Option ID=94]
3[Option ID=95]
4[Option ID=96]

Sl. No.25
QBID:11130025

If the distance between the earth and the sun becomes half its present value, the number of days in a year would have been

1. 64.5 days
2. 129 days
3. 182.5 days
4. 730 days

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=97]
2[Option ID=98]
3[Option ID=99]
4[Option ID=100]

Sl. No.26
QBID:11130026

Which law explained solubility of gasses in a liquid?

1. Charles law
2. Henry's law
3. Raoult's law
4. Boyle's law

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=101]
2[Option ID=102]
3[Option ID=103]
4[Option ID=104]

Sl. No.27
QBID:11130027

Which of the following conditions are correct for the spontaneity of the cell reaction?

- 1. $\Delta G = 0$; $E = 0$
- 2. $\Delta G = -ve$; $E = -ve$
- 3. $\Delta G = +ve$; $E = +ve$
- 4. $\Delta G = -ve$; $E = +ve$

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=105]
2[Option ID=106]
3[Option ID=107]
4[Option ID=108]

Sl. No.28
QBID:11130028

The rate constant is given by the equation, $K = PZe^{\frac{-E}{RT}}$. Which factor should register a decrease for the reaction to proceed more rapidly?

- 1. T
- 2. Z
- 3. E
- 4. P

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=109]
2[Option ID=110]
3[Option ID=111]
4[Option ID=112]

Sl. No.29
QBID:11130029

At the critical micelle concentration (CMC) the surfactant molecules

1. decompose
2. dissociate
3. associate
4. become completely soluble

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=113]

2[Option ID=114]

3[Option ID=115]

4[Option ID=116]

Sl. No.30

QBID:11130030

When manganese dioxide is fused with KOH in air, it gives

1. potassium permanganate
2. potassium manganate
3. manganese hydroxide
4. Mn_3O_4

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=117]

2[Option ID=118]

3[Option ID=119]

4[Option ID=120]

Sl. No.31

QBID:11130031

Ammonium dichromate is used in some fireworks. The green coloured powder blown in air is

1. CrO_3
2. Cr_2O_3
3. Cr
4. $\text{CrO}(\text{O}_2)_2$

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=121]

2[Option ID=122]

3[Option ID=123]

4[Option ID=124]

Sl. No.32
QBID:11130032

Alcoholic solution of KOH is a specific reagent for

1. dehydration
2. dehalogenation
3. dehydrohalogenation
4. dehydrogenation

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=125]
2[Option ID=126]
3[Option ID=127]
4[Option ID=128]

Sl. No.33
QBID:11130033

Which of the following is more suitable method for removing the traces of water from ethanol?

1. Heating with Na metal
2. Passing dry HCl gas through it
3. Distilling it
4. Reacting with Mg

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=129]
2[Option ID=130]
3[Option ID=131]
4[Option ID=132]

Sl. No.34
QBID:11130034

Which of the following reactions is a method for the conversion of a ketone into a hydrocarbon?

1. Aldol condensation
2. Reimer-Tiemann reaction
3. Cannizzaro reaction
4. Wolff-Kishner reduction

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=133]
2[Option ID=134]

3[Option ID=135]
4[Option ID=136]

Sl. No.35
QBID:11130035

Ethyl isocyanide on acidic hydrolysis generates

1. ethylamine salt and methanoic acid
2. propanoic acid and ammonium salt
3. ethanoic acid and ammonium salt
4. methylamine salt and ethanoic acid

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=137]
2[Option ID=138]
3[Option ID=139]
4[Option ID=140]

Sl. No.36
QBID:11130036

Synthetic polymer prepared by using ethylene glycol and terephthalic acid is known as

1. teflon
2. terylene
3. nylon
4. PVC

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=141]
2[Option ID=142]
3[Option ID=143]
4[Option ID=144]

Sl. No.37
QBID:11130037

Which one of the following is the heterocyclic compound?

1. Thiophene
2. Phenol
3. Aniline
4. Benzene

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=145]
2[Option ID=146]

3[Option ID=147]
4[Option ID=148]

Sl. No.38
QBID:11130038

Which of the following is a characteristic of an aromatic compound?

1. Cyclic
2. Planar
3. $(4n+2)$ electrons
4. All of these

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=149]
2[Option ID=150]
3[Option ID=151]
4[Option ID=152]

Sl. No.39
QBID:11130039

Which of the following is not an electrophile?

1. H_2O
2. Cl_2
3. HBr
4. Br_2

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=153]
2[Option ID=154]
3[Option ID=155]
4[Option ID=156]

Sl. No.40
QBID:11130040

Which among the following lanthanide shows stable +4 oxidation state in aqueous solution?

1. Eu
2. Ln
3. La
4. Ce

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=157]
2[Option ID=158]
3[Option ID=159]
4[Option ID=160]

Sl. No.41
QBID:11130041

Which among the following is known as 'Inorganic benzene'?

1. $P_3N_3Cl_6$
2. $B_3N_3H_6$
3. B_2H_6
4. N_2H_6

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=161]
2[Option ID=162]
3[Option ID=163]
4[Option ID=164]

Sl. No.42
QBID:11130042

In $Pt(Ph_3P)_2(CH_2=CH_2)$, carbon-carbon bond lengthening occurs due to:

1. steric hinderance
2. electronegativity of phosphorous
3. π -backbonding
4. due to lone pair of electrons of phosphorous

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=165]
2[Option ID=166]
3[Option ID=167]
4[Option ID=168]

Sl. No.43
QBID:11130043

Which among the following statement is not correct about Lambert's and Beer's law?

1. Lambert and Beer's law is applicable to monochromatic radiations only.
2. Absorbance is proportional to concentration of absorbing substance.
3. Absorbance is inversely proportional to thickness of absorbing solution.
4. $Absorbance = -\log(Transmittance)$

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=169]
2[Option ID=170]

3[Option ID=171]
4[Option ID=172]

Sl. No.44
QBID:11130044

Which of the following is not a correct match?

1. Coper pyrites- sulphide ore
2. Anglesite- sulphate ore
3. Calamine-Oxide ore
4. Cinnabar-Sulphide ore

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=173]
2[Option ID=174]
3[Option ID=175]
4[Option ID=176]

Sl. No.45
QBID:11130045

Enantiomers differ in:

1. melting point
2. boiling point
3. density
4. action towards plane polarized light

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=177]
2[Option ID=178]
3[Option ID=179]
4[Option ID=180]

Sl. No.46
QBID:11130046

Which among the following is an extensive property?

1. temperature
2. density
3. enthalpy
4. specific volume

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=181]
2[Option ID=182]
3[Option ID=183]
4[Option ID=184]

Sl. No.47
QBID:11130047

Acid rain is caused by the oxides of:

1. sulphur and nitrogen
2. carbon and phosphorous
3. sulphur and phosphorous
4. carbon and nitrogen

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=185]

2[Option ID=186]

3[Option ID=187]

4[Option ID=188]

Sl. No.48

QBID:11130048

Isotopes differs in:

1. number of proton
2. number of electron
3. electronic configuration
4. number of neutron

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=189]

2[Option ID=190]

3[Option ID=191]

4[Option ID=192]

Sl. No.49

QBID:11130049

Which among the following polycyclic aromatic hydrocarbon is most abundant in coal tar?

1. naphthalene
2. phenanthrene
3. anthracene
4. styrene

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=193]

2[Option ID=194]

3[Option ID=195]

4[Option ID=196]

Sl. No.50

QBID:11130050

Identify the component that can be separated by steam distillation process;

1. different components of crude petroleum
2. alcohol water mixture
3. glycerol and spent lye in soap industry
4. nitrobenzene and water

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=197]

2[Option ID=198]

3[Option ID=199]

4[Option ID=200]

Sl. No.51

QBID:11130051

_____ and _____ used bacterial genes to perform the first successful rDNA experiment

1. Beedle and Tatum
2. Baruch Blumberg and Irving Millman
3. Stanley Cohen and Herbert Boyer
4. Jacob and Monad

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=201]

2[Option ID=202]

3[Option ID=203]

4[Option ID=204]

Sl. No.52

QBID:11130052

The most common solidifying agent used in micropropagation is

1. Mennan
2. Dextran
3. Agar
4. gelatin

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=205]

2[Option ID=206]

3[Option ID=207]

4[Option ID=208]

Sl. No.53

QBID:11130053

Which of the following about CRISPR-Cas 9 is correct

1. It is a tool which is designed to detect TB
2. It is a unique technology that enables geneticists and medical researchers to edit parts of the genome
3. It is a fungal DNA
4. It is defence mechanism of bacteria against the fungi

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=209]

2[Option ID=210]

3[Option ID=211]

4[Option ID=212]

Sl. No.54

QBID:11130054

The genetic material of SARS-CoV-2 is

1. Double stranded DNA
2. single stranded RNA
3. Double stranded RNA
4. Single stranded DNA

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=213]

2[Option ID=214]

3[Option ID=215]

4[Option ID=216]

Sl. No.55

QBID:11130055

The stretch of codons between AUG and a stop codon is called

1. redundant
2. degenerate
3. open reading frame
4. colinearity

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=217]

2[Option ID=218]

3[Option ID=219]

4[Option ID=220]

Sl. No.56

QBID:11130056

Nude mice used for developing tumour models lack one of the following functional glands

1. Pituitary
2. Thymus
3. Thyroid
4. Prostrate

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=221]

2[Option ID=222]

3[Option ID=223]

4[Option ID=224]

Sl. No.57

QBID:11130057

Water logging is a phenomenon that is referred to

1. Erosion of soil
2. Rolalion of crop pattens
3. Saturation of soil root zones
4. cultivating the same crop

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=225]

2[Option ID=226]

3[Option ID=227]

4[Option ID=228]

Sl. No.58

QBID:11130058

The "living fossil" Ginkobiloba is

1. Angiosperm
2. Gymnosperm
3. Pteridophyte
4. Bryophyte

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=229]

2[Option ID=230]

3[Option ID=231]

4[Option ID=232]

Sl. No.59

QBID:11130059

"Pneumatophores" are associated with

1. Xerophytes
2. Lithophytes
3. Hydrophytes
4. Mangroves

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=233]

2[Option ID=234]

3[Option ID=235]

4[Option ID=236]

Sl. No.60

QBID:11130060

From a protein mixture, same molecular weight proteins can be separated by using

1. Capillary electrophoresis
2. Agarose gel electrophoresis
3. 2D-PAGE
4. SDS-PAGE

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=237]

2[Option ID=238]

3[Option ID=239]

4[Option ID=240]

Sl. No.61

QBID:11130061

The following pathways occur only in mitochondria

1. Glycolysis and pentose phosphate pathway
2. Glycolysis and citric acid cycle
3. citric acid cycle and oxidative phosphorylation
4. glycolysis and oxidative phosphorylation

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=241]

2[Option ID=242]

3[Option ID=243]

4[Option ID=244]

Sl. No.62

QBID:11130062

Concentration of following ion is high on the intracellular side

1. Ca^{2+}
2. K^{+}
3. Na^{+}
4. Cl^{-}

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=245]

2[Option ID=246]

3[Option ID=247]

4[Option ID=248]

Sl. No.63

QBID:11130063

Following ion is very important in a polymerase chain reaction carried out in vitro

1. Mg^{2+}
2. Ca^{2+}
3. Zn^{+}
4. Ions are not important as long as molarity remains optimal

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=249]

2[Option ID=250]

3[Option ID=251]

4[Option ID=252]

Sl. No.64

QBID:11130064

In the term "3' end" of DNA, the number 3 refers to

1. Number of Phosphate groups
2. Number of nucleosides
3. carbon number on base
4. carbon number on pentose

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=253]

2[Option ID=254]

3[Option ID=255]

4[Option ID=256]

Sl. No.65

QBID:11130065

This amino acid best suits as amphipathic

1. tryptophan
2. phenylalanine
3. histidine
4. valine

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=257]

2[Option ID=258]

3[Option ID=259]

4[Option ID=260]

Sl. No.66

QBID:11130066

A circular plasmid was digested with an endonuclease PstI which has two sites on the plasmid. When we run a gel after partial digestion of plasmid with Pst I, we are likely to see _____ bands on the gel.

1. 1
2. 2
3. 3
4. 4

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=261]

2[Option ID=262]

3[Option ID=263]

4[Option ID=264]

Sl. No.67

QBID:11130067

The most abundant extracellular molecule in soft tissues is

1. Proteoglycan
2. collagen
3. elastin
4. fibronectin

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=265]

2[Option ID=266]

3[Option ID=267]

4[Option ID=268]

Sl. No.68

QBID:11130068

El-Nino is

1. Tsunami
2. Typhoon
3. warm ocean current
4. tropical disturbance

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=269]

2[Option ID=270]

3[Option ID=271]

4[Option ID=272]

Sl. No.69

QBID:11130069

In pea a tall plant (TT) is crossed with a short plant (tt). In F2 the ratio of tall and short plant would be

1. 2:1
2. 1:1
3. 1:2
4. 1:3

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=273]

2[Option ID=274]

3[Option ID=275]

4[Option ID=276]

Sl. No.70

QBID:11130070

The dark reaction of photosynthesis is not totally independent of light because

1. The initial reaction happens in light
2. The reaction is inhibited by light
3. the reaction utilises the product of light reaction
4. it can occur during day

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=277]

2[Option ID=278]

3[Option ID=279]

4[Option ID=280]

Sl. No.71

QBID:11130071

SARS CoV2 genome size is approximately

1. 9Kb
2. 19 Kb
3. 29 Kb
4. 209 Kb

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=281]

2[Option ID=282]

3[Option ID=283]

4[Option ID=284]

Sl. No.72

QBID:11130072

Which one of the following will make plasma membrane more fluid

1. Cholesterol
2. linoleic acid
3. stearic acid
4. ergosterol

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=285]

2[Option ID=286]

3[Option ID=287]

4[Option ID=288]

Sl. No.73

QBID:11130073

Jellyfish breathe through:

1. Book lungs
2. Gills
3. Diffusion
4. spiracles

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=289]

2[Option ID=290]

3[Option ID=291]

4[Option ID=292]

Sl. No.74

QBID:11130074

Vacuole in plant cell

1. lacks membrane and contains air
2. lacks membrane and contains water and excretory substances
3. is membrane bound and contain storage proteins and lipids
4. is membrane bound and contains water and excretory substances

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=293]

2[Option ID=294]

3[Option ID=295]

4[Option ID=296]

Sl. No.75

QBID:11130075

Through which structure cytoplasm of two neighbouring cells are connected?

1. Cell wall
2. Middle lamella
3. Plasmodesmata
4. Cell membrane

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=297]

2[Option ID=298]

3[Option ID=299]

4[Option ID=300]

Sl. No.76

QBID:11130076

Accreditation of Forensic Science Laboratories in India is done by which of the following?

1. ASCLD
2. DEA
3. NABL
4. IAI

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=301]

2[Option ID=302]

3[Option ID=303]

4[Option ID=304]

Sl. No.77

QBID:11130077

Journal of Forensic Science is published by which of the following associations?

1. Indian Academy of Forensic Sciences
2. European Academy of Forensic Sciences
3. Australian Academy of Forensic Sciences
4. American Academy of Forensic Sciences

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=305]

2[Option ID=306]

3[Option ID=307]

4[Option ID=308]

Sl. No.78

QBID:11130078

Which of the following is not a type of crime scene mapping?

1. Base line
2. Triangular
3. Polar coordinate
4. Rhombohedral

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=309]

2[Option ID=310]

3[Option ID=311]

4[Option ID=312]

Sl. No.79

QBID:11130079

The 'Linkage Theory' is associated with which of the following?

1. Principle of exchange
2. Law of probability
3. Principle of comparison
4. Principle of analysis

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=313]

2[Option ID=314]

3[Option ID=315]

4[Option ID=316]

Sl. No.80

QBID:11130080

Preservation of footprints in snow can be done using which of the following:

1. Casting with plaster of Paris
2. Casting with dental stone
3. Casting with wax
4. Casting with sulphur

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=317]
2[Option ID=318]
3[Option ID=319]
4[Option ID=320]

Sl. No.81
QBID:11130081

CAD programs enhance the ability to:

1. Enhance digital photographs
2. Aid in note-taking
3. Create finished crime scene sketches
4. Track evidence

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=321]
2[Option ID=322]
3[Option ID=323]
4[Option ID=324]

Sl. No.82
QBID:11130082

The method of recovery or collection of fibers from crime scene include:

- (a) Collection using magnetic brush (b) Surface debris taping (c) Scraping
(d) Vacuuming

Choose the correct answer from the options given below:

1. (a), (b), (d) only
2. (a), (b), (c) only
3. (d), (a), (c) only
4. (b), (c), (d) only

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=325]
2[Option ID=326]
3[Option ID=327]
4[Option ID=328]

Sl. No.83
QBID:11130083

At crime scene, a blood-stained hand print is observed by the crime scene investigator. What type of the evidence will it be called?

1. Latent Print evidence
2. Patent Print evidence
3. Plastic prints
4. None of the above

(1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=329]
2[Option ID=330]
3[Option ID=331]
4[Option ID=332]

Sl. No.84
QBID:11130084

Expert witness:

1. is nowhere defined in law.
2. Legally defined U/S 45 IEA (Indian Evidence Act).
3. Legally defined U/S 176 Cr PC (Criminal Procedure Code).
4. Legally defined U/S 320 IPC (Indian Penal Code).

(1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=333]
2[Option ID=334]
3[Option ID=335]
4[Option ID=336]

Sl. No.85
QBID:11130085

The para-dimethyl aminoacid (DMAC) reacts with ____, if present, produces a pink colour product.

1. Creatinine
2. Ammonia
3. Uric acid
4. Urea

(1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=337]
2[Option ID=338]
3[Option ID=339]
4[Option ID=340]

Sl. No.86
QBID:11130086

The ideal method of collecting and packing of physical evidence for its transportation to a forensic science laboratory mainly depends on:

1. Nature of transportation available
2. Nature of evidence
3. Nature of investigator
4. Nature of scene of crime

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=341]
2[Option ID=342]
3[Option ID=343]
4[Option ID=344]

Sl. No.87
QBID:11130087

Exhumation means

1. Execution of a death sentence
2. Examination of skeletal remains
3. Digging out of a buried body
4. Injecting formalin into body for preservation

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=345]
2[Option ID=346]
3[Option ID=347]
4[Option ID=348]

Sl. No.88
QBID:11130088

The length is the greatest dimension in which of the following wounds?

1. Impalement
2. Chop
3. Incised
4. Perforating

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=349]
2[Option ID=350]
3[Option ID=351]
4[Option ID=352]

Sl. No.89
QBID:11130089

Currens rule is used

1. to determine legal insanity
2. to determine cause of death in infanticide
3. to differentiate hanging from strangulation
4. to differentiate true rape from consensual sexual intercourse.

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=353]
2[Option ID=354]
3[Option ID=355]
4[Option ID=356]

Sl. No.90
QBID:11130090

For hardening of plaster of Paris cast of footprints, following substance is added:

1. Sodium chloride
2. Sodium carbonate
3. Talcum powder
4. Sodium sulphate

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=357]
2[Option ID=358]
3[Option ID=359]
4[Option ID=360]

Sl. No.91
QBID:11130091

Serum protein polymorphism are demonstrated by:

1. HPLC
2. Centrifugation
3. GC-MS
4. Electrophoresis

- (1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=361]
2[Option ID=362]
3[Option ID=363]
4[Option ID=364]

Sl. No.92
QBID:11130092

_____ is used in place of luminol test to detect the blood stain.

1. Phadebas reagent
2. Copper sulphate
3. Cupric sulphate
4. Bluestar

(1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=365]
2[Option ID=366]
3[Option ID=367]
4[Option ID=368]

Sl. No.93
QBID:11130093

Section 326 A IPC deals with:

1. Punishment for voluntarily causing grievous hurt by dangerous weapons.
2. Criminal force.
3. Voluntarily causing grievous hurt by use of acid.
4. Kidnaping

(1) 1
(2) 2
(3) 3
(4) 4

1[Option ID=369]
2[Option ID=370]
3[Option ID=371]
4[Option ID=372]

Sl. No.94
QBID:11130094

Section 354 B IPC deals with:

1. Battered baby syndrome.
2. Stalking.
3. Assault or criminal force to woman with intent to disrobe or compelling her to be naked.
4. Assault or criminal force to any human being with intent to disrobe or compelling to be naked

(1) 1

- (2) 2
- (3) 3
- (4) 4

1[Option ID=373]
2[Option ID=374]
3[Option ID=375]
4[Option ID=376]

Sl. No.95
QBID:11130095

When the Director, Dy. Director, Assistant Director of a Forensic Science Lab are summoned by a court, he may depute any officer conversant with the case. This provision is made under:

1. Section 291 Cr. P.C.
2. Section 293 Cr. P.C.
3. Section 295 Cr. P.C.
4. Section 297 Cr. P.C.

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=377]
2[Option ID=378]
3[Option ID=379]
4[Option ID=380]

Sl. No.96
QBID:11130096

Which of the following is first thing to be done by Crime Scene Investigator at crime scene?

1. Preliminary examination of scene
2. Retaining the suspects
3. Asking for the medical assistance for injured at the crime scene
4. Collecting the evidence

- (1) 1
- (2) 2
- (3) 3
- (4) 4

1[Option ID=381]
2[Option ID=382]
3[Option ID=383]
4[Option ID=384]

Sl. No.97
QBID:11130097

Who was the first person to use a scientific method for personal identification?

1. Francis Galton
2. Alphonse Bertillon
3. Calvin Goddard
4. Wilton Marion Krogman

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=385]

2[Option ID=386]

3[Option ID=387]

4[Option ID=388]

Sl. No.98

QBID:11130098

At a scene of fire, the debris containing accelerants should be packed in (give most appropriate answer):

1. Paper Bags
2. Large plastic bags
3. Large glass bottles
4. Unused paint cans that can be made airtight

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=389]

2[Option ID=390]

3[Option ID=391]

4[Option ID=392]

Sl. No.99

QBID:11130099

Punishment for repeat rape offenders is prescribed under:

1. Section 375 IPC
2. Section 376 (E) IPC
3. Section 377 IPC
4. Section 164 (A) CrPC

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=393]

2[Option ID=394]

3[Option ID=395]

4[Option ID=396]

Immediate restraint of the mentally ill person is done under which law?

1. Section 81 IPC
2. Section 23 Mental Health Act, 1987
3. Section 23 Indian Lunacy Act, 1912
4. Section 30 Prisoners Act,

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=397]

2[Option ID=398]

3[Option ID=399]

4[Option ID=400]