



Test Date : 07 Dec 2022

Test Slot : Slot 1

Subject : ONEH,THRH,FORH-Environment Science Area-I, Area-III and Area-IV

Sl. No.1

QBID:8852001

Which of the following is NOT a free online plagiarism detection software?

- (1) Ephorus
- (2) Plagiarism checker
- (3) Plagium
- (4) Viper

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1201]

2[Option ID=1202]

3[Option ID=1203]

4[Option ID=1204]

Sl. No.2

QBID:8852002

Falsification is

- (1) Making up of data or results and recording or reporting them
- (2) Manipulating the research data that are not represented in the research
- (3) Not a form of research misconduct
- (4) The appropriation of another person's ideas without giving credit

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1205]

2[Option ID=1206]

3[Option ID=1207]

4[Option ID=1208]

Sl. No.3

QBID:8852003

Which of the following are examples of violation of research ethics.

- (A) Violating participant confidentiality
- (B) Appropriation of another person's ideas without giving credit
- (C) Using an inappropriate research design
- (D) Changing data to meet a desired outcome
- (E) Using qualitative method in place of a quantitative methods

Choose the correct answer from the options given below :

- (1) (A), (B) and (C) only
- (2) (A), (B) and (D) only
- (3) (A), (B) and (E) only
- (4) (B), (C) and (D) only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1209]

2[Option ID=1210]

3[Option ID=1211]

4[Option ID=1212]

Sl. No.4

QBID:8852004

An author "X" has 8 papers that have been cited 33, 30, 20, 15, 7, 6, 5 and 4 times respectively. The h-index of author 'X' is

- (1) 30
- (2) 20
- (3) 15
- (4) 6

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1213]

2[Option ID=1214]

3[Option ID=1215]

4[Option ID=1216]

Sl. No.5

QBID:8852005

Match List I with List II :

List I	List II
(A) SCI Mago Journal Rank (SJR)	(I) $\frac{\text{Average number of weighted citations reached in a year}}{\text{number of documents published in previous 3 years}}$
(B) Source Normalized Impact per Paper (SNIP)	(II) $\frac{\text{Journal's citation count per paper}}{\text{Citations potential in its subject field}}$
(C) Cite score	(III) $\frac{\text{Citations in a year to documents published in previous 3 years}}{\text{number of documents published in previous 3 years}}$
(D) Field-Weighted Citation Impact (FWCI)	(IV) $\frac{\text{number of citations received by a document}}{\text{expected number of citations for similar documents}}$

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

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

1[Option ID=1217]
2[Option ID=1218]
3[Option ID=1219]
4[Option ID=1220]

Sl. No.6
QBID:8852006

Which of the following is NOT a journal metric?

- (1) Cite score
- (2) H index
- (3) Impact factor
- (4) SNIP

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

1[Option ID=1221]
2[Option ID=1222]
3[Option ID=1223]
4[Option ID=1224]

Sl. No.7
QBID:8852007

i10 index is an author metric given by

- (1) Web of science
- (2) Scopus
- (3) Google scholar
- (4) Pubmed

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

1[Option ID=1225]
2[Option ID=1226]
3[Option ID=1227]
4[Option ID=1228]

Sl. No.8
QBID:8852008

As per UGC regulations, 2018 for promotion of academic integrity and prevention of plagiarism in Higher Educational Institutions, similarities above 10% to 40% are considered to be of level

- (1) 0
- (2) 1
- (3) 2
- (4) 3

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

1[Option ID=1229]
2[Option ID=1230]
3[Option ID=1231]
4[Option ID=1232]

Sl. No.9
QBID:8852009

INFLIBNET is

- (1) Informatics and Library Network Centre
- (2) Library and Information Network Centre
- (3) Information and Library Network Centre
- (4) Integrative Library Network Centre

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

1[Option ID=1233]
2[Option ID=1234]

3[Option ID=1235]

4[Option ID=1236]

Sl. No.10

QBID:8852010

Which of the following is NOT a citation style?

- (1) MLA
- (2) Refwork
- (3) Chicago
- (4) APA

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1237]

2[Option ID=1238]

3[Option ID=1239]

4[Option ID=1240]

Sl. No.11

QBID:8852011

A random variable is distributed normally. The probability that it takes a value within one standard deviation of the mean, is approximately

- (1) 0.68
- (2) 0.85
- (3) 0.95
- (4) 0.99

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1241]

2[Option ID=1242]

3[Option ID=1243]

4[Option ID=1244]

Sl. No.12

QBID:8852012

How many different samples of size $n = 4$ can be chosen from a finite population of $N = 10$?

- (1) 120
- (2) 240
- (3) 210
- (4) 420

(1) 1

(2) 2

(3) 3

(4) 4

- 1[Option ID=1245]
- 2[Option ID=1246]
- 3[Option ID=1247]
- 4[Option ID=1248]

Sl. No.13

QBID:8852013

Given below are two statements :

- Statement I : When the goal of an experiment is to establish an assertion, the negation of the assertion should be taken as the null hypothesis.
- Statement II : Type II error is committed on accepting the null hypothesis when it is false.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

- 1[Option ID=1249]
- 2[Option ID=1250]
- 3[Option ID=1251]
- 4[Option ID=1252]

Sl. No.14

QBID:8852014

A model based on which of the following types of analysis does not involve apriori classification of variables into dependent and independent variables?

- (1) Bivariate Regression Analysis
- (2) Multivariate Regression Analysis
- (3) Logit Analysis
- (4) Factor Analysis

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

- 1[Option ID=1253]

2[Option ID=1254]
3[Option ID=1255]
4[Option ID=1256]

Sl. No.15
QBID:8852015

Identify the correct statements from those given below.

- (A) Arithmetic mean is a more sensitive measure of central tendency than the median
- (B) Range is a better measure of dispersion than the mean deviation
- (C) The mean of a standard normal variate is always zero

Choose the correct answer from the options given below :

- (1) (A) and (B) only
- (2) (B) and (C) only
- (3) (A) and (C) only
- (4) (A), (B) and (C)

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

1[Option ID=1257]
2[Option ID=1258]
3[Option ID=1259]
4[Option ID=1260]

Sl. No.16
QBID:8852016

In a bivariate linear regression model

- (A) There should be no autocorrelation between residuals (i.e. error terms)
- (B) The variance of residuals (error terms) should remain same regardless of the values of independent variable
- (C) The conditional mean value of the residuals should be zero

Choose the correct answer from the options given below :

- (1) (A) and (B) only
- (2) (B) and (C) only
- (3) (A) and (C) only
- (4) (A), (B) and (C)

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

1[Option ID=1261]
2[Option ID=1262]
3[Option ID=1263]
4[Option ID=1264]

Sl. No.17
QBID:8852017

Given below are two statements :

Statement I : Karl Pearson's coefficient of correlation is an appropriate measure to comment upon curvilinear association between variables.

Statement II : Karl Pearson's coefficient of correlation is a confirmatory tool to decide if two variables are in causal relationship.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1265]
2[Option ID=1266]
3[Option ID=1267]
4[Option ID=1268]

Sl. No.18
QBID:8852018

Which among the following is a non-parametric test in hypothesis testing?

- (1) Z-test
- (2) t-test
- (3) Mann Whitney test
- (4) F-test

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

1[Option ID=1269]
2[Option ID=1270]
3[Option ID=1271]
4[Option ID=1272]

Sl. No.19
QBID:8852019

A large random sample is drawn from a normally distributed population. A researcher conducts a two tailed test of hypothesis and computes a test statistic. For the null hypothesis to be rejected at 5% level of significance, the value of the test statistic should be

- (1) less than 1.645
- (2) more than 1.645 but less than 1.9
- (3) more than 1.96
- (4) less than 1.96

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

1[Option ID=1273]
2[Option ID=1274]
3[Option ID=1275]
4[Option ID=1276]

Sl. No.20
QBID:8852020

Given below are two statements :

Statement I : For a positively skewed distribution, the modal value is greater than the mean value.

Statement II : The log-normal distribution is negatively skewed.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1277]
2[Option ID=1278]
3[Option ID=1279]
4[Option ID=1280]

Sl. No.21
QBID:8852021

Which of the following parameters is mandatory to determine in the field while collecting water sample?

- (1) Specific conductance
- (2) Nitrate
- (3) Turbidity
- (4) Sulphide

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

1[Option ID=1281]
2[Option ID=1282]
3[Option ID=1283]
4[Option ID=1284]

SI. No.22
QBID:8852022

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.

Assertion (A) : Sampling tools and containers should be contamination free and cleaned thoroughly before collecting samples.

Reasons (R) : When the sampling medium is heterogeneous, a composite sample is more representative than a single grab sample.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
- (3) (A) is correct but (R) is not correct
- (4) (A) is not correct but (R) is correct

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

1[Option ID=1285]
2[Option ID=1286]
3[Option ID=1287]
4[Option ID=1288]

SI. No.23
QBID:8852023

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.

Assertion (A) : A spectrophotometer is used to measure the concentration of solutes in a clear solution.

Reason (R) : The amount of light absorbed by the solution depends on the solute concentration.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1289]

2[Option ID=1290]

3[Option ID=1291]

4[Option ID=1292]

Sl. No.24

QBID:8852024

Basic information required for collecting water samples in the field includes.

- (A) ID number
- (B) Location
- (C) Date and time
- (D) Method of preservation

Choose the correct answer from the options given below :

- (1) (A) and (B) only
- (2) (C) and (D) only
- (3) (A), (B) and (D) only
- (4) (A), (B), (C) and (D)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1293]

2[Option ID=1294]

3[Option ID=1295]

4[Option ID=1296]

Sl. No.25
QBID:8852025

Match List I with List II

List I – Crop	List II – Soil sampling depth
(A) Grasses and grasslands	(I) 22 cm
(B) Rice, groundnut and millet (shallow rooted crops)	(II) 15 cm
(C) Cotton, sugarcane, banana (deep rooted crops)	(III) 90 cm
(D) Perennial crops, plantations and orchard crops	(IV) 5 cm

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (3) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (4) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)

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

1[Option ID=1297]
2[Option ID=1298]
3[Option ID=1299]
4[Option ID=1300]

Sl. No.26
QBID:8852026

Which of the following preservation measures is used to prevent changes in the heavy metal composition of the water sample?

- (1) Adding HCl to pH < 5
- (2) Adding HNO₃ to pH < 2
- (3) Adding HNO₃ to pH < 7
- (4) Adding H₂SO₄ to pH < 4

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

1[Option ID=1301]
2[Option ID=1302]
3[Option ID=1303]
4[Option ID=1304]

Sl. No.27
QBID:8852027

The composition of water samples may change because of microbiological activity. At what temperature the water sample is preserved to avoid microbiological degradation?

- (1) ~ 4°C
- (2) ~ 8°C
- (3) ~ 10°C
- (4) ~ 6°C

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

1[Option ID=1305]
2[Option ID=1306]
3[Option ID=1307]
4[Option ID=1308]

Sl. No.28
QBID:8852028

Most commonly used soil sampling method(s) is/are

- (A) Grid sampling
- (B) Zone sampling
- (C) Deep depth sampling

Choose the correct answer from the options given below :

- (1) (A) only
- (2) (A) and (B) only
- (3) (A), (B) and (C) only
- (4) (B) and (C) only

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

1[Option ID=1309]
2[Option ID=1310]
3[Option ID=1311]
4[Option ID=1312]

Sl. No.29
QBID:8852029

The membrane filter pore size required to determine the dissolved metals in water samples, is

- (1) 0.25 μm
- (2) 0.35 μm
- (3) 0.57 μm
- (4) 0.45 μm

- (1) 1
- (2) 2

(3) 3

(4) 4

1[Option ID=1313]

2[Option ID=1314]

3[Option ID=1315]

4[Option ID=1316]

Sl. No.30

QBID:8852030

Sodium and potassium are estimated using the method of

(1) Gas-Liquid chromatography

(2) Electrical resistivity

(3) Flame photometry

(4) Electrical conductivity

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1317]

2[Option ID=1318]

3[Option ID=1319]

4[Option ID=1320]

Sl. No.31

QBID:8852031

Alkalinity is expressed as

(1) mg/L as CaCO_3

(2) mg/L

(3) mg/L as MgCO_3

(4) mg/g

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1321]

2[Option ID=1322]

3[Option ID=1323]

4[Option ID=1324]

Sl. No.32

QBID:8852032

Match List I with List II. Match the types of spectroscopy across the electromagnetic spectrum.

List I – (Region)

- (A) Gamma ray
- (B) Radio waves
- (C) Ultraviolet
- (D) Infrared

List II – (Spectroscopy)

- (I) Vibrational
- (II) Electronic
- (III) Nuclear Magnetic Resonance
- (IV) Mössbauer

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (3) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (4) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

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

1[Option ID=1325]
2[Option ID=1326]
3[Option ID=1327]
4[Option ID=1328]

Sl. No.33
QBID:8852033

Match List I with List II

List I – (Detector)

- (A) Flame ionization detector
- (B) Photoionization detector
- (C) Electrolytic conductivity detector (ELCD) and electron capture detector (ECD)
- (D) Flame photometric detector (FPD)

List II – (Application)

- (I) Selective to organic compounds containing sulfur and phosphorus
- (II) Selective to organic chlorinated and oxygenated compounds
- (III) Selective to aromatic and unsaturated compounds
- (IV) Non-selective, responds to virtually all organic compounds with the carbon-hydrogen bonds

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

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

(4) 4

1[Option ID=1329]
2[Option ID=1330]
3[Option ID=1331]
4[Option ID=1332]

Sl. No.34

QBID:8852034

Match List I with List II

List I – (Quality Assessment)

List II – (Quality Control)

- | | |
|------------------------|-----------------------------|
| (A) Reference material | (I) GLP, GMP, SOP |
| (B) Replicates | (II) Standardization |
| (C) Splits | (III) Calibration |
| (D) Spikes | (IV) Instrument maintenance |

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(4) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

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

1[Option ID=1333]
2[Option ID=1334]
3[Option ID=1335]
4[Option ID=1336]

Sl. No.35

QBID:8852035

Which of the following ions does NOT contribute to hardness of water?

- | | |
|----------------------|----------------------|
| (1) Na^+ | (2) Ca^{2+} |
| (3) Mg^{2+} | (4) Mn^{2+} |

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

1[Option ID=1337]
2[Option ID=1338]
3[Option ID=1339]
4[Option ID=1340]

Sl. No.36

QBID:8852036

The BIS acceptable limit for total dissolved solids (TDS) in drinking water is

- | | |
|---------------|---------------|
| (1) 250 mg/L | (2) 500 mg/L |
| (3) 1000 mg/L | (4) 2000 mg/L |

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

1[Option ID=1341]
2[Option ID=1342]
3[Option ID=1343]
4[Option ID=1344]

Sl. No.37
QBID:8852037

Which of the following is NOT the common tool used for soil sampling?

- | | |
|---------------------|------------------|
| (1) Scoop or trowel | (2) Tube sample |
| (3) Bucket auger | (4) Ponar dredge |

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

1[Option ID=1345]
2[Option ID=1346]
3[Option ID=1347]
4[Option ID=1348]

Sl. No.38
QBID:8852038

The BOD bottle is a narrow-mouth glass-stopped container with a capacity of

- | | |
|------------|-------------|
| (1) 250 ml | (2) 300 ml |
| (3) 500 ml | (4) 1000 ml |

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

1[Option ID=1349]
2[Option ID=1350]
3[Option ID=1351]
4[Option ID=1352]

Sl. No.39
QBID:8852039

In the volumetric method of analysis

- (A) Standardization is a process in which the concentration of a solution is determined by using the solution to titrate a known amount of another reagent.
- (B) The equivalence point is the point in a titration when the amount of added standard reagent exactly equals the amount of analyte.
- (C) The end point is the point in a titration when a physical change occurs that is associated with the condition of chemical equivalence.
- (D) Back titrations are often required when the rate of reaction between the analyte and reagent is slow or when the reagent lacks stability.

Choose the correct answer from the options given below.

- (1) (A) only
- (2) (A), (B) only
- (3) (A), (B), (C) only
- (4) (A), (B), (C), (D)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1353]

2[Option ID=1354]

3[Option ID=1355]

4[Option ID=1356]

Sl. No.40

QBID:8852040

Given below are two statements :

Statement I : Accuracy refers to how close a result is to the true value.

Statement II : Precision describes how well a number of measurements agree with each other.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

- 1[Option ID=1357]
 2[Option ID=1358]
 3[Option ID=1359]
 4[Option ID=1360]

Sl. No.41
 QBID:8852041

Match List I with List II

List I – (Wavelength (μ m))	List II – (Principal Application)
(A) 0.45 – 0.52	(I) Vegetation vigour assessment
(B) 0.52 – 0.62	(II) Soil moisture and snow mapping
(C) 1.55 – 1.75	(III) Mineral and rock type identification
(D) 2.08 – 2.35	(IV) Coastal water mapping

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
 (2) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
 (3) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
 (4) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

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

- 1[Option ID=1361]
 2[Option ID=1362]
 3[Option ID=1363]
 4[Option ID=1364]

Sl. No.42
 QBID:8852042

Which of the following is the most desired method for studying changes along environmental gradient or ecotone?

- (1) Bisect method (2) Line transect method
 (3) Point-frame method (4) Quadrat method

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

- 1[Option ID=1365]
 2[Option ID=1366]
 3[Option ID=1367]
 4[Option ID=1368]

Sl. No.43
 QBID:8852043

As per the Whitford's Index (Abundance/Frequency), which of the following values explain contagious distribution?

- | | |
|-------------|------------------|
| (1) < 0.025 | (2) 0.025 – 0.05 |
| (3) > 0.05 | (4) 0 |

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

1[Option ID=1369]
2[Option ID=1370]
3[Option ID=1371]
4[Option ID=1372]

Sl. No.44
QBID:8852044

Species Area Curve (SAC) is prepared using

- | | |
|--------------------------|----------------------------|
| (1) Circular plot design | (2) Nested plot design |
| (3) Random plot design | (4) Systematic plot design |

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

1[Option ID=1373]
2[Option ID=1374]
3[Option ID=1375]
4[Option ID=1376]

Sl. No.45
QBID:8852045

Match List I with List II :

List I – Efficiency		List II – Mathematical Expression	
(A) Assimilation efficiency	(I)	$\frac{\text{Production at trophic level } n}{\text{Ingestion at trophic level } n} \times 100$	
(B) Consumption efficiency	(II)	$\frac{\text{Food energy absorbed}}{\text{Food energy ingested}} \times 100$	
(C) Production efficiency	(III)	$\frac{\text{Ingestion at trophic level } n}{\text{Net production at trophic level } n-1} \times 100$	
(D) Ecological growth efficiency	(IV)	$\frac{\text{Production at trophic level } n}{\text{Assimilation at trophic level } n} \times 100$	

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
(2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
(3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
(4) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

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

1[Option ID=1377]
2[Option ID=1378]
3[Option ID=1379]
4[Option ID=1380]

Sl. No.46
QBID:8852046

A researcher is interested in a measure that combines both the number of species and their relative abundances compared with one another. Which of the following computations can address both the requirements?

- | | |
|-----------------------|-------------------------|
| (1) Species diversity | (2) Species richness |
| (3) Species evenness | (4) Species association |

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

1[Option ID=1381]
2[Option ID=1382]
3[Option ID=1383]
4[Option ID=1384]

Sl. No.47
QBID:8852047

For which of the following, point sampling is NOT recommended?

- | | |
|-----------------------------------|------------------------------|
| (1) Ecosystem/landscape inventory | (2) Multiple taxa inventory |
| (3) Population species inventory | (4) Single species inventory |

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

1[Option ID=1385]
2[Option ID=1386]
3[Option ID=1387]
4[Option ID=1388]

Sl. No.48
QBID:8852048

Identify the correct statements :

- (A) In random sampling, all units from an environment have an equal chance of being selected.
- (B) Random sampling selects sampling locations at predefined intervals in space or time.
- (C) Systematic sampling assumes all units from an environment have an equal chance of being selected.
- (D) Systematic sampling selects sampling locations at predefined intervals in space or time.

Choose the correct answer from the options given below :

- (1) (A) only
- (2) (A) and (D) only
- (3) (B) only
- (4) (C) only

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

1[Option ID=1389]
2[Option ID=1390]
3[Option ID=1391]
4[Option ID=1392]

Sl. No.49
QBID:8852049

The technique in which proteins are separated according to their size, is called as

- (1) Ion exchange chromatography
- (2) Hydrophobic chromatography
- (3) Gel filtration chromatography
- (4) Affinity chromatography

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

1[Option ID=1393]
2[Option ID=1394]
3[Option ID=1395]
4[Option ID=1396]

Sl. No.50
QBID:8852050

Which of the following is used during Sodium dodecyl Sulfate (SDS) poly acrylamide gel eletrophoresis to break s-s-linkage in the protein?

- (1) Sodium dodecyl sulfate
- (2) β - Mercaptoethanol
- (3) Coomassie blue
- (4) Poly acrylamide

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

1[Option ID=1397]
2[Option ID=1398]
3[Option ID=1399]
4[Option ID=1400]

Sl. No.51
QBID:8852051

In the ionosphere

- (A) the F-layer is present only during the night
- (B) the D-layer tends to absorb the radio waves
- (C) the D-layer is present only during the day

Choose the correct answer from the options given below :

- (1) (A) and (B) only
- (2) (B) and (C) only
- (3) (A) and (C) only
- (4) (A), (B) and (C) only

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

1[Option ID=1401]
2[Option ID=1402]
3[Option ID=1403]
4[Option ID=1404]

Sl. No.52
QBID:8852052

Given below are two statements :

Statement I : Atmospheric absorption of sound over low frequencies is more than that over the high frequencies.

Statement II : Ground absorption of sound is more pronounced over high frequencies than that over low frequencies.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1405]
2[Option ID=1406]
3[Option ID=1407]
4[Option ID=1408]

Sl. No.53
QBID:8852053

Given below are two statements :

Statement I : A material with higher value of the bulk modulus of elasticity will conduct sound more rapidly than a material with lower value of the bulk modulus.

Statement II : Speed of sound wave in air is dependent to the first order on the square root of the absolute temperature.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1409]
2[Option ID=1410]
3[Option ID=1411]
4[Option ID=1412]

Sl. No.54
QBID:8852054

The sound pressure level associated with a root mean square sound pressure of 2Pa is

- (1) 94 dB
- (2) 100 dB
- (3) 114 dB
- (4) 134 dB

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

1[Option ID=1413]
2[Option ID=1414]
3[Option ID=1415]
4[Option ID=1416]

Sl. No.55
QBID:8852055

Given below are two statements :

Statement I : A satellite in an elliptical orbit has a uniform angular velocity.

Statement II : Eccentricity of a circular orbit is equal to one.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1417]
2[Option ID=1418]
3[Option ID=1419]
4[Option ID=1420]

Sl. No.56
QBID:8852056

Mass of water vapor in a unit mass of dry air is called

- (1) Mixing ratio
- (2) Absolute humidity
- (3) Relative humidity
- (4) Specific humidity

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

1[Option ID=1421]
2[Option ID=1422]
3[Option ID=1423]
4[Option ID=1424]

Sl. No.57
QBID:8852057

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.

Assertion (A) : Polished metal surfaces appear anomalously cold when viewed by thermal remote sensors.

Reasons (R) : Polished metal surfaces have high emissivities

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

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

1[Option ID=1425]
2[Option ID=1426]
3[Option ID=1427]
4[Option ID=1428]

Sl. No.58
QBID:8852058

Given below are two statements :

- Statement I : Mechanical eddies produced over an extensive grass surface are generally larger than those produced by buildings in urban areas.
- Statement II : Thermal turbulence can generate eddies which are larger than those produced by mechanical turbulence.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

- (1) 1
- (2) 2

(3) 3

(4) 4

1[Option ID=1429]

2[Option ID=1430]

3[Option ID=1431]

4[Option ID=1432]

Sl. No.59

QBID:8852059

Given below are two statements :

Statement I : Downdrafts in the atmosphere generally originate from higher levels where momentum is greater.

Statement II : Updrafts are generally sensed as relative lulls in wind speed.

In the light of the above statements, choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but Statement II is false

(4) Statement I is false but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1433]

2[Option ID=1434]

3[Option ID=1435]

4[Option ID=1436]

Sl. No.60

QBID:8852060

Given below are two statements :

Statement I : Thermal conductivity of dry sandy soil is more than that of wet sandy soil.

Statement II : Heat capacity of air is more than that of soil.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1437]

2[Option ID=1438]

3[Option ID=1439]

4[Option ID=1440]

Sl. No.61

QBID:8852061

Ground water flows in response to

- (1) Gravity and density
- (2) Gravity and porosity
- (3) Permeability and topography
- (4) Gravity and hydraulic pressure

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1441]

2[Option ID=1442]

3[Option ID=1443]

4[Option ID=1444]

Sl. No.62

QBID:8852062

Given below are two statements :

Statement I : Drainage patterns are determined largely by the way in which erosion is affected by the topography, composition and structure of the terrain.

Statement II : A rectangular drainage pattern forms when stream erosion enlarges joints, fractures and faults in bed rock.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1445]
2[Option ID=1446]
3[Option ID=1447]
4[Option ID=1448]

Sl. No.63
QBID:8852063

Which of the following is NOT a gravity spring?

- (1) Artesian spring
- (2) Solution tubular spring
- (3) Volcanic spring
- (4) Depression spring

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

1[Option ID=1449]
2[Option ID=1450]
3[Option ID=1451]
4[Option ID=1452]

Sl. No.64
QBID:8852064

Match List I with List II

List I – Rock

- (A) Chalk
- (B) Coal
- (C) Coquina
- (D) Limestone

List II – Composition

- (I) Concentrated carbon
- (II) Calcite
- (III) Skeletal coccolithophorids
- (IV) Shell fragments

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
- (3) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (4) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)

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

1[Option ID=1453]
2[Option ID=1454]
3[Option ID=1455]
4[Option ID=1456]

Sl. No.65
QBID:8852065

Given below are two statements :

Statement I : Most of the world's large scale geological activities, such as earthquakes and volcanic eruptions, occur at or near plate boundaries.

Statement II : The interiors of plates are relatively quiet geologically, with milder earthquakes and little volcanic activity.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

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

1[Option ID=1457]
2[Option ID=1458]
3[Option ID=1459]
4[Option ID=1460]

Sl. No.66
QBID:8852066

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.

Assertion (A) : An earthquakes strength depends on how much of the energy stored in the rocks is released.

Reasons (R) : A seismograph is a machine that measures the intensity of earthquakes by sensing and recording the seismic waves they generate.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

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

1[Option ID=1461]
2[Option ID=1462]
3[Option ID=1463]
4[Option ID=1464]

Sl. No.67
QBID:8852067

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.

Assertion (A) : Slide prevention involves manipulating a slope so that the forces driving down slope movement are diminished.

Reasons (R) : Terraces may be cut into slope to increase the slope angle and to catch any falling debris.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

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

1[Option ID=1465]
2[Option ID=1466]
3[Option ID=1467]
4[Option ID=1468]

Sl. No.68
QBID:8852068

Match List I with List II

List I – Sand Dune type

- (A) Barchan
- (B) Parabolic
- (C) Longitudinal
- (D) Star

List II – Shape

- (I) Pyramid; three or more arms radiate from a peaked center
- (II) Large, straight sand ridge longer than wide
- (III) Crescent moon; horns point upwind
- (IV) Crescent moon ; horns point down wind

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
- (2) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

- (1) 1
- (2) 2

(3) 3

(4) 4

1[Option ID=1469]

2[Option ID=1470]

3[Option ID=1471]

4[Option ID=1472]

Sl. No.69

QBID:8852069

Dangerous type of mass wasting on active volcanoes is known as

- | | |
|------------------|---------------|
| (1) Creep | (2) Rockslide |
| (3) Solifluction | (4) Lahars |

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1473]

2[Option ID=1474]

3[Option ID=1475]

4[Option ID=1476]

Sl. No.70

QBID:8852070

Weathering consists of

- (1) Erosion, tectonics and uplift
- (2) Chemical, triological and physical degradation
- (3) Crust age, chemistry and sedimentary minerals
- (4) Sedimentary quartz, heamatite and alumina

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1477]

2[Option ID=1478]

3[Option ID=1479]

4[Option ID=1480]

Sl. No.71

QBID:8852071

Which of the following combinations of substances would produce a buffer?

- (1) A strong acid and a salt of the strong acid
- (2) A weak acid and a salt of the weak acid
- (3) A salt of a strong acid and a salt of the weak acid
- (4) A strong acid and a weak acid

(1) 1

(2) 2

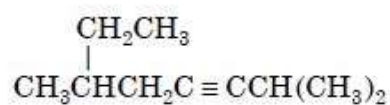
(3) 3

(4) 4

1[Option ID=1481]
2[Option ID=1482]
3[Option ID=1483]
4[Option ID=1484]

Sl. No.72
QBID:8852072

The IUPAC name for the compound



- (1) 2, 4-dimethyl-3-octyne
- (2) 6-ethyl-2-methyl-3-heptyne
- (3) 2-ethylpropyl isopropyl acetylene
- (4) 2-ethyl-6-methyl-4-heptyne

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

1[Option ID=1485]
2[Option ID=1486]
3[Option ID=1487]
4[Option ID=1488]

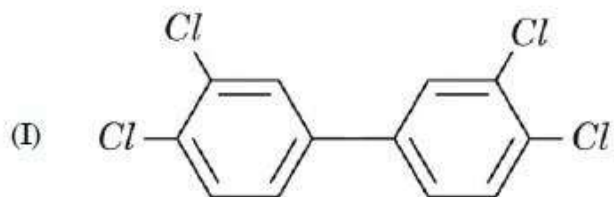
Sl. No.73
QBID:8852073

Match List I with List II

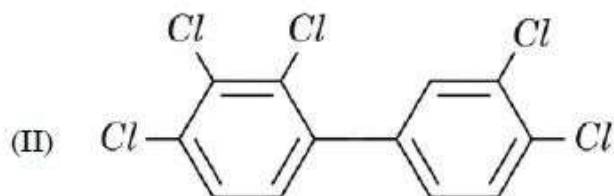
List I – PCBs

List II – Chemical Structure

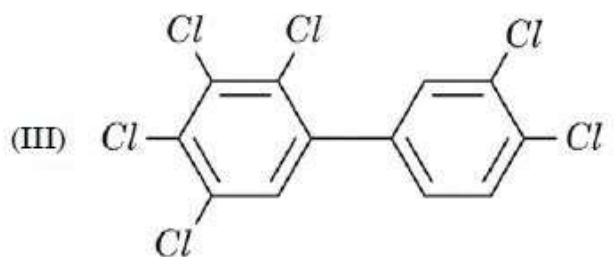
(A) PCB 77



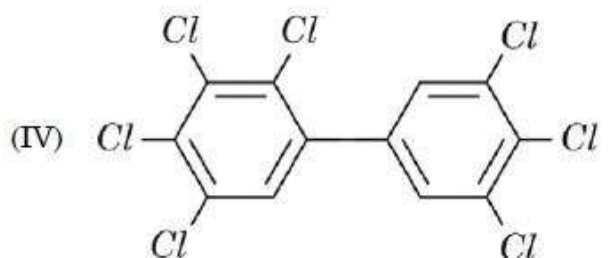
(B) PCB 105



(C) PCB 156



(D) PCB 189



Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

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

1[Option ID=1489]
 2[Option ID=1490]
 3[Option ID=1491]
 4[Option ID=1492]

Arrange the following elements from most negative to least negative electron affinity

- (A) K
- (B) Br
- (C) Cs
- (D) Cl

Choose the correct answer from the options given below :

- (1) $\text{Cl} < \text{Br} < \text{K} < \text{Cs}$
- (2) $\text{K} < \text{Cs} < \text{Cl} < \text{Br}$
- (3) $\text{Cs} < \text{K} < \text{Cl} < \text{Br}$
- (4) $\text{Br} < \text{Cl} < \text{Cs} < \text{K}$

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

1[Option ID=1493]

2[Option ID=1494]

3[Option ID=1495]

4[Option ID=1496]

Sl. No.75

QBID:8852075

Which of the following is not a strong electrolyte?

- (1) HNO_3
- (2) HClO_3
- (3) HClO_4
- (4) HCl

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

1[Option ID=1497]

2[Option ID=1498]

3[Option ID=1499]

4[Option ID=1500]

Sl. No.76

QBID:8852076

Arrange the following silicon tetrahalides in the decreasing order of Lewis acidity

- (A) SiF_4
- (B) SiCl_4
- (C) SiBr_4
- (D) SiI_4

Choose the correct answer from the options given below :

- (1) $\text{Si F}_4 > \text{Si Cl}_4 > \text{Si Br}_4 > \text{Si I}_4$
- (2) $\text{Si I}_4 > \text{Si Br}_4 > \text{Si Cl}_4 > \text{Si F}_4$
- (3) $\text{Si Cl}_4 > \text{Si Br}_4 > \text{Si I}_4 > \text{Si F}_4$
- (4) $\text{Si Br}_4 > \text{Si Cl}_4 > \text{Si F}_4 > \text{Si I}_4$

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

1[Option ID=1501]
2[Option ID=1502]
3[Option ID=1503]
4[Option ID=1504]

Sl. No.77
QBID:8852077

What is the ionic strength of a 0.1 M solution of KNO_3 ?

- | | |
|---------|---------|
| (1) 0.1 | (2) 0.2 |
| (3) 0.4 | (4) 0.8 |

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

1[Option ID=1505]
2[Option ID=1506]
3[Option ID=1507]
4[Option ID=1508]

Sl. No.78
QBID:8852078

Match List I with List II

List I – Type of Reaction

- (A) Combination reaction
- (B) Decomposition reaction
- (C) Single replacement reaction
- (D) Double replacement reaction

List II – Description

- (I) A chemical reaction in which a single product is produced from two or more reactants
- (II) A chemical reaction in which a single reactant is converted into two or more simpler substances
- (III) A chemical reaction in which an atom or a molecule replaces an atom or a group of atoms from a compound
- (IV) A chemical reaction in which two substances exchange parts with one another and form two different substances

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

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

- 1[Option ID=1509]
2[Option ID=1510]
3[Option ID=1511]
4[Option ID=1512]

Sl. No.79
QBID:8852079

The label on a vinegar bottle says it contains 5.0% acetic acid. The bottle contains 240 ml of vinegar. How many grams of acetic acid are in the bottle.

- | | |
|----------|----------|
| (1) 6 g | (2) 12 g |
| (3) 24 g | (4) 48 g |

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

- 1[Option ID=1513]
2[Option ID=1514]
3[Option ID=1515]
4[Option ID=1516]

Sl. No.80
QBID:8852080

Match List I with List II

List I

List II

- | | |
|--|---|
| (A) $\text{HP}_2\text{O}_7^{3-}$ | (I) <i>cyclo</i> -triphosphate |
| (B) $\text{H}_2\text{P}_3\text{O}_9^-$ | (II) dihydrogen- <i>cyclo</i> -triphosphate |
| (C) $\text{P}_3\text{O}_9^{3-}$ | (III) Phosphonate |
| (D) HPO_9^{2-} | (IV) hydrogendiphosphate |

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(4) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

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

- 1[Option ID=1517]
2[Option ID=1518]
3[Option ID=1519]
4[Option ID=1520]

Sl. No.81
QBID:8852081

C₄ plants tend

- (A) to be inhibited by high oxygen concentrations.
- (B) to be more resistant to grazing by insects
- (C) to peak in photosynthetic rate at moderate light intensities and temperature
- (D) to peak in photosynthetic rate in bright light and high temperature
- (E) to have little photorespiration

Choose the correct answer from the options given below :

- (1) (A), (B) and (E) only
- (2) (B), (D) and (E) only
- (3) (A), (C) and (E) only
- (4) (C), (D) and (E) only

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

1[Option ID=1521]
2[Option ID=1522]
3[Option ID=1523]
4[Option ID=1524]

Sl. No.82
QBID:8852082

Which of the following survivorship curve shape is expected if survival differs greatly in successive stages of the life history?

- (1) Diagonal straight line
- (2) Concave curve
- (3) Convex curve
- (4) Stair step line

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

1[Option ID=1525]
2[Option ID=1526]
3[Option ID=1527]
4[Option ID=1528]

Sl. No.83
QBID:8852083

Protocooperation refers to

- (1) one population is benefited, but the other is not affected
- (2) both populations benefit by the association but their relations are not obligatory
- (3) growth and survival of both populations is benefited, and neither can survive under natural conditions without the other
- (4) one population is inhibited and the other is not affected

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

1[Option ID=1529]
2[Option ID=1530]
3[Option ID=1531]
4[Option ID=1532]

Sl. No.84
QBID:8852084

The site is handed over by one seral community to the other until a climax community is developed. This relates to

- (1) disequilibrium theory of succession
- (2) initial floristic composition
- (3) relay floristic composition
- (4) unified model of succession

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

1[Option ID=1533]
2[Option ID=1534]
3[Option ID=1535]
4[Option ID=1536]

Sl. No.85
QBID:8852085

The species which are identical in morphology and appearance but do not interbreed are known as

- | | |
|----------------|----------------|
| (1) Allopatric | (2) Parapatric |
| (3) Siblings | (4) Sympatric |

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

1[Option ID=1537]
2[Option ID=1538]
3[Option ID=1539]
4[Option ID=1540]

Sl. No.86
QBID:8852086

Alkaptonuria is caused by

- | | |
|--------------------------------|------------------------------------|
| (1) Tyrosine aminotransferase | (2) Homogentisate 1, 2 dioxigenase |
| (3) Phenyl alanine hydroxylase | (4) Fumarylaceto acetase |

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

1[Option ID=1541]
2[Option ID=1542]
3[Option ID=1543]
4[Option ID=1544]

Sl. No.87
QBID:8852087

Which of the following is the first stable product of C₄ plant?

- | | |
|--------------------------|--------------------------|
| (1) Phosphoglyceric acid | (2) Oxalo acetic acid |
| (3) Glucose 6 phosphate | (4) Fructose 6 phosphate |

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

1[Option ID=1545]
2[Option ID=1546]
3[Option ID=1547]
4[Option ID=1548]

Sl. No.88

QBID:8852088

Identify the correct statements regarding plant hormones.

- (A) Absciscic acid is exported from leaves in the phloem and from roots in the xylem.
(B) Auxin is transported both polarly and nonpolarly
(C) Cytokinins are transported in the phloem from roots to shoots
(D) Hyperelongation of shoot is done by ethylene

Choose the correct answer from the options given below :

- | | |
|----------------------|----------------------|
| (1) (A) only | (2) (A) and (B) only |
| (3) (C) and (D) only | (4) (D) only |

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

1[Option ID=1549]
2[Option ID=1550]
3[Option ID=1551]
4[Option ID=1552]

Sl. No.89

QBID:8852089

Which of the following hormones is responsible for spermatogenesis in males?

- (1) Follicle stimulating hormone
(2) Testosterone
(3) Leutinizing hormone
(4) Estradiol

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

1[Option ID=1553]
2[Option ID=1554]
3[Option ID=1555]
4[Option ID=1556]

Match List I with List II

List I – Plant hormones

- (A) Auxins
- (B) Gibberellins
- (C) Cytokinins
- (D) Absciscic acid

List II – Effects

- (I) Promotion of cell division
- (II) Apical dominance
- (III) Stomatal closure
- (IV) Hyperelongation of shoot

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
- (2) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (3) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (4) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

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

1[Option ID=1557]
2[Option ID=1558]
3[Option ID=1559]
4[Option ID=1560]

Match List I with List II

List I – Biosphere Reserve

- (A) Dibru-Saikhowa
- (B) Dehang-Debang
- (C) Khangchendzonga
- (D) Nokrek

List II – State

- (I) Arunachal Pradesh
- (II) Assam
- (III) Meghalaya
- (IV) Sikkim

Choose the correct answer from the options given below :

- (1) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (4) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)

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

1[Option ID=1561]
2[Option ID=1562]
3[Option ID=1563]
4[Option ID=1564]

Sl. No.92
QBID:8852092

Arrange the following in decreasing order of impact of invasive species on following systems.

- (A) Coastal
- (B) Desert
- (C) Inland water
- (D) Island
- (E) Marine

Choose the correct answer from the options given below :

- | | |
|-----------------------------|-----------------------------|
| (1) (C), (E), (B), (A), (D) | (2) (C), (D), (A), (B), (E) |
| (3) (D), (C), (A), (B), (E) | (4) (D), (E), (B), (A), (C) |

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

1[Option ID=1565]
2[Option ID=1566]
3[Option ID=1567]
4[Option ID=1568]

Sl. No.93
QBID:8852093

In the wind flow near the earth's surface

- (1) wind blows parallel to the isobars
- (2) the coriolis force is greater than the pressure gradient force
- (3) pressure gradient force balances the coriolis force and the centrifugal force
- (4) the coriolis force is less than the pressure gradient force

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

1[Option ID=1569]
2[Option ID=1570]
3[Option ID=1571]
4[Option ID=1572]

Sl. No.94
QBID:8852094

Absolute stability prevails in the atmosphere when

- (1) environmental lapse rate is greater than the dry adiabatic lapse rate
- (2) environmental lapse rate is greater than the saturated adiabatic lapse rate
- (3) environmental lapse rate is between the dry and saturated adiabatic lapse rates
- (4) environmental lapse rate is less than the saturated adiabatic lapse rate

- (1) 1
- (2) 2

(3) 3

(4) 4

1[Option ID=1573]

2[Option ID=1574]

3[Option ID=1575]

4[Option ID=1576]

Sl. No.95

QBID:8852095

Prolonged exposure to cold temperature may cause

(1) Trenchfoot

(2) Fainting

(3) Rashes

(4) Cramps

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1577]

2[Option ID=1578]

3[Option ID=1579]

4[Option ID=1580]

Sl. No.96

QBID:8852096

Which of the following is NOT a cataclysmic hazard?

(1) Earthquake

(2) Volcanic eruptions

(3) Drought

(4) Cyclonic storms

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1581]

2[Option ID=1582]

3[Option ID=1583]

4[Option ID=1584]

Sl. No.97

QBID:8852097

In water logging areas, fertile agricultural lands may become barren because pore spaces of soil are

- (A) completely filled with water only
- (B) completely filled with air only
- (C) filled partially with water and partially with mineral matter
- (D) filled with air and mineral matter

Choose the correct answer from the options given below :

- (1) (A) and (B) only
- (2) (A) only
- (3) (B) and (D) only
- (4) (A), (B), (C) only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1585]

2[Option ID=1586]

3[Option ID=1587]

4[Option ID=1588]

Sl. No.98

QBID:8852098

Match List I with List II : Match the major reaction processes involved in the nitrogen cycle.

List I

- (A) Fixation
- (B) Assimilation
- (C) Ammonification
- (D) Nitrification

List II

- (I) $N_2 \rightarrow$ ammonical nitrogen (NH_3/NH_4^+)
- (II) Ammonical nitrogen $\rightarrow$ amino acids
- (III) Amino acids $\rightarrow$ ammonical nitrogen
- (IV) Ammonical nitrogen $\rightarrow$ nitrite ion $\rightarrow$ nitrate ion

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1589]

2[Option ID=1590]

3[Option ID=1591]

4[Option ID=1592]

Sl. No.99

QBID:8852099

- (A) The O horizons of a soil are dominantly organic horizons occuring above mineral horizons.
- (B) The A horizons are more apt to be cultivated than the E horizons
- (C) In most B horizons, one of the dominant processes of soil formation has been eluviation.
- (D) The C horizons are generally more completely weathered than the other horizons

Choose the correct answer from the options given below :

- (1) (A) only (2) (A) and (B) only
- (3) (A), (B), (C) only (4) (A), (B), (C), (D)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1593]

2[Option ID=1594]

3[Option ID=1595]

4[Option ID=1596]

Sl. No.100

QBID:8852100

Which of the following is an organochlorine based insecticide?

- (1) Malathione (2) Aldrin
- (3) Parathion (4) Carbofuran

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=1597]

2[Option ID=1598]

3[Option ID=1599]

4[Option ID=1600]