

National Testing Agency

Question Paper Name :	PHYSICAL SCIENCES 23rd Sep 2020 Shift 1 Set 2
Subject Name :	PHYSICAL SCIENCES
Creation Date :	2020-09-23 13:49:42
Duration :	120
Total Marks :	480
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes

PHYSICAL SCIENCES

Group Number :	1
Group Id :	2105295
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	480
Is this Group for Examiner? :	No

PHYSICAL SCIENCES

Section Id :	2105299
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	120

Number of Questions to be attempted :	120
Section Marks :	480
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	2105299
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 210529541 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The predominant mechanism of gaseous exchange in soil is

1. Mass flow
2. Contact exchange
3. Ion exchange
4. Diffusion

Options :

- 2105292161. 1
- 2105292162. 2
- 2105292163. 3
- 2105292164. 4

Question Number : 2 Question Id : 210529542 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Robinson	I. Colour Chart
B. Yoder	II. Consistency limits
C. Munsell	III. Pipette method
D. Atterberg	IV. Wet sieving

Choose the correct answer from the options given below:

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

Options :

- 2105292165. 1
- 2105292166. 2
- 2105292167. 3
- 2105292168. 4

Question Number : 3 Question Id : 210529543 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil heat flux is upward during

1. Noon
2. Afternoon
3. Forenoon
4. Midnight

Options :

- 2105292169. 1
- 2105292170. 2
- 2105292171. 3

2105292172. 4

Question Number : 4 Question Id : 210529544 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil heat flux is equal to

1. $\frac{dT}{dz}$
2. $K \frac{dz}{dT}$
3. $K \frac{dT}{dz}$
4. $\frac{dz}{dT}$

Options :

- 2105292173. 1
- 2105292174. 2
- 2105292175. 3
- 2105292176. 4

Question Number : 5 Question Id : 210529545 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following physical processes is responsible for soil heat loss?

1. Infiltration
2. Transpiration
3. Evaporation
4. Condensation

Options :

- 2105292177. 1
- 2105292178. 2
- 2105292179. 3
- 2105292180. 4

Question Number : 6 Question Id : 210529546 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The albedo is the highest in

1. Water surface
2. Bare soil
3. Cropped area
4. Ice

Options :

2105292181. 1

2105292182. 2

2105292183. 3

2105292184. 4

Question Number : 7 Question Id : 210529547 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil temperature at 5 cm depth is higher in

1. Crop field
2. Bare field
3. Wet field
4. Ploughed field

Options :

2105292185. 1

2105292186. 2

2105292187. 3

2105292188. 4

Question Number : 8 Question Id : 210529548 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

**Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

The Resource Conservation Technologies include

- A. Zero (or) Minimum Tillage
- B. Direct Seeding
- C. Bed Planting with residue mulch

Choose the correct answer from the options given below:

- 1. All A, B and C
- 2. Both A and B
- 3. A only
- 4. Both B and C

Options :

- 2105292189. 1
- 2105292190. 2
- 2105292191. 3
- 2105292192. 4

**Question Number : 9 Question Id : 210529549 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question
Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 4 Wrong Marks : 1

According to Ministry of Water Resources, the waterlogged areas are the land areas having

- 1. Water-table within 2 m from land surface
- 2. Water-table between 2-3 m from land surface
- 3. Water-table below 3 m from land surface
- 4. Standing water column

Options :

- 2105292193. 1

2105292194. 2

2105292195. 3

2105292196. 4

Question Number : 10 Question Id : 210529550 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If the soil temperature at 5 cm depth is 20°C then what will be its value in degree Farenheit?

1. 52°F

2. 86°F

3. 68°F

4. 98°F

Options :

2105292197. 1

2105292198. 2

2105292199. 3

2105292200. 4

Question Number : 11 Question Id : 210529551 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Transformed Vegetation Index is expressed as

1. $\sqrt{\text{NDVI}}$

2. $(\text{NDVI})^2$

3. $\sqrt{\text{GVI}}$

4. $\sqrt{0.5 + \text{NDVI}}$

Options :

2105292201. 1

2105292202. 2

2105292203. 3

2105292204. 4

Question Number : 12 Question Id : 210529552 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

If a satellite completes revolution in orbit two times a day, then angular velocity is

1. $180^\circ/\text{day}$
2. $360^\circ/\text{day}$
3. $720^\circ/\text{day}$
4. $90^\circ/\text{day}$

Options :

- 2105292205. 1
- 2105292206. 2
- 2105292207. 3
- 2105292208. 4

Question Number : 13 Question Id : 210529553 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

GPS needs at least ___ signals from satellites for providing geographic location

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

Options :

- 2105292209. 1
- 2105292210. 2
- 2105292211. 3
- 2105292212. 4

Question Number : 14 Question Id : 210529554 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

RADAR works in which of the following EMR bands?

1. Visible
2. Radiowave
3. Microwave
4. Infrared

Options :

- 2105292213. 1
- 2105292214. 2
- 2105292215. 3
- 2105292216. 4

Question Number : 15 Question Id : 210529555 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which software is used for spatial data analysis?

1. GIS
2. GPS
3. IRS
4. GSM

Options :

- 2105292217. 1
- 2105292218. 2
- 2105292219. 3
- 2105292220. 4

Question Number : 16 Question Id : 210529556 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Emissivity of black body is

1. 0.50
2. 0.25
3. 1.00
4. 0.75

Options :

- 2105292221. 1
- 2105292222. 2
- 2105292223. 3
- 2105292224. 4

Question Number : 17 Question Id : 210529557 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Infrared thermometer works on the principle of which of the following Radiation Laws?

1. Beer's Law
2. Stefan Boltzman's Law
3. Wien's Law
4. Kirchoff's Law

Options :

- 2105292225. 1
- 2105292226. 2
- 2105292227. 3
- 2105292228. 4

Question Number : 18 Question Id : 210529558 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following organisms is NOT free living?

1. Azotobacter
2. Cyanobacteria
3. Rhodospirillum
4. Frankia

Options :

2105292229. 1
2105292230. 2
2105292231. 3
2105292232. 4

Question Number : 19 Question Id : 210529559 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Spectral resolution	I. 22 Days
B. Spatial resolution	II. 8 bits
C. Radiometric resolution	III. 110 nm
D. Temporal resolution	IV. 36 m

Choose the correct answer from the options given below:

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

Options :

2105292233. 1
2105292234. 2
2105292235. 3

2105292236. 4

Question Number : 20 Question Id : 210529560 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The spectral bands used in Greenness Vegetation Index are

- A. Red
- B. Blue
- C. Green
- D. NIR
- E. MIR

Choose the correct answer from the options given below:

1. A, D, C and E only
2. A, B and C only
3. B, C and D only
4. A, B, C and D only

Options :

- 2105292237. 1
- 2105292238. 2
- 2105292239. 3
- 2105292240. 4

Question Number : 21 Question Id : 210529561 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The potential difference between the fixed part and freely mobile portion of the solution side of double layer in soil colloids is known as

1. Total Water Potential
2. Theta Potential
3. Gravitational Potential
4. Zeta Potential

Options :

- 2105292241. 1
- 2105292242. 2
- 2105292243. 3
- 2105292244. 4

Question Number : 22 Question Id : 210529562 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Amount of Boron uptake may be higher in

1. Organic Soil
2. Acidic Soil
3. Acidic soil of humid region
4. Clayey soil

Options :

- 2105292245. 1
- 2105292246. 2
- 2105292247. 3
- 2105292248. 4

Question Number : 23 Question Id : 210529563 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Orientation of leaves and other parts of the plant towards sunlight is called

1. Photoperiodism
2. Phototropism
3. Long day plants
4. Short day plants

Options :

- 2105292249. 1
- 2105292250. 2
- 2105292251. 3
- 2105292252. 4

Question Number : 24 Question Id : 210529564 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The conversion of a sol to a gel is called

1. Solation
2. Gelation
3. Filtration
4. Precipitation

Options :

- 2105292253. 1
- 2105292254. 2
- 2105292255. 3
- 2105292256. 4

Question Number : 25 Question Id : 210529565 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The enzymes which catalyse the interconversion of aldose and ketose sugars are

1. Isomerases
2. Epimerases
3. Carboxylases
4. Transferases

Options :

- 2105292257. 1
- 2105292258. 2
- 2105292259. 3
- 2105292260. 4

Question Number : 26 Question Id : 210529566 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The building units for oligosaccharides and polysaccharides are

1. Monosaccharides
2. Glyceraldehyde
3. Dihydroxyacetone
4. Trioses

Options :

- 2105292261. 1
- 2105292262. 2
- 2105292263. 3
- 2105292264. 4

Question Number : 27 Question Id : 210529567 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The common table sugar is

1. Glucose
2. Fructose
3. Sucrose
4. Maltose

Options :

- 2105292265. 1
- 2105292266. 2
- 2105292267. 3
- 2105292268. 4

Question Number : 28 Question Id : 210529568 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In general, longer the plant is in contact with nitrate, there would be

1. Constant accumulation of nitrate reserve
2. Greater nitrogen fixation
3. No effect on nitrate accumulation
4. Reduced denitrification

Options :

- 2105292269. 1
- 2105292270. 2
- 2105292271. 3
- 2105292272. 4

Question Number : 29 Question Id : 210529569 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The major factors controlling the leaching loss of nitrate are

- A. Concentration of nitrate in soil profile at the time of leaching
- B. Quantity of water passing through the soil profile
- C. Water holding capacity of soil

Select the correct answer from the options given below

- 1. A only
- 2. B only
- 3. Both A and B
- 4. C only

Options :

- 2105292273. 1
- 2105292274. 2
- 2105292275. 3
- 2105292276. 4

Question Number : 30 Question Id : 210529570 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The consumption of water containing high levels of nitrate-N can lead to

- 1. Methemoglobinemia in infants
- 2. Night blindness
- 3. Colour blindness
- 4. Scurvy disease

Options :

- 2105292277. 1
- 2105292278. 2
- 2105292279. 3

2105292280. 4

Question Number : 31 Question Id : 210529571 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The WHO standard of drinking water is

1. 20 mg NO_3^- – N/L
2. 10 mg NO_3^- – N/L
3. 30 mg NO_3^- – N/L
4. 50 mg NO_3^- – N/L

Options :

- 2105292281. 1
- 2105292282. 2
- 2105292283. 3
- 2105292284. 4

Question Number : 32 Question Id : 210529572 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The process of enrichment of surface water bodies with nutrients is called

1. Eutrophication
2. Oligotrophication
3. Putrefaction
4. Nutrification

Options :

- 2105292285. 1
- 2105292286. 2
- 2105292287. 3
- 2105292288. 4

Question Number : 33 Question Id : 210529573 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Decomposition of algae and macrophytes

1. Leads to reduced nitrogen content
2. Increases dissolved oxygen
3. Enriches water quality
4. Reduces dissolved oxygen, leads to fish mortality and impairs water quality

Options :

2105292289. 1

2105292290. 2

2105292291. 3

2105292292. 4

Question Number : 34 Question Id : 210529574 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Environmental Protection Act was enacted in the year

1. 1988
2. 1987
3. 1986
4. 1985

Options :

2105292293. 1

2105292294. 2

2105292295. 3

2105292296. 4

Question Number : 35 Question Id : 210529575 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For the restoration of highly degraded areas, plantation of which of the following is recommended?

1. Tree seedlings
2. Grasses
3. Fast-growing tree seedlings
4. Nitrogen-fixing tree seedlings

Options :

- 2105292297. 1
- 2105292298. 2
- 2105292299. 3
- 2105292300. 4

Question Number : 36 Question Id : 210529576 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

DDT has stable and high persistence in

1. Plants only
2. Soil only
3. Water only
4. Plant, Soil and Water

Options :

- 2105292301. 1
- 2105292302. 2
- 2105292303. 3
- 2105292304. 4

Question Number : 37 Question Id : 210529577 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Specific agricultural practices used to slow down the water run-off include

A. Contour tillage

B. Strip Cropping

C. Terracing

1. Both A and B
2. Both B and C
3. All A, B and C
4. Both A and C

Options :

2105292305. 1

2105292306. 2

2105292307. 3

2105292308. 4

Question Number : 38 Question Id : 210529578 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Comparatively stable fraction of the soil organic matter, left after the decomposition of major portion of added plant and animal residues, is called

1. Podzol
2. Mineralization
3. Humus
4. Immobilization

Options :

2105292309. 1

2105292310. 2

2105292311. 3

2105292312. 4

Question Number : 39 Question Id : 210529579 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Deficiency of Vitamin A causes

1. Night blindness
2. Scurvy disease
3. Anaemia
4. Beri-Beri

Options :

2105292313. 1

2105292314. 2

2105292315. 3

2105292316. 4

Question Number : 40 Question Id : 210529580 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The formula for Ethane is

1. CH_4
2. CH_3CH_3
3. $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$
4. $\text{CH}_3(\text{CH}_2)_4\text{CH}_3$

Options :

2105292317. 1

2105292318. 2

2105292319. 3

2105292320. 4

Question Number : 41 Question Id : 210529581 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Instrumental method of analysis of pesticide residue include chromatographic techniques such as

A. TLC

B. GLC

C. HPLC

1. Both A and B
2. All A, B and C
3. C only
4. Both B and C

Options :

2105292321. 1

2105292322. 2

2105292323. 3

2105292324. 4

Question Number : 42 Question Id : 210529582 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Most limiting factor for crop cultivation in desert areas is

1. Water only
2. Temperature only
3. Water and Temperature
4. Solar-radiation

Options :

2105292325. 1

2105292326. 2

2105292327. 3

2105292328. 4

Question Number : 43 Question Id : 210529583 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The potentially renewable resource is

1. Petroleum
2. Fossil fuel
3. Fertile soil
4. Coal

Options :

2105292329. 1

2105292330. 2

2105292331. 3

2105292332. 4

Question Number : 44 Question Id : 210529584 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Flame photometry is based on the principle of

1. Absorption spectroscopy
2. Emission spectroscopy
3. ESR spectroscopy
4. IR spectroscopy

Options :

2105292333. 1

2105292334. 2

2105292335. 3

2105292336. 4

Question Number : 45 Question Id : 210529585 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In general, lower the latitude of a place, the

1. More the solar energy it receives
2. Lesser the solar energy it receives
3. The more windy is the place
4. The climate is cold

Options :

2105292337. 1

2105292338. 2

2105292339. 3

2105292340. 4

Question Number : 46 Question Id : 210529586 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The make up of soil according to proportion of sand, silt and clay is known as

1. Soil texture
2. Soil structure
3. Soil horizon
4. Soil health

Options :

2105292341. 1

2105292342. 2

2105292343. 3

2105292344. 4

Question Number : 47 Question Id : 210529587 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Absence of air in soil limits the activity of

1. Microorganisms only
2. Mesoorganisms only
3. Micro-organisms and affects oxidation process
4. Pollutants only

Options :

2105292345. 1

2105292346. 2

2105292347. 3

2105292348. 4

Question Number : 48 Question Id : 210529588 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The most abundant element in the earth's crust is

1. Oxygen
2. Silica
3. Aluminium
4. Iron

Options :

2105292349. 1

2105292350. 2

2105292351. 3

2105292352. 4

Question Number : 49 Question Id : 210529589 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The rate of decomposing organic matter is affected negatively by the presence of

1. Protein
2. Fat
3. Lignin
4. Water-soluble compounds

Options :

- 2105292353. 1
- 2105292354. 2
- 2105292355. 3
- 2105292356. 4

Question Number : 50 Question Id : 210529590 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Soil Quality	I. Removal of the fertile layer
B. Water pollution	II. Point & Non-point source
C. Soil erosion	III. Agricultural crops
D. Land capability	IV. Soil health

Choose the correct answer from the options given below:

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

Options :

- 2105292357. 1
- 2105292358. 2
- 2105292359. 3

2105292360. 4

Question Number : 51 Question Id : 210529591 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The unconsolidated material above the parent material is called

1. Profile
2. Regolith
3. Solum
4. Pedon

Options :

- 2105292361. 1
- 2105292362. 2
- 2105292363. 3
- 2105292364. 4

Question Number : 52 Question Id : 210529592 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Shale on metamorphosis changes to

1. Quartzite
2. Marble
3. Slate
4. Basalt

Options :

- 2105292365. 1
- 2105292366. 2
- 2105292367. 3
- 2105292368. 4

Question Number : 53 Question Id : 210529593 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following is the active factor of soil formation?

1. Climate
2. Relief
3. Topography
4. Time

Options :

- 2105292369. 1
- 2105292370. 2
- 2105292371. 3
- 2105292372. 4

Question Number : 54 Question Id : 210529594 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Stoke's Law suggests that velocity of fall of particles is directly proportional to the

1. Density of the medium
2. Square of the density of the medium
3. Radius of the particle
4. Square of the radius of the particle

Options :

- 2105292373. 1
- 2105292374. 2
- 2105292375. 3
- 2105292376. 4

Question Number : 55 Question Id : 210529595 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The K bearing mineral dominated in soil is

1. Olivine
2. Hornblende
3. Micas
4. Zircon

Options :

2105292377. 1
2105292378. 2
2105292379. 3
2105292380. 4

Question Number : 56 Question Id : 210529596 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Clay particles in soil have the diameter of

1. < 0.002 mm
2. 0.02 - 0.002 mm
3. 0.02 - 0.2 mm
4. 2.0 - 0.20 mm

Options :

2105292381. 1
2105292382. 2
2105292383. 3
2105292384. 4

Question Number : 57 Question Id : 210529597 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The number of epipedon commonly found in India is

1. 3
2. 8
3. 9
4. 13

Options :

- 2105292385. 1
- 2105292386. 2
- 2105292387. 3
- 2105292388. 4

Question Number : 58 Question Id : 210529598 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The highest category of soil classification system is

1. Series
2. Type
3. Great groups
4. Order

Options :

- 2105292389. 1
- 2105292390. 2
- 2105292391. 3
- 2105292392. 4

Question Number : 59 Question Id : 210529599 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Natural aggregates of soil are called

1. Clods
2. Peds
3. Clusters
4. Floccules

Options :

- 2105292393. 1
- 2105292394. 2
- 2105292395. 3
- 2105292396. 4

Question Number : 60 Question Id : 210529600 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The first steps in aggregate formation is

1. Cementation
2. Dispersion
3. Flocculation
4. Compaction

Options :

- 2105292397. 1
- 2105292398. 2
- 2105292399. 3
- 2105292400. 4

Question Number : 61 Question Id : 210529601 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The parent material constituted by the windblown transported material consisting of silt particles is known as

1. Alluvium
2. Colluvium
3. Loess
4. Dune

Options :

- 2105292401. 1
- 2105292402. 2
- 2105292403. 3
- 2105292404. 4

Question Number : 62 Question Id : 210529602 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hydrometer is used in soil analysis to determine

1. Soil moisture content
2. Soil hydraulic conductivity
3. Soil structure
4. Soil texture

Options :

- 2105292405. 1
- 2105292406. 2
- 2105292407. 3
- 2105292408. 4

Question Number : 63 Question Id : 210529603 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which instrument is used for the determination of K content in soil?

1. UV - VIS spectrophotometer
2. Atomic absorption spectrophotometer
3. Flame photometer
4. Colorimeter

Options :

- 2105292409. 1
- 2105292410. 2
- 2105292411. 3
- 2105292412. 4

Question Number : 64 Question Id : 210529604 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is a man-made epipedon?

1. Albic
2. Ochric
3. Anthropic
4. Mollic

Options :

- 2105292413. 1
- 2105292414. 2
- 2105292415. 3
- 2105292416. 4

Question Number : 65 Question Id : 210529605 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Illuviation is the process of

1. Accumulation
2. Leaching
3. Transportation
4. Weathering

Options :

- 2105292417. 1
- 2105292418. 2
- 2105292419. 3
- 2105292420. 4

Question Number : 66 Question Id : 210529606 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following best represents the pH range of sodic soils?

1. 8 - 10
2. < 8.5
3. > 8.5
4. 6.0 - 8.0

Options :

- 2105292421. 1
- 2105292422. 2
- 2105292423. 3
- 2105292424. 4

Question Number : 67 Question Id : 210529607 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which gas is emitted from the soil due to rice cultivation

1. N₂
2. C₂H₂
3. CH₄
4. SO₂

Options :

2105292425. 1
2105292426. 2
2105292427. 3
2105292428. 4

Question Number : 68 Question Id : 210529608 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Keen's box is used to determine which of the following properties?

1. Water holding capacity
2. Soil temperature
3. Soil permeability
4. Soil moisture tension

Options :

2105292429. 1
2105292430. 2
2105292431. 3
2105292432. 4

Question Number : 69 Question Id : 210529609 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

'K' in Darcy's Law ($q = K \cdot \frac{\Delta A}{L}$) is represented by

1. Flux density
2. Hydraulic conductivity
3. Hydraulic gradient
4. Hydraulic head

Options :

- 2105292433. 1
- 2105292434. 2
- 2105292435. 3
- 2105292436. 4

Question Number : 70 Question Id : 210529610 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

'Chroma' variables in determination of soil colour is represented by

1. Spectral region of the colour
2. Whiteness of the colour
3. Relative brightness of the colour
4. Relative purity of the colour

Options :

- 2105292437. 1
- 2105292438. 2
- 2105292439. 3
- 2105292440. 4

Question Number : 71 Question Id : 210529611 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Biotite is the example of which type of rock-forming mineral?

1. Orthosilicate
2. Isosilicate
3. Tectosilicate
4. Phyllosilicate

Options :

- 2105292441. 1
- 2105292442. 2
- 2105292443. 3
- 2105292444. 4

Question Number : 72 Question Id : 210529612 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which master horizon of soil is known as the zone of illuviation?

1. O horizon
2. A horizon
3. B horizon
4. C horizon

Options :

- 2105292445. 1
- 2105292446. 2
- 2105292447. 3
- 2105292448. 4

Question Number : 73 Question Id : 210529613 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following diagnostic surface horizons is not common in India?

1. Mollic
2. Anthropic
3. Ochric
4. Umbric

Options :

2105292449. 1
2105292450. 2
2105292451. 3
2105292452. 4

Question Number : 74 Question Id : 210529614 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Regur is used to identify which of the following soils?

1. Lateritic soil
2. Red soil
3. Black soil
4. Acid soil

Options :

2105292453. 1
2105292454. 2
2105292455. 3
2105292456. 4

Question Number : 75 Question Id : 210529615 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sodium Adsorption ratio can be expressed as

1. $\frac{Na^+}{\sqrt{\frac{Ca^{++} + Mg^{++}}{2}}}$
2. $\sqrt{\frac{Na^+}{\frac{Ca^{++} + Mg^{++}}{2}}}$
3. $\frac{Na^+}{\sqrt{Ca^{++} + Mg^{++}}}$
4. $\frac{Na^+}{\frac{Ca^{++} + Mg^{++}}{2}}$

Options :

2105292457. 1
2105292458. 2
2105292459. 3
2105292460. 4

Question Number : 76 Question Id : 210529616 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Black cotton soil is commonly represented in order of

1. Alfisols
2. Vertisols
3. Entisols
4. Aridisols

Options :

2105292461. 1
2105292462. 2
2105292463. 3
2105292464. 4

Question Number : 77 Question Id : 210529617 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil moisture characteristics curve represents the relationship between

1. Soil texture and soil moisture content
2. Soil structure and soil moisture content
3. Available soil moisture and soil moisture content
4. Soil moisture tension and soil moisture content

Options :

2105292465. 1

2105292466. 2

2105292467. 3

2105292468. 4

Question Number : 78 Question Id : 210529618 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT a suborder of entisols?

1. Aqualfs
2. Fluvents
3. Orthents
4. Arents

Options :

2105292469. 1

2105292470. 2

2105292471. 3

2105292472. 4

Question Number : 79 Question Id : 210529619 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A surface horizon produced by continuous cropping is known as

1. Plaggen epipedon
2. Ochric epipedon
3. Umbric epipedon
4. Anthropic epipedon

Options :

2105292473. 1

2105292474. 2

2105292475. 3

2105292476. 4

Question Number : 80 Question Id : 210529620 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If the mean annual soil temperature is 8 – 15°C and the difference between mean annual summer and mean annual winter temperature is < 5°C, then the soil temperature regime is known as

1. Mesic
2. Isomesic
3. Thermic
4. Isothermic

Options :

2105292477. 1

2105292478. 2

2105292479. 3

2105292480. 4

Question Number : 81 Question Id : 210529621 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question

Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Lime is required for the reclamation of

1. Saline soil
2. Sodic soil
3. Acid soil
4. Acid sulfate soil

Options :

- 2105292481. 1
- 2105292482. 2
- 2105292483. 3
- 2105292484. 4

Question Number : 82 Question Id : 210529622 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question
Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Process of intermixing of soil horizons by external factor is called

1. Argillation
2. Horizonation
3. Gleization
4. Pedoturbation

Options :

- 2105292485. 1
- 2105292486. 2
- 2105292487. 3
- 2105292488. 4

Question Number : 83 Question Id : 210529623 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question
Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Gleization	I. Desilication
B. Laterisation	II. Process of decomposition of organic matter
C. Humification	III. Concretions of Fe & Mn
D. Podzolisation	IV. Removal of oxides of Fe & Al

Choose the correct answer from the options given below:

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

Options :

2105292489. 1
2105292490. 2
2105292491. 3
2105292492. 4

Question Number : 84 Question Id : 210529624 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Thomas Way	I. pH
B. Thomas Graham	II. PF
C. Sorenson	III. Colloid
D. Schofield	IV. CEC

Choose the correct answer from the options given below:

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

Options :

- 2105292493. 1
- 2105292494. 2
- 2105292495. 3
- 2105292496. 4

Question Number : 85 Question Id : 210529625 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of the total mass of soil solids to the total volume of soil solids is called

1. Bulk density
2. Porosity
3. Particle density
4. Plasticity

Options :

- 2105292497. 1
- 2105292498. 2
- 2105292499. 3

2105292500. 4

Question Number : 86 Question Id : 210529626 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Total nitrogen in soil is measured by

1. Kjeldahl method
2. Walkley & Black method
3. Colorimeter method
4. Hydrometer method

Options :

2105292501. 1

2105292502. 2

2105292503. 3

2105292504. 4

Question Number : 87 Question Id : 210529627 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is related with *in situ* moisture conservation?

1. Fertigation
2. Weeding
3. Mulching
4. Seeding

Options :

2105292505. 1

2105292506. 2

2105292507. 3

2105292508. 4

Question Number : 88 Question Id : 210529628 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The most important process of chemical weathering process of rocks is

1. Solution
2. Hydration
3. Hydrolysis
4. Oxidation

Options :

- 2105292509. 1
- 2105292510. 2
- 2105292511. 3
- 2105292512. 4

Question Number : 89 Question Id : 210529629 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The drought-tolerant leguminous green manures are

1. *Crotalaria juncea* and *Tephrosia purpurea*
2. *Vigna trilobata* and *Lens culinaris*
3. *Trifolium alexandrinum* and *Cymopsis tetragonaloba*
4. *Vigna unguiculata* and *Macrotyloma uniflorum*

Options :

- 2105292513. 1
- 2105292514. 2
- 2105292515. 3
- 2105292516. 4

Question Number : 90 Question Id : 210529630 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The critical stages in rice with respect to irrigation are

1. Crown Root Initiation (CRI) and Flowering
2. Sprouting and Panicle initiation
3. Early littering and Flowering
4. Ripening and Maturity

Options :

- 2105292517. 1
- 2105292518. 2
- 2105292519. 3
- 2105292520. 4

Question Number : 91 Question Id : 210529631 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Water requirement of Rice crop

1. 25 cm
2. 50 cm
3. 120 cm
4. 200 cm

Options :

- 2105292521. 1
- 2105292522. 2
- 2105292523. 3
- 2105292524. 4

Question Number : 92 Question Id : 210529632 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is 2:1 non-expanding clay mineral?

1. Kaolinite
2. Vermiculite
3. Montmorillonite
4. Illite

Options :

2105292525. 1
2105292526. 2
2105292527. 3
2105292528. 4

Question Number : 93 Question Id : 210529633 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Rhizosphere is closely related to

1. Soil structure
2. Soil texture
3. Plant root system
4. Wilting range

Options :

2105292529. 1
2105292530. 2
2105292531. 3
2105292532. 4

Question Number : 94 Question Id : 210529634 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The equation to estimate soil loss by wind erosion is $E = IRKFCWDB$, in which K stands for

1. Soil textured class factor
2. Surface roughness factor
3. Surface cover factor
4. Wind barrier factor

Options :

- 2105292533. 1
- 2105292534. 2
- 2105292535. 3
- 2105292536. 4

Question Number : 95 Question Id : 210529635 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Biological control of wind erosion is

1. Strip cropping
2. Contour bunding
3. Graded bunding
4. Ridge and furrow system

Options :

- 2105292537. 1
- 2105292538. 2
- 2105292539. 3
- 2105292540. 4

Question Number : 96 Question Id : 210529636 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Water erosion permitting crop is

1. Red gram
2. Black gram
3. Soyabean
4. Cow pea

Options :

- 2105292541. 1
- 2105292542. 2
- 2105292543. 3
- 2105292544. 4

Question Number : 97 Question Id : 210529637 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Bench terrace sloping outwards are effective only in

1. High rainfall area
2. Low rainfall area
3. Medium rainfall area
4. Heavy rainfall area

Options :

- 2105292545. 1
- 2105292546. 2
- 2105292547. 3
- 2105292548. 4

Question Number : 98 Question Id : 210529638 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The correct order of wind erosion processes is

1. Surface creep, Saltation, Suspension
2. Saltation, Surface creep, Suspension
3. Suspension, Surface creep, Saltation
4. Saltation, Suspension, Surface creep

Options :

- 2105292549. 1
- 2105292550. 2
- 2105292551. 3
- 2105292552. 4

Question Number : 99 Question Id : 210529639 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is the soil order for old alluvial soils?

1. Inceptisols
2. Entisols
3. Histosols
4. Molisols

Options :

- 2105292553. 1
- 2105292554. 2
- 2105292555. 3
- 2105292556. 4

Question Number : 100 Question Id : 210529640 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The instrument used for estimating consumptive use of water is

1. Anemometer
2. Piezometer
3. Lysimeter
4. Hydrometer

Options :

- 2105292557. 1
- 2105292558. 2
- 2105292559. 3
- 2105292560. 4

Question Number : 101 Question Id : 210529641 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Working range of tensiometer for determination of soil moisture is

1. 0 - 15 bar
2. 0 - 0.8 bar
3. 0.8 - 15 bar
4. 0 - 0.3 bar

Options :

- 2105292561. 1
- 2105292562. 2
- 2105292563. 3
- 2105292564. 4

Question Number : 102 Question Id : 210529642 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under saturated condition, the soil water potential is

1. Always negative
2. Either positive and negative
3. Always positive
4. May be zero or negative

Options :

- 2105292565. 1
- 2105292566. 2
- 2105292567. 3
- 2105292568. 4

Question Number : 103 Question Id : 210529643 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The On-Farm Development (OFD) activities undertaken under Command Area Development include

- A. Construction of field channels and drains
- B. Reclamation of waterlogged areas
- C. Renovation and rehabilitation of minor irrigation tanks

Choose the correct answer from the options given below:

1. A only
2. Both B and C
3. C only
4. All A, B and C

Options :

- 2105292569. 1
- 2105292570. 2

2105292571. 3

2105292572. 4

Question Number : 104 Question Id : 210529644 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Available water for plant indicates water held in

1. 0.33 - 15 bar
2. 0.1 - 0.2 bar
3. Above 15 bar
4. Below 0.1 bar

Options :

2105292573. 1

2105292574. 2

2105292575. 3

2105292576. 4

Question Number : 105 Question Id : 210529645 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is an aerobic non-symbiotic nitrogen-fixing bacteria?

1. Azotobacter
2. Clostridium
3. Rhizobium
4. Beizerinkia

Options :

2105292577. 1

2105292578. 2

2105292579. 3

2105292580. 4

Question Number : 106 Question Id : 210529646 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What is the C:N ratio of normal soil?

1. 5:1
2. 10:1
3. 15:1
4. 20:1

Options :

- 2105292581. 1
- 2105292582. 2
- 2105292583. 3
- 2105292584. 4

Question Number : 107 Question Id : 210529647 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The essentiality of Molybdenum was discovered by

1. A L Sommer and C P Lipman
2. D I Arnon and P R Stout
3. C Sprengle
4. G Gris and P H Brown

Options :

- 2105292585. 1
- 2105292586. 2
- 2105292587. 3
- 2105292588. 4

Question Number : 108 Question Id : 210529648 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Phosphate availability is maximum in the pH ranges of

1. 6.5 - 7.5
2. 5.5 - 6.5
3. 7.5 - 8.5
4. 8.5 - 9.5

Options :

- 2105292589. 1
- 2105292590. 2
- 2105292591. 3
- 2105292592. 4

**Question Number : 109 Question Id : 210529649 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Geohydrological unit of land which drains through a common point is called

1. Pond
2. Water body
3. Watershed
4. Rain shed

Options :

- 2105292593. 1
- 2105292594. 2
- 2105292595. 3
- 2105292596. 4

**Question Number : 110 Question Id : 210529650 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Soils of these textured class have minimum water holding capacity

1. Sandy soil
2. Clay soil
3. Loam soil
4. Clay loam soil

Options :

- 2105292597. 1
- 2105292598. 2
- 2105292599. 3
- 2105292600. 4

Question Number : 111 Question Id : 210529651 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The chemical used to remove organic matter from the soil during mechanical analysis is

1. CaCl_2
2. HCl
3. NaOH
4. H_2O_2

Options :

- 2105292601. 1
- 2105292602. 2
- 2105292603. 3
- 2105292604. 4

Question Number : 112 Question Id : 210529652 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under what condition, denitrification is a major mechanism of nitrogen loss from the soil?

1. Well-drained soil
2. Fallow soils
3. Submerged soil
4. Pastured land soil

Options :

- 2105292605. 1
- 2105292606. 2
- 2105292607. 3
- 2105292608. 4

Question Number : 113 Question Id : 210529653 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Phosphorous in DAP is

1. 25%
2. 60%
3. 18%
4. 46%

Options :

- 2105292609. 1
- 2105292610. 2
- 2105292611. 3
- 2105292612. 4

Question Number : 114 Question Id : 210529654 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Weight of one ha furrow slice of root zone depth soil is about

1. 2.2×10^6 kg
2. 1.5×10^6 kg
3. 20×10^6 kg
4. 15×10^6 kg

Options :

2105292613. 1
2105292614. 2
2105292615. 3
2105292616. 4

Question Number : 115 Question Id : 210529655 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Biofertilizers are

1. Organic manure
2. Gree manure
3. FYM
4. Culture of micro-organisms

Options :

2105292617. 1
2105292618. 2
2105292619. 3
2105292620. 4

Question Number : 116 Question Id : 210529656 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which nutrient element imparts indirect drought resistance?

1. K
2. Ca
3. Mg
4. S

Options :

2105292621. 1
2105292622. 2
2105292623. 3
2105292624. 4

Question Number : 117 Question Id : 210529657 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT associated with podzolization?

1. Removal of Fe & Al
2. Removal of Silica
3. Removal of humus
4. Acidic condition

Options :

2105292625. 1
2105292626. 2
2105292627. 3
2105292628. 4

Question Number : 118 Question Id : 210529658 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil pH is measured by making soil: water suspension in the ratio of

1. 1 : 10
2. 1 : 5
3. 1 : 2.5
4. 1 : 1

Options :

2105292629. 1
2105292630. 2
2105292631. 3
2105292632. 4

Question Number : 119 Question Id : 210529659 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. Splash erosion	I. Wind Erosion
B. Saltation	II. Rainfall factor
C. Erosivity	III. Impact force required to detach soil particles
D. Dispersion ratio	IV. Impact of falling raindrops

Choose the correct answer from the options given below

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

Options :

2105292633. 1
2105292634. 2
2105292635. 3

2105292636. 4

Question Number : 120 Question Id : 210529660 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
A. <i>In situ</i> measurement	I. Textural classification chart
B. USDA	II. Wilting range
C. Arrangement of soil particles	III. Soil moisture
D. Above 15 bar	IV. Soil structure

Choose the correct answer from the options given below:

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

Options :

2105292637. 1
2105292638. 2
2105292639. 3
2105292640. 4