

## National Testing Agency

**Question Paper Name:** PHYSICAL SCIENCES 1st July 2019 Shift2  
**Subject Name:** PHYSICAL SCIENCES  
**Creation Date:** 2019-07-01 18:50:34  
**Duration:** 150  
**Total Marks:** 640  
**Display Marks:** Yes  
**Share Answer Key With Delivery Engine:** Yes  
**Actual Answer Key:** Yes

### PHYSICAL SCIENCES

**Group Number :** 1  
**Group Id :** 55317216  
**Group Maximum Duration :** 0  
**Group Minimum Duration :** 150  
**Revisit allowed for view? :** No  
**Revisit allowed for edit? :** No  
**Break time:** 0  
**Group Marks:** 640

### Part A : PHYSICAL SCIENCES

**Section Id :** 55317224  
**Section Number :** 1  
**Section type :** Online  
**Mandatory or Optional:** Mandatory  
**Number of Questions:** 160  
**Number of Questions to be attempted:** 160  
**Section Marks:** 640  
**Display Number Panel:** Yes  
**Group All Questions:** No

**Sub-Section Number:** 1  
**Sub-Section Id:** 55317246  
**Question Shuffling Allowed :** Yes

**Question Number : 1 Question Id : 5531722595 Question Type : MCQ Option Shuffling : No Display Question Number : Yes**  
**Single Line Question Option : No Option Orientation : Vertical**  
**Correct Marks : 4 Wrong Marks : 1**

ICAR for better management and planning has divided entire country into agroclimatic zones. The total number of functional agroclimatic zone is

- 1) 127
- 2) 15
- 3) 21
- 4) 131

**Options :**

55317210321. 1  
55317210322. 2  
55317210323. 3  
55317210324. 4

**Question Number : 2 Question Id : 5531722596 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

India stands at number two position with reference to the production of:

- 1) Rice, wheat and jute
- 2) Rice, wheat and sugarcane
- 3) Rice, barley and sorghum
- 4) Wheat, tea and potato

**Options :**

55317210325. 1  
55317210326. 2  
55317210327. 3  
55317210328. 4

**Question Number : 3 Question Id : 5531722597 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The crop which has maximum radiation use efficiency is

- 1) Maize
- 2) Wheat
- 3) Rice
- 4) Sugarcane

**Options :**

55317210329. 1  
55317210330. 2  
55317210331. 3  
55317210332. 4

**Question Number : 4 Question Id : 5531722598 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

When the respiration equals the gross photosynthesis, it is known as

- 1) Compensation point
- 2) Zero point
- 3) Null point
- 4) Conducive point

Options :

55317210333. 1  
55317210334. 2  
55317210335. 3  
55317210336. 4

Question Number : 5 Question Id : 5531722599 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Select the correct sequence of the soil temperature (in °C) recorded at 7.00 IST at 5 cm, 10 cm, 20 cm soil depth respectively

- 1) 15.1, 17.2, 19.0
- 2) 19.0, 17.2, 15.1
- 3) 15.1, 19.0, 17.2
- 4) 19.0, 15.1, 17.2

Options :

55317210337. 1  
55317210338. 2  
55317210339. 3  
55317210340. 4

Question Number : 6 Question Id : 5531722600 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Neutron moisture probe estimates moisture in soil by detecting molecules of

- 1) Water
- 2) Oxygen
- 3) Hydrogen
- 4) Carbon

Options :

55317210341. 1  
55317210342. 2  
55317210343. 3  
55317210344. 4

Question Number : 7 Question Id : 5531722601 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The mineralization of organic nitrogen will be maximum at

- 1) 30 – 35 °C soil temperature and 40 – 60% soil moisture
- 2) 30 – 35 °C soil temperature and 60 – 80% soil moisture
- 3) 35 – 40 °C soil temperature and 80 – 100% soil moisture
- 4) 35 – 40 °C soil temperature and 60 – 80% soil moisture

**Options :**

55317210345. 1

55317210346. 2

55317210347. 3

55317210348. 4

**Question Number : 8 Question Id : 5531722602 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Select correct descending order of sugarcane producing states

- 1) Maharashtra, UP, Karnataka
- 2) Maharashtra, UP, Punjab
- 3) UP, Maharashtra, Punjab
- 4) UP, Maharashtra, Karnataka

**Options :**

55317210349. 1

55317210350. 2

55317210351. 3

55317210352. 4

**Question Number : 9 Question Id : 5531722603 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

ISRO was established in the year

- 1) 1971
- 2) 1972
- 3) 1973
- 4) 1969

**Options :**

55317210353. 1

55317210354. 2

55317210355. 3

55317210356. 4

**Question Number : 10 Question Id : 5531722604 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Plant shows maximum absorptance in

- 1) Blue, green and red bands
- 2) Blue, green and NIR bands
- 3) Blue, red and NIR bands
- 4) Green, red and NIR bands

**Options :**

55317210357. 1  
55317210358. 2  
55317210359. 3  
55317210360. 4

**Question Number : 11 Question Id : 5531722605 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Sentinel series of satellites is launched by

- 1) ISRO
- 2) NASA
- 3) ESA
- 4) JPSC

**Options :**

55317210361. 1  
55317210362. 2  
55317210363. 3  
55317210364. 4

**Question Number : 12 Question Id : 5531722606 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Ultraviolet (UV) radiation emitted by Sun does not reach the ground due to

- 1) Absorptance by ozone
- 2) Absorptance by oxygen
- 3) Absorptance by water vapor
- 4) Absorptance by methane

**Options :**

55317210365. 1  
55317210366. 2  
55317210367. 3  
55317210368. 4

**Question Number : 13 Question Id : 5531722607 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Acid rain occurs due to

- 1) CO<sub>2</sub>
- 2) SO<sub>2</sub>
- 3) CFC
- 4) NH<sub>4</sub>

Options :

55317210369. 1  
55317210370. 2  
55317210371. 3  
55317210372. 4

Question Number : 14 Question Id : 5531722608 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The Space Application Centre, ISRO is located at

- 1) Ahmedabad
- 2) Hyderabad
- 3) Bengaluru
- 4) Delhi

Options :

55317210373. 1  
55317210374. 2  
55317210375. 3  
55317210376. 4

Question Number : 15 Question Id : 5531722609 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The theoretical range of NDVI is

- 1) 0 to 1
- 2) - 1 to +1
- 3) - 1 to 0
- 4) 0 to 100

Options :

55317210377. 1  
55317210378. 2  
55317210379. 3  
55317210380. 4

Question Number : 16 Question Id : 5531722610 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

If a white flower is photographed with yellow absorptive filter, the colour of the flower will appear as

- 1) Yellow
- 2) Red
- 3) Blue
- 4) Black

**Options :**

- 55317210381. 1
- 55317210382. 2
- 55317210383. 3
- 55317210384. 4

**Question Number : 17 Question Id : 5531722611 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

GPS provides accurate positional information by receiving signals from satellite. The position of place is determined with help of

- 1) Triangulation method
- 2) Strength of signal
- 3) Wavelength of signal
- 4) Illumination caused by signal

**Options :**

- 55317210385. 1
- 55317210386. 2
- 55317210387. 3
- 55317210388. 4

**Question Number : 18 Question Id : 5531722612 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The vector data model has been mainly designed for:

- 1) Remote sensing and to certain extent GIS
- 2) GIS and to certain extent Remote sensing
- 3) Both GIS and remote sensing
- 4) Both GIS and GPS

**Options :**

- 55317210389. 1
- 55317210390. 2
- 55317210391. 3
- 55317210392. 4

**Question Number : 19 Question Id : 5531722613 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The suitability of agricultural crops over large geographical region may be quickly analyzed with the help of

- 1) GIS
- 2) Remote sensing
- 3) GPS
- 4) SIS

**Options :**

55317210393. 1  
55317210394. 2  
55317210395. 3  
55317210396. 4

**Question Number : 20 Question Id : 5531722614 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The physical basis of precision farming is

- 1) Input quality
- 2) Variable rate technology
- 3) Field variability
- 4) Site specific input

**Options :**

55317210397. 1  
55317210398. 2  
55317210399. 3  
55317210400. 4

**Question Number : 21 Question Id : 5531722615 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The matric potential of soil is the result of

- 1) Capillary action
- 2) Attraction due to ions
- 3) Adsorption due to soil solid
- 4) Attraction due to gravity of earth

**Options :**

55317210401. 1  
55317210402. 2  
55317210403. 3  
55317210404. 4

**Question Number : 22 Question Id : 5531722616 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



The major mechanism of reducing heat load from crop canopy is

- 1) Advective heat losses
- 2) Evaporation
- 3) Transpiration
- 4) Heat absorption by soil

**Options :**

55317210405. 1  
55317210406. 2  
55317210407. 3  
55317210408. 4

**Question Number : 23 Question Id : 5531722617 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Soil aeration refers to:

- 1) Drying of soil due to air movement
- 2) Flow of air over soil surface
- 3) Release of gases from soil due to microbial activities
- 4) Exchange of oxygen and CO<sub>2</sub> between soil pore space and atmosphere

**Options :**

55317210409. 1  
55317210410. 2  
55317210411. 3  
55317210412. 4

**Question Number : 24 Question Id : 5531722618 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

CO<sub>2</sub> in atmosphere exhibits maximum absorption of radiation at

- 1) 2700 nm wavelength
- 2) 700 nm wavelength
- 3) 1900 nm wavelength
- 4) 1400 nm wavelength

**Options :**

55317210413. 1  
55317210414. 2  
55317210415. 3  
55317210416. 4

**Question Number : 25 Question Id : 5531722619 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The soil water which is NOT usually used by plant is

- 1) Hygroscopic and gravitational water
- 2) Hygroscopic and capillary water
- 3) Gravitational and capillary water
- 4) Only hygroscopic water only

**Options :**

- 55317210417. 1
- 55317210418. 2
- 55317210419. 3
- 55317210420. 4

**Question Number : 26 Question Id : 5531722620 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Black frost in plants occurs due to

- 1) Subzero temperature and very low R. H.
- 2) Temperature greater than zero and low R. H.
- 3) Subzero temperature and high R. H.
- 4) Temperature greater than zero and high R. H.

**Options :**

- 55317210421. 1
- 55317210422. 2
- 55317210423. 3
- 55317210424. 4

**Question Number : 27 Question Id : 5531722621 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Carbon partitioning in plants chiefly depends on:

- 1) Photo assimilates
- 2) Rate of photosynthesis
- 3) Temperature
- 4) Phenological stages

**Options :**

- 55317210425. 1
- 55317210426. 2
- 55317210427. 3
- 55317210428. 4

**Question Number : 28 Question Id : 5531722622 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Canopy Temperature Depression (CTD) is inversely proportional to the amount of

- 1) Soil moisture
- 2) Soil temperature
- 3) Air temperature
- 4) Canopy temperature

**Options :**

55317210429. 1  
55317210430. 2  
55317210431. 3  
55317210432. 4

**Question Number : 29 Question Id : 5531722623 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

"Grey Speck" disease is observed due to deficiency of

- 1) Sulphur
- 2) Iron
- 3) Manganese
- 4) Zinc

**Options :**

55317210433. 1  
55317210434. 2  
55317210435. 3  
55317210436. 4

**Question Number : 30 Question Id : 5531722624 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The average level of CO<sub>2</sub> concentration in upper layer of soil is:

- 1) ~ 0.03%
- 2) ~ 0.003%
- 3) ~ 0.025%
- 4) ~ 0.25%

**Options :**

55317210437. 1  
55317210438. 2  
55317210439. 3  
55317210440. 4

**Question Number : 31 Question Id : 5531722625 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The strategical decisions related to crop management are made on the basis of:

- 1) Nowcasting
- 2) Short range weather forecast
- 3) Medium range weather forecast
- 4) Seasonal outlook

**Options :**

- 55317210441. 1
- 55317210442. 2
- 55317210443. 3
- 55317210444. 4

**Question Number : 32 Question Id : 5531722626 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The value of albedo during day will be minimum

- 1) 6 – 8 hr
- 2) 12 hr
- 3) 14 – 16 hr
- 4) 16 – 18 hr

**Options :**

- 55317210445. 1
- 55317210446. 2
- 55317210447. 3
- 55317210448. 4

**Question Number : 33 Question Id : 5531722627 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Soil temperature in hilly regions is most affected by

- 1) Soil type
- 2) Moisture
- 3) Slope
- 4) Aspect

**Options :**

- 55317210449. 1
- 55317210450. 2
- 55317210451. 3
- 55317210452. 4

**Question Number : 34 Question Id : 5531722628 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The bulb of soil thermometer is molded at an angle of

- 1) 60°
- 2) 90°
- 3) 120°
- 4) 150°

Options :

55317210453. 1  
55317210454. 2  
55317210455. 3  
55317210456. 4

Question Number : 35 Question Id : 5531722629 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The maximum diurnal variation in soil temperature is recorded at soil depth of

- 1) 30 cm
- 2) 20 cm
- 3) 10 cm
- 4) 0 cm

Options :

55317210457. 1  
55317210458. 2  
55317210459. 3  
55317210460. 4

Question Number : 36 Question Id : 5531722630 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Transparent polythene sheet laid on soil increases soil temperature as

- 1) It absorbs all the incidence of radiation
- 2) It absorbs shortwave radiation
- 3) It transmits shortwave radiation and blocks longwave radiation
- 4) It absorbs longwave radiation

Options :

55317210461. 1  
55317210462. 2  
55317210463. 3  
55317210464. 4

Question Number : 37 Question Id : 5531722631 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Photoperiodism is the capacity of plant to measure:

- 1) Period of high amount of photon
- 2) Period of high temperature
- 3) Period of equivalent to bright sunshine hours
- 4) Proportion of day length in 24-hour period

Options :

- 55317210465. 1
- 55317210466. 2
- 55317210467. 3
- 55317210468. 4

Question Number : 38 Question Id : 5531722632 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Vernalization is:

- 1) Period of vernal equinox
- 2) Period of vernal season
- 3) Low temperature requirement for flowering of winter plants
- 4) Snowfall required for flowering of winter plants

Options :

- 55317210469. 1
- 55317210470. 2
- 55317210471. 3
- 55317210472. 4

Question Number : 39 Question Id : 5531722633 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Which part of the plant shows positive gravitropism?

- 1) Flower
- 2) Leaves
- 3) Shoot
- 4) Roots

Options :

- 55317210473. 1
- 55317210474. 2
- 55317210475. 3
- 55317210476. 4

Question Number : 40 Question Id : 5531722634 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Name the scientists who established that it is dark period, not the light period which is measured by plants

- 1) Garner and Allard
- 2) Hammer and Bonner
- 3) Hammer and Allard
- 4) Garner and Bonner

**Options :**

- 55317210477. 1
- 55317210478. 2
- 55317210479. 3
- 55317210480. 4

**Question Number : 41 Question Id : 5531722635 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which one of the following insecticides is the most persistent in soil?

- 1) Malathion
- 2) Aldrin
- 3) Imidachloropid
- 4) Parathion

**Options :**

- 55317210481. 1
- 55317210482. 2
- 55317210483. 3
- 55317210484. 4

**Question Number : 42 Question Id : 5531722636 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Hormone responsible for breaking dormancy of winter buds is

- 1) Ethylene
- 2) Gibberellin
- 3) Auxin
- 4) Cytokinin

**Options :**

- 55317210485. 1
- 55317210486. 2
- 55317210487. 3
- 55317210488. 4

**Question Number : 43 Question Id : 5531722637 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Rhizobium is a

- 1) Biological fertilizer
- 2) Algal biofertilizer
- 3) Fungal biofertilizer
- 4) Pathogenic bacteria

Options :

55317210489. 1

55317210490. 2

55317210491. 3

55317210492. 4

Question Number : 44 Question Id : 5531722638 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The processes involved in the decomposition of organic matter and leading to formation of humus is called

- 1) Decomposition
- 2) Humification
- 3) Heavy soil formation
- 4) Immobilization

Options :

55317210493. 1

55317210494. 2

55317210495. 3

55317210496. 4

Question Number : 45 Question Id : 5531722639 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The conversion of an element from an organic form to an inorganic form as a result of microbial decomposition is called

- 1) Immobilization
- 2) Mineralization
- 3) Nitrification
- 4) Denitrification

Options :

55317210497. 1

55317210498. 2

55317210499. 3

55317210500. 4

Question Number : 46 Question Id : 5531722640 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Glycosides are a kind of

- 1) Oligosaccharides
- 2) Monosaccharides
- 3) Polysaccharides
- 4) Disaccharides

**Options :**

55317210501. 1  
55317210502. 2  
55317210503. 3  
55317210504. 4

**Question Number : 47 Question Id : 5531722641 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is a limiting factor in a desert ecosystem?

- 1) Water only
- 2) Temperature only
- 3) Both water and temperature
- 4) Humidity

**Options :**

55317210505. 1  
55317210506. 2  
55317210507. 3  
55317210508. 4

**Question Number : 48 Question Id : 5531722642 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

For ecofriendly use of pesticides, following is most important

- 1) Slow release formulation
- 2) Effectively targeting to kill
- 3) Easy biodegradability
- 4) All of these

**Options :**

55317210509. 1  
55317210510. 2  
55317210511. 3  
55317210512. 4

**Question Number : 49 Question Id : 5531722643 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The production of natural pyrethrum extract can be obtained from

- 1) Chrysanthemum plant
- 2) Neem tree
- 3) Eucalyptus tree
- 4) Camphor tree

**Options :**

55317210513. 1  
55317210514. 2  
55317210515. 3  
55317210516. 4

**Question Number : 50 Question Id : 5531722644 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Formation of seedless fruits without pollination and fertilization is called

- 1) Parthenocarpy
- 2) Phytotrophy
- 3) Chemotaxy
- 4) Thermotaxy

**Options :**

55317210517. 1  
55317210518. 2  
55317210519. 3  
55317210520. 4

**Question Number : 51 Question Id : 5531722645 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The photons with the proper energy level for photosynthesis lie between

- 1) 100 – 300 nm
- 2) 400 – 700 nm
- 3) 900 – 1100 nm
- 4) 1200 – 1800 nm

**Options :**

55317210521. 1  
55317210522. 2  
55317210523. 3  
55317210524. 4

**Question Number : 52 Question Id : 5531722646 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which of the following increases resistance of the body towards diseases?

- 1) Vit A and C
- 2) Vitamin B Complex
- 3) Vitamin C
- 4) Vitamin D

**Options :**

55317210525. 1

55317210526. 2

55317210527. 3

55317210528. 4

**Question Number : 53 Question Id : 5531722647 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Vitamins soluble in oils and fats are

- 1) Vitamin A only
- 2) Vitamin D only
- 3) Vitamin K only
- 4) Vitamin A, D and K only

**Options :**

55317210529. 1

55317210530. 2

55317210531. 3

55317210532. 4

**Question Number : 54 Question Id : 5531722648 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The accurate measure of the molecular weight of a protein can be done through

- 1) Mass spectroscopy
- 2) Mass spectrometry
- 3) Sequencer
- 4) Chromatograph

**Options :**

55317210533. 1

55317210534. 2

55317210535. 3

55317210536. 4

**Question Number : 55 Question Id : 5531722649 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The radioisotope used for study of photosynthesis in plants is

- 1)  $^3\text{H}$
- 2)  $^{14}\text{C}$
- 3)  $^{45}\text{Ca}$
- 4)  $^{32}\text{P}$

Options :

55317210537. 1  
55317210538. 2  
55317210539. 3  
55317210540. 4

Question Number : 56 Question Id : 5531722650 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The SI unit of radioactivity is

- 1) Roentgen
- 2) Rad
- 3) Becquerel
- 4) Gray

Options :

55317210541. 1  
55317210542. 2  
55317210543. 3  
55317210544. 4

Question Number : 57 Question Id : 5531722651 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
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) IR spectroscopy
- 4) ESR spectroscopy

Options :

55317210545. 1  
55317210546. 2  
55317210547. 3  
55317210548. 4

Question Number : 58 Question Id : 5531722652 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following bands of the electromagnetic spectrum is involved in analysis of substances by NMR spectroscopy?

- 1) Radiowaves
- 2) Microwaves
- 3) UV waves
- 4) X Rays

Options :

55317210549. 1  
55317210550. 2  
55317210551. 3  
55317210552. 4

Question Number : 59 Question Id : 5531722653 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A technique in biochemical and microbiological research used to find out exact location and distribution of radioactive materials in the living tissues is:

- 1) Radiography
- 2) Autoradiography
- 3) Polarimetry
- 4) Radioactivity

Options :

55317210553. 1  
55317210554. 2  
55317210555. 3  
55317210556. 4

Question Number : 60 Question Id : 5531722654 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

One of the various factors determining fate of pesticides in the environment is:

- 1) Fumigation
- 2) Photolysis
- 3) Bionematicides
- 4) Antagonism

Options :

55317210557. 1  
55317210558. 2  
55317210559. 3  
55317210560. 4

Question Number : 61 Question Id : 5531722655 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The process of increasing concentration of pollutants through food chain is called

- 1) Magnification
- 2) Biomagnification
- 3) Toxification
- 4) Eutrophication

**Options :**

- 55317210561. 1
- 55317210562. 2
- 55317210563. 3
- 55317210564. 4

**Question Number : 62 Question Id : 5531722656 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The weathering of quartile rocks results in the formation of

- 1) Both acidic and sandy soil
- 2) Basic soil only
- 3) Clayey soil only
- 4) Sandy soil only

**Options :**

- 55317210565. 1
- 55317210566. 2
- 55317210567. 3
- 55317210568. 4

**Question Number : 63 Question Id : 5531722657 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Quartzite is a

- 1) Sedimentary rock only
- 2) Metamorphic rock only
- 3) Igneous rock only
- 4) Both igneous and metamorphic rock

**Options :**

- 55317210569. 1
- 55317210570. 2
- 55317210571. 3
- 55317210572. 4

**Question Number : 64 Question Id : 5531722658 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The dominant mineral in sandstone is

- 1) Dolomite
- 2) Quartz
- 3) Calcite
- 4) Clay

Options :

- 55317210573. 1
- 55317210574. 2
- 55317210575. 3
- 55317210576. 4

Question Number : 65 Question Id : 5531722659 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Unconsolidated and partly weathered mineral materials accumulated by disintegration of consolidated rock in place is called:

- 1) Residual soil
- 2) Regosol
- 3) Regolith
- 4) Rill

Options :

- 55317210577. 1
- 55317210578. 2
- 55317210579. 3
- 55317210580. 4

Question Number : 66 Question Id : 5531722660 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The process by which sediments are converted to sedimentary rocks are called

- 1) Lithification
- 2) Cementation
- 3) Compaction
- 4) Lineament

Options :

- 55317210581. 1
- 55317210582. 2
- 55317210583. 3
- 55317210584. 4

Question Number : 67 Question Id : 5531722661 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The weathering away of the land surface by running water, wind, ice or other geological agents as gravitation creep is called

- 1) Accelerated erosion
- 2) Erosion
- 3) Gully erosion
- 4) Rill erosion

**Options :**

- 55317210585. 1
- 55317210586. 2
- 55317210587. 3
- 55317210588. 4

**Question Number : 68 Question Id : 5531722662 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The soil exhibited with equal proportion of sand, silt and clay particles is called

- 1) Coarse texture
- 2) Fine texture
- 3) Loamy soil
- 4) Silty soil

**Options :**

- 55317210589. 1
- 55317210590. 2
- 55317210591. 3
- 55317210592. 4

**Question Number : 69 Question Id : 5531722663 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The combined loss of water from a given area and during a specified period of time by evaporation from the soil surface and by transpiration from plants is known as

- 1) Evaporation
- 2) Evapotranspiration
- 3) Transpiration
- 4) Water loss

**Options :**

- 55317210593. 1
- 55317210594. 2
- 55317210595. 3
- 55317210596. 4

**Question Number : 70 Question Id : 5531722664 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Which fertilizer has good environmental value:

- 1) Urea
- 2) Neem coated urea
- 3) DAP
- 4) SSP

**Options :**

55317210597. 1

55317210598. 2

55317210599. 3

55317210600. 4

**Question Number : 71 Question Id : 5531722665 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The I and II land capability classes are suitable for

- 1) Horticulture
- 2) Forestry
- 3) Agriculture
- 4) Grassland

**Options :**

55317210601. 1

55317210602. 2

55317210603. 3

55317210604. 4

**Question Number : 72 Question Id : 5531722666 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Immobilization of nutrients in soil refers to

- 1) Organic matter to humus
- 2) Organic to inorganic
- 3) Inorganic to organic
- 4) Mineralization

**Options :**

55317210605. 1

55317210606. 2

55317210607. 3

55317210608. 4

**Question Number : 73 Question Id : 5531722667 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

A soil in which the surface layer becomes so well aggregated that it does not crust and seal under impact of rain is named as

- 1) Mulch soil
- 2) Self-mulching soil
- 3) Loamy soil
- 4) Sandy soil

**Options :**

- 55317210609. 1
- 55317210610. 2
- 55317210611. 3
- 55317210612. 4

**Question Number : 74 Question Id : 5531722668 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Pollution stress affects the

- 1) Growth of plants only
- 2) Both growth and metabolism of plants
- 3) Metabolism of plants only
- 4) Leafy areas of plants only

**Options :**

- 55317210613. 1
- 55317210614. 2
- 55317210615. 3
- 55317210616. 4

**Question Number : 75 Question Id : 5531722669 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The known source of water pollution is called

- 1) Main source
- 2) Point source
- 3) Non – point source
- 4) Primary source

**Options :**

- 55317210617. 1
- 55317210618. 2
- 55317210619. 3
- 55317210620. 4

**Question Number : 76 Question Id : 5531722670 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The polluted water body is called

- 1) Oligotrophic
- 2) Eutrophic
- 3) Marshy water body
- 4) Inundated field

**Options :**

55317210621. 1  
55317210622. 2  
55317210623. 3  
55317210624. 4

**Question Number : 77 Question Id : 5531722671 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The government body at national level to control pollution is

- 1) CPCB
- 2) ICAR
- 3) ICMR
- 4) NBPGR

**Options :**

55317210625. 1  
55317210626. 2  
55317210627. 3  
55317210628. 4

**Question Number : 78 Question Id : 5531722672 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The benefits of green manuring in soil include

- 1) Addition of nitrogen
- 2) Conservation and availability of nutrients
- 3) Conservation of soil
- 4) All of these

**Options :**

55317210629. 1  
55317210630. 2  
55317210631. 3  
55317210632. 4

**Question Number : 79 Question Id : 5531722673 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

As one moves from a hot to cooler climate, the nitrogen of comparable soils tends to

- 1) Increase
- 2) Decrease
- 3) Remain unaffected
- 4) Remain variable

Options :

55317210633. 1

55317210634. 2

55317210635. 3

55317210636. 4

Question Number : 80 Question Id : 5531722674 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Contour furrowing at suitable intervals in soils helps in

- 1) Stabilizing the soil
- 2) Providing more water for crops
- 3) Controlling soil erosion
- 4) All of these

Options :

55317210637. 1

55317210638. 2

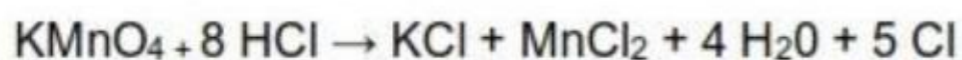
55317210639. 3

55317210640. 4

Question Number : 81 Question Id : 5531722675 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Calculate the equivalent weight of  $\text{KMnO}_4$  from the equation



- 1) 36.1
- 2) 31.6
- 3) 30.1
- 4) 30.6

Options :

55317210641. 1

55317210642. 2

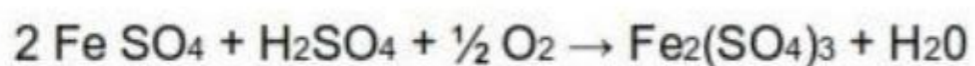
55317210643. 3

55317210644. 4

Question Number : 82 Question Id : 5531722676 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What would be the equivalent weight of iron when it is involved in the following reaction:



(Fe = 56, S = 32, O = 16 and Cl = 35.5)

- 1) 52
- 2) 54
- 3) 56
- 4) 58

Options :

55317210645. 1

55317210646. 2

55317210647. 3

55317210648. 4

Question Number : 83 Question Id : 5531722677 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

0.532 g of chloroplatinate of a diacid base left on ignition  
0.195 g of platinum. Determine the molecular weight of the  
base. (Pt = 195)

- 1) 120
- 2) 122
- 3) 124
- 4) 126

Options :

55317210649. 1

55317210650. 2

55317210651. 3

55317210652. 4

Question Number : 84 Question Id : 5531722678 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The highest osmotic pressure will be observed in

- 1) 0.1 M Urea
- 2) 0.1 M Glucose
- 3) 0.1M NaCl
- 4) 0.1 M  $\text{Al}_2(\text{SO}_4)_3$

Options :

55317210653. 1

55317210654. 2

55317210655. 3

55317210656. 4

Question Number : 85 Question Id : 5531722679 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of osmotic pressure of  $\text{BaCl}_2$ ,  $\text{NaCl}$  and urea will be

- 1) 3: 2: 1
- 2) 1: 2: 3
- 3) 2: 1: 3
- 4) 3: 1: 2

**Options :**

55317210657. 1  
55317210658. 2  
55317210659. 3  
55317210660. 4

**Question Number : 86 Question Id : 5531722680 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Osmotic pressure can be measured by an instrument called

- 1) Manometer
- 2) Barometer
- 3) Osmometer
- 4) Nanometer

**Options :**

55317210661. 1  
55317210662. 2  
55317210663. 3  
55317210664. 4

**Question Number : 87 Question Id : 5531722681 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Heat capacity at constant volume is the change in

- 1) Internal energy with temperature at constant volume
- 2) Internal energy with temperature at constant pressure
- 3) Enthalpy with temperature at constant volume
- 4) Enthalpy with temperature at constant pressure

**Options :**

55317210665. 1  
55317210666. 2  
55317210667. 3  
55317210668. 4

**Question Number : 88 Question Id : 5531722682 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following properties is not a function of state?

- 1) Concentration
- 2) Internal energy
- 3) Enthalpy
- 4) Entropy

Options :

55317210669. 1

55317210670. 2

55317210671. 3

55317210672. 4

Question Number : 89 Question Id : 5531722683 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Cathode rays are reflected by

- 1) Electric field only
- 2) Magnetic field only
- 3) Both electric and magnetic field
- 4) None of these

Options :

55317210673. 1

55317210674. 2

55317210675. 3

55317210676. 4

Question Number : 90 Question Id : 5531722684 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The energy of a photon is given by the relation

- 1)  $E = h\nu/\lambda$
- 2)  $E = hc/\lambda$
- 3)  $E = hc/\nu$
- 4)  $E = \lambda c/h$

Options :

55317210677. 1

55317210678. 2

55317210679. 3

55317210680. 4

Question Number : 91 Question Id : 5531722685 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In photoelectric effect, the kinetic energy of photo electrons increases linearly with

- 1) Wavelength of incident light
- 2) Frequency of incident light
- 3) Velocity of incident light
- 4) None of these

Options :

55317210681. 1  
55317210682. 2  
55317210683. 3  
55317210684. 4

Question Number : 92 Question Id : 5531722686 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The value of equilibrium constant K for the equilibrium

$AB \rightleftharpoons A^+ + B^-$  is

- 1)  $K = [A][B] / [A^+][B^-]$
- 2)  $K = [A^+][B^-] / [A][B]$
- 3)  $K = [A][B]^2 / [A^+][B^-]$
- 4)  $K = [A][B] / [A^+]^2 [B^-]^2$

Options :

55317210685. 1  
55317210686. 2  
55317210687. 3  
55317210688. 4

Question Number : 93 Question Id : 5531722687 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Acetylene reacts with water in the presence of sulphuric acid and mercuric sulphate to give

- 1) Acetone
- 2) Acetic acid
- 3) Formaldehyde
- 4) Acetaldehyde

Options :

55317210689. 1  
55317210690. 2  
55317210691. 3  
55317210692. 4

Question Number : 94 Question Id : 5531722688 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1



A triple bond consists of

- 1) 2 sigma bonds and 1 pi bond
- 2) 3 sigma bonds
- 3) 1 sigma bond and 2 pi bonds
- 4) 3 pi bonds

Options :

55317210693. 1

55317210694. 2

55317210695. 3

55317210696. 4

Question Number : 95 Question Id : 5531722689 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following statements about alkenes and alkynes is correct?

- 1) Alkynes are reduced more readily than alkenes
- 2) Alkynes are reduced less readily than alkenes
- 3) Alkynes and alkene are reduced with equal speed
- 4) Alkynes and alkenes cannot be reduced

Options :

55317210697. 1

55317210698. 2

55317210699. 3

55317210700. 4

Question Number : 96 Question Id : 5531722690 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Mineral soils consist of inorganic or mineral materials, organic matter, water and air. The volume composition of sub soils differs somewhat from that of top soils. Sub soils are

- 1) Lower in organic matter content, lower total pore space and contain a higher percentage of small pores that are filled much of the time with water rather than air
- 2) Lower in organic matter content, higher total pore space and contain a lower percentage of small pores that are filled much of the time with air rather than water
- 3) Lower in organic matter content, lower total pore space and contain a lower percentage of small pores that are filled much of the time with water rather than air
- 4) Higher in organic matter content, lower total pore space and contain a higher percentage of small pores that are filled much of the time with air rather than water

Options :

55317210701. 1

55317210702. 2

55317210703. 3

55317210704. 4

**Question Number : 97 Question Id : 5531722691 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Exfoliation phenomenon occurs in rocks due to

- 1) Temperature
- 2) Differential heating and cooling
- 3) Freezing and thawing
- 4) Peeling of surface layer of rocks

**Options :**

55317210705. 1

55317210706. 2

55317210707. 3

55317210708. 4

**Question Number : 98 Question Id : 5531722692 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Iron is present in most primary minerals in the form of

- 1) Ferrous ions
- 2) Ferric ions
- 3) Ferrous hydroxide
- 4) Ferric hydroxide

**Options :**

55317210709. 1

55317210710. 2

55317210711. 3

55317210712. 4

**Question Number : 99 Question Id : 5531722693 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Weathering of minerals is influenced by

- 1) Temperature and water
- 2) Physical properties of rocks
- 3) Chemical properties of rocks
- 4) Climate, physical and chemical properties of rocks

**Options :**

55317210713. 1

55317210714. 2

55317210715. 3

55317210716. 4

**Question Number : 100 Question Id : 5531722694 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 4 Wrong Marks : 1

Soils not having diagnostic horizon other than an ochric or anthropic epipedon, some mineral weathering and surface accumulation of organic matter, but the original crystalline, metamorphic and sedimentary features of their parent materials are little altered by soil formation, fluvial nature belongs to the soil order

- 1) Entisols
- 2) Inceptisols
- 3) Mollisols
- 4) Ultisols

Options :

55317210717. 1  
55317210718. 2  
55317210719. 3  
55317210720. 4

Question Number : 101 Question Id : 5531722695 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Based on specific surface area ( $\text{cm}^2/\text{g}$ ) soil particles can be arranged in ascending order

- 1) Clay, silt, fine sand & coarse sand
- 2) Coarse sand, fine sand, silt and clay
- 3) Fine sand, coarse sand, clay, silt
- 4) Fine sand, silt, clay and coarse sand

Options :

55317210721. 1  
55317210722. 2  
55317210723. 3  
55317210724. 4

Question Number : 102 Question Id : 5531722696 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A soil sample contains 0 – 10 % sand, 40 – 60% silt and 80 – 100% clay. Based on this data, this soil sample falls under which textural class?

- 1) Silty clay loam
- 2) Silt loam
- 3) Silt clay
- 4) Loam

Options :

55317210725. 1  
55317210726. 2  
55317210727. 3  
55317210728. 4

Question Number : 103 Question Id : 5531722697 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

The unconsolidated material overlying the rocks is known as

- 1) Solum
- 2) Regolith
- 3) C – Horizon
- 4) R or Bed Rock

Options :

55317210729. 1  
55317210730. 2  
55317210731. 3  
55317210732. 4

Question Number : 104 Question Id : 5531722698 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

In comparison to Black and Alluvial soils, Red soils have

- 1) High CEC and high base saturation
- 2) Low CEC and low base saturation
- 3) High CEC and low base saturation
- 4) Low CEC and high base saturation

Options :

55317210733. 1  
55317210734. 2  
55317210735. 3  
55317210736. 4

Question Number : 105 Question Id : 5531722699 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Podzolic soils have

- 1) Moderate to strongly acidic, high organic matter content and low base saturation
- 2) Acidic, low organic matter and low base saturation
- 3) Highly acidic, low organic matter and high base saturation
- 4) Highly acidic, high organic matter and high base saturation

Options :

55317210737. 1  
55317210738. 2  
55317210739. 3  
55317210740. 4

Question Number : 106 Question Id : 5531722700 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Trioctahedral layer is formed due to isomorphous substitution of  $\text{Al}^{3+}$  ions mainly by

- 1)  $\text{Mg}^{2+}$  ions
- 2)  $\text{Mg}^{2+}$ ,  $\text{Fe}^{2+}$  ions
- 3)  $\text{Ca}^{2+}$ ,  $\text{Fe}^{2+}$  ions
- 4)  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Fe}^{2+}$  ions

Options :

55317210741. 1

55317210742. 2

55317210743. 3

55317210744. 4

Question Number : 107 Question Id : 5531722701 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Kaoline group of clay mineral have 1:1 tetrahedral and octahedral layers which are joined together with

- 1) Oxygen bonding only
- 2) Hydrogen bonding only
- 3) Both oxygen and hydrogen bonding
- 4) Electron bonding only

Options :

55317210745. 1

55317210746. 2

55317210747. 3

55317210748. 4

Question Number : 108 Question Id : 5531722702 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

pH dependent charge is developed in kaolinite mineral due to the

- 1) Open edge of tetrahedral layer only
- 2) Open edge of octahedral layer only
- 3) Both open edge of tetrahedral and octahedral layer
- 4) Due to isomorphous substitution of dioctahedral layer

Options :

55317210749. 1

55317210750. 2

55317210751. 3

55317210752. 4

Question Number : 109 Question Id : 5531722703 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Maximum internal surface area is observed in

- 1) Vermiculite (Diocetaheadral)
- 2) Smectite
- 3) Illite
- 4) Chlorite

Options :

55317210753. 1  
55317210754. 2  
55317210755. 3  
55317210756. 4

Question Number : 110 Question Id : 5531722704 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Minerals formed mainly by alteration of trioctahedral micas (particularly phlogopite and biotite) and chlorite are known as

- 1) Illite
- 2) Trioctahedral Vermiculite
- 3) Hydrous mica
- 4) Beidelite

Options :

55317210757. 1  
55317210758. 2  
55317210759. 3  
55317210760. 4

Question Number : 111 Question Id : 5531722705 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The amphoteric nature of soil colloids is associated with the presence of

- 1) Gels of iron and aluminum
- 2) Gels of iron and manganese
- 3) Gels of iron, aluminum and manganese
- 4) Gels of aluminum and manganese

Options :

55317210761. 1  
55317210762. 2  
55317210763. 3  
55317210764. 4

Question Number : 112 Question Id : 5531722706 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Cation exchange equilibria in soils are influenced by

- 1) Clay minerals, organic matter and surface charge density
- 2) Total electrolyte concentration, type of cations and anions
- 3) Clay minerals, organic matter and type of cations and anions
- 4) Clay minerals, organic matter, surface charge density, total electrolyte concentration and type of cations and anions

**Options :**

55317210765. 1

55317210766. 2

55317210767. 3

55317210768. 4

**Question Number : 113 Question Id : 5531722707 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The effect of ions on the zeta potential is apparently related to

- 1) Charge of the ion only
- 2) Hydration size of the ion only
- 3) Both charge of the ion and its hydration size
- 4) Ions absorbed on minerals only

**Options :**

55317210769. 1

55317210770. 2

55317210771. 3

55317210772. 4

**Question Number : 114 Question Id : 5531722708 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If the acidity of soil increases, then

- 1) Only anion exchange increases
- 2) Only cation exchange increases
- 3) Both anion and cation exchange increases
- 4) Both anion and cation exchange decreases

**Options :**

55317210773. 1

55317210774. 2

55317210775. 3

55317210776. 4

**Question Number : 115 Question Id : 5531722709 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Halloysite is an example of 1:1 type mineral. This mineral generally occurs in soils of

- 1) Alluvial soils
- 2) Volcanic soils
- 3) Laterite soils
- 4) Podzol soils

**Options :**

55317210777. 1

55317210778. 2

55317210779. 3

55317210780. 4

**Question Number : 116 Question Id : 5531722710 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Nutrient content associated with only growth reduction and not accompanied by appearance of deficiency symptoms is termed

- 1) Deficient
- 2) Insufficient
- 3) Unavailable
- 4) Beneficial

**Options :**

55317210781. 1

55317210782. 2

55317210783. 3

55317210784. 4

**Question Number : 117 Question Id : 5531722711 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The mineral elements which stimulate plant growth but are not essential or which are essential only for certain plant species, or under specific conditions are known as

- 1) Nutrient
- 2) Available
- 3) Beneficial
- 4) Supplementary

**Options :**

55317210785. 1

55317210786. 2

55317210787. 3

55317210788. 4

**Question Number : 118 Question Id : 5531722712 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Essentiality of molybdenum was discovered in 1939 by

- 1) C Sprengel
- 2) Theodore de Saussure
- 3) K Warington
- 4) Arnon and Stout

Options :

55317210789. 1  
55317210790. 2  
55317210791. 3  
55317210792. 4

Question Number : 119 Question Id : 5531722713 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Essentiality of Sulphur was established by Sachs and Knop in the year

- 1) 1839
- 2) 1860
- 3) 1843
- 4) 1923

Options :

55317210793. 1  
55317210794. 2  
55317210795. 3  
55317210796. 4

Question Number : 120 Question Id : 5531722714 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Plant usable form of phosphorous in the soil are:

- 1)  $\text{H}_2\text{PO}_4^-$
- 2)  $\text{HPO}_4^{2-}$
- 3)  $\text{H}_2\text{PO}_4^-$  and  $\text{HPO}_4^{2-}$
- 4)  $\text{H}_2\text{PO}_4^-$ ,  $\text{HPO}_4^{2-}$  and  $\text{PO}_4^{3-}$

Options :

55317210797. 1  
55317210798. 2  
55317210799. 3  
55317210800. 4

Question Number : 121 Question Id : 5531722715 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The average water requirement of rice crop to complete its growth cycle is

- 1) 40 – 60 cm
- 2) 60 – 80 cm
- 3) 110 – 125 cm
- 4) 180 – 200 cm

**Options :**

55317210801. 1  
55317210802. 2  
55317210803. 3  
55317210804. 4

**Question Number : 122 Question Id : 5531722716 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Identify the most critical stage of wheat when irrigation is required

- 1) Crown root initiation
- 2) Tillering stage
- 3) Flowering stage
- 4) Booting stage

**Options :**

55317210805. 1  
55317210806. 2  
55317210807. 3  
55317210808. 4

**Question Number : 123 Question Id : 5531722717 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Water erosion follows the sequence

- 1) Sheet, Splash, Rill, Gully
- 2) Splash, Sheet, Rill, Gully
- 3) Rill, Sheet, Splash, Gully
- 4) Gully, Sheet, Splash, Rill

**Options :**

55317210809. 1  
55317210810. 2  
55317210811. 3  
55317210812. 4

**Question Number : 124 Question Id : 5531722718 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Rain gauge is used for determination of

- 1) Irrigation
- 2) Run off
- 3) Rainfall
- 4) Water depth

Options :

55317210813. 1  
55317210814. 2  
55317210815. 3  
55317210816. 4

Question Number : 125 Question Id : 5531722719 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Select the option NOT related with in-situ moisture conservation

- 1) Mulching
- 2) Deep furrows
- 3) Inter plot water harvesting
- 4) Fertigation

Options :

55317210817. 1  
55317210818. 2  
55317210819. 3  
55317210820. 4

Question Number : 126 Question Id : 5531722720 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

In Wind Erosion Equation,  $E = f(I \times K \times C \times L \times V)$ , I denotes

- 1) Soil erosivity
- 2) Surface roughness
- 3) Soil erodibility index
- 4) Crop coefficient

Options :

55317210821. 1  
55317210822. 2  
55317210823. 3  
55317210824. 4

Question Number : 127 Question Id : 5531722721 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Water use efficiency is maximum in

- 1) Pitcher pot irrigation
- 2) Drip irrigation
- 3) Furrow irrigation
- 4) Sprinkler irrigation

**Options :**

- 55317210825. 1
- 55317210826. 2
- 55317210827. 3
- 55317210828. 4

**Question Number : 128 Question Id : 5531722722 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Soil water potential is generally

- 1) Positive
- 2) Negative
- 3) Neutral
- 4) Zero

**Options :**

- 55317210829. 1
- 55317210830. 2
- 55317210831. 3
- 55317210832. 4

**Question Number : 129 Question Id : 5531722723 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Highest wind erosion has occurred in

- 1) North India
- 2) West India
- 3) North East India
- 4) South India

**Options :**

- 55317210833. 1
- 55317210834. 2
- 55317210835. 3
- 55317210836. 4

**Question Number : 130 Question Id : 5531722724 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Available water for plant indicates water held between

- 1) 0.33 bar to 15 bar
- 2) 0.1 bar to 0.33 bar
- 3) Above 15 bar
- 4) Below 0.1 bar

Options :

- 55317210837. 1
- 55317210838. 2
- 55317210839. 3
- 55317210840. 4

Question Number : 131 Question Id : 5531722725 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The land capability classes NOT suitable for cultivation are

- 1) III – IV
- 2) I – IV
- 3) I – II
- 4) V – VIII

Options :

- 55317210841. 1
- 55317210842. 2
- 55317210843. 3
- 55317210844. 4

Question Number : 132 Question Id : 5531722726 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

World Soil Day is celebrated every year on

- 1) 10<sup>th</sup> September
- 2) 5<sup>th</sup> October
- 3) 10<sup>th</sup> November
- 4) 5<sup>th</sup> December

Options :

- 55317210845. 1
- 55317210846. 2
- 55317210847. 3
- 55317210848. 4

Question Number : 133 Question Id : 5531722727 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The softest mineral in earth crust is

- 1) Talc
- 2) Diamond
- 3) Gold
- 4) Quartz

Options :

55317210849. 1  
55317210850. 2  
55317210851. 3  
55317210852. 4

Question Number : 134 Question Id : 5531722728 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of total mass of soil solids to total volume of soil solids (inclusive pore spaces) is called

- 1) Porosity
- 2) Plasticity
- 3) Particle density
- 4) Bulk density

Options :

55317210853. 1  
55317210854. 2  
55317210855. 3  
55317210856. 4

Question Number : 135 Question Id : 5531722729 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil acidity is measured by

- 1) Spectrophotometer
- 2) Flame photometer
- 3) pH meter
- 4) E C bridge

Options :

55317210857. 1  
55317210858. 2  
55317210859. 3  
55317210860. 4

Question Number : 136 Question Id : 5531722730 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The particle density of a mineral soil is normally in the range of

- 1) 2.60 – 2.75 Mg / m<sup>3</sup>
- 2) 2.75 – 2.90 Mg / m<sup>3</sup>
- 3) 1.30 – 1.50 Mg / m<sup>3</sup>
- 4) 2.00 – 2.40 Mg / m<sup>3</sup>

Options :

55317210861. 1  
55317210862. 2  
55317210863. 3  
55317210864. 4

Question Number : 137 Question Id : 5531722731 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Terracing is an effective measure for soil conservation in

- 1) Plain area
- 2) Hilly area
- 3) Desert area
- 4) Coastal regions

Options :

55317210865. 1  
55317210866. 2  
55317210867. 3  
55317210868. 4

Question Number : 138 Question Id : 5531722732 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The approach used for delineation of water shed boundary is

- 1) Field Survey method
- 2) Land classification method
- 3) Contour lines and elevation map
- 4) Reconnaissance survey

Options :

55317210869. 1  
55317210870. 2  
55317210871. 3  
55317210872. 4

Question Number : 139 Question Id : 5531722733 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil potassium is measured by

- 1) Flame photometer
- 2) E C bridge
- 3) Spectrophotometer
- 4) pH meter

**Options :**

55317210873. 1  
55317210874. 2  
55317210875. 3  
55317210876. 4

**Question Number : 140 Question Id : 5531722734 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The most erosion resistant crop is

- 1) Soyabean
- 2) Rice
- 3) Maize
- 4) Red gram

**Options :**

55317210877. 1  
55317210878. 2  
55317210879. 3  
55317210880. 4

**Question Number : 141 Question Id : 5531722735 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which soil order stands for recent alluvial soil?

- 1) Inceptisols
- 2) Entisols
- 3) Histosols
- 4) Mollisols

**Options :**

55317210881. 1  
55317210882. 2  
55317210883. 3  
55317210884. 4

**Question Number : 142 Question Id : 5531722736 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



The word soil has been derived from

- 1) French
- 2) Latin
- 3) Greek
- 4) Arabic

**Options :**

55317210885. 1

55317210886. 2

55317210887. 3

55317210888. 4

**Question Number : 143 Question Id : 5531722737 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The most suitable soil for groundnut cultivation is

- 1) Clay loam
- 2) Clayey
- 3) Sandy loam
- 4) Silty loam

**Options :**

55317210889. 1

55317210890. 2

55317210891. 3

55317210892. 4

**Question Number : 144 Question Id : 5531722738 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The Dapog method of raising rice nursery was introduced in India from

- 1) Myanmar
- 2) Japan
- 3) China
- 4) Philippines

**Options :**

55317210893. 1

55317210894. 2

55317210895. 3

55317210896. 4

**Question Number : 145 Question Id : 5531722739 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The practice of controlling water erosion by cultivation of alternate erosion permitting and erosion resistant crop is called

- 1) Mixed cropping
- 2) Inter cropping
- 3) Strip cropping
- 4) Relay cropping

**Options :**

55317210897. 1

55317210898. 2

55317210899. 3

55317210900. 4

**Question Number : 146 Question Id : 5531722740 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which crop removes maximum N from the soil?

- 1) Rice
- 2) Wheat
- 3) French bean
- 4) Maize

**Options :**

55317210901. 1

55317210902. 2

55317210903. 3

55317210904. 4

**Question Number : 147 Question Id : 5531722741 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The instrument used for measuring depth of water table is

- 1) Anemometer
- 2) Piezometer
- 3) Lysimeter
- 4) Hydrometer

**Options :**

55317210905. 1

55317210906. 2

55317210907. 3

55317210908. 4

**Question Number : 148 Question Id : 5531722742 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Black soils of India are locally called as

- 1) Matasi
- 2) Dorsa
- 3) Bhata
- 4) Regur

**Options :**

55317210909. 1  
55317210910. 2  
55317210911. 3  
55317210912. 4

**Question Number : 149 Question Id : 5531722743 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
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 and Black method
- 3) Calorimetric method
- 4) Hydro meter method

**Options :**

55317210913. 1  
55317210914. 2  
55317210915. 3  
55317210916. 4

**Question Number : 150 Question Id : 5531722744 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Most of the coastal soils are rich in

- 1) Phosphorous and Calcium
- 2) Nitrogen and Magnesium
- 3) Potassium and Calcium
- 4) Calcium and Magnesium

**Options :**

55317210917. 1  
55317210918. 2  
55317210919. 3  
55317210920. 4

**Question Number : 151 Question Id : 5531722745 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Accumulation of soluble salt in soil is called

- 1) Humification
- 2) Salinization
- 3) Laterization
- 4) Gleization

Options :

55317210921. 1  
55317210922. 2  
55317210923. 3  
55317210924. 4

Question Number : 152 Question Id : 5531722746 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Rajasthan and Gujarat belong to which agro – ecological region?

- 1) Semi – arid only
- 2) Both arid and semi - arid
- 3) Humid
- 4) Coastal

Options :

55317210925. 1  
55317210926. 2  
55317210927. 3  
55317210928. 4

Question Number : 153 Question Id : 5531722747 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What percentage of pore space is found in a typical mineral soil on volume basis?

- 1) 100
- 2) 75
- 3) 50
- 4) 25

Options :

55317210929. 1  
55317210930. 2  
55317210931. 3  
55317210932. 4

Question Number : 154 Question Id : 5531722748 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil particles size in saltation phenomenon during wind erosion is

- 1) Less than 0.1 mm
- 2) 0.1 – 0.5 mm
- 3) 0.5 – 1.0 mm
- 4) 1.0 – 1.5 mm

**Options :**

- 55317210933. 1
- 55317210934. 2
- 55317210935. 3
- 55317210936. 4

**Question Number : 155 Question Id : 5531722749 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Agronomical measure for soil conservation is:

- 1) Contour trench
- 2) Contour cultivation
- 3) Bench terrace
- 4) Conservation bench terrace

**Options :**

- 55317210937. 1
- 55317210938. 2
- 55317210939. 3
- 55317210940. 4

**Question Number : 156 Question Id : 5531722750 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Area of micro – watershed is

- 1) 10 – 100 ha
- 2) 100 – 1000 ha
- 3) 1000 – 10,000 ha
- 4) 10,000 – 50,000 ha

**Options :**

- 55317210941. 1
- 55317210942. 2
- 55317210943. 3
- 55317210944. 4

**Question Number : 157 Question Id : 5531722751 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

The  $EC_e$  value of more than 4 dS/m and pH less than 8.5 represents:

- 1) Saline soils
- 2) Alkali soils
- 3) Sodic soils
- 4) Acidic soils

Options :

55317210945. 1  
55317210946. 2  
55317210947. 3  
55317210948. 4

Question Number : 158 Question Id : 5531722752 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Hydro - technical amelioration for saline soil is

- 1) Leaching with water only
- 2) Drainage only
- 3) Both leaching and drainage
- 4) None of these

Options :

55317210949. 1  
55317210950. 2  
55317210951. 3  
55317210952. 4

Question Number : 159 Question Id : 5531722753 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

Which of the following is a symbiotic nitrogen fixation organism?

- 1) Rhizobium
- 2) Blue green algae
- 3) Azotobacter
- 4) Actinomycetes

Options :

55317210953. 1  
55317210954. 2  
55317210955. 3  
55317210956. 4

Question Number : 160 Question Id : 5531722754 Question Type : MCQ Option Shuffling : No Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1

N: P: K are more in animal excreta of

- 1) Poultry
- 2) Sheep
- 3) Goat
- 4) Cow

**Options :**

55317210957. 1

55317210958. 2

55317210959. 3

55317210960. 4