

ICAR 20-SEP-2022
(Candidate Response Sheet)

Roll Number	
Name of the Candidate	
Examination Name	AGRONOMY ICAR SEPT 2022
Exam Date & Time	20-09-2022 09:00:00

Subject : 05 AGRONOMY_PG

Question ID:- 895

The most critical growth stage for moisture stress in lentil

Options:-

- Branching, Option ID :- 3577,
- Flower bud initiation, Option ID :- 3578,
- Pod formation, Option ID :- 3579,
- Rosetting, Option ID :- 3580,

Answer Given:- Flower bud initiation, Option ID : -3578

Question ID:- 919

Following are the statements with respect to economization of irrigation water in rice

- A. Rice should be cultivated on heavy soils with percolation above 5 mm per day
- B. Subsoil loosening to enhance water flux to soil.
- C. Rice should be grown in small isolated blocks to reduce seepage
- D. Application of tank silt to light soils
- E. Puddling to reduce soil permeability

Choose the *correct* answer from the options given below

Options:-

- B, C and E only , Option ID :- 3673,
- B and E only , Option ID :- 3674,
- A and D only , Option ID :- 3675,
- D and E only , Option ID :- 3676,

Answer Given:- D and E only , Option ID : -3676

Question ID:- 846

The soil with more than 20 Kg/ ha Phosphorus are rated as

Options:-

- Low in P , Option ID :- 3381,
- Medium in P , Option ID :- 3382,
- High in P , Option ID :- 3383,

• Very low in P , Option ID :- 3384,
Answer Given:- Medium in P , Option ID : -3382

Question ID:- 857
Which phytohormone forms the association between roots and microbes?
Options:-

- Gibberellin, Option ID :- 3425,
 - Auxin, Option ID :- 3426,
 - Brassinosteroid, Option ID :- 3427,
 - Strigolactones, Option ID :- 3428,
- Answer Given:- Auxin, Option ID : -3426**

Question ID:- 847
Which of the following is the latest addition to the list of essential nutrients?
Options:-

- Selenium, Option ID :- 3385,
 - Cobalt, Option ID :- 3386,
 - Chlorine, Option ID :- 3387,
 - Nickel, Option ID :- 3388,
- Answer Given:- Nickel, Option ID : -3388**

Question ID:- 923
Irrigation requirement of 90 days duration maize variety is 50 cm. How much area can be irrigated with a flow rate of 20 litre per second for 8 hours in a day.
Options:-

- 20.2 ha, Option ID :- 3689,
 - 16.5 ha, Option ID :- 3690,
 - 12 ha, Option ID :- 3691,
 - 10.4 ha, Option ID :- 3692,
- Answer Given:- 10.4 ha, Option ID : -3692**

Question ID:- 957
Which of the following books is on conservation agriculture?
Options:-

- *One Straw Revolution*, Option ID :- 3825,
 - *Silent Spring*, Option ID :- 3826,
 - *An Agricultural Testament*, Option ID :- 3827,
 - *Look to the Land*, Option ID :- 3828,
- Answer Given:- One Straw Revolution, Option ID : -3825**

Question ID:- 949
Suitable agronomic soil moisture conservation technique for dryland areas
Options:-

- Contour farming, Option ID :- 3793,
- Contour bunding, Option ID :- 3794,
- Bench terracing, Option ID :- 3795,

• Trenching, Option ID :- 3796,
Answer Given:- Contour bunding, Option ID : -3794

Question ID:- 938

The soil formation equation, $S = f(c, l, o, r, p, t, \dots)$ was first formulated by:

Options:-

- Jackson, Option ID :- 3749,
- Jenny, Option ID :- 3750,
- Dokuchaev, Option ID :- 3751,
- Hilgard, Option ID :- 3752,

Answer Given:- Jenny, Option ID : -3750

Question ID:- 954

For preparation of 1000 mL of 0.1 N potassium dichromate solution ($0.1\text{ N K}_2\text{Cr}_2\text{O}_7$, atomic mass of K = 39, Cr = 52, O = 16), the amount of analytical grade potassium dichromate required is:

Options:-

- 294 gram, Option ID :- 3813,
- 49.0 gram, Option ID :- 3814,
- 4.9 gram, Option ID :- 3815,
- 29.4 gram, Option ID :- 3816,

Answer Given:- 29.4 gram, Option ID : -3816

Question ID:- 876

Which of the following statements are correct for “Cytokinins”?

- A. Cytokinin stimulates cell division
- B. One of the potent cytokinin is 6-Benzyladenine
- C. Cytokinin hastens senescence
- D. Cytokinin breaks dormancy of seeds and buds

Choose the *correct* answer from the options given below:

Options:-

- B, C and D only, Option ID :- 3501,
- A, B and C only, Option ID :- 3502,
- A, B and D only, Option ID :- 3503,
- B and D only, Option ID :- 3504,

Answer Given:- A, B and D only, Option ID : -3503

Question ID:- 843

The daughter cells produced after mitosis will have _____ number of chromosomes as original cells.

Options:-

- Twice more, Option ID :- 3369,
- Half of, Option ID :- 3370,
- Thrice more, Option ID :- 3371,

• Same, Option ID :- 3372,
Answer Given:- Same, Option ID : -3372

Question ID:- 883
The botanical name of pop corn
Options:-

- *Zea mays amylacea*, Option ID :- 3529,
 - *Zea mays everta*, Option ID :- 3530,
 - *Zea mays tunicata*, Option ID :- 3531,
 - *Zea mays ceratina*, Option ID :- 3532,
- Answer Given:- *Zea mays everta*, Option ID : -3530**

Question ID:- 940
The book *Nature and Properties of Soils* is written by
Options:-

- M. L. Jackson, Option ID :- 3757,
 - H. Marschner, Option ID :- 3758,
 - N. C. Brady and R. R. Weil, Option ID :- 3759,
 - K. Mengel and E. A Kirkby, Option ID :- 3760,
- Answer Given:- N. C. Brady and R. R. Weil, Option ID : -3759**

Question ID:- 930
The sulphur (S) containing mineral is:
Options:-

- Zeolite, Option ID :- 3717,
 - Dolomite, Option ID :- 3718,
 - Magnesite, Option ID :- 3719,
 - Epsomite, Option ID :- 3720,
- Answer Given:- Epsomite, Option ID : -3720**

Question ID:- 921
If irrigation water is NOT limited, groundnut grown in a sandy loam soil should be irrigated throughout crop period using which of the following schedule
Options:-

- 50 % depletion of available soil moisture or IW/CPE ratio of 0.6, Option ID :- 3681,
 - 25 % depletion of available soil moisture or IW/CPE ratio of 1.0, Option ID :- 3682,
 - 25 % depletion of available soil moisture or IW/CPE ratio of 0.6, Option ID :- 3683,
 - 50 % depletion of available soil moisture or IW/CPE ratio of 0.75, Option ID :- 3684,
- Answer Given:- 25 % depletion of available soil moisture or IW/CPE ratio of 0.6, Option ID : -3683**

Question ID:- 889
In greengram, nitrogen fixation starts at the age of
Options:-

- 12-15 days, Option ID :- 3553,
- 18-21 days, Option ID :- 3554,

- 24-27 days, Option ID :- 3555,
 - 30-33 days, Option ID :- 3556,
- Answer Given:- 12-15 days, Option ID : -3553

Question ID:- 850

Match List I with List II

List I	List II
Inhibitor	Function
A. Malonate	I. Blocks complex III in ETC
B.Cyanide	II. Prevents oxidation of succinate in Krebs cycle
C. Oligomycin	III. Inhibits cytochrome oxidase in ETC
D. Rotenone	IV. Inhibits ATP synthase

Choose the correct answer from the options given below:

Options:-

- A -II , B - III, C -IV , D - I , Option ID :- 3397,
- A -I , B - II, C -IV , D - III , Option ID :- 3398,
- A -III , B - II, C -IV , D - I , Option ID :- 3399,
- A -IV , B - III, C -I , D - II , Option ID :- 3400,

Answer Given:- Not Attempted

Question ID:- 950

IWDP stands for

Options:-

- International watershed development project, Option ID :- 3797,
- Integrated watershed development project, Option ID :- 3798,
- Integrated watershed development programme, Option ID :- 3799,
- Integrated watershed driven plan, Option ID :- 3800,

Answer Given:- Integrated watershed development project, Option ID : -3798

Question ID:- 913

Dew can also be a water resource; accumulation of dew in north and north-east India during 6 months from October to March is

Options:-

- 5 – 10 mm, Option ID :- 3649,
- 10–15 mm, Option ID :- 3650,
- 15– 30 mm, Option ID :- 3651,
- 30–50 mm, Option ID :- 3652,

Answer Given:- Not Attempted

Question ID:- 935

Methemoglobinemia disease is caused due to toxic concentration of

Options:-

- Nitrate, Option ID :- 3737,
 - Sulphate, Option ID :- 3738,
 - Phosphate, Option ID :- 3739,
 - Silicate, Option ID :- 3740,
- Answer Given:- Nitrate, Option ID : -3737

Question ID:- 868

For how many days in advance, weather forecasts are currently issued by IMD in DAMU Project?

Options:-

- 3 days, Option ID :- 3469,
 - 5 days, Option ID :- 3470,
 - 10 days, Option ID :- 3471,
 - 21 days, Option ID :- 3472,
- Answer Given:- Not Attempted

Question ID:- 914

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Ratio between the area of crop irrigated and quantity of water applied to the crop is called as delta

Reason R: Any crop management practice aimed at economy in irrigation water application increases delta

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

Options:-

- Both A and R are correct and R is the correct explanation of A, Option ID :- 3653,
 - Both A and R are correct but R is NOT the correct explanation of A, Option ID :- 3654,
 - Both A and R are incorrect, Option ID :- 3655,
 - A is incorrect but R is correct, Option ID :- 3656,
- Answer Given:- Both A and R are incorrect, Option ID : -3655

Question ID:- 898

Match List I with List II

List I	List II
Bio-herbicide	Weed species controlled
A. Devine	I. <i>Sorghum halepense</i>
B. Collego	II. <i>Morrential odorata</i>
C. Bipolaris	III. <i>Cuscuta</i>
D. Lubao-2	IV. <i>Aeschynomene</i>

Choose the correct answer from the options given below:

Options:-

- A - IV, B - I, C - III, D - II, Option ID :- 3589,
- A - II, B - III, C - IV, D - I, Option ID :- 3590,

- A - III, B - I, C - IV, D - II, Option ID :- 3591,
 - A - II , B - IV, C - I, D - III, Option ID :- 3592,
- Answer Given:- A - II , B - IV, C - I, D - III, Option ID : -3592

Question ID:- 870

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : A Geographical Information System (GIS) links spatial data with descriptive information about a particular feature on a map.

Reason R : The information is stored as attributes of the geographically represented features.

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

Options:-

- Both A and R are true and R is the correct explanation of A, Option ID :- 3477,
- Both A and R are true but R is NOT the correct explanation of A, Option ID :- 3478,
- A is true but R is false, Option ID :- 3479,
- A is false but R is true, Option ID :- 3480,

Answer Given:- Both A and R are true and R is the correct explanation of A, Option ID : -3477

Question ID:- 909

Which of the following sprayers require the minimum volume of spray solution to cover a hectare of wheat crop?

Options:-

- Power sprayer, Option ID :- 3633,
- Hand sprayer, Option ID :- 3634,
- Foot sprayer, Option ID :- 3635,
- Knapsack sprayer, Option ID :- 3636,

Answer Given:- Power sprayer, Option ID : -3633

Question ID:- 849

The first acceptor of CO₂ _____ and first product of C₄ plant is _____

Options:-

- Oxaloacetic acid and phosphoenolpyruvate, Option ID :- 3393,
- Malic acid and oxaloacetate, Option ID :- 3394,
- Phosphoenolpyruvate and oxaloacetate, Option ID :- 3395,
- Oxaloacetic acid and malate, Option ID :- 3396,

Answer Given:- Phosphoenolpyruvate and oxaloacetate, Option ID : -3395

Question ID:- 958

Percentage of lignin in sugarcane bagasse (*Saccharum officinarum*)

Options:-

- 4-6, Option ID :- 3829,
- 15-19, Option ID :- 3830,
- 25-32, Option ID :- 3831,
- 40-45, Option ID :- 3832,

Answer Given:- Not Attempted

Question ID:- 900

Match List I with List II

List I	List II
Mechanism of action	Condidate herbicide
A. Inhibition of EPSP synthase	I. Clomazone
B. Carotenoid biosynthesis inhibitor	II. Carfentrazone
C. ALS inhibitor	III. Metsulfuron methyl
D. PPO inhibitor	IV. Glyphosate

Choose the correct answer from the options given below:

Options:-

- A - II, B - III, C - IV , D - I, Option ID :- 3597,
 - A - IV , B - I, C - II , D - III, Option ID :- 3598,
 - A - IV , B - III, C - I, D - II, Option ID :- 3599,
 - A - II , B - IV , C - I, D - III, Option ID :- 3600,
- Answer Given:- A - IV , B - I, C - II , D - III, Option ID : -3598

Question ID:- 902

Match List I with List II

List I	List II
A. Liquid formulation	I. Surfactant
B. Utility modifier	II. CIBRC
C. Activator adjuvant	III. Emulsifier
D. Regulatory Agency	IV. WSC

Choose the correct answer from the options given below:

Options:-

- A - IV, B - III, C - I, D - II, Option ID :- 3605,
 - A - II, B -IV , C - I, D - III, Option ID :- 3606,
 - A -II , B - I, C - IV, D - III, Option ID :- 3607,
 - A - IV, B - I, C - II, D - III, Option ID :- 3608,
- Answer Given:- A - IV, B - III, C - I, D - II, Option ID : -3605

Question ID:- 952

Dokuchaev, the Father of Soil Science, did pioneering work on “Chernozem” somewhat similar to that of Indian soil of:

Options:-

- Calcareous soil, Option ID :- 3805,
 - Alluvial soil, Option ID :- 3806,
 - Red soil, Option ID :- 3807,
 - Black soil, Option ID :- 3808,
- Answer Given:- Black soil, Option ID : -3808

Question ID:- 881

The total age of rice seedlings for transplanting in main field through double transplanting method

Options:-

- 60-70 days, Option ID :- 3521,
- 50-60 days, Option ID :- 3522,
- 40-50 days, Option ID :- 3523,
- 30-40 days, Option ID :- 3524,

Answer Given:- 50-60 days, Option ID : -3522

Question ID:- 855

Out of the following statements, which one is not correct ?

Options:-

- Number of stomata found in all different leaves is different in plants, Option ID :- 3417,
- Distribution of stomata is different in different plants, Option ID :- 3418,
- Distribution, number, size and type of stomata are same in every plant, Option ID :- 3419,
- Size and type of stomata is different in different plants, Option ID :- 3420,

Answer Given:- Distribution, number, size and type of stomata are same in every plant, Option ID : -3419

Question ID:- 903

Glufosinate inhibits the enzyme

Options:-

- Glutamine synthetase, Option ID :- 3609,
- EPSP, Option ID :- 3610,
- ACCase, Option ID :- 3611,
- PPO, Option ID :- 3612,

Answer Given:- Glutamine synthetase, Option ID : -3609

Question ID:- 926

A typical mineral soil, on volume basis, contains:

Options:-

- Mineral material 45%, organic matter 15%, air 10-20% and water 20-30%, Option ID :- 3701,
- Mineral material 55%, organic matter 5%, air 10-20% and water 20-30%, Option ID :- 3702,
- Mineral material 45%, organic matter 5%, air 20-30% and water 20-30%, Option ID :- 3703,
- Mineral material 55%, organic matter 5%, air 20-30% and water 10-20%, Option ID :- 3704,

Answer Given:- Mineral material 45%, organic matter 5%, air 20-30% and water 20-30%, Option ID : -3703

Question ID:- 880

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Theoretically, a planophile canopy would be more efficient if radiation were distributed more evenly over leaf surfaces.

Reason R: Such an equitable distribution could be accomplished by having leaves, at least the upper leaves, at a vertical leaf inclination when the sun is at high elevations.

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

Options:-

- Both A and R are true and R is the correct explanation of A, Option ID :- 3517,

- Both A and R are true but R is NOT the correct explanation of A, Option ID :- 3518,
 - A is true but R is false, Option ID :- 3519,
 - A is false but R is true, Option ID :- 3520,
- Answer Given:- Both A and R are true and R is the correct explanation of A, Option ID : -3517

Question ID:- 896

Match List I with List II

List I	List II
Vegetative organ	Weed species
A. Tuber	I. <i>Trifolium repens</i>
B. Rhizomes	II. <i>Allium vineale</i>
C. Stolons	III. <i>Elytrigia repens</i>
D. Bulb	IV. <i>Cyperus rotundus</i>

Choose the correct answer from the options given below:

- Options:-
- A - IV, B - III, C - I, D - II, Option ID :- 3581,
 - A - IV, B - I, C - III, D - II, Option ID :- 3582,
 - A - II, B - I, C - IV, D - III, Option ID :- 3583,
 - A - III, B - I, C - IV, D - II, Option ID :- 3584,
- Answer Given:- A - IV, B - III, C - I, D - II, Option ID : -3581

Question ID:- 841

Which of the following is the non-physiological oxidant used by Robert Hill known as Hill reagent?

- Options:-
- Ferricyanide, Option ID :- 3361,
 - Ferric oxalate, Option ID :- 3362,
 - DCPIP, Option ID :- 3363,
 - NADP⁺, Option ID :- 3364,
- Answer Given:- Ferricyanide, Option ID : -3361

Question ID:- 933

Fertilizers having least hygroscopicity is

- Options:-
- Ammonium nitrate, Option ID :- 3729,
 - Ammonium sulphate, Option ID :- 3730,
 - Anhydrous chloride, Option ID :- 3731,
 - Urea, Option ID :- 3732,
- Answer Given:- Ammonium sulphate, Option ID : -3730

Question ID:- 945

In dry spell, during crop period, which of the following cannot be moisture stress mitigation practice?

Options:-

- Ratooning, Option ID :- 3777,
 - Thinning, Option ID :- 3778,
 - Mulching, Option ID :- 3779,
 - Intensive cropping, Option ID :- 3780,
- Answer Given:- Intensive cropping, Option ID : -3780

Question ID:- 915

Correct order of irrigation terminologies with respect to amount of water involved during a given event of irrigation (WR stands for water requirement, IR for irrigation requirement, NIR for net irrigation requirement and E for evaporation)

Options:-

- $E > WR > NIR > IR$, Option ID :- 3657,
 - $IR > WR > E > NIR$, Option ID :- 3658,
 - $IR > WR > NIR > E$, Option ID :- 3659,
 - $WR > IR > NIR > E$, Option ID :- 3660,
- Answer Given:- $WR > IR > NIR > E$, Option ID : -3660

Question ID:- 871

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Rayleigh scattering causes the sky to appear blue.

Reason R: As most of the Rayleigh scatterers have size $\ll \lambda$ (wavelength).

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

Options:-

- Both A and R are true and R is the correct explanation of A , Option ID :- 3481,
 - Both A and R are true but R is NOT the correct explanation of A , Option ID :- 3482,
 - A is true but R is false , Option ID :- 3483,
 - A is false but R is true , Option ID :- 3484,
- Answer Given:- Both A and R are true and R is the correct explanation of A , Option ID : -3481

Question ID:- 934

Beneficial elements of plants are:

- A. Sodium
- B. Vanadium
- C. Selenium
- D. Cobalt

Choose the *correct* answer from the options given below

Options:-

- A, B and D only, Option ID :- 3733,
- A, B and C only, Option ID :- 3734,
- A, C and D only, Option ID :- 3735,

• B, C and D only, Option ID :- 3736,
Answer Given:- A, B and D only, Option ID : -3733

Question ID:- 917

Match List I with List II

List I	List II
Soil texture	Moisture content at saturation level
A. Sand	I. 45%
B. Silt loam	II. 50%
C. Sandy loam	III. 42%
D. Loamy sand	IV. 40%
E. Clay Loam	V. 38 %

Choose the correct answer from the options given below:

Options:-

- A - V, B - III, C - IV, D - I, E - II , Option ID :- 3665,
 - A - V, B - I, C - III, D - IV, E - II , Option ID :- 3666,
 - A - I, B - V, C - III, D - II, E - IV , Option ID :- 3667,
 - A - V, B - III, C - I, D - IV, E - II , Option ID :- 3668,
- Answer Given:- A - V, B - I, C - III, D - IV, E - II , Option ID : -3666

Question ID:- 854

Which of these statements is incorrect?

- A. Glycolysis occurs in cytosol
- B. Oxidative phosphorylation takes place in outer mitochondrial membrane
- C. Respiratory ETS in plants located in inner mitochondrial membrane
- D. ATP is synthesized through complex V

Options:-

- A, Option ID :- 3413,
 - B, Option ID :- 3414,
 - C, Option ID :- 3415,
 - D, Option ID :- 3416,
- Answer Given:- B, Option ID : -3414

Question ID:- 925

Drainage of one ha-cm in 24 hours equals to drainage of how much water

Options:-

- 1.157 Ips, Option ID :- 3697,

- 1.671 Ips, Option ID :- 3698,
 - 1.925 Ips, Option ID :- 3699,
 - 2.157 Ips, Option ID :- 3700,
- Answer Given:- 1.157 Ips, Option ID : -3697

Question ID:- 960

Match List I with List II

List I	List II
A. Leaching	I. Acid sulphate soil
B. Gypsum requirement	II. Acid soil
C. Jarrosite	III. Sodic soil
D. Liming	IV. Salt affected soil
E. Urea briquette	V. Water logged soil

Choose the correct answer from the options given below:

- Options:-
- A - II, B - IV, C - V, D - I, E - III , Option ID :- 3837,
 - A - IV , B - III, C - I, D - II, E - V , Option ID :- 3838,
 - A - III, B - II, C - I, D - IV, E - V , Option ID :- 3839,
 - A - V, B - I , C - II, D - III, E - IV , Option ID :- 3840,
- Answer Given:- A - IV , B - III, C - I, D - II, E - V , Option ID : -3838

Question ID:- 884

The suitable seed rate of pearl millet to get seedlings for transplanting in one hectare area

- Options:-
- 2 kg/ha, Option ID :- 3533,
 - 4 kg/ha, Option ID :- 3534,
 - 6 kg/ha, Option ID :- 3535,
 - 8 kg/ha, Option ID :- 3536,
- Answer Given:- 2 kg/ha, Option ID : -3533

Question ID:- 890

Small seeded late maturing type of blackgram

- Options:-
- *Vigna mungo var. niger* , Option ID :- 3557,
 - *Vigna mungo var. viridis* , Option ID :- 3558,
 - Both 1 and 2, Option ID :- 3559,
 - *Vigna aconitifolia*, Option ID :- 3560,
- Answer Given:- *Vigna mungo var. viridis* , Option ID : -3558

Question ID:- 944

Which of the following is not a film forming type anti-transpirant?

- Options:-
- Mobileaf, Option ID :- 3773,
 - Hexadecanol, Option ID :- 3774,
 - Folicot, Option ID :- 3775,

• CaHCO_3 , Option ID :- 3776,
Answer Given:- CaHCO_3 , Option ID : -3776

Question ID:- 845

Given below are two statements

Statement I: Osmotic pressure is always negative.

Statement II: Osmotic potential is also always negative.

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

Options:-

- Both Statement I and Statement II are true, Option ID :- 3377,
 - Both Statement I and Statement II are false, Option ID :- 3378,
 - Statement I is true but Statement II is false, Option ID :- 3379,
 - Statement I is false but Statement II is true, Option ID :- 3380,
- Answer Given:- Statement I is false but Statement II is true, Option ID : -3380**
-

Question ID:- 856

In oxygenic photosynthetic organism, photosynthetic pigment is located in _____

Options:-

- Peroxisome , Option ID :- 3421,
 - Stroma , Option ID :- 3422,
 - Chlorosome , Option ID :- 3423,
 - Thylakoid membranes , Option ID :- 3424,
- Answer Given:- Thylakoid membranes , Option ID : -3424**
-

Question ID:- 912

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: The probe of a neutron moisture meter is inserted into an access tube fixed vertically in the soil

Reason R: The probe of a neutron moisture meter contains a source of fast protons and a detector of slow electrons and helps in estimating soil moisture content

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

Options:-

- Both A and R are correct and R is the correct explanation of A, Option ID :- 3645,
 - Both A and R are correct but R is NOT the correct explanation of A, Option ID :- 3646,
 - A is correct but R is not correct, Option ID :- 3647,
 - A is not correct but R is correct, Option ID :- 3648,
- Answer Given:- A is correct but R is not correct, Option ID : -3647**
-

Question ID:- 955

Major properties of soil order are:

A. Gelisols - Occur in areas of cold region such as Artic, Antarctic or high mountains.

B. Histosols - Organic matter rich (>20%) soils with peaty horizon under permanent water saturated environment.

C. Oxisols - Deeply weathered soils of humid tropics with brick red colour.

D. Mollisols - Dark coloured low base containing soils (<50% base saturated>

Choose the *correct* answer from the options given below:

Options:-

• A, B and D only , Option ID :- 3817,

• A, B and C only , Option ID :- 3818,

• A, C and D only , Option ID :- 3819,

• B, C and D only , Option ID :- 3820,

Answer Given:- A, B and C only , Option ID : -3818

Question ID:- 943

ICRISAT was established in the year

Options:-

• 1962, Option ID :- 3769,

• 1972, Option ID :- 3770,

• 1982, Option ID :- 3771,

• 1992, Option ID :- 3772,

Answer Given:- 1972, Option ID : -3770

Question ID:- 885

Buggy whipping condition in sorghum is caused by

Options:-

• Deficiency of nitrogen, Option ID :- 3537,

• Deficiency of Zn, Option ID :- 3538,

• Application of higher dose of 2, 4-D, Option ID :- 3539,

• Application of higher dose of atrazine, Option ID :- 3540,

Answer Given:- Application of higher dose of 2, 4-D, Option ID : -3539

Question ID:- 959

Given below are two statements

Statement I: Maximum wasteland areas in our country lies in Madhya Pradesh.

Statement II: In Haryana, most wastelands comprise saline, sodic or sandy land areas.

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

Options:-

• Both Statement I and Statement II are correct , Option ID :- 3833,

• Both Statement I and Statement II are incorrect , Option ID :- 3834,

• Statement I is correct but Statement II is incorrect , Option ID :- 3835,

• Statement I is incorrect but Statement II is correct , Option ID :- 3836,

Answer Given:- Statement I is incorrect but Statement II is correct , Option ID : -3836

Question ID:- 947

Following are the statements about common feature of drought avoidance in plants

- A. Early stomata closure
- B. Efficient root system
- C. Lipid deposition on foliage
- D. Reduction in water uptake
- E. Straightening of leaves

Choose the *correct* answer from the options given below:

Options:-

- A, D and E only, Option ID :- 3785,
- B, D and E only, Option ID :- 3786,
- B, C and D only, Option ID :- 3787,
- A, B and C only, Option ID :- 3788,

Answer Given:- A, B and C only, Option ID : -3788

Question ID:- 878

What is the weight of one centimeter of surface soil over one hectare of land?

Options:-

- 100 t, Option ID :- 3509,
- 150 t, Option ID :- 3510,
- 200 t, Option ID :- 3511,
- 250 t, Option ID :- 3512,

Answer Given:- 150 t, Option ID : -3510

Question ID:- 862

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: The temperature increases with increasing height in the stratosphere.

Reason R: Ozone absorbs ultra violet radiation in the stratosphere and makes it warm.

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

Options:-

- Both A and R are true and R is the correct explanation of A, Option ID :- 3445,
- Both A and R are true but R is NOT the correct explanation of A, Option ID :- 3446,
- A is true but R is false, Option ID :- 3447,
- A is false but R is true, Option ID :- 3448,

Answer Given:- Both A and R are true and R is the correct explanation of A, Option ID : -3445

Question ID:- 937

Ammonium sulphate fertilizer is advisable for

Options:-

- Potato, Option ID :- 3745,

- Wheat, Option ID :- 3746,
 - Cotton, Option ID :- 3747,
 - Maize, Option ID :- 3748,
- Answer Given:- Cotton, Option ID : -3747

Question ID:- 908

Imperata cylindrica is propagated by means of

Options:-

- Rhizomes, Option ID :- 3629,
 - Off-setts, Option ID :- 3630,
 - Stolon, Option ID :- 3631,
 - Sucker, Option ID :- 3632,
- Answer Given:- Rhizomes, Option ID : -3629

Question ID:- 874

Arrange in correct sequence the steps of Precision Agriculture

- A. Evaluation of Precision Agriculture
- B. Preparation of variability maps
- C. Managing Variability
- D. Assessing Variability

Choose the *correct* answer from the options given below

Options:-

- A, B, C, D , Option ID :- 3493,
 - D, B, C, A , Option ID :- 3494,
 - B, C, D, A , Option ID :- 3495,
 - C, D, A, B , Option ID :- 3496,
- Answer Given:- D, B, C, A , Option ID : -3494

Question ID:- 864

Match List I with List II

List I	List II
Crop	Minimum cardinal temperature (⁰ C)
A. Rice	I. 1.0 - 2.0
B. Wheat	II. 3.0 - 4.5
C. Maize	III. 8.0 - 10.0
D. Peas	IV. 10.0 -12.0

Choose the correct answer from the options given below:

Options:-

- A - I, B - II, C - IV, D - III, Option ID :- 3453,
- A - II, B - IV, C - I, D - III, Option ID :- 3454,
- A - IV, B - II, C - III, D - I, Option ID :- 3455,

• A - II, B - IV, C - III, D - I, Option ID :- 3456,
Answer Given:- A - IV, B - II, C - III, D - I, Option ID : -3455

Question ID:- 844

A band of suberin layer develops all around the cell in the middle of the transverse and radial walls. This suberin is called _____ strip.

Options:-

- Intercalary, Option ID :- 3373,
- Pericycle, Option ID :- 3374,
- Cambium, Option ID :- 3375,
- Casparian, Option ID :- 3376,

Answer Given:- Casparian, Option ID : -3376

Question ID:- 863

What is the date of winter solstice in the southern hemisphere?

Options:-

- 22nd December, Option ID :- 3449,
- 21st March, Option ID :- 3450,
- 21st June, Option ID :- 3451,
- 23rd September, Option ID :- 3452,

Answer Given:- 21st June, Option ID : -3451

Question ID:- 939

The water soluble P (as % P_2O_5) in diammonium phosphate (DAP) is

Options:-

- 42.5, Option ID :- 3753,
- 44.5, Option ID :- 3754,
- 46.0, Option ID :- 3755,
- 40.5, Option ID :- 3756,

Answer Given:- 42.5, Option ID : -3753

Question ID:- 922

An area of 0.6 ha each of wheat and maize is irrigated daily with a discharge of 2000 litre per minute for a period of 15 hours. Each crop receives 8 cm of water. Determine efficiency (%) of irrigation system

Options:-

- 66.7, Option ID :- 3685,
- 76.7, Option ID :- 3686,
- 80.7, Option ID :- 3687,
- 85.6, Option ID :- 3688,

Answer Given:- 66.7, Option ID : -3685

Question ID:- 853

NAD^+ in cellular respiration acts as _____

Options:-

- A source for ATP synthase, Option ID :- 3409,
- An enzymes, Option ID :- 3410,
- An electron carrier, Option ID :- 3411,
- An electron acceptor for anaerobic respiration, Option ID :- 3412,

Answer Given:- An electron carrier, Option ID : -3411

Question ID:- 920

Read the statements with respect to water management in maize

- A. Most critical stage for irrigation is flowering period including tasseling, silking and pollination**
- B. Water deficit at flowering stage causes heaviest yield loss mainly due to reduction in grain size**
- C. Under the conditions of adequate irrigation water, irrigations should be applied at 25 % depletion of available soil moisture**
- D. Under the conditions of adequate irrigation water, irrigations should be applied at IW/CPE of 0.6 or 0.8 throughout growth period of crop**
- E. As maize is mostly grown in rainy season, applying irrigation is wasteful**

Choose the *correct* answer from the options given below:

Options:-

- A, B and C only, Option ID :- 3677,
- B, D and E only, Option ID :- 3678,
- A and C only, Option ID :- 3679,
- A , B and D only, Option ID :- 3680,

Answer Given:- A and C only, Option ID : -3679

Question ID:- 904

Bispyribac sodium is commonly used in

Options:-

- Maize, Option ID :- 3613,
- Rice, Option ID :- 3614,
- Tomato, Option ID :- 3615,
- Okra, Option ID :- 3616,

Answer Given:- Rice, Option ID : -3614

Question ID:- 907

A herbicide for the control of *Lantana camara*

Options:-

- Simazine, Option ID :- 3625,
- Fenoxaprop -p- ethyl, Option ID :- 3626,
- Paraquat, Option ID :- 3627,
- Glyphosate, Option ID :- 3628,

Answer Given:- Glyphosate, Option ID : -3628

Question ID:- 901

Glutathione -S-transferase is responsible for the selectivity of

Options:-

- Phenyl ureas, Option ID :- 3601,
- Sulfonyl ureas, Option ID :- 3602,
- Imidazolinones, Option ID :- 3603,
- Triazines, Option ID :- 3604,

Answer Given:- Triazines, Option ID : -3604

Question ID:- 861

Which one of the following is NOT a pressure unit?

Options:-

- Atmosphere, Option ID :- 3441,
- Pascal, Option ID :- 3442,
- Newton, Option ID :- 3443,
- Torr, Option ID :- 3444,

Answer Given:- Newton, Option ID : -3443

Question ID:- 927

The bulk density is expressed as:

- A. g/cm^3
- B. Mg/m^3
- C. kg/m^3
- D. g/m^3

Choose the *correct* answer from the options given below:

Options:-

- A and D only, Option ID :- 3705,
- A and B only, Option ID :- 3706,
- A and C only, Option ID :- 3707,
- B and C only, Option ID :- 3708,

Answer Given:- A and B only, Option ID : -3706

Question ID:- 910

If the tank capacity of the sprayer is 20 litres and the application rate is 500 l/ha, then butachlor 50 EC required at 1.4 kg ai/ha per spray load is will be

Options:-

- 100 ml, Option ID :- 3637,
- 50 ml, Option ID :- 3638,
- 25 ml, Option ID :- 3639,
- 75 ml, Option ID :- 3640,

Answer Given:- 100 ml, Option ID : -3637

Question ID:- 946

In early withdrawal of monsoon what should be best moisture mitigation practice?

Options:-

- Early sowing of suitable *Rabi* crops, Option ID :- 3781,
- Late sowing of suitable *Rabi* crops, Option ID :- 3782,
- Late sowing of suitable *Kharif* crops, Option ID :- 3783,
- Both 1 and 2, Option ID :- 3784,

Answer Given:- Late sowing of suitable *Rabi* crops, Option ID : -3782

Question ID:- 886

Which of the following is NOT in the mustard group?

Options:-

- *Brassica juncea*, Option ID :- 3541,
- *Brassica napus*, Option ID :- 3542,
- *Brassica nigra*, Option ID :- 3543,
- *Brassica carinata*, Option ID :- 3544,

Answer Given:- *Brassica napus*, Option ID : -3542

Question ID:- 906

Give the chronological order in the development of following herbicides

- A. Atrazine
- B. 2,4-D
- C. Bispyribac Sodium
- D. Alachlor
- E. Butachlor

Choose the *correct* answer from the options given below

Options:-

- B, A, C, D, E, Option ID :- 3621,
- B, A, D, E, C, Option ID :- 3622,
- C, B, A, E, D, Option ID :- 3623,
- D, B, E, A, C, Option ID :- 3624,

Answer Given:- B, A, D, E, C, Option ID : -3622

Question ID:- 924

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Sulphuric acid can be used to amend water quality and can be applied directly to soil or in the irrigation water

Reason R: Sulphuric acid rapidly neutralizes the Na constituents of water or reacts with lime in the soil to produce soluble Ca

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

Options:-

- Both A and R are correct and R is the correct explanation of A, Option ID :- 3693,
 - Both A and R are correct but R is NOT the correct explanation of A, Option ID :- 3694,
 - A is correct but R is not correct, Option ID :- 3695,
 - A is not correct but R is correct, Option ID :- 3696,
- Answer Given:- A is not correct but R is correct, Option ID : -3696

Question ID:- 956
Highest area under conservation agriculture is in which of the Continent?
Options:-

- Africa, Option ID :- 3821,
 - Asia, Option ID :- 3822,
 - Australia, Option ID :- 3823,
 - America, Option ID :- 3824,
- Answer Given:- America, Option ID : -3824

Question ID:- 872
Match List I with List II

List I	List II
Name of ICAR research institute	Head quarter
A. ICAR-Indian Institute of Seed Science	I. Bhopal
B. ICAR-National Institute of High Security Animal Diseases	II. Bhimtal
C. ICAR- National Research Centre on Integrated Farming	III. Motihari
D. ICAR-Directorate of Cold Water Fisheries Research	IV. Mau

Choose the correct answer from the options given below:

- Options:-
- A - II, B - IV, C - I, D - III , Option ID :- 3485,
 - A - I, B - III, C - II, D - IV , Option ID :- 3486,
 - A - III, B - II, C - IV, D - III , Option ID :- 3487,
 - A - IV, B - I, C - III, D - II , Option ID :- 3488,
- Answer Given:- A - IV, B - I, C - III, D - II , Option ID : -3488

Question ID:- 951
Which one of the following crops requires highest amount of calcium?

- Options:-
- Oil seeds, Option ID :- 3801,
 - Cereals, Option ID :- 3802,
 - Legumes, Option ID :- 3803,
 - Forage crops, Option ID :- 3804,
- Answer Given:- Legumes, Option ID : -3803

Question ID:- 928
The most abundant minerals and mineral groups in sand and silt of soils throughout the world is:
Options:-

- Olivines, Option ID :- 3709,
- Feldspars, Option ID :- 3710,

- Pyroxenes and Amphiboles, Option ID :- 3711,
 - Quartz, Option ID :- 3712,
- Answer Given:- Quartz, Option ID : -3712

Question ID:- 887
The suitable seed rate for row-sown sesame
Options:-

- 3-4 kg/ha, Option ID :- 3545,
 - 9-10 kg/ha, Option ID :- 3546,
 - 14-15 kg/ha, Option ID :- 3547,
 - 19-20 kg/ha, Option ID :- 3548,
- Answer Given:- 3-4 kg/ha, Option ID : -3545

Question ID:- 852
Which of the following are correct about C₄ cycle and C₄ plant?
A. Phosphoenolpyruvate carboxylase is located in cytosol
B. C₄ cycle occurs in the chloroplasts of bundle sheath cells
C. C₄ cycle is a CO₂ enrichment cycle
D. C₄ cycle occurs in the chloroplasts of mesophyll cells.

- Options:-
- A and B only
- , Option ID :- 3405,
- B and C only, Option ID :- 3406,
 - A, B and C only, Option ID :- 3407,
 - C and D only, Option ID :- 3408,
- Answer Given:- C and D only, Option ID : -3408

Question ID:- 897
Match List I with List II

List I	List II
A. Pappus/parachute	I. <i>Anemone sp</i>
B. Comose	II. <i>Physalis minima</i>
C. Persistence/feathry calyz	III. Canada thistle
D. Baloon	IV. <i>Saccharum sp</i>

Choose the correct answer from the options given below:

- Options:-
- A - III, B - IV , C - I, D - II, Option ID :- 3585,
 - A - II, B - IV, C - I, D - III, Option ID :- 3586,
 - A - IV, B - I, C - II , D - III, Option ID :- 3587,
 - A - III, B - I, C - IV, D - II, Option ID :- 3588,
- Answer Given:- A - III, B - IV , C - I, D - II, Option ID : -3585

Question ID:- 893

Which of the following is not synonymous with soybean crop?

Options:-

- Wonder crop, Option ID :- 3569,
- Miracle crop, Option ID :- 3570,
- Golden bean, Option ID :- 3571,
- Queen of oilseeds, Option ID :- 3572,

Answer Given:- Queen of oilseeds, Option ID : -3572

Question ID:- 867

At what height, geostationary satellites are placed above the earth surface?

Options:-

- 800 km, Option ID :- 3465,
- 1000 km, Option ID :- 3466,
- 18000 km, Option ID :- 3467,
- 36000 km, Option ID :- 3468,

Answer Given:- 36000 km, Option ID : -3468

Question ID:- 932

Honey-comb structure is found in

Options:-

- Black soils, Option ID :- 3725,
- Red soils, Option ID :- 3726,
- Salt-affected soils, Option ID :- 3727,
- Laterites and lateritic soils, Option ID :- 3728,

Answer Given:- Laterites and lateritic soils, Option ID : -3728

Question ID:- 931

Match List I with List II

List I	List II
A. Manganese	I. Master cation
B. Boron	II. Grey speck of oats
C. Molybdenum	III. Seed setting and fertilization
D. Potassium	IV. Whiptail of cauliflower

Choose the correct answer from the options given below:

Options:-

- A – III, B – IV, C – I, D – II, Option ID :- 3721,
- A – IV, B – II, C – III, D – I, Option ID :- 3722,
- A – II, B – III, C –IV, D – I, Option ID :- 3723,
- A – I, B – III, C – II, D – IV, Option ID :- 3724,

Answer Given:- A – II, B – III, C –IV, D – I, Option ID : -3723

Question ID:- 888

The optimum spacing (row × plant) of hybrid cotton grown in the irrigated areas

Options:-

- 30 × 15 cm, Option ID :- 3549,

- 60 × 30 cm, Option ID :- 3550,
 - 90 × 45 cm, Option ID :- 3551,
 - 120 × 60 cm, Option ID :- 3552,
- Answer Given:- 120 × 60 cm, Option ID : -3552

Question ID:- 848

Given below are two statements

Statement I: C₃ plants are more efficient than C₄ plants in terms of carbon dioxide fixation

Statement II: C₄ plants are less water efficient and consume more amount of water than C₃ plants for same amount of CO₂ fixed.

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

Options:-

- Both Statement I and Statement II are true, Option ID :- 3389,
 - Both Statement I and Statement II are false, Option ID :- 3390,
 - Statement I is true but Statement II is false, Option ID :- 3391,
 - Statement I is false but Statement II is true, Option ID :- 3392,
- Answer Given:- Both Statement I and Statement II are false, Option ID : -3390

Question ID:- 875

What is the optimum plant population for wheat crop?

Options:-

- 3.33 lakh/ ha, Option ID :- 3497,
 - 4.33 lakh/ ha, Option ID :- 3498,
 - 5.66 lakh/ ha, Option ID :- 3499,
 - 6.66 lakh/ ha, Option ID :- 3500,
- Answer Given:- 3.33 lakh/ ha, Option ID : -3497

Question ID:- 860

Match List I with List II

List I	List II
A. Enooplasmic reticulum	I. Robert Brown, 1831
B. Nucleus	II. T. Boveri, 1888
C. Centrosomes	III. F. Miescher, 1869
D. Nucleic acid	IV. Carniar, 1897

Choose the correct answer from the options given below:

Options:-

- A -III , B -I, C -IV , D -II, Option ID :- 3437,
 - A - II, B -III , C -I , D - IV, Option ID :- 3438,
 - A - I, B -II , C -IV , D - III, Option ID :- 3439,
 - A - IV, B -I , C -II , D - III, Option ID :- 3440,
- Answer Given:- Not Attempted

Question ID:- 879

Weight of a soil sample with can is 210 g and dry weight with can is 180 g. Weight of empty moisture can is 40 g. What will be moisture content of soil sample?

Options:-

- 18.7 %, Option ID :- 3513,
- 21.4 %, Option ID :- 3514,
- 25.7%, Option ID :- 3515,
- 27.3 %, Option ID :- 3516,

Answer Given:- 21.4 %, Option ID : -3514

Question ID:- 894

In Ca and S deficient soils, gypsum placement should be done at

Options:-

- 10 days after sowing, Option ID :- 3573,
- 30 days after sowing, Option ID :- 3574,
- 50 days after sowing, Option ID :- 3575,
- 70 days after sowing, Option ID :- 3576,

Answer Given:- 10 days after sowing, Option ID : -3573

Question ID:- 869

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: In a Global Positioning System (GPS), four satellites are accommodated in each orbit at an altitude of 20,185 km from surface of earth.

Reason R: All these GPS satellites are placed in six orbits.

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

Options:-

- Both A and R are true and R is the correct explanation of A, Option ID :- 3473,
- Both A and R are true but R is NOT the correct explanation of A, Option ID :- 3474,
- A is true but R is false, Option ID :- 3475,
- A is false but R is true, Option ID :- 3476,

Answer Given:- Not Attempted

Question ID:- 882

The optimum temperature for the ideal vegetative growth of wheat

Options:-

- 4-6 °C, Option ID :- 3525,
- 10-16 °C, Option ID :- 3526,
- 16-22 °C, Option ID :- 3527,
- 22-28 °C, Option ID :- 3528,

Answer Given:- 16-22 °C, Option ID : -3527

Question ID:- 905

Orobanche is a problem weed in

Options:-

- Wheat, Option ID :- 3617,
- Tomato, Option ID :- 3618,
- Cotton, Option ID :- 3619,
- Sugarcane, Option ID :- 3620,

Answer Given:- Tomato, Option ID : -3618

Question ID:- 929

The use of Stokes' law for measurement of the size of soil particle depends on certain simplifying assumptions. These are:

- A. Particles must be spherical, smooth and rigid
- B. Fall must be unhindered
- C. Particles must be of uniform density
- D. Size of particles must be small compared to the size of molecules of liquid

Choose the *correct* answer from the options given below:

Options:-

- A, B and D only , Option ID :- 3713,
- A, B and C only , Option ID :- 3714,
- A, C and D only , Option ID :- 3715,
- B, C and D only , Option ID :- 3716,

Answer Given:- A, B and C only , Option ID : -3714

Question ID:- 892

Land area needed to raise seedlings for transplanting in 1 ha through spaced transplanting method of sugarcane

Options:-

- 50-100 m², Option ID :- 3565,
- 500-600 m², Option ID :- 3566,
- 1000-1100 m², Option ID :- 3567,
- 1500-1600 m², Option ID :- 3568,

Answer Given:- 50-100 m², Option ID : -3565

Question ID:- 866

Which of the following sequences is correct in terms of the Global Warming Potential?

Options:-

- CO₂>CH₄>N₂O>SF₆, Option ID :- 3461,
- SF₆>N₂O>CH₄>CO₂, Option ID :- 3462,
- N₂O>CH₄>CO₂>SF₆, Option ID :- 3463,
- N₂O> F₆>CH₄>CO₂, Option ID :- 3464,

Answer Given:- SF₆>N₂O>CH₄>CO₂, Option ID : -3462

Question ID:- 911

Match List I with List II

List I	List II
A. Machkund	I. Maharashtra
B. Gobindsagar	II. Odisha
C. Ukai	III. Himachal Pradesh
D. Jayalwadi	IV. Tamil Nadu
E. Adiyar	V. Gujarat

Choose the correct answer from the options given below:

Options:-

- A - II, B - III, C - V, D - I, E - IV, Option ID :- 3641,
- A - II, B - IV, C - V, D - I, E - III, Option ID :- 3642,
- A - I, B - V, C - III, D - II, E - IV, Option ID :- 3643,
- A - V, B - III, C - IV, D - II, E - I, Option ID :- 3644,

Answer Given:- A - II, B - III, C - V, D - I, E - IV, Option ID : -3641

Question ID:- 941
The optimum crop combination for strip cropping
Options:-

- Sorghum and pearl millet, Option ID :- 3761,
- Soybean and groundnut, Option ID :- 3762,
- Maize and mustard, Option ID :- 3763,
- Sorghum and greengram, Option ID :- 3764,

Answer Given:- Sorghum and greengram, Option ID : -3764

Question ID:- 899
Match List I with List II

List I	List II
Habitat type	Weed species
A. Roadside	I. <i>Hydrilla verticillata</i>
B. Xerophytic	II. <i>Parthenium sp</i>
C. Floating aquatic	III. <i>Pluchia lanceolata</i>
D. Submerged aquatic	IV. <i>Eichhornia crassipes</i>

Choose the correct answer from the options given below:

Options:-

- A - II, B - I, C - IV , D - III, Option ID :- 3593,
- A - II, B - IV, C - III , D - I, Option ID :- 3594,
- A - II, B - III, C - IV , D - I, Option ID :- 3595,
- A - III , B - I, C - IV, D - II, Option ID :- 3596,

Answer Given:- A - II, B - III, C - IV , D - I, Option ID : -3595

Question ID:- 918

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: When the water moving downward through a fine textured soil encounters a layer of coarse sand, the downward movement is temporarily increased until the soil suction in wetting front is sufficiently reduced

Reason R: Presence of large macrospores in the coarse sand are too large to take in water from the unsaturated microspores of the soil rapidly.

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

Options:-

- Both A and R are correct and R is the correct explanation of A, Option ID :- 3669,
- Both A and R are correct but R is NOT the correct explanation of A, Option ID :- 3670,
- A is correct but R is not correct, Option ID :- 3671,
- A is not correct but R is correct, Option ID :- 3672,

Answer Given:- A is not correct but R is correct, Option ID : -3672

Question ID:- 877

What is the enzyme responsible for carboxylation in C4 plants?

Options:-

- Phosphoenol pyruvic acid (PEP) carboxylase, Option ID :- 3505,
- Phosphophenol pyruvic acid (PEP) carboxylase, Option ID :- 3506,
- Phospho pyruvic acid (PEP) carboxylase, Option ID :- 3507,
- Phosphanol pyruvic acid (PEP) carboxylase, Option ID :- 3508,

Answer Given:- Phosphoenol pyruvic acid (PEP) carboxylase, Option ID : -3505

Question ID:- 842

Conversion of glucose to glucose-6-phosphate, is catalyzed by_____

Options:-

- Aldolase, Option ID :- 3365,
- Enolase, Option ID :- 3366,
- Phosphofructokinase, Option ID :- 3367,
- Hexokinase, Option ID :- 3368,

Answer Given:- Hexokinase, Option ID : -3368

Question ID:- 942

Farming in humid regions with growing period more than 120 days

Options:-

- Rainfed farming, Option ID :- 3765,
- Dryland farming, Option ID :- 3766,
- Dry faming, Option ID :- 3767,
- Conservation farming, Option ID :- 3768,

Answer Given:- Rainfed farming, Option ID : -3765

Question ID:- 948

Terminal drought is also known as

Options:-

- Early season drought, Option ID :- 3789,

- Mid season drought, Option ID :- 3790,
 - Late season drought, Option ID :- 3791,
 - Invisible drought, Option ID :- 3792,
- Answer Given:- Late season drought, Option ID : -3791

Question ID:- 873

Given below are two statements

Statement I: A soil with good tilth is quite porous and has free drainage up to water table

Statement II: The capillary and non-capillary pores should be in a ratio of 1:4 so that sufficient amount of water is retained in the soil as well as free air

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

Options:-

- Both Statement I and Statement II are true, Option ID :- 3489,
 - Both Statement I and Statement II are false, Option ID :- 3490,
 - Statement I is true but Statement II is false, Option ID :- 3491,
 - Statement I is false but Statement II is true, Option ID :- 3492,
- Answer Given:- Statement I is true but Statement II is false, Option ID : -3491

Question ID:- 865

Which of the following is responsible for the anthropogenic climate change phenomenon?

Options:-

- Volcanic eruption, Option ID :- 3457,
 - Variation in earth's orbital characteristics or Milankovitch cycles, Option ID :- 3458,
 - Variation in solar output, Option ID :- 3459,
 - Effect of green house gases, Option ID :- 3460,
- Answer Given:- Effect of green house gases, Option ID : -3460

Question ID:- 858

The basic cell membrane structure consists of and in the animal cell of an organism.

Options:-

•

Lipid bilayer, Option ID :- 3429,

•

Embedded proteins, Option ID :- 3430,

•

Golgi vesicles, Option ID :- 3431,

- Lipid bilayer and embedded proteins, Option ID :- 3432,

Answer Given:- Lipid bilayer and embedded proteins, Option ID : -3432

Question ID:- 851

Which of the following hormone deficiency causes dwarfism in plant?

Options:-

- Auxin, Option ID :- 3401,
- Gibberellin, Option ID :- 3402,
- Brassinosteroid, Option ID :- 3403,
- Ethylene, Option ID :- 3404,

Answer Given:- Gibberellin, Option ID : -3402

Question ID:- 859

Match List I with List II

List I	List II
Theory proposed	Author
A. Root pressure theory	I. J. C . Bose
B. Pulsation theory	II. Priestley
C. Relay pump hypotheis	III. Dixon and Jolly
D. Transpiration pull	IV. Godlewski

Choose the correct answer from the options given below:

Options:-

- A - I, B -II , C - IV, D -III , Option ID :- 3433,
- A -II , B -I , C -IV , D - III , Option ID :- 3434,
- A -II, B -I , C - III, D -IV , Option ID :- 3435,
- A -III, B - I, C -II , D - IV , Option ID :- 3436,

Answer Given:- A -II , B -I , C -IV , D - III , Option ID : -3434

Question ID:- 953

Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: After application of urea in soil, it undergoes hydrolysis where organic form of N is transformed to inorganic form of ammonium carbonate. The hydrolysis of urea is more in sandy soil than clay soil.

Reason R: Urea molecule forms positive charged ion due to *keto-enol* formation or zwitterion formation, resulting formation of positive charged urea molecules which is adsorbed by the negatively charged clay.

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

Options:-

- Both A and R are true and R is the correct explanation of A, Option ID :- 3809,
- Both A and R are true but R is NOT the correct explanation of A, Option ID :- 3810,
- A is true but R is false, Option ID :- 3811,
- A is false but R is true, Option ID :- 3812,

Answer Given:- A is true but R is false, Option ID : -3811

Question ID:- 916

A 1.5 ha wheat crop field was supplied with 6 cm depth of irrigation, compute how many liters of water has gone into the field.

Options:-

- 3 lakh, Option ID :- 3661,

- 4.5 lakh, Option ID :- 3662,
 - 7.5 lakh, Option ID :- 3663,
 - 9 lakh, Option ID :- 3664,
- Answer Given:- 9 lakh, Option ID : -3664**
-

Question ID:- 891

Deep sowing of chickpea is better than shallow depth in rainfed areas; which of the following statements not linked with benefits of deep sowing?

Options:-

- Reduces incidence of wilt, Option ID :- 3561,
- Promotes better root development, Option ID :- 3562,
- Promotes good germination, Option ID :- 3563,
- Protection of seed from U.V. radiation, Option ID :- 3564,

Answer Given:- Protection of seed from U.V. radiation, Option ID : -3564

Question ID:- 936

Mineral having maximum cation exchange capacity is

Options:-

- Mica, Option ID :- 3741,
- Illite, Option ID :- 3742,
- Smectite, Option ID :- 3743,
- Kaolinite, Option ID :- 3744,

Answer Given:- Smectite, Option ID : -3743

Print ResponseSheet

ICAR JRF 2022 AGRONOMY ANSWER

QUESTION ID	ANSWER
895	C
919	B
846	B
857	D
847	D
923	D
957	C
949	B
938	B
954	C
876	C
843	D
883	B
940	C
930	D
921	C
889	B
850	A
950	C
913	C
935	A
868	B
914	D
898	D
870	A
909	B
849	C
958	B
900	B
902	A
952	D
881	A
855	C
903	A
926	C
880	A
896	A
841	A
933	D
945	D
915	D

QUESTION ID	ANSWER
871	A
934	C
917	D
854	B
925	A
960	B
884	A
890	A
944	D
845	D
856	D
912	C
955	B
943	B
885	C
959	D
947	D
878	B
862	A
937	A
908	A
874	B
864	C
844	D
863	B
939	D
922	C
853	C
920	A
904	B
907	D
901	D
861	C
927	C
910	A
946	A
886	B
906	B
924	A
956	D
872	D
951	C
928	D

QUESTION ID	ANSWER
887	A
852	A
897	A
893	D
867	D
932	D
931	C
888	D
848	B
875	B
860	D
879	B
894	B
869	C
882	D
905	B
929	A
892	B
866	B
911	A
941	D
899	C
918	A
877	A
842	D
942	A
948	C
873	D
865	D
858	D
851	D
859	B
953	B
916	D
891	D
936	C