		A4 : 4		
Objective Question				
3	903	If it is said that wind is blowing from 360°, then what is its meaning? 1. Wind is not blowing 2. Wind is blowing from south direction 3. Wind is blowing from true north direction 4. Wind is blowing from magnetic south direction A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
4	904	The complex which is specifically inhibited by SHAM in the electron transport chain 1. Complex I 2. Complex II 3. Complex III 4. Complex IV A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	905	The cystic fibrosis transmembrane conductance regulator (CFTR) is a transporter involved in 1. Glucose transport 2. Chloride ion transport 3. Calcium homeostasis 4. Amino acid uptake A1 : 1 A2 : 2 A3 : 3	4.0	1.00

PREVIEW QUESTION BANK

Module Name : AGRONOMY-ENG
Exam Date : 09-Jul-2023 Batch : 10:00-12:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	901	The term used for the growth of terrestrial plants without soil in mineral nutrient solutions is 1. Nutrient culture 2. Aquaculture 3. Soilless culture 4. Solution culture A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	902	Match **List-I** with **List-II** (Choose the correct answer from the options given below:) **List-I** / **List-II** **Instrument** / **Parameter** (A) Wind vane — (I) Photosynthetically active radiation (B) Quantum sensor — (II) Wind speed (C) Anemometer — (III) Atmospheric pressure (D) Barometer — (IV) Wind direction Choose the ***correct*** answer from the options given below: 1. (A) - (IV), (B) - (I), (C) - (II), (D) - (III) 2. (A) - (I), (B) - (III), (C) - (IV), (D) - (II) 3. (A) - (III), (B) - (IV), (C) - (I), (D) - (II) 4. (A) - (IV), (B) - (III), (C) - (II), (D) - (I) A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

6 | 906 | 4.0 | 1.00

Given below are two statements:

Statement I : Minimum, optimum and maximum temperatures for germination of rice crop are 10-12°C, 30-32°C and 36-38°C, respectively.

Statement II : Minimum, optimum and maximum temperatures for germination of wheat crop are 3-4.5°C, 20-25°C and 30-40°C, respectively.

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

1. Both **Statement I** and **Statement II** are correct
2. Both **Statement I** and **Statement II** are not correct
3. **Statement I** is correct but **Statement II** is not correct
4. **Statement I** is not correct but **Statement II** is correct

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

7 | 907 | 4.0 | 1.00

The transcription factor SNAC1 (Stress-responsive NAC1) is involved in drought stress response in which of the following crop plants ?

1. *Sorghum bicolor* (sorghum)
2. *Phaseolus vulgaris* (common bean)
3. *Brassica napus* (rapeseed)
4. *Musa spp* (banana)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

8 | 908 | 4.0 | 1.00

		The technique used to study the spatial distribution of nutrients in plant tissues at a cellular level is ? 1. Immunohistochemistry 2. Laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) 3. Metabolomics 4. RNA-sequencing (RNA-seq) A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
9	909	Leaf relative growth rate (LRGR) can be calculated using which of the following expressions ? 1. $LRGR = \frac{LogLW2 - Log\ LW1}{t2 - t1}$ 2. $LRGR = \frac{LW2 - LW1}{t2 - t1}$ 3. $LRGR = \frac{LogLW2 + Log\ LW1}{t2 - t1}$ 4. $LRGR = \frac{LW2 + LW1}{t2 - t1}$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
10	910	The efficiency of PCR amplification in DNA barcoding can be enhanced by the presence of which mineral nutrient known for its stabilizing effect on DNA polymerase? 1. Rhodium 2. Ruthenium 3. Osmium 4. Iridium A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
11	911	The amino acid considered as a branched-chain amino acid (BCAA) is 1. Serine 2. Leucine 3. Asparagine 4. Tyrosine A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
12	912	A lack of micronutrients affects not only plant growth but also vital functions, such as photosynthetic and mitochondrial electron flow. Which of the following group of elements shall have the greatest impact on both photosynthetic and mitochondrial electron transport? 1. Co, Ni and Mo 2. Ca, K and Na 3. Mn, Co and Ca 4. Cu, Mn and Fe A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
13	913	The deficiency symptoms of an essential element tend to appear first in young leaves indicating that the element is relatively immobile. Such symptoms would be shown by which one of the following elemental deficiencies? 1. Sulphur 2. Iron 3. Nitrogen 4. Potassium	4.0	1.00

		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
14	914	In which of the following organelles, enzyme pyruvate dehydrogenease complex and glycolytic pathway are located 1. Cytosol and Mitochondria 2. Cytosol and chloroplast 3. Golgi bodies and ER 4. Microsomes and ribosomes A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
15	915	During translocation of photosynthates is plants from source to sink : 1. The loading of photosynthates at source is by active transport and unloading at the sink is by passive transport. 2. The loading of photosyntates at source is by passive transport and unloading at the sink is by active transport. 3. Both loading at the source and unloading at the sink are by active transport. 4. Both loading at the source and unloading at the sink are by passive transport. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	916		4.0	1.00

Match **List-I** with **List-II**

List-I	List-II
Specialized part of cell	**Specialized combinations of cell**
(A) Centriole	(I) Infoldings in mitochondria
(B) Chlorophyll	(II) Thylakoids
(C) Cristae	(III) Nucleic acids
(D) Ribozymes	(IV) Basal body cilia or flagella

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

17 | 917 | 4.0 | 1.00

Select out of the following the correct statement regarding cell membrane

1. Na and K ions move across cell membrane by passive transport.
2. Proteins make up 60 to 70% of the cell membrane.
3. Fluid mosaic model of cell membrane was proposed by Singer and Nicolson.
4. Lipids are arranged in a bilayer with polar heads towards the inner part.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

18 | 918 | 4.0 | 1.00

		Vegetable crops like tomatoes and bell pepper, allowed growing in a carbon dioxide rich environment, showed higher yields because : 1. C pathway for carbon fixation at high carbon dioxide is the limiting factor in such plants. 2. These showed an increased rate of photosynthesis at higher carbon dioxide concentrations. 3. These can respond to high carbon dioxide conditions even in low light conditions. 4. Only carbon dioxide is the limiting factor in such plants. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
19	919	Photorespiration does not take place in C_4 plants because such plants 1. Do not contain fixation enzyme RUBISCO 2. Have cells that are impermeable to oxygen 3. Have mechanism that increases the concentration of CO_2 at the enzyme site 4. Cells do not allow oxygen to accumulate in them A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
20	920	The product of photorespiration process is 1. Phosphoglycerate 2. Phosphoglycolate 3. Both A and B 4. Oxalo Acetic Acid A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

21	921	The country that has given name of the tropical cyclone "Mocha" developed in the month of May, 2023 in Bay of Bengal is 1. Bangladesh 2. Pakistan 3. India 4. Yemen A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

22	922	Which of the following clouds is a rain bearing cloud? 1. Nimbostratus 2. Altocumulus 3. Cirrostratus 4. Stratocumulus A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

23	923	Which of the following statements is correct ? 1. One cm of rainfall is the equivalent of one liter of water per square meter. 2. One millimeter of rainfall is the equivalent of 10 liter of water per square meter. 3. One millimeter of rainfall is the equivalent of one liter of water per square meter. 4. One cm of rainfall is the equivalent of 10 liter of water per square meter. A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

24 | 924 | 4.0 | 1.00

Particles that are not used for cloud seeding in artificial rain making is

1. Silver iodide
2. Dry ice
3. Common salt
4. Kaolinite

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

25 | 925 | 4.0 | 1.00

Given below are two statements:

Statement (I) : In the atmosphere, 90% of the ozone is distributed in the troposphere, while only 10% is confined to the stratosphere

Statement (II) : According to IPCC (2007) estimated value of radiative forcing from the tropospheric ozone is to be 0.35 ± 0.15 W m^{-2}.

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26 | 926 | 4.0 | 1.00

Full form of NISAR satellite is

1. National Indian Satellite for Agricultural Research
2. NASA ISRO Satellite for Agricultural Research
3. NASA ISRO Synthetic Aperture Radar
4. NASA ISRO Synchronised Agricultural Radar

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

27 927

Match **List-I** with **List-II**

List-I	**List-II**
(Fact /feature/event/ phenomena)	**(Definition)**
(A) Ecotype	(I) A uniform interbreeding population spread over time and space.
(B) Ecotone	(II) It is a group of individual organisms of the same species in a given area.
(C) Species	(III) It is a population of individuals of a species, which are genetically different.
(D) Population	(IV) A zone of transition, presenting a situation of special ecological interest between two different types of communities.

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

28 | 928 | 4.0 | 1.00

Match **List-I** with **List-II**

List-I	**List-II**
(Types of ecology)	**(Explanation)**
(A) Ecosystem ecology	(I) The units of study are interactions between different communities of area.
(B) Community ecology	(II) The units of study are pure stands of individuals of a single species.
(C) Biome ecology	(III) The units of study are groups of individuals belonging to different species of plants as well as animals.
(D) Population ecology	(IV) The most complicated synecological approach to the ecology of an area.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

29 | 929 | 4.0 | 1.00

The region of atmosphere having the constant temperature is

1. Troposphere
2. Mesopause
3. Stratosphere
4. Ionosphere

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

30 | 930 | 4.0 | 1.00

The concentration of nitrogen in atmosphere upto 50 km from the ground surafce is

1. About 48% nitrogen
2. About 58% nitrogen
3. About 68% nitrogen
4. About 78% nitrogen

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

31 931 4.0 1.00

Match **List-I** with **List-II**

List-I (CGIAR centers.)	**List-II** (Headquarter.)
(A) International Institute of Tropical Agriculture (IITA)	(I) Nairobi, Kenya
(B) International Livestock Research Institute (ILRI)	(II) Battaramulla, Sri Lanka
(C) International Water Management Institute (IWMI)	(III) Beirut, Lebanon
(D) International Center for Agricultural Research in the Dry Areas (ICARDA)	(IV) Ibadan, Nigeria

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

32 932 4.0 1.00

Which of the following statements are correct for "Tillage"?

(A) The most important objectives of tillage are seedbed preparation, increasing soil fertility, and soil moisture conservation.

(B) Tillage increases the bulk density of soil in the longirerer.

(C) Tillage improve soil tilth, soil aeration and root penetration.

(D) Tillage removes hard pans thus increase the soil depth for water absorption.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

33	933		4.0	1.00

Given below are two statements:

Statement (I) : Precision agriculture is generally defined as information and technology based farm management system to identify, analyze and manage variability within fields for optimum profitability, sustainability and protection of the land resources.

Statement (II) : Precision agriculture is the application of drone technologies in agricultural production

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34	934		4.0	1.00

		Calculate cumulative evaporation required for scheduling irrigation at 0.5 IW / CPE ratio with 5 cm of irrigation water? 1. 5 cm 2. 10 cm 3. 15 cm 4. 20 cm A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
35	935	Which of the following statements are correct for "Dryland agriculture"? (A) Growing season in dryland agriculture is < 300 days. (B) Rainfall should be < 1800 mm. (C) Main constraints are wind and water erosion. (D) Growing regions are mainly humid and tropical as well as uplands. Choose the ***correct*** answer from the options given below: 1. (A) and (B) only. 2. (A) and (C) only. 3. (B), (C) and (D) only. 4. (B) and (C) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
36	936		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(Plant hormones)	**(Major function)**
(A) Auxins	(I) Induces leaf and fruit abscission
(B) Cytokinin	(II) Elongation of cells
(C) Abscisic acid	(III) Stimulates the swelling of stems and roots
(D) Ethylene	(IV) Stimulate cell division

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

37 937

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as
Reason (R).

Assertion (A) : Zero-tillage practice in rice-wheat cropping system is a climate change adaptation strategy.

Reason (R) : It helps to avoid terminal heat stress of wheat.

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

38	938	What is the optimum range of soil moisture for effective ploughing? 1. 5 to 10 per cent depletion of available soil moisture 2. 15 to 20 per cent depletion of available soil moisture 3. 25 to 50 per cent depletion of available soil moisture 4. 50 to 60 per cent depletion of available soil moisture A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

39	939	Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**. **Assertion (A) :** Ridging increases albedo, thereby increasing the effective incoming radiation compared to a flat surface. **Reason (R) :** Tillage causes unequal distribution of energy at the soil surface. In light of the above statements, choose the ***correct*** answer from the options given below. 1. Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**. 2. Both **(A)** and **(R)** are true but **(R)** is NOT the correct explanation of **(A)**. 3. **(A)** is true but **(R)** is false. 4. **(A)** is false but **(R)** is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

40	940		4.0	1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : The Net Assimilation Rate (NAR) is a measure of the average photosynthetic efficiency of leaves in a crop community.

Reason (R) : It is highest when the plants are small and most of the leaves are exposed to sun light.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41	941	The practice of controlling water erosion by cultivation of alternate erosion permitting and erosion resistant crops is called as 1. Mixed cropping 2. Intercropping 3. Strip cropping 4. Relay cropping	4.0	1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42	942	The Dapog method of raising rice nursery was introduced in India from 1. Myanmar 2. Japan 3. China 4. Philippines	4.0	1.00

		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
43	943	Area of the micro-watershed is 1. 10-100 ha 2. 100-1000 ha 3. 1000-10000 ha 4. 10000-50000 ha A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
44	944	Type of soil water available for normal crop growth 1. Hygroscopic 2. Gravitational 3. Capillary 4. Hygroscopic and Gravitational A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
45	945		4.0	1.00

		Using the following types of water erosion, find which order is the correct one. (A) Splash erosion (B) Sheet erosion (C) Rill erosion (D) Gully erosion Choose the ***correct*** answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (D), (C), (B). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
46	946	The physical basis of precision farming is 1. Input quality 2. Variable rate technology 3. Field variability 4. Site-specific output A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
47	947	An intercropping system can be said beneficial, if it has LER: 1. Equal to 1.0 2. < 1.0 3. >1.0 4. Zero A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

48	948	Drought avoidance mechanism is found in which of the following crops? 1. Barley 2. Maize 3. Sorghum 4. Sunflower A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

49	949	Planting geometry that ensures a uniform incidence of solar radiation 1. Square planting 2. Rectangular planting 3. Mixed planting 4. Random planting A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

50	950	The Kufri Bahar is a prominant variety of 1. Sunflower 2. Cotton 3. Potato 4. Tobacco A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

51	951	Hyrbid rice for commercial production was first evolved in 1. India 2. China 3. Japan 4. USA A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

52	952	Mentha crop is commercially raised through 1. Seed 2. Root cutting 3. Stolons 4. Leaflets A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

53	953	The oil content in sunflower is 1. 10-20% 2. 20-35% 3. 35-45% 4. 45-60% A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

54	954	Which among the following is the temperate grass ? 1. White and red clover 2. Napier grass 3. Setaria grass 4. Guinea grass A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

55	955	Aeroponic technology is commercially used in quality seed/planting material production in 1. Tomato 2. Capsicum 3. Potato 4. Brinjal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

56	956	Weed seed dispersal by ants is called as 1. Exozoochory 2. Autochory 3. Myrmecochory 4. Herpochory A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
57	957	*Commelina benghalensis* bearing blue coloured short-lived flowers is a _____. 1. Pteridophyta 2. Spermatophyta 3. Dicot 4. Monocot A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
58	958	Given below are two statements: **Statement (I) :** The combined effect of competition and allelopathy where growth of weeds or crop or both is reduced is called allelomediation. **Statement (II) :** Allelopathy depends on addition of chemical compounds while competition involves removal of an essential factor from the environment. In light of the above statements, choose the ***most appropriate*** answer from the options given below. 1. Both **Statement (I)** and **Statement (II)** are true. 2. Both **Statement (I)** and **Statement (II)** are false. 3. **Statement (I)** is true but **Statement (II)** is false. 4. **Statement (I)** is false but **Statement (II)** is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
59	959		4.0	1.00

Which among the following is an ephemeral weed?

1. *Stellaria media*
2. *Phalaris minor*
3. *Medicago denticulata*
4. *Phyllanthus niruri*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

60 960

Given below are two statements:

Statement (I) : Management means to maintain weed population below a threshold level, however, control remains implicit in management.

Statement (II) : Integrated weed management (IWM) necessarily embraces that a combination of the methods of weed control rather than a single method be exercised for management of weeds below a threshold population.

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

61 961

Which of the following groups of herbicides, dicamba belongs to?

1. Aryloxy alkanoic acids
2. Arylcarboxylic acids
3. Thiocarbamates
4. Dinitroanilines

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

62 962

Inhibitors of photosynthesis at photosystem I.

1. Sulfonylureas
2. Benzoic acids
3. Diphenyl ethers
4. Bipyridyls

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

63 963

Match **herbicides** with their **first use/testing or synthesis**

Herbicide	First synthesis/use/testing
(A) Glyphosate	(I) 1995
(B) 2, 4-D	(II) 1971
(C) Diclosulam	(III) 1958
(D) Atrazine	(IV) 1944

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

64	964	Given below are two statements: **Statement (I) :** Three types of adjuvants used with herbicides are activator, spray modifier and utility. **Statement (II) :** Activator adjuvants are a part of the formulation. In light of the above statements, choose the ***most appropriate*** answer from the options given below. 1. Both **Statement (I)** and **Statement (II)** are correct. 2. Both **Statement (I)** and **Statement (II)** are incorrect. 3. **Statement (I)** is correct but **Statement (II)** is incorrect. 4. **Statement (I)** is incorrect but **Statement (II)** is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

65	965	In India, herbicie resistance was first reported in _____. 1. *Echinochloa colona* 2. *Phalaris minor* 3. *Ageratum houstonianum* 4. *Chenopodium album* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

66	966	Which of the following herbicides is highly volatile? 1. Pendimethalin 2. Atrazine 3. Ethalfluralin 4. EPTC A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
67	967	Suitable nozzles for herbicide spraying 1. Fan and impact type 2. Adjustable nozzles 3. Hollow cone nozzles 4. Tripple action A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
68	968	A weed of both cropped and non cropped lands 1. *Urena lobata* 2. *Urtica dioca* 3. *Ageratum* sp 4. *Solanum xanthocarpum* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
69	969	A selective post-emergence herbicide used for weed control in rice is 1. Pretilachlor 2. Butachlor 3. Bispyribac Sodium 4. Tembotrione A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

70 970

Match **Cultural pracices** with **crops**

Cultural Practice	Crop
(A) Beushaning	(I) Sunflower
(B) Blind hoeing	(II) Maize
(C) Earthing up	(III) Rice
(D) Intercultivation with bullocks	(IV) Sugarcane

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

71 971

4.0 1.00

Match **List-I** with **List-II**

List-I	**List-II**
Dam/Reservoir	**State**
(A) Tawa	(I) Uttar Pradesh
(B) Lower Bhavani	(II) Madhya Pradesh
(C) Balimala	(III) Tamil Nadu
(D) Matatila	(IV) Odisha
(E) Mayurakshi	(V) West Bengal

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

72 | 972 | 4.0 | 1.00

Given below are two statements:

Statement (I) : According to USDA estimates, the total amount of water on earth is about 1400 billion cubic kilometers

Statement (II) : This amount of water is enough to cover the earth with a layer of 300 meters (depth)

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73 | 973 | 4.0 | 1.00

Correct order, in decreasing trend, of principal components of India's water budget

1. Potential flow in rivers > Precipitation >Natural recharge > Evapotranspiration
2. Precipitation > Evapotranspiration < Potential flow in rivers > Natural recharge
3. Potential flow in rivers > Precipitation > Evapotranspiration > Natural recharge
4. Precipitation > Potential flow in rivers > Evapotranspiration > Natural recharge

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

74 | 974 | 4.0 | 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : Addition of organic matter to a mineral soil leads to improvement in water holding capacity of the soil.

Reason (R) : Under tropical conditions, water holding properties and available water range of a mineral soil due to addition of organic matter may not change materially

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

75 | 975 | 4.0 | 1.00

Read the following statements.

(A) TDR stands for Time Domain Refraction.

(B) TDR is based on the estimation of dielectric constant of water.

(C) Dielectric constant of water is 80.

(D) TDR is relatively unaffected by salinity or bulk density variations.

(E) TDR measures soil moisture suction.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

76	976	When Δ (delta) is in cm, B (base period) is in days and D is in ha cumec^{-1} 1. $\Delta = \frac{864\,B}{D}(cm)$ 2. $\Delta = \frac{864\,D}{B}(cm)$ 3. $\Delta = \frac{8640\,B}{D}(cm)$ 4. $\Delta = \frac{86.4\,B}{D}(cm)$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

77	977		4.0	1.00

Given below are two statements:

Statement (I) : The sum of matric and osmotic potential is called 'hydraulic head' which is useful index for characterizing the energy status of soil-water with respect to plant-water uptake

Statement (II) : Hydraulic potential is useful in evaluating the direction and intensity of water moving forces in the soil profile.

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

78 978

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as
Reason (R).

Assertion (A) : In a double ring infiltrometer, the double ring avoids requirement of deep insertion into the soil.

Reason (R) : The outer ring provides a buffer of infiltrating water, which leads to force of infiltration below the inner ring to remain completely vertical and unidirectional.

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79 | 979 | 4.0 | 1.00

Match **List-I** with **List-II**

List-I	**List-II**
Instrument	**Parameter measurement**
(A) Gypsum blocks	(I) Water flow
(B) Flume	(II) Soil moisture suction
(C) Infra-red balance	(III) Di-electric constant
(D) Irrometer	(IV) Electric resistance
(E) TDR	(V) Gravimetric moisture content

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

80 | 980 | 4.0 | 1.00

A 4% salt concentration is equal to how many ppm?

1. 40000
2. 4000
3. 400
4. 40

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

81 | 981 | 4.0 | 1.00

If electrical conductivity of a saturation extract of the soil is 11 dS/m, what will be the electrical conductivity (dS/m) of drainage water?

1. 0.11
2. 1.1
3. 5.5
4. 22

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

82	982	A sugarcane crop of 2 ha area was irrigated 5 times with 6 cm water in each irrigation; workout the total quantity of water applied in cubic meter. 1. 15000 2. 12000 3. 6000 4. 3000 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

83	983	Which among the followings provides the correct sequence of four zones of the infiltration profile (from top to bottom) 1. Transmission Zone – Wetting Zone – Transition Zone – Saturation Zone 2. Saturation Zone – Transition Zone –Transmission Zone – Wetting Zone 3. Transmission Zone – Transition Zone – Saturation Zone – Wetting Zone 4. Wetting Zone – Transmission Zone – Transition Zone – Saturation Zone A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

84	984	According to Kung (1971) water requirement to raise nursery for 1 ha irrigated rice crop is 1. 40 mm 2. 40 cm 3. 10 cm 4. 200 mm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

85	985	Read the statements about irrigation management in chickpea (A) Flowering and pod filling are the most critical stages for irrigation. (B) Water requirement of chickpea ranges from 400–600 mm. (C) Irrigating chickpea with saline water that has salinity of 10 mmhos/cm can reduce yield by about 55%. (D) Chickpea is usually irrigated following check basin method. (E) Under conditions of low evaporative demand as in North India, irrigation can cause lodging in chickpea. Choose the ***correct*** answer from the options given below: 1. (A), (B) and (E) only 2. (A), (B) and (D) only 3. (B), (C) and (E) only 4. (C), (D) and (E) only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

86	986		4.0	1.00

		The Law which states that whatever is being taken by plants from soil needs to be restored to maintain the nutrient supplying capacity of the soil is called "Law of Restitution" and it is propounded by: 1. Justus von Liebig (1840) 2. Hilgard (1888) 3. J.B. Boussingault (1802-1882) 4. E.W. Hilgard (1833-1916) A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
87	987	Parker et al. (1951) introduced the concept of Nutrient Index Value (NIV) to describe the fertility status of soils for the purpose of mapping. The NIV value of medium nutrient status is: 1. 0.5-1.0 2. 1.0-1.5 3. 1.5-2.0 4. 1.5-2.5 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
88	988	Secondary tillage is done primarily 1. To prepare root bed 2. To break hard pan 3. To prepare a fine tilth seed bed 4. To preserve soil structure A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
89	989	The dominant clay mineral present in Inceptisol is 1. Montmorrilonite 2. Illite 3. Kaolinite 4. Chlorite A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
90	990	The diameter of fine particle in sand fraction according to USDA is: 1. 0.25-0.10 mm 2. 0.50-0.25 mm 3. 0.05-0.002 mm 4. 2.00 -1.00 mm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
91	991		4.0	1.00

Given below are two statements: One is labeled as **Statement (I)** and the other is labeled as (**Statement II**).

Statement (I) : In India, Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce, Government of India, is the key accreditation agency

Statement (II) : During XII Plan, Government of India initiated a Scheme named "Paramparagat Krishi Vikas Yojana" or "PKVY", which envisages promotion of organic farming.

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

92 992 4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as
Reason (R).

Assertion (A) : Sulphur deficiencies first appear on the younger growth in the plants.

Reason (R) : Sulphur is mobile in the plants, thereby, fading the normal green colour of the young leaves.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93	993	Phosphorus (P) is an important essential nutrient. (A) Plant roots absorb P in the $H_2PO_4^-$ form, but under neutral to alkaline environments, HPO_4^{2-} and or PO_4^{3-} ions could also be taken up. (B) In normal P-sufficient plants, P-content varies from 0.1% to 0.4% by weight. (C) It is an essential ingredient for *Rhizobium* bacteria to convert atmospheric N (N_2) into the ammonium (NH_4) form usable by plant. (D) Because of being immobile in plants, first signs of its deficiency appear on the older leaves. Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (D) only. 3. (B), (C) and (D) only. 4. (A), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

94	994	As per critical relative humidity (CRH), the most hygroscopic fertilizer is 1. Ammonium sulphate 2. Urea ammonium sulphate 3. Ammonium nitrate 4. Ammonium chloride A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

95	995		4.0	1.00

Match **List-I** with **List-II**

Theory proposed	Thinker/Name of Theory, etc.)
(A) Root interception	(I) Bray, R.H. (1954)
(B) Law of diffusion	(II) Cate and Nelson (1965)
(C) Mobility concept	(III) Jenny and Overstrect (1939)
(D) Critical limit	(IV) Fick's (1885)

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 996

Monoammonium phosphate is produced by reaction of ammonia with

1. Phosphoric acid
2. Nitric acid
3. Sulphuric acid
4. Hydrochloric acid

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

97 997

Prismatic soil structure is a distinct feature in

1. Red soils
2. Black soils
3. Alluvial soils
4. Sodic soils

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

98 998

Soil extractants used for available nutrients:

(A) 2 M KCL extract is used for determination of mineral N (NH_4 and NO_3) using soil: solution ratio of 1:10.

(B) DTPA extractant (pH 7.5) is used for determination of micronutrients using soil: solution ratio of 1:20.

(C) Ammonium acetate (1 N) solution is used for determination of potassium using soil: solution ratio of 1:5.

(D) Olsen reagent (0.5 M $NaHCO_3$, pH 8.5) is used for determination of available P in soil using soil: solution ratio of 1:20.

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99 999

The targeted yield concept for soil fertility evaluation was proposed by:

1. S.P. Raychaudhuri
2. T.D. Biswas
3. B. Ramamoorthy
4. N.P. Datta

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

100 1000

Match **List-I** with **List-II**

List-I (Book/Theory proposed/ Characteristic, etc.)	**List-II** (Author/Thinker/ Name of Theory, etc.)
(A) Khaira disease	(I) Molybdenum
(B) Whiptail symptom	(II) Zinc
(C) Hollow-heart in groundnut	(III) Manganese
(D) Grey speck in cereals	(IV) Boron

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

101 1001

Which one is a minor-millet ?

1. Foxtail millet
2. Buck wheat
3. Sorghum
4. Barley

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

102 1002

4.0 1.00

		The term allelopathy was coined by 1. Holm 2. Harper 3. Molisch 4. Arnon A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
103	1003	What will be the concentration of an atrazine solution if 2 kg of atrataf (50 y.a i of atrazina) 1. 0.2 % 2. 2.0 % 3. 0.1 % 4. 1.0 % A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
104	1004	Correct sequence of herbicide resistant cases in following crops : 1. Rice>wheat>maize>soybean 2. Wheat>rice>soybean>maize 3. Wheat>maize>rice>soybean 4. Rice>maize>wheat>soybean A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				

105	1005	Relationship between plant population and yield in fodder crops is 1. Asymptotic 2. Linear 3. Parabolic 4. Exponential A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
106	1006	Protein and oil content of soybean is _____% and _____%, respectively. 1. 43 and 20 2. 35 and 30 3. 30 and 35 4. 20 and 43 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
107	1007	The interaction between legume and non-legume plants in the form of supplementation is called as : 1. Annidation 2. Allelopathic 3. Antagonism 4. Supplementary A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

108	1008	If a soil sample contains 20% moisture, calculate the specific heat of this soil (specific heat of water and soil is 1.0 and 0.2, respectively). 1. 0.44 cal/kg 2. 0.44 cal/g 3. 0.33 cal/kg 4. 0.33 cal/g A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

109	1009	Which one is not the correct ideotype for dryland farming? 1. Thick leaves 2. Shallow root system 3. Leaves horizontally oriented 4. High water requirement A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

110	1010	Which endogenous harmone increases under drought conditions? 1. Auxins 2. Gibbrelic acid 3. Abscisic acid 4. Cytokinin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

111 1011

If the weight of soil is 1.0 g, amount of potassium dichromate (1 N) is 10 ml, volume of ferrous ammonium sulphate (0.5 N) solution required for blank titration is 20.1 ml and volume of ferrous ammonium sulphate (0.5 N) solution required for soil sample titration is 17.4 ml, then the organic carbon content (%) in soil will be:

1. 0.47%
2. 0.57%
3. 0.37%
4. 0.67%

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

112 1012

The functions of zinc are:

(A) It is involved in the synthesis of indole acetic acid, metabolism of gibberellic acid and synthesis of RNA.

(B) It is a constituent of enzymes such as carbonic anhydrase (CA), alcoholic dehydrogenase and superoxide dismutase (SOD).

(C) Because of its preferential binding to sulphydryl group, Zn plays an important role in the stabilization and structural orientation of the membrane proteins.

(D) It influences translocation and transportation of P in plants. Under Zn-deficiency, poor translocation of P occurs, resulting in P-deficiency.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

113 1013

4.0 1.00

What will be the porosity when a soil have its bulk density and particle density of 1.50 mg/m^3 and 2.65 mg/m^3, respectively ?

1. 44.4%
2. 43.4%
3. 45.3%
4. 46.3%

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

114	1014	Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**. **Assertion (A) :** Organic-S is made available to plants under aerobic upland conditions by mineralization into sulphates by S-oxidizing bacteria such as *Thiobacillus*. **Reason (R) :** Mineralization of organic-S results in production of H^+ ions leading to the acidification of soil. In light of the above statements, choose the ***correct*** answer from the options given below. 1. Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**. 2. Both **(A)** and **(R)** are true but **(R)** is NOT the correct explanation of **(A)**. 3. **(A)** is true but **(R)** is false. 4. **(A)** is false but **(R)** is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

115	1015		4.0	1.00

Given below are two statements:

Statement (I) : Molybdenum is a component of nitrate reductase, nitrogenase, xanthine oxidase/dehydrogenase and sulphite oxidase.

Statement (II) : The critical concentration of molybdenum-deficiency in plants is usually more than 0.1 ppm and its deficiencies resemble the N-deficiencies.

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

1. Both **Statement (I)** and **Statement (II)** are correct.
2. Both **Statement (I)** and **Statement (II)** are incorrect.
3. **Statement (I)** is correct but **Statement (II)** is incorrect.
4. **Statement (I)** is incorrect but **Statement (II)** is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

116	1016	The physical process of soil degradation : 1. Fertility imbalance 2. Organic matter decline 3. Erosion and depletion 4. Acidification A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

117	1017		4.0	1.00

Given below are two statements:

Statement (I) : A key component of conservation agriculture is soil tillage connected to zero tillage, reduced tillage and ridge tillage.

Statement (II) : Improved crop yields are one benefit of the innovation known as zero tillage especially in rice-wheat system due to timely seeding of wheat.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118	1018	Biochar produd by incomplete combustion of biological materials is rich in 1. Nitrogen 2. Sulphur 3. Phosphorus 4. Carbon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

119	1019	Tree Crops: A Permanent Agriculture is written by 1. Charles C. Harrison 2. Edgar F. Smith 3. Josiah H. Penniman 4. J. Russel Smith A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
120	1020	Integrated Wasteland Development Programme (IWDP) had been under implementation since 1. 1979-80 2. 1989-90 3. 1994-95 4. 1997-98 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00