

PREVIEW QUESTION BANK

Module Name : PHYSICAL SCIENCE-ENG
Exam Date : 29-Jun-2024 Batch : 10:00-12:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	30001	<p>According to Bray's Nutrient Mobility concept, which among following element is mobile in plants but immobile in soil?</p> <ol style="list-style-type: none"> 1. Nitrogen 2. Phosphorus 3. Boron 4. Zing <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>		4.0
Objective Question				
2	30002	<p>Which of the following nutrient is related with deficiency symptoms like discoloration of leaf buds, breaking and dropping of buds?</p> <ol style="list-style-type: none"> 1. Boron, 2. Molybdenum, 3. Iron, 4. Magnesium. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>		4.0
Objective Question				
3	30003	<p>The pF range of soft or friable consistency of soil is-</p> <ol style="list-style-type: none"> 1. More than 4.5, 2. 2.8-4.5 3. 0.5-2.8 4. Less than 0.5 <p>A1 : 1</p>		4.0

A2 : 2

A3 : 3

A4 : 4

Objective Question

4	30004	<p>The amount of organic matter in a soil with 'Value 0' according to Munsell colour system is-</p> <ol style="list-style-type: none">1. High2. Medium,3. Low4. Does not depend.	4.0
		A1 : 1	
		A2 : 2	
		A3 : 3	
		A4 : 4	

Objective Question

5	30005	<p>The most common 1:1 type of clay mineral in soil is-</p> <ol style="list-style-type: none">1. Montmorillonite,2. Kaolinite,3. Vermiculite,4. Halloysite.	4.0
		A1 : 1	
		A2 : 2	
		A3 : 3	
		A4 : 4	

Objective Question

6	30006	<p>The O_a sub-horizon denotes-</p> <ol style="list-style-type: none">1. Organic horizon with highly decomposed organic matter2. Organic horizon with intermediately decomposed organic matter3. Organic horizon with least decomposed organic matter4. Organic horizon without decomposed organic matter	4.0
		A1 : 1	
		A2 : 2	

A3 : 3

A4 : 4

Objective Question

7	30007	<p>Who first observed that legumes can utilize atmospheric nitrogen?</p> <ol style="list-style-type: none"> 1. M. W. Beijerinck 2. J. B. Boussingault 3. A. I. Virtanen 4. G. S. Sekhon <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

8	30008	<p>Which of the following is/are the example of nitrifying bacteria?</p> <ol style="list-style-type: none"> 1. Nitrosomonas 2. Nitrobacter 3. Nitrospira 4. Nitrosomonas, Nitrobacter, Nitrospira <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

9	30009	<p>Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).</p> <p>Assertion (A) : Gypsum is commonly used for the reclamation of sodic soil.</p> <p>Reason (R) : Reclamation process involves reduction in exchangeable sodium with calcium and its removal from soil solution through leaching.</p> <p>In light of the above statements, choose the <i>correct</i> answer from the options given below.</p> <ol style="list-style-type: none"> 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
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A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

10 30010

4.0

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

Assertion (A) : Ammonium-based fertilisers are the major contributors to soil acidification.

Reason (R): Especially the non-leachable nitrogen ions which have been taken up by plants contribute to the soil acidity

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

11 30011

4.0

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

Assertion (A) : Implementing agroforestry practices helps in soil conservation.

Reason (R) : Agroforestry combines the cultivation of trees and crops on the same land, which reduces soil erosion by providing ground cover and enhancing soil structure through the roots of trees.

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

12	30012	<p>Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).</p> <p>Assertion (A): Manganese deficiency in plants primarily affects the photosynthetic process.</p> <p>Reason (R) : Manganese is a cofactor for several enzymes involved in the photosynthetic electron transport chain, facilitating electron transfer reactions within chloroplasts.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below .</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

13	30013	<p>Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).</p> <p>Assertion (A): Intense weathering of soil shifts its Zero Point Charge towards higher pH owing to greater accumulation of iron and aluminium oxides</p> <p>Reason (R): The application of organic matter in soil also pushes the soil Zero Point Charge towards higher pH.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

14	30014		4.0
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Arrange the following in decreasing order according to the number of linkages among silicon tetrahedra of soil particles

- (A). Nesosilicates
- (B). Phyllosilicates
- (C). Tectosilicates
- (D). Inosilicates

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

15 30015

Arrange the following in increasing the amount of nitrogen in the fertilizers

- (A). Ammonium sulphate,
- (B). Ammonium nitrate,
- (C). Ammonium chloride,
- (D). Calcium ammonium nitrate.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

16 30016

4.0

Arrange the following in decreasing order of Basal Spacing

- (A). Kaolinite
- (B). Montmorillonite
- (C). Illite
- (D). Vermiculite

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

17 30017

4.0

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

List-I	List-II
List I (Parent rock)	List II (Metamorphic rock)
(A). Conglomerate	(I). Graphite
(B). Slate	(II). Phyllite
(C). Coal	(III). Gneiss
(D). Sandstone	(IV). Quartzite

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

18	30018	4.0
Match List-I with List-II		
List-I	List-II	
List I (Soil Order)	List II (Characteristics)	
(A). Ultisols	(I). Deep soils with high organic matter content and more than 50% base saturation.	
(B). Vertisols	(II). clay-rich soils with swelling shrinkage properties according to soil moisture content.	
(C). Mollisols	(III). base saturation <35% with argillic or kandic horizon.	
(D). Alfisols	(IV). soils that have argillic, kandic, or nitric horizon and a base saturation of 35% or greater with ochric epipedon, but may have an umbric epipedon.	
Choose the correct answer from the options given below:		
1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)		
2. (A) - (III), (B) - (II), (C) - (I), (D) - (IV)		
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)		
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)		
A1 : 1		
A2 : 2		
A3 : 3		
A4 : 4		

Objective Question

19	30019	4.0
Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).		
Assertion (A): Waterlogged soil typically displays a grayish color due to reduced oxygen levels.		
Reason (R): Upland soil usually maintains a reddish or brownish hue due to its well-aerated nature.		
In light of the above statements, choose the <i>most appropriate</i> 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

20 30020

4.0

Arrange the following consequences of submergence in the soil in the correct sequence:

- (A). Depletion of soil oxygen,
- (B). Accumulation of toxic substances like hydrogen sulfide,
- (C). Loss of beneficial soil organisms,
- (D). Increased soil pH in acidic soil.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

21 30021

4.0

Arrange the following factors affecting irrigation water quality in agriculture in the correct sequence:

- (A). Salinity,
- (B). pH
- (C). Sediment content,
- (D). Chemical contaminants.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

22 30022

4.0

Match List-I with List-II

List-I	List-II
Event	Function
(A). Thermal Imaging	(I). Monitoring crop water stress and irrigation management
(B). Radar Remote Sensing	(II). Identifying crop types and crop health
(C). Normalized Difference Vegetation Index (NDVI)	(III). Mapping soil moisture content and terrain elevation
(D). Multispectral Imaging	(IV). Detecting temperature variations in crops for stress detection.

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (I), (B) - (III), (C) - (IV), (D) - (II)
- (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23 30023

4.0

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

List-I	List-II
Event	Observation
(A). Harvest Planning	(I). Determining field boundaries and property lines accurately.
(B). Soil Sampling	(II). Collecting soil samples at precise locations for analysis and management decisions.
(C). Boundary Mapping	(III). Planning optimal routes for harvesting equipment to maximize efficiency.
(D). Pest Management	(IV). Tracking pest populations and movements to inform control strategies.

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

24 30024

4.0

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

List-I	List-II
Method	Determination
(A). Kjeldahl method	(I). Primarily assesses the available phosphorus content in the soil.
(B). Bray P1 test	(II). Measures the potassium content in the soil solution.
(C). Ammonium acetate extraction	(III). Determines the total nitrogen content in the soil.
(D). Flame photometry	(IV). Quantifies the exchangeable ammonium and potassium content in the soil.

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (I), (C) - (IV), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

25 30025

4.0

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

List-I	List-II
Type of pollution	Effect
(A). Point source pollution	(I). Pollution that originates from a specific, identifiable source, such as a factory or sewage treatment plant.
(B). Non-point source pollution	(II). Pollution that comes from diffuse sources, such as agricultural runoff or urban stormwater.
(C). Groundwater pollution	(III). Contamination of underground water sources, often caused by industrial spills or improper waste disposal.
(D). Surface water pollution	(IV). Pollution of lakes, rivers, and oceans due to various human activities such as industrial discharge, agricultural runoff, and sewage overflow.

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

- (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26 30026

4.0

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

List-I	List-II
Activity	Plant Direction
(A). Phototropism	(I). Bend towards soil
(B). Geotropism	(II). Response to day length
(C). Thigmotropism	(III). Bending towards light
(D). Photoperiodism	(IV). Response to touch or movement

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

- (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

27 30027

4.0

Given below are two statements:

Statement (I): Single superphosphate, double superphosphate, triple superphosphate are mono-calcium phosphate.

Statement (II): Mono calcium phosphates are water soluble and thus have high leaching losses.

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

- Both Statement (I) and Statement (II) are true.
- Both Statement (I) and Statement (II) are false.
- Statement (I) is true but Statement (II) is false.
- Statement (I) is false but Statement (II) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

28	30028	<p>When rainfall is inadequate to meet the evapotranspiration losses, usually occurs in Humid Regions.</p> <p>(A). Invisible drought</p> <p>(B). Contingent drought</p> <p>(C). Meteorological drought</p> <p>(D). Permanent drought</p> <p>Choose the correct answer from the options given below:</p> <p>1. (A) only.</p> <p>2. (B) only.</p> <p>3. (C) only</p> <p>4. (D) only.</p> <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

29	30029	<p>Given below are two statements, one is labeled as Assertion (A) , and other one labeled as Reason (R).</p> <p>Assertion (A): The break of monsoon at critical stages for soil moisture stress leads to a reduction in yield.</p> <p>Reason (R): Only when the break of monsoon exceeds 15 days duration or more.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <p>1. Both (A) and (R) are correct and (R) is the correct explanation of (A).</p> <p>2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).</p> <p>3. (A) is correct but (R) is not correct.</p> <p>4. (A) is not correct but (R) is correct.</p> <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

30	30030		4.0
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Nutrient supply in organic farming is based on feeding the soil not feeding the crop -Justify

- (A). In organic management nutrient sources are mostly on-farm produced and naturally occurred not off-farm external inputs
- (B). Soil fertility is maintained by a variety of means like crop rotation, organic mulching, cover crop, etc.
- (C). Recycling and reuse of products and by-products of different components of an organic farm
- (D). Nutrients enrichment of soil by encouraging natural cycles and soil biological activity

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

31	30031	<p>Certification is essential for authenticating organic products because</p> <p>(A). A third-party certification agency monitoring the organic production system</p> <p>(B). Organic products are produced by following NPOP guidelines</p> <p>(C). Organic farmers are dedicated in cultivation practices</p> <p>(D). Potentiality of marketing of organic products are increasing</p> <p>Choose the correct answer from the options given below:</p> <ol style="list-style-type: none"> 1. (A), (B) and (D) only. 2. (A), (C) and (D) only. 3. (A) and (B) only 4. (B), (C) and (D) only. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

32	30032		4.0
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Conversion period of an organic farm is generally (for perinnial crop)

1. One year
2. Two year
3. Three year
4. Four year

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

33 30033

The organic certificate of an organic farm is valid for

1. One year
2. Two year
3. Three years
4. Four year

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

34 30034

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

Assertion (A): Organic farming promotes environmental sustainability

Reason (R): Organic farming avoids the use of synthetic pesticides and fertilizers, which helps preserve soil health, conserve water resources, and reduce pollution of air and water bodies.

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

4.0

A4 : 4

Objective Question

35 30035

4.0

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

Assertion (A) : Cover cropping is a common practice in organic farming systems.

Reason (R) : Cover crops help to improve soil health, suppress weeds, and enhance biodiversity, aligning with the principles of organic agriculture

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

36 30036

4.0

The height of the capillary rise of water in the soil is

- (A). Inversely proportional to the radius of the tube
- (B). Inversely proportional to the density of water
- (C). Directly proportional to the radius of the tube
- (D). Inversely proportional to the surface tension of water

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

37 30037

4.0

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

List-I	List-II
(Theory proposed/Characteristic,)	(Thinker/Name of Theory, etc.)
(A). Saturated flow in soil	(I). Wien's law
(B). Soil textural analysis	(II). Darcy's law
(C). Wavelength of emitted radiation-temperature relation	(III). Fick's law
(D). Diffusive flux of gas	(IV). Stokes law

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (I), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

38 30038

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

Assertion (A): Organic mulch conserves soil moisture.

Reason (R): Organic mulches cut off solar radiation falling on the soil surface and reduce evaporation.

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

- Both (A) and (R) are true and (R) is the correct explanation of (A).
- Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (A) is true but (R) is false.
- (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

4.0

39	30039	<p>Given below are two statements:</p> <p>Statement (I): Hue is a measure of the chromatic composition of light.</p> <p>Statement (II): The Munsell colour system is based on five principal hues.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

40	30040	<p>The Indian Remote Sensing Satellite (IRS)</p> <p>(A). Look over a fixed point at the same local time</p> <p>(B). Are at a low altitude (<1000 km)?</p> <p>(C). Are used for weathering forecasting?</p> <p>(D). Have large agricultural and natural resources application</p> <p>(E). Provide service to telecommunications.</p> <p>Choose the correct answer from the options given below:</p> <ol style="list-style-type: none">1. (A), (B) and (D) only.2. (A), (B) and (C) only.3. (A), (B), (C) and (D).4. (A), (D) and (E) only. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

41	30041		4.0
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Which of the following statement (s) is/are true for tensiometer?

- (A). It measures soil water potential.
- (B). It is simple in operation and very useful for scheduling irrigation.
- (C). It can also be used for measuring soil water flux.
- (D). Although limited to < 1 bar matric potential, this range can be increased by increasing the permeability of its porous cup.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42 30042

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

Assertion (A): Equilibrium water content in soil at a certain matric potential is higher when the soil is under the drying process (desorption) compared to when the soil is under the wetting process (sorption).

Reason (R): The contact angle between water and the soil solid phase is greater during the imbibition of water than during drainage.

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

4.0

Objective Question

43 30043

4.0

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

List-I	List-II
(Physical Parameter)	(Unit.)
(A). Surface tension	(I). Kilogram per cubic meter
(B). Viscosity	(II). Newton per meter
(C). Soil permeability	(III). Meter per hour
(D). Particle density	(IV). Pascal - second

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (II), (B) - (IV), (C) - (III), (D) - (I)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44 30044

The soil hydraulic head is expressed by

- Potential energy per unit mass of soil water.
- Potential energy per unit volume of soil water.
- Potential energy per unit weight of soil water.
- Height of standing water on the soil surface.

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

- (A), (B) and (D) only.
- (A), (C) and (D) only.
- (A), (B), (C) and (D).
- (C) only.

A1 : 1

A2 : 2

A3 : 3

4.0

A4 : 4

Objective Question

45	30045	<p>Given below are two statements, one is labeled as Assertion (A), and the other one labeled as Reason (R).</p> <p>Assertion (A): Darc's law is valid for a steady and stationary flow process in the soil.</p> <p>Reason (R): In a steady flow condition, potential and gradient at every point in the flow path remain constant.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none"> Both (A) and (R) are correct and (R) is the correct explanation of (A). Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). (A) is correct but (R) is not correct. (A) is not correct but (R) is correct. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

46	30046	<p>Arrange the following forms of soil consistencies with decreasing soil wetness.</p> <p>(A). Hard</p> <p>(B). Friable /Soft</p> <p>(C). Plastic</p> <p>(D). Viscous</p> <p>(E). Sticky</p> <p>Choose the correct answer from the options given below:</p> <ol style="list-style-type: none"> (A), (B), (C), (D), (E). (A), (B), (C), (E), (D). (B), (A), (E), (D), (C). (D), (E), (C), (B), (A). <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

47	30047		4.0
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Given below are two statements:

Statement (I): Application of nitrogenous fertilizer leads to N_2O emission from the soil

Statement (II): Nitrous oxide is present in large quantities compared to methane in the atmosphere and therefore processes higher potent danger.

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

48 30048

Given below are two statements:

Statement (I): The surface of a 'Pedon' is roughly polygonal

Statement (II): The surface area of a pedon ranges from 1 m^2 to 10 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 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

49 30049

Following are four stages of gully development. Arrange these in order.

- (A). Healing stage
- (B). Development stage
- (C). Stabilization stage
- (D). Formation stage

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

50 30050

4.0

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

List-I	List-II
(Theory proposed)	Name of Theory)
(A). Hydrodynamics	(I). Daniel Bernoulli
(B). Acoustics	(II). Johannes Kepler
(C). Mechanics	(III). Hermann Von Helmholtz
(D). Aerodynamics	(IV). Ludwig Prandtl

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

51	30051	<p>Given below are two statements, one is labeled as Assertion (A), and the other one is labelled as Reason (R).</p> <p>Assertion (A): The effective rainfall erosion index of a given area is linearly proportional to the percentage of ground that is not covered by vegetation.</p> <p>Reason (R): The rain erosion index includes both the kinetic energy of rain and the maximum 30-minute rain intensity.</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

52	30052	<p>Given below are two statements, one is labeled as Assertion (A), and the other one labeled as Reason (R).</p> <p>Assertion (A): Drainage increases the soil temperature.</p> <p>Reason (R): Drainage decreases the heat capacity</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

53	30053		4.0
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The steady-state soil infiltration rate is

1. Soil Surface controlled
2. Soil profile controlled
3. Water supply controlled
4. Ground water controlled

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

54 30054

Saturated hydraulic conductivity in situ is measured by

1. Guelph permeameter
2. Neutron probe
3. Infiltrometer
4. Piezometer

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

55 30055

The process by which neutrons lose their kinetic energy through elastic collisions in the soil is known as

1. Normalization
2. Cooling
3. Radiation
4. Thermalization

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

56 30056

4.0

The pF curve is same as

1. Moisture - density relation
2. Soil temperature - water relation
3. Soil pH- base saturation relation
4. Soil water content - matric potential relation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

57 30057

In the International Union of Soil Science classification system, fine sand has a size range of

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

58 30058

Water erosion follows the sequence

- (A). Ravine
- (B). Sheet
- (C). Splash
- (D). Rill
- (E). Gully

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

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

A1 : 1

4.0

A2 : 2

A3 : 3

A4 : 4

Objective Question

59	30059	<p>Original design of tensiometer was first proposed by</p> <ol style="list-style-type: none">1. Willard Gardner2. L. A. Richards3. B. E. Livingstom4. Henry Darcy <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

60	30060	<p>Given below are two statements:</p> <p>Statement (I): Acid sulfate soils can release harmful concentrations of heavy metals such as aluminum, iron, and manganese into the environment under acidic conditions.</p> <p>Statement (II): Acid sulfate soils are typically characterized by their high organic matter content, which contributes to their fertility and ability to support diverse plant life.</p> <p>In light of the above statements,choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">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. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

61	30061		4.0
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Given below are two statements:

Statement (I): The capacitance method measures soil moisture content by analyzing changes in electrical capacitance, offering precise numerical readings due to its direct correlation with moisture levels.

Statement (II): The finger-licking method estimates soil moisture content based on tactile sensations, yielding subjective numerical values prone to individual interpretation biases.

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

62	30062	<p>The term 'Organic farming ' was first coined by</p> <ol style="list-style-type: none"> 1. Lord Northbourne 2. Bill Mollison 3. Rudolf Stainer 4. Masanobu Fukuoka <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

63	30063	<p>Natural Farming is associated with</p> <ol style="list-style-type: none"> 1. John Howard 2. Nicholas Lampkin 3. Lord Northbourne 4. Masanobu Fukuoka <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p>	4.0
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A4 : 4

Objective Question

64	30064	Father of Modern Organic Agriculture is 1. John Howard 2. Nicholas Lampkin 3. Lord Northbourne 4. Masanobu Fukuoka A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

65	30065	Certified Organic logo in India is – 1. India organic 2. India green 3. India Healthy 4. India Fresh A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

66	30066	The most dominant exchangeable cation in the earth's crust 1. Aluminium 2. Calcium 3. Sodium 4. Magnesium A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

67	30067	<p>Stable compound formed during urea hydrolysis</p> <ol style="list-style-type: none">1. Ammonium hydroxide2. Ammonium crbamate3. Ammonia4. Ammonium carbonate <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

68	30068	<p>The parameters of N use efficiency are</p> <p>(A). Appaent N. recovery</p> <p>(B). Agronomic efficiency</p> <p>(C). Production efficiency</p> <p>(D). Physiological N efficiency</p> <p>Choose the correct answer from the options given below:</p> <ol style="list-style-type: none">1. (A), (B) and (D) only.2. (A), (B) and (C) only.3. (A), (B), (C) and (D).4. (B), (C) and (D) only. <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

69	30069	<p>Chemical weathering involving complete disintegration or modification in structure and composition of primary minerals</p> <ol style="list-style-type: none">1. Hydration2. Oxidation3. Hydrolysis4. Carbonation <p>A1 : 1</p>	4.0
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A2 : 2

A3 : 3

A4 : 4

Objective Question

70	30070	<p>Given below are two statements:</p> <p>Statement (I): Nitrobacteria are obligate autotrophic aerobes</p> <p>Statement (II): Nitrate will not be produced from NH_4^+ in the absence of oxygen</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below.</p> <ol style="list-style-type: none">1. Both Statement (I) and Statement (II) are correct2. Both Statement (I) and Statement (II) are incorrect3. Statement (I) is correct but Statement (II) is incorrect4. Statement (I) is incorrect but Statement (II) is correct <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

71	30071	<p>A stem nodulating plant</p> <ol style="list-style-type: none">1. <i>Glyricidia maculata</i>2. <i>Sesbania rostrata</i>3. <i>Pongamia pinnata</i>4. <i>Sesbania aculeata</i> <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

72	30072		4.0
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Bone meal is a source of

(A). Ca

(B). N

(C). P

(D). Mo

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73 30073

Mottle leaf of citrus is caused by the deficiency of

1. Mo
2. B
3. Zn
4. Cu

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

74 30074

4.0

Humic substances are composed of

- (A). Phenols
- (B). Quinones
- (C). Carboxylic acid
- (D). Fatty acid

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

75 30075

4.0

Microorganisms that oxidise ammonia to nitrite

- (A). Nitrosomonas
- (B). Thiobacillus
- (C). Nitrobacter
- (D). Nitrosolobus

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

76 30076

4.0

Elements associated with nitrogenase enzyme in biological nitrogen fixation

- (A). Molybdenum
- (B). Iron
- (C). Copper
- (D). Nickel

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

77 30077

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

Assertion (A) : Liming should not be done along with ammoniacal fertilizer applicaton

Reason (R) : Liming leads to volatilisation loss of ammonia

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

Objective Question

78 30078

4.0

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

Assertion (A) : Free silica occurs in soil s quartz and opal

Reason (R) : Quartz consists of a continuous framework of silica tetrahedra

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

79 30079

Parent material transported by wind is called

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

80 30080

4.0

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

List-I	List-II
Rock	Mineral
(A). Igneous rock	(I). Volcanic ash
(B). Marine sedimentary rock	(II). Granite
(C). Metamorphic rock	(III). Limestone
(D). Terrestrial sedimentary rock	(IV). Gneiss

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

81 30081

4.0

Given below are two statements:

Statement (I): 2:1 layer silicates consist of two tetrahedral sheets bound to either side of an octahedral sheet

Statement (II): Two tetrahedral sheets of 2:1 layer silicates is bound to one side of an octahedral sheet in 2:1 layer silicates

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

- Both Statement (I) and Statement (II) are correct.
- Both Statement (I) and Statement (II) are incorrect.
- Statement (I) is correct but Statement (II) is incorrect.
- Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

82	30082	<p>Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).</p> <p>Assertion (A) : Cations adsorbed on soil colloids determine aggregate formation</p> <p>Reason (R) : Cations form electropositive links between electronegative soil particles</p> <p>In light of the above statements, choose the <i>most appropriate</i> answer from the options given below .</p> <ol style="list-style-type: none"> Both (A) and (R) are correct and (R) is the correct explanation of (A) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A) (A) is correct but (R) is not correct (A) is not correct but (R) is correct <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

83	30083	<p>The characteristic of Saline-Alkali soil are</p> <ol style="list-style-type: none"> pH > 8.5, EC > 4 dSm⁻¹, ESP > 15 pH > 8.5, ESP < 15, EC > 4 dSm⁻¹ pH < 8.5, ESP > 15, EC < 4 dSm⁻¹ pH > 8.5, ESP > 15, EC < 4 dSm⁻¹ <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

84	30084	<p>Trace elements that show affinity for sulphide minerals are called</p> <ol style="list-style-type: none"> Siderophile Chalcophile Lithophile Hydrophile <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p>	4.0
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A4 : 4

Objective Question

85	30085	Element associated with urease activity 1. Ni 2. Mo 3. Fe 4. Co A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

86	30086	Dolomite is a source of (A). Calcium (B). Magnesium (C). Iron (D). Sulphur Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A) and (B) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

87	30087		4.0
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K fixing power of clay minerals follow the order

- (A). Illite
- (B). Montmorillonite
- (C). Kaolonite
- (D). Vermiculite

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

88 30088

The different pools of potassium in soils are

- (A). Soil solution K
- (B). Fixed K
- (C). Exchangeable K
- (D). Lattice K

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

89 30089

4.0

Removal of lime in solution from upper to the lower part of the soil profile leads to the formation of ----

1. Saline soils
2. Regur
3. Kari soils
4. Kankar

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

90 30090

Bray No. 1 is

1. 0.5M NaHCO_3 at pH 8.5
2. 0.5N NaHCO_3 at pH 8.5
3. 0.03M NH_4F + 0.025N HCl
4. 0.03N NH_4F + 0.025N HCl

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

91 30091

The form of phosphorus in rock phosphate

1. $\text{Ca}(\text{H}_2\text{PO}_4)_2$
2. CaHPO_4
3. $\text{Ca}_3(\text{PO}_4)_2$
4. $3(\text{Ca}_3\text{PO}_4)_2 \cdot \text{Ca}(\text{OH})_2$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

92 30092

4.0

Laterisation involves the following

1. Removal of Fe and Al complexed with humus from upper to lower horizon
2. Removal of silica from soil
3. Removal of silica and accumulation of sesquioxides in soil
4. Accumulation of sesquioxides in soil

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93 30093

Release of iron from primary minerals and their dispersal as coatings on soil particles to impart brown to red colour to soil particles

- (A). Braunification
- (B). Ferruginisation
- (C). Rubification
- (D). Laterisation

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

94 30094

The comprehensive system of soil classification is based on

1. Soil colour and vegetation
2. Soil environmental factors
3. Measurable soil properties
4. Intrinsic properties of soil

A1 : 1

A2 : 2

4.0

A3 : 3

A4 : 4

Objective Question

95	30095	Mixing of soil matrix within a pedon resulting in irregular or broken horizons over permafrost 1. Eluviation 2. Pedoturbation 3. Illuviation 4. Cryoturbation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

96	30096	Colchicine treated cells are arrested in 1. S phase 2. Prophase 3. G1 phase 4. Metaphase A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0
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Objective Question

97	30097		4.0
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Match **List-I** with **List-II**

List-I	List-II
Element	Occurance
(A) Chloride	(I) Little leaf disease
(B). Zinc	(II). Regeneration of PEP
(C). Sodium	(III). Splitting of water
(D). Manganese	(IV). Nitrogen metabolism
(E). Molybdenum	(V). Interveinal chlorosis

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

- (A) - (III), (B) - (II), (C) - (I), (D) - (IV), (E) - (V)
- (A) - (III), (B) - (I), (C) - (II), (D) - (V), (E) - (IV)
- (A) - (II), (B) - (I), (C) - (IV), (D) - (III), (E) - (V)
- (A) - (III), (B) - (II), (C) - (IV), (D) - (V), (E) - (I)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

98 30098

4.C

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

List-I	List-II
(Year)	(Milestone)
(A). 1952	(I). Agricultural Technology Management Agency (ATMA)
(B). 1964	(II). Community Development Program
(C). 1998	(III). Intensive Agricultural District Program
(D). 1960	(IV). Intensive Agricultural Area Program

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

- (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (II), (C) - (IV), (D) - (I)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99 30099

Which of the following statement is not true for chloroplast

- It contains DNA as its genetic material
- It produces ATP
- It has an electron transport chain
- It contains transcriptional but no translational apparatus

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

100 30100

4.0

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

List-I (Reaction)	List-II (Occurance)
(A) Dark acidification	(I) Smooth endoplasmic reticulum
(B). Fatty acid synthesis	(II). CAM plants
(C). Hill reaction	(III). Regeneration of RUBP
(D). Rubisco	(IV). Oxygen evolution
(E). Calvin cycle	(V). Photorespiration

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

- (A) - (III), (B) - (II), (C) - (I), (D) - (IV), (E) - (V)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (V), (E) - (III)
- (A) - (II), (B) - (I), (C) - (IV), (D) - (V), (E) - (III)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III), (E) - (V)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

101 30101

4.0

Increasing order of Water Use Efficiency.

- Drip Irrigation
- Pitcher pot Irrigation
- Surface Irrigation
- Sprinkler Irrigation

- (A), (B), (C), (D).
- (D), (C), (B), (A).
- (B), (A), (D), (C).
- (C), (D), (A), (B).

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102	30102	<p>Choose the correct sequence</p> <ol style="list-style-type: none">1. Chrysanthemum cinerariaefolium → Pyrethrins → Insecticide2. Streptomyces griseus → Streptomycin → Nematicide3. Streptomyces griseochromogenes → Blastocidin → Insecticide4. Streptomyces griseochromogenes → Blastocidin → Herbicide <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.C
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Objective Question

103	30103	<p>Weed not found in rice crop is</p> <ol style="list-style-type: none">1. Echinochloa spp.2. Cyperus iria3. Chenopodium album4. Eleusine indica <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.C
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Objective Question

104	30104	<p>Dichloral urea is used as a</p> <ol style="list-style-type: none">1. Soil herbicide for pre emergence treatment2. Soil herbicide for post-emergence treatment3. Soil nematicide for pre emergence treatment4. Soil fungicide for post emergence treatment <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p>	4.C
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A4 : 4

Objective Question

105 30105

4.0

The term oligotrophic refers to

1. Higher nutrients in the water
2. High aquatic productivity
3. Algal blooms
4. Low nutrients and low productivity

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

106 30106

4.0

Organic nutrients in water bodies promote

1. Growth of the natural population of aquatic bacteria
2. BOD
3. Eutrophication
4. Growth of the natural population of aquatic bacteria, BOD and Eutrophication

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107 30107

4.0

Laterite soil is rich in

1. Ca
2. Fe
3. C
4. Cu

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

108 30108

4.0

Match List-I with List-II

List-I	List-II
Event	Occurance
(A). Carcinogenic	(I). Promoting cancer
(B). Pollution	(II). Photochemical smog
(C). Eutrophication	(III). Cell
(D). Gene	(IV). Over application of fertilizer

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

109 30109

4.0

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

List-I	List-II
Different act	Year
(A). The Environment Protection Act	(I). 1972
(B). The Forest Conservation Act	(II). 1986
(C). The water (Prevention and Control of pollution)	(III). 1980
(D). The Wildlife Protection Act	(IV). 1974

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

- (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
- (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
- (A) - (IV), (B) - (II), (C) - (I), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

110 30110

Ecological races are also know as

- Ecards
- Ecotone
- Ecophens
- Ecotypes

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

Objective Question

111 30111

4.0

Match List-I with List-II

List-I	List-II
Name of Gas	Chemical Formula
(A). Methane	(I). C_3H_8
(B). Ethane	(II). CH_4
(C). Propane	(III). C_4H_{10}
(D). Butane	(IV). C_2H_6

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III)
- (A) - (IV), (B) - (II), (C) - (III), (D) - (I)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

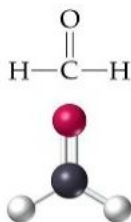
A4 : 4

Objective Question

112 30112

4.0

Which group is this



?

- Ketone
- Carboxylic acid
- Aldehyde
- Amide

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

113	30113	<p>Which one the following is not a monosaccharide?</p> <ol style="list-style-type: none">1. Glucose2. Fructose3. Rhamnose4. Maltose <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

114	30114	<p>Which one of the following is an aromatic amino acid?</p> <ol style="list-style-type: none">1. Histidine2. Proline3. Tyrosine4. Lysine <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

115	30115	<p>Which sugar is present in DNA?</p> <ol style="list-style-type: none">1. Ribose2. Arabinose3. Deoxyribose4. Glucose <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

116	30116	<p>Which covalent bond is present in nucleic acid?</p> <ol style="list-style-type: none">1. Peptide bond2. Phosphodiester bond3. Glycosidic bond4. Thymine bond <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

117	30117	<p>Mass media channels are relatively more important than interpersonal channels for</p> <ol style="list-style-type: none">1. Laggard2. Late Adopters3. Early adopters4. Early Majority <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

118	30118	<p>Model is an example of</p> <ol style="list-style-type: none">1. Display type of visual aid2. Attractive type of visual aid3. Design type of visual aid4. Presentation type of visual aid <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	4.0
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Objective Question

119	30119		4.0
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A personnel who because of special interest and fitness is selected to serve as a leader in advancing some phase of local extension programme is called

1. Project leader
2. Cooperator
3. Administrator
4. Community leader

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

120 30120

4.0

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

List-I	List-II
(Crop)	(Water requirement (cm.))
(A). Sugar cane	(I). 200
(B). Rice	(II). 100
(C). Wheat	(III). 35
(D). Spinach leafy vegetable	(IV). 15

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4