

PREVIEW QUESTION BANK

Module Name : Agronomy-ENG
Exam Date : 14-Jul-2023 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	2001	Choose the incorrect statement regarding the composition of election commission. 1. Appointment of the chief election commissioner and other election commissioners shall be made by the president. 2. President can also appoint regional commissioners after consultation with the election commission. 3. Conditions of service and tenure of office of the election commissioners and regional commissioners shall not be determined by the president. 4. Article 324 under constitution of India is dealing with the composition of election commission. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	2002	Which one of the following amendment acts is referred to as the 'mini constitution'? 1. 42nd 2. 44th 3. 46th 4. 48th A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	2003		4.0	1.00

With regard to the jurisdiction and powers of high court, disputes relating to the election of members of parliament and state legislatures, comes under the ambit of which one of the following jurisdictions?

1. Original
2. Writ
3. Appellate
4. Supervisory

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

4 2004

Which of the following is formed when the moisture is deposited in the form of water droplets on cooler surfaces of solid objects?

1. Frost
2. Fog
3. Mist
4. Dew

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

5 2005

Which of the following is the correct reason for the occurrence of best fishing grounds in the mixing zones (the mixing of warm and cold currents)?

1. It has the moderate temperature
2. It has the slowest sea waves
3. It has the high growth of planktons.
4. It has the sunrays perpendicular to the sea level.

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

6	2006	Eisenhower Cup is associated with which among the following sports?	4.0	1.00
		1. Tennis 2. Chess 3. Football 4. Golf		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

7	2007	Who was the first woman President of the Indian National Congress?	4.0	1.00
		1. Kasturba Gandhi 2. Sarojini Naidu 3. Annie Besant 4. Aruna Ali		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

8	2008	The dockyard was found in which of the following sites in Indus Valley Civilization?	4.0	1.00
		1. Chanhudaro 2. Lothal 3. Kalibangan 4. Banawali		
		A1 : 1		

A2 : 2

A3 : 3

A4 : 4

Objective Question

9	2009	Who built the famous Charminar of Hyderabad? 1. Krishndev Rai 2. Muhammad Quli Qutb Shah 3. Nadir Shah 4. Aurangzeb A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
---	------	---	-----	------

Objective Question

10	2010	Who discovered the right triangle? 1. Pythagoras 2. Ancient Egyptians 3. Archimedes 4. Michelangelo A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

11	2011	Citrus canker is caused by 1. Virus 2. Viriod 3. Bacteria 4. Fungus	4.0	1.00
----	------	---	-----	------

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

12 2012

DBM is a specific insect of

1. Brinjal
2. Tomato
3. Cabbage
4. Bottle gourd

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

13 2013

What is the scientific name of mulberry silkworm?

1. Bombyx mori
2. Antherea paphia
3. Antheraea assama
4. Attacus Ricinii

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

14 2014

4.0 1.00

Subject matter of economics are want, effort and

1. Wealth
2. Growth
3. Satisfaction
4. Income

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

15 2015

The National Bureau of Animal Genetic Resources (NBAGR) is located in

1. Karnal
2. Bengaluru
3. Hisar
4. Jind

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

16 2016

The oldest known agroforestry systems is

1. Alley cropping
2. Taungya systems
3. Home Gardening
4. Shifting cultivation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

17	2017	The effect or requirement of the relative length of day and night on flowering is called 1. Photomechanics 2. Transpiration 3. Photoperiodism 4. Phytoperiodism A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

18	2018	Which of the following statements are true? (A) Small pores in epidermis of leaves is called stomata. (B) Guard cells present in the stomata are helpful in exchange of gases with atmosphere (C) Transpiration takes place through stomata Choose the correct answer from the options given below: 1. (A) and (B) only. 2. (B) and (C) only. 3. (A) and (C) only. 4. (A), (B) and (C). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	--	-----	------

Objective Question

19	2019		4.0	1.00
----	------	--	-----	------

Water holding capacity is highest in which of the following soils?

1. Silt soil
2. Clayey soil
3. Chalk soil
4. Peat soil

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

20 2020

Certified seed is the progeny of

1. Nucleus seed
2. Foundation seed
3. Breeder's seed
4. Registered seed

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

21 161001

The correct descending order of average area of the following crops in India in the last decade from 2010-11 to 2019-20 :

1. Groundnut > Pigeonpea > Jowar > Bajra
2. Bajra > Jowar > Groundnut > Pigeonpea
3. Groundnut > Jowar > Pigeonpea > Bajra
4. Pigeonpea > Groundnut > Bajra > Jowar

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

22	161002	Concentration of nutrients in Ammonium phosphate sulphate are : 1. 16% N, 20% P ₂ O ₅ and 15% S 2. 16% N, 15% P ₂ O ₅ and 10% S 3. 21% N, 24% P ₂ O ₅ and 12% S 4. 18% N, 34% P ₂ O ₅ and 21% S A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

23	161003	A plant which grows on ice or snow is called : 1. Psychroxerophyte 2. Oxylophyte 3. Xylophyte 4. Cryophyte A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	--	-----	------

Objective Question

24	161004	The H ⁺ activity in _____ is expressed as soil pH. 1. moles per litre solution 2. meq/g of soil 3. millimoles per litre solution 4. cmol/g of soil A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

25	161005		4.0	1.00
----	--------	--	-----	------

Which of the following agenda is not contributed by the International year of Millets 2023 to the UN 2030 Agenda for Sustainable Development ?

1. Life on land
2. Decent work and economic growth
3. Nutrition for the most vulnerable
4. Responsible consumption and production

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26 161006

What is the area of organic agricultural land including in-conversion areas in India in 2021-22 ?

1. 4.73 million hectares
2. 2.66 million hectares
3. 2.30 million hectares
4. 1.94 million hectares

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

27 161007

Calculate the seed rate of rice in kg/ha, if the spacing of hills for transplanting is 20 cm × 20 cm; number of seedlings/hill is 2; germination% of seeds is 90; purity% of seeds is 90; test weight of rice seed is 25 g; damaged seedlings during uprooting from the nursery is 20% of the uprooted seedlings.

1. 15.4
2. 18.5
3. 9.6
4. 19.3

A1 : 1

A2 : 2

A3 : 3

4.0 1.00

A4 : 4

Objective Question

28	161008	Which of the following approaches utilize the apparent recovery efficiency for fertilizer recommendation ? 1. Nutrient expert 2. Fertilizer recommendation based on response equation 3. Soil test crop response 4. DRIS approach A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

29	161009	Experimental design with a single factor : 1. Factorial RCB design 2. Split-plot design 3. Lattice design 4. Strip-plot design A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	--	-----	------

Objective Question

30	161010	Which crop can tolerate the exchangeable sodium percentage of 70 better than other crops ? 1. Barley 2. Rice 3. Beets 4. Mustard A1 : 1 A2 : 2 A3 : 3	4.0	1.00
----	--------	--	-----	------

A4 : 4

Objective Question

31 161011

Which among the followings is not the characteristic of the durum wheat ?

1. Blades of the durum wheat leaves are usually narrower than those of bread wheat.
2. Durum wheat kernels are harder and heavier than bread wheat.
3. Durum wheat kernels are typically larger than that of bread wheat.
4. The dough of durum wheat is less elastic than the bread wheat.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

32 161012

Crops which have been recognized as “Nutri-Cereals” by the Ministry of Agriculture and Farmers’ Welfare, India ?

- (A) Buckwheat (*Fagopyrum esculentum*)
- (B) Grain amaranth (*Amaranthus caudatus*)
- (C) Quinoa (*Chenopodium quinoa*)
- (D) Chia (*Salvia hispanica*)
- (E) Job's tears (*Coix lacryma-jobi*)

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

33 161013

4.0 1.00

What is the USDA textural class for the soil containing equal proportion of sand, silt and clay fractions, i.e. 33.3% ?

1. Silt loam
2. Loam
3. Clay loam
4. Silty Clay loam

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34 161014

The relative higher yield of a crop compared to other in an intercropping is assessed by _____.

1. Relative yield total
2. Aggressivity
3. Competitive ratio
4. Relative crowding coefficient

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

35 161015

- (A) Honey-comb structure is found in laterites and lateritic soils.
 (B) Gilgai microrelief is common in black soils.
 (C) Mollic epipedon is found in alluvial soils.
 (D) Argillic sub-surface is a diagnostic feature in red soils

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

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

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

36	161016	The founder of the modern pedology who established the concept of soil as an independent natural body goes to : 1. Baldwin et al. (1938) 2. Kellogg and Thorp (1949) 3. Dokuchaev (1900) 4. Marbut (1927) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

37	161017	The cation exchange capacity of red soils ranges from : 1. 25-40 cmol(p⁺)kg⁻¹ 2. 15-25 cmol(p⁺)kg⁻¹ 3. 80-100 cmol(p⁺)kg⁻¹ 4. 40-80 cmol(p⁺)kg⁻¹ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	--	-----	------

Objective Question

38	161018		4.0	1.00
----	--------	--	-----	------

According to Fertiliser (Control) order (1985), the Diammonium phosphate (DAP) has the specification of :

- (A) Moisture per cent by weight is 2.5 (maximum).
- (B) Available phosphorus (as P_2O_5) per cent by weight is 46.0 (minimum).
- (C) Water soluble phosphorus (as P_2O_5) per cent by weight is 39.5 (minimum).
- (D) Free phosphoric acid (as P_2O_5) by weight is 4.0 (maximum).

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

39 161019

Polyphosphoric acid is a mixture of different forms of phosphoric acid. A polyphosphoric acid containing 76% P_2O_5 , will have :

- 1. 40% H_3PO_4 (ortho-phosphoric acid), 40% $H_4P_2O_7$ (pyro-phosphoric acid), 20% higher forms (tri-, tetra-, penta-, hexa-, hepta-, octa-, nona- and deca-polyphosphoric acid).
- 2. 30% H_3PO_4 (ortho-phosphoric acid), 40% $H_4P_2O_7$ (pyro-phosphoric acid), 30% higher forms (tri-, tetra-, penta-, hexa-, hepta-, octa-, nona- and deca-polyphosphoric acid).
- 3. 40% H_3PO_4 (ortho-phosphoric acid), 30% $H_4P_2O_7$ (pyro-phosphoric acid), 30% higher forms (tri-, tetra-, penta-, hexa-, hepta-, octa-, nona- and deca-polyphosphoric acid).
- 4. 40% H_3PO_4 (ortho-phosphoric acid), 20% $H_4P_2O_7$ (pyro-phosphoric acid), 40% higher forms (tri-, tetra-, penta-, hexa-, hepta-, octa-, nona- and deca-polyphosphoric acid).

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

40 161020

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

Assertion (A) : The heterotrophs are the organisms that depend on organic compounds for their carbon and energy.

Reason (R) : The autotrophs are the organisms that derive their energy from photosynthesis or oxidation of various elements and obtain their carbon solely from carbon dioxide.

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 161021

4.0 1.00

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

List-I	List-II
(Scientist)	(Name of Theory)
(A) Schofield	(I) Law of Maximum
(B) Wallace and Wallace	(II) Ionic Theory of indicator
(C) Ostwald	(III) Ratio Law
(D) Ramamurthy	(IV) Equilibrium Phosphate Potential

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42	161022	A silicate-clay-enriched horizon formed by illuviation of clay is termed as : 1. Cambic horizon 2. Salic horizon 3. Kandic horizon 4. Argillic horizon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	--	-----	------

Objective Question

43	161023	Nitrophosphates or nitric phosphates are the NPK complex fertilizers manufactured by dissolution of rock phosphate with nitric acid to form phosphoric acid and calcium nitrate followed by removal of calcium nitrate from phosphoric acid and subsequent removal of calcium nitrate by any of the following processes : (A) Removal of calcium by ion exchange by passing the mother liquor through a potassium-resin. (B) Precipitation of calcium as calcium sulphate by the addition of soluble sulphate and its removal. (C) Removal of calcium nitrate by heating of mother liquor and crystallization of calcium nitrate. (D) Adjusting the mole ratio of CaO : P₂O₅ to a desired level by the addition of soluble phosphate (instead of removing the calcium). 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	1.00
----	--------	---	-----	------

Objective Question

44	161024		4.0	1.00
----	--------	--	-----	------

Out of the following crops, the one registering the highest K uptake is :

1. Maize
2. Banana
3. Tomato
4. Cabbage

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45 161025

4.0 1.00

Given below are two statements :

Statement (I) : Zonal Soils — The soils whose characteristics are determined primarily by the environment, especially climate and vegetation.

Statement (II) : Azonal Soils — The soils that have poorly developed profiles because of time as a limiting factor, e.g. young soils without horizon differentiation.

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

46 161026

4.0 1.00

Ammonium bicarbonate-DTPA extractant (AB-DTPA) is used as the universal extraction reagent for alkaline soils. The AB-DTPA extract consists of :

1. 1 M NH_4HCO_3 + 0.005 M DTPA (pH 7.3)
2. 1 M NH_4HCO_3 + 0.05 M DTPA (pH 7.6)
3. 1 M NH_4HCO_3 + 0.05 M DTPA (pH 7.3)
4. 1 M NH_4HCO_3 + 0.005 M DTPA (pH 7.6)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

47 161027

Penoxsulam is comparatively new pesticide. It is a :

1. Insecticide
2. Herbicide
3. Fungicide
4. Acaricide

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

48 161028

Number of pesticides registered under section 9(3) of the Insecticides Act, 1968 for use in India till date.

1. 318
2. 328
3. 320
4. 330

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

49 161029

Triflumezopyrim, a newly commercialized molecule from DuPont Crop Protection, is a :

1. Insecticide
2. Herbicide
3. Fungicide
4. PGR

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

50 161030

4.0 1.00

In terms of number of sample analysis per unit time and solvent consumption, which one of the following is applicable ?

1. UPLC < HPLC
2. UPLC > HPLC
3. UPLC = HPLC
4. Can't be compared

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

51 161031

4.0 1.00

Karanjin is known to act as a nitrification inhibitor. Source of karanjin is

1. *Catharanthus roseus*
2. *Pongamia glabra*
3. *Vitex negundo*
4. *Derris eliptica*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

52 161032

4.0 1.00

According to FAO definition of pesticides, the term does not include which of the followings ?

1. Plant growth regulator
2. Dessicant
3. Ripening agent
4. Defoliant

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

53 161033

4.0 1.00

Chromic acid is used for cleaning glassware in the laboratory. It is composed of :

1. KMnO_4 and H_2SO_4
2. KMnO_4 and HCl
3. $\text{K}_2\text{Cr}_2\text{O}_7$ and H_2SO_4
4. $\text{K}_2\text{Cr}_2\text{O}_7$ and HCl

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

54 161034

4.0 1.00

Which of the following pesticides belongs to chloroacetanilide group ?

1. Metolachlor
2. Propineb
3. Linuron
4. Simazine

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

55 161035

4.0 1.00

Metarhizium anisopliae is a biopesticide. It is a :

1. Fungus
2. Actinomycetes
3. Plant
4. Bacteria

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

56	161036	Oxathiapipron 10.1% OD is a registered pesticide in India. What is OD formulation ? 1. Oil dilute 2. Oil dispersion 3. Oil dissolvable 4. Dispersed oil	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

57	161037	In phase II metabolism, metabolite has become more : 1. Polar 2. Non polar 3. No change in polarity 4. dispersed	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

58	161038	Neem coated urea has mainly one of the following compounds : 1. Nimbin 2. Karajin 3. Terpenoids 4. Thiophene	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		

A4 : 4

Objective Question

59 161039

What percentage of its water is used for irrigation by Asia ?

1. 23
2. 69
3. 86
4. 72

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

60 161040

The term "pF" represents :

1. Positive pressure head in cm of water
2. Negative pressure head in cm of water
3. Logarithm of the positive pressure head in cm of water
4. Logarithm of the negative pressure head in cm of water

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

61 161041

Water potential in the plant tissue is :

1. < 0 Mpa
2. 0 - 0.2 Mpa
3. 0.2 - 0.8 Mpa
4. > 0.8 Mpa

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

62	161042	Equipment used to measure the velocity of flow in open channels : 1. Current meter 2. Weir 3. H-flume 4. Venturimeter A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

63	161043	The area under hydrograph gives : 1. Runoff depth 2. Runoff rate 3. Runoff volume 4. Effective rainfall A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

64	161044	Through which of the following states the Ganga river does not flow ? 1. Assam 2. Uttarpradesh 3. Bihar 4. West Bengal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	--	-----	------

Objective Question

65	161045	Amrit Sarovar programme was started during which of the following year ? 1. 2019 2. 2021 3. 2022 4. 2023 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

66	161046	The book " A treatise in Agriculture" was written by : 1. Kautilya 2. Chakrapani 3. Karyapa Muni 4. Chola King A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

67	161047	According to Ministry of Water Resources, (2011), the per capita availability of water during 2050 will be : 1. 1820 m³ 2. 1341 m³ 3. 1140 m³ 4. 1020 m³ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	--------	---	-----	------

Objective Question

68	161048		4.0	1.00
----	--------	--	-----	------

In India the demand for drinking water is divided between the urban and rural population which comprises about how much percentage of the total water demand :

1. 2 - 3
2. 4 - 6
3. 6 - 8
4. 8 - 10

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

69 161049

The volume of water needed for the production of goods and services consumed by the inhabitants of a country is known as :

1. Virtual water
2. Water footprint
3. Water auditing
4. Water budgeting

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

70 161050

Which year was declared as International Year of Water Cooperation by the United Nations ?

1. 2021
2. 2015
3. 2013
4. 2011

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

71	1003201	Given below are two statements : Statement (I) : The most useful electromagnetic radiation in remote sensing includes visible light (VIS), near infra red (NIR) and shortwave infrared (SWIR), thermal infrared (TIR) and microwave bands. Statement (II) : Active remote sensing sensors record incident radiation reflected or emitted from the objects while passive sensors emit their own radiation, which interacts with the target to be investigated and returns to the measuring instrument In light of the above statements, choose the <i>most appropriate</i> 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	4.0	1.00
----	---------	---	-----	------

Objective Question

72	1003202	The maximum yield of cytosolic ATP from the complete oxidation of sucrose to CO₂ via aerobic glycolysis and the citric acid cycle is : 18 31 52 60 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	---	-----	------

Objective Question

73	1003203		4.0	1.00
----	---------	--	-----	------

Read carefully the following statements :

- (A) Light channeling occurs when some of the incident light is propagated through the central vacuole of the palisade cells and through the air spaces between the cells transmitting light to the leaf interior
- (B) In spongy mesophyll, there is scattering of light due to irregular shape of cells and surrounding large air spaces
- (C) Photon path lengths within leaves are commonly shorter than thickness of the leaf
- (D) Total absorption of light by a given amount of chlorophyll in a palisade cell is higher than the light absorbed by the same amount of chlorophyll in a solution
- (E) Palisade cell properties that allow light to pass through and light scattering in the spongy mesophyll cells cause uniform light absorption throughout the leaf

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

74 1003204

National Bureau of Soil Survey & Land Use Planning (NBSS & LUP) divided the country into :

- 1. 15 Agro-climatic zone, later subdivided into 72 sub-zones
- 2. 20 Agro-ecological regions, later subdivided into 60 sub-zone
- 3. 20 Agro-ecological regions, later divided into 127 sub-regions
- 4. 6 Agro-climatic zones, later divided into 64 sub-regions

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

75 1003205

4.0 1.00

Given below are two statements :

Statement (I) : *Polypogon monspeliensis* is a broad-leaf weed, grows erect and belongs to Asteraceae family.

Statement (II) : *Polygonum plebejum* is a broad-leaf weed, grows prostrate and belongs to Polygonaceae family

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

76 1003206

Read the following statements about weeds :

- (A) *Eichhornia crassipes* is a broad-leaf dicotyledonous weed
- (B) *Spergula arvensis* is a narrow-leaved dicotyledonous weed
- (C) *Trianthema portulacastrum* is a broad-leaf dicotyledonous weed
- (D) *Plantago lanceolata* is a narrow-leaved monocotyledonous weed
- (E) *Parthenium hysterophorus* is a broad-leaf monocotyledonous weed

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

77 1003207

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

List-I	List-II
Name of weed	(Introduced from)
(A) <i>Opuntia stricta</i>	(I) Malaysia
(B) <i>Mikania micrantha</i>	(II) USA
(C) <i>Phaseolus labatus</i>	(III) Australia
(D) <i>Salvinia molesta</i>	(IV) Africa

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

78 1003208

4.0 1.00

Read the following statements carefully :

- Shallow and frequent pre-sowing tillage followed by irrigation is highly useful for controlling annual weeds
- Deep tillage during hot summer months is useful for controlling perennial weeds
- Tillage makes seed bed fine and favours crops only
- Under zero-tillage conditions problem from perennial weeds is more
- Tillage reduces insect-pest and disease problems killing the insect-pests and pathogens with types of plough

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79	1003209	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Symmetrical chloro-triazines (simazine, atrazine) have longer persistence in soil Reason (R) : Chlorine moiety on herbicides is less prone to be attacked by microorganisms In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - 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. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	---	-----	------

Objective Question

80	1003210	What amount of atrazine (50% WP) should be dissolved in one tank of knap-sack sprayer, if recommended rate of application is 1 kg ai and spray volume is 600 L/ha and capacity of the knap-sac sprayer is 20 L. 33.33 g 66.66 g 50 g 100 g A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

81	1003211		4.0	1.00
----	---------	--	-----	------

Which of the following statements is correct as per the recommendation of the FAO from the workshop held at New Delhi for rice-wheat sequential system under alluvial soils in the Indian subcontinent ?

1. P is to be applied to rice crop of the sequential system
2. K is to be applied to the rice crop of the sequential system
3. Zn is to be applied to wheat crop of the sequential system
4. K is to be applied to wheat crop of the sequential system

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

82	1003212	What does the plant available P present in P fertilizers indicate ?	4.0	1.00
		1. Water-soluble P only 2. Citrate-soluble P only 3. Water and citrate-soluble P 4. Citrate-insoluble P along with water and citrate-soluble P		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

83	1003213	Which of the following nutrients has very long-lasting residual effect in available form in the soil after application of higher amount than required for the crop ?	4.0	1.00
		1. Cu 2. B 3. Mn 4. Zn		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

84	1003214	One farmer grows crops in the warm and moist climate. The availability of P fertilizers in this region is not sufficient, but the farmer can get some amount of low quality rock phosphate from the nearby mining area. The cultivated lands of the farmer are located in four different places in the same region. As per the recommendation from the scientist, the farmer uses rock phosphate in one particular land out of his four lands instead of P fertilizer due to the non-availability. The pH of soils of four cultivated lands of the farmer are: 6.5, 5.8, 5.0 and 4.2. Then, the soil of the land having which pH will be more suitably recommended by the scientist for the direct use of the rock phosphate ? 1. 6.5 2. 5.8 3. 5 4. 4.2 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

85	1003215	Which of the following statements is not correct about the use of slow- and controlled-release fertilizers ? 1. Sulphur-coated fertilizers, with a parabolic nutrient release pattern, the release of nutrients at later stages of crops too slow to be available to the plant 2. A yield response to dicyandiamide only occurs, if N is not prone to losses by leaching or denitrification 3. The application of urea combined with a urease inhibitor may have phytotoxic effect on crops 4. Application of sulphur-coated urea may increase the acidity of the soil A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

86	1003216		4.0	1.00
----	---------	--	-----	------

What is the annual atmospheric precipitation to be designated as arid farming as per Widtsoe (1920)?

1. < 100 inches
2. < 150 inches
3. < 200 inches
4. < 250 inches

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87 1003217

What is the value of climatic aridity index for semiarid zone based on precipitation (P) and potential evaporation (E_p) from the Penman ET model (UNESCO, 1977) ?

1. $-66.6 < \frac{P}{E_p} < -33.3$
2. $-33.3 < \frac{P}{E_p} < 0$
3. $0.05 < \frac{P}{E_p} < 0.20$
4. $0.20 < \frac{P}{E_p} < 0.50$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

88 1003218

Which of the following statements is not correct about the shelterbelt ?

1. Shelterbelts give protection from desiccating winds to the extent of 15 times their height on windward side and up to 30 times on leeward side.
2. Shelterbelts do not obstruct the wind flow completely.
3. The protection offered by the shelterbelts is dependent on the height of central tree row in the shelterbelts
4. It reduces wind speed without causing turbulence.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

89 1003219

Which of the following mechanisms of drought resistance does not reduce the productive processes?

1. Increase in stomatal and cuticular resistance
2. Reduction in radiation absorbed
3. Rapid phonological development
4. Reduction in leaf area

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

90 1003220

The specific heat of the soil is 1 Joule/g/°C. Then, 1 calorie of heat will raise the temperature of 1 g soil by how much °C approximately ?

1. 0.24
2. 4.2
3. 2.5
4. 0.4

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

91 1003221

Which among the followings is not the correct measure to overcome the bronzing of rice ?

1. Transplanting of rice about 3 weeks after flooding
2. Apply 3 kg chelated Mn per hectare during tillering stage
3. Application of Ca, P and K to soil
4. Foliar spray of urea

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

92 1003222

4.0 1.00

Match List-I with List-II

List-I	List-II
(Nutrition in grain of millets)	(Millet crop with highest nutritional value)
(A) Protein	(I) Pearl millet
(B) Total minerals	(II) Kodo millet
(C) Iron	(III) Proso millet
(D) Thiamine	(IV) Barnyard millet
(E) Folic acid	(V) Foxtail millet

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93 1003223

4.0 1.00

Which among the following crops relatively fails to germinate, when the crop is sown at relatively deeper depth than normal to avail the adequate soil moisture present in the deeper layer ?

- Cowpea
- Pigeonpea
- Lentil
- Chickpea

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

94	1003224	The presence of which compound between the kernel and husk of pigeonpea grain plays a role in difficulty for milling ? 1. Piscidic acid 2. Caprylic acid 3. Lauric acid 4. Uranic acid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

95	1003225	Which of the following factors may sometimes lead to boll shedding of cotton ? 1. High carbohydrate accumulation after flowering 2. Cytokinin production in root 3. Internal retranslocation of nitrogen 4. Leaf water potential of 0 to -10 MPa A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

96	1003226	Which of the following functions does not take place due to topping in tobacco ? 1. Topping improves root system 2. It improves weight of leaf 3. It increases the nicotine and nitrogen contents of the leaf 4. The individual leaf area is doubled after topping A1 : 1 A2 : 2 A3 : 3	4.0	1.00
----	---------	--	-----	------

A4 : 4

Objective Question

97	1003227	Which test is used to compare the equality of several population variances ?	4.0	1.00
		1. F – test 2. χ^2 – test 3. t - test 4. z - test		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

98	1003228	Transformation of data is required in which of the following situations ?	4.0	1.00
		1. The effects of treatments are not additive 2. Independence of errors 3. Homogeneity of errors 4. Data follows normal distribution		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

99	1003229	An experiment is conducted in a split-plot design with 4 levels of P application (0, 25, 50 and 75 kg/ha) as main plot treatments and 3 sources of P (SSP, DAP and TSP) as sub-plot treatments. What is the value of degree of freedom for error (b), if the experiment is conducted with 3 replications ?	4.0	1.00
		1. 16 2. 17 3. 18 4. 20		
		A1 : 1		
		A2 : 2		

A3 : 3

A4 : 4

Objective Question

100 1003230

4.0 1.00

Which basic principles of the experimental designs are used to validate the estimate of the experimental error ?

- (A) Replication
- (B) Randomization
- (C) Local control

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

101 1003231

4.0 1.00

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

List I	List II
(History of conservation agriculture with year)	(Year)
(A) Introduction of conservation agriculture in India	(I) 1943
(B) Publication of book on no-till entitled "Plowman's Folly"	(II) 1973
(C) Publication of Book on "No-Tillage Farming" by Phillips and Young	(III) 1976
(D) Commercial launch of transgenic glyphosate-resistant soybean	(IV) 1990
(E) Registration of glyphosate for general broad-spectrum weed control	(V) 1996

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102 1003232

Which is a promising herbicide for the control of annual grasses, broad-leaved weeds and sedges in soybean under conservation agriculture ?

1. Fenoxaprop + chlorimuron
2. Chlorimuron ethyl
3. Imazethapyr
4. Metribuzin

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

103 1003233

Match List I with List II

List I	List II
(Management techniques under agroforestry)	(Activity of agroforestry)
(A) Pollarding	(I) Cutting tree species close to ground level to produce new shoots from the stem
(B) Pruning	(II) Cutting back the crown of a tree in order to harvest wood and browse to produce regrowth beyond the reach of animal
(C) Coppicing	(III) Cutting one or more branches of shading tree or shrub
(D) Lopping	(IV) Cutting back plant growth, including side branches or roots

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

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

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

104 1003234

4.0 1.00

What is the relationship between the rate of diffusion of water vapour through the soil (r) and the effective porosity (n), regardless of pore sizes?

1. $r \propto \sqrt{n}$

2. $r \propto n^2$

3. $r \propto \frac{1}{n^2}$

4. $r \propto \frac{1}{\sqrt{n}}$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

105 1003235

4.0 1.00

How many times the hydraulic conductivity will be increased in a saturated flow, if the radius of the pore increases 2 times ?

1. 2

2. 4

3. 8

4. 16

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

106 1003236

4.0 1.00

Which of the following statements is false about rice root ?

1. The root diameter is relatively larger in higher moisture regime compared to drier moisture regime.
2. The root volume of rice is more with continuous submergence compared to moisture regime between field capacity and 20% depletion of available moisture.
3. The branching of roots is in higher order in favourable moisture regime compared to drier moisture regime.
4. The root surface area is increased enormously at higher moisture regime compared to drier regime.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107 1003237

What is the diameter of the most widely used evaporation pan, i.e. the standard US Weather Class A pan ?

1. 100 cm
2. 110 cm
3. 120 cm
4. 130 cm

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

108 1003238

Which of the following statements are true for crop water requirement ?

- (A) It is a function of weather and crop.
- (B) It depends on soil type and irrigation method.
- (C) It depends on temperature and humidity.
- (D) It is not a function of depth to water table or saturated layer.

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

109 1003239

As per the classification of CSSRI, Karnal what should be the EC and boron concentration values for normal water of irrigation ?

1. EC < 1.5 dS/m and B concentration < 3 ppm
2. EC < 1.5 dS/m and B concentration < 4 ppm
3. EC < 2 dS/m and B concentration < 3 ppm
4. EC < 2 dS/m and B concentration < 4 ppm

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

110 1003240

The total quantum of surface and ground water used for irrigation in India in 2018-19 is :

1. 716 km³
2. 1027 km³
3. 347 km³
4. 671 km³

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

111 1003241

Water-use efficiency of sugarcane under field condition is :

1. 1.8-2.5 t/ha-cm
2. 1.4-1.6 t/ha-cm
3. 0.8-1.2 t/ha-cm
4. 0.4-0.6 t/ha-cm

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

112 1003242

4.0 1.00

Which of the followings is the disadvantage in border irrigation method ?

1. Labour requirement for irrigation is very high
2. Large irrigation streams cannot be efficiently used
3. Operation of the system is not simple and easy
4. Uniform distribution and high water application efficiencies are not possible though the system is properly designed

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

113 1003243

4.0 1.00

What is the gypsum requirement (t/ha) for the upper 15 cm of the soil, if the soil CEC is 20 meq/100 g and the final ESP required by the farmer is 10% from the initial ESP of 20%?

1. 3440
2. 344
3. 34.4
4. 3.44

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

114 1003244

4.0 1.00

Calculate the minimum amount of water must be leached, if the maximum acceptable limit of EC of the soil solution for the required crop to be grown is 4 dS/m, the EC of the irrigation water is 0.8 dS/m and the amount of water needed to saturate the profile is 15 cm ?

1. 3 cm
2. 18 cm
3. 5 cm
4. 20 cm

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115 1003245

The optimum soil pH for garlic is 6.5-7.5. The garlic is cultivated in 2 ha area for 5 years. A 200 kg N/ha through urea is applied each year to the garlic crop. Estimate the quantity of the lime needed in kg to neutralize the acidity produced by the application of N from the above source to the above garlic crop.

1. 1429
2. 7143
3. 3571
4. 720

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

116 1003246

4.0 1.00

Application of farmyard manure (FYM) releases one-third of N and P only during the growth period of the first crop, for which it is applied. The remaining amount of N and P present in the FYM become available to second, third and to a very small extent to the fourth crop raised on the same piece of land. If the proportion of availability of nutrients from the applied FYM in different crops follows the same trend as applied for the first crop and the same amount of FYM is applied to every crop and two crops are grown in one year; then after how many years the soil will provide the total amount of N and P present in the FYM in available form to every crop assuming no loss of these nutrients from soil, except the crop uptake ?

1. The time for the availability of total amount of N and P cannot be estimated from the above information
2. 2 years
3. 3 years
4. 4 years

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

117 1003247

$Y = a + bx - cx^2$ is the yield response equation for pigeonpea, where Y is the grain yield of pigeonpea in t/ha and x is the amount of phosphorus applied in kg/ha through farmyard manure (FYM). The applied FYM contains 0.2% P after proper processing for analysis and 60% moisture on fresh weight basis. What is the price ratio for the estimation of economic optimum phosphorus amount to be applied through FYM, if the price of pigeonpea is ₹ 6600.00 per quintal and that of the applied fresh FYM is ₹ 2.64 per kg?

1. 20
2. 2
3. 0.5
4. 0.05

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118 1003248

As per the Fertilizer (control) order, 1985; the percentage loss in weight from fresh weight is to be reported as the moisture content of vermicompost. The fresh weight of vermicompost is $x+y$, and weight of moisture in fresh sample of vermicompost is y . Then, the moisture content estimated through the percentage gain in weight from dry weight will be how many times more than the moisture content estimation as per Fertilizer (control) order, 1985?

1. $\frac{x+y}{x}$

2. $\frac{x}{x+y}$

3. $\frac{y}{x+y}$

4. $\frac{x+y}{y}$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

119 1003249

The intercrop grain yield of crop i and j are Y_{ij} and Y_{ji} kg/ha., respectively. The sole crop grain yield of crop i and j are Y_i and Y_j kg/ha, respectively. One farmer is interested to grow the above mentioned intercrop in his total land of 0.8 ha due to yield advantage. But, his annual requirement of grain from crop i is Y_i kg, without which he cannot run his family. The relationship between yield and requirement of crop i is: $0.8 Y_{ij} < Y_i < 0.8 Y_{ii}$. One scientist suggested the strategy that the farmer can grow the sole crop of i in some parts of his land and rest part for intercrop. The farmer followed the advice and harvested Y_i kg grain of crop i . How much area was diverted for the sole production of crop i as per the suggestion from the scientist ?

1. $\frac{Y_i - Y_{ij}}{Y_{ii} - Y_{ij}}$ ha

2. $\frac{Y_i - (0.8 \times Y_{ij})}{0.8 \times (Y_{ii} - Y_{ij})}$ ha

3. $\frac{(1.25 \times Y_i) - Y_{ij}}{Y_{ii} - Y_{ij}}$ ha

4. $0.8 \times \frac{Y_i - (0.8 \times Y_{ij})}{0.8 \times (Y_{ii} - Y_{ij})}$ ha

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

120 1003250

4.0 1.00

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

List-I	List-II
(Books related to organic farming)	(Author)
(A) The Soil and Health A Study of Organic Agriculture	(I) M. M. Kononova
(B) The Living Soil	(II) Masanobu Fukuoka
(C) The One-Straw Revolution	(III) E. B. Balfour
(D) Soil Organic Matter: Its Nature, Its Role in Soil Formation and in Soil Fertility	(IV) G. T. Wrench
(E) The Wheel of Health	(V) Sir Albert Howard

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4