

PREVIEW QUESTION BANK

Module Name : WATER SCIENCE AND TECHNOLOGY-ENG
Exam Date : 09-Jul-2023 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	2001	Which one of the following is not one of the features of parliamentary form of government? 1. Majority party rule 2. Collective Responsibility 3. Integrated and Independent Judiciary 4. Dissolution of the lower house A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	2002	Which of the following term implies that 'India is a neither a dependency nor a dominion of any other nation'? 1. Socialist 2. Sovereign 3. Secular 4. Democratic A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	2003	Which of the following form the maximum water composition on the earth's surface? 1. Oceans 2. Ice caps 3. Glaciers 4. Lakes A1 : 1 A2 : 2	4.0	1.00

		A3 : 3		
		A4 : 4		
Objective Question				
4	2004	Which one of the following does not fall under the category of 'biomes? 1. Forest 2. Sky 3. Desert 4. Grassland A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	2005	IUCN publishes information about which of the following species as Red List of threatened species? 1. Endangered Species 2. Vulnerable Species 3. Extinct Species 4. Rare Species A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	2006	Who was the first Indian to win an individual medal in Olympics? 1. Milkha Singh 2. Karnam Malleshwari 3. P. T. Usha 4. K. D. Jadhav A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
7	2007	Who among the following reformers founded "Arya Samaj"? 1. Raja Ram Mohan Roy 2. Swami Dayananda Saraswati 3. Atmaram Pandurang 4. Ishwarchandra Vidyasagar A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
8	2008	What does "Triratna" mean in Buddhism? 1. Tripitaka 2. Buddha, Dhamma (dharma), Sangha 3. Satya, Ahimsa, Karuna 4. Sheel, Samadhi, Sangha A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
9	2009	Who started the Indian Reforms Association? 1. Narayan Guru 2. Swami Vivekananda 3. Krishna swami Aiyar 4. Keshav Chandra Sen A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

10	2010	4.0	1.00
	Consider the following statements (A). UN General Assembly has declared 2023 as the international year of millets (B). Odisha govt. ropes in FICCI to promote millets globally (C). Odisha Millets Mission is a flagship programme of the Odisha government to revive millets in farms and on plates 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		

Objective Question

11	2011	4.0	1.00
	Phomopsis blight occurs in which of the following crops? 1. Brinjal 2. Bajra 3. Sugarcane 4. Potato A1 : 1 A2 : 2 A3 : 3 A4 : 4		

Objective Question

12	2012	4.0	1.00
	Endemic pests can be described as? 1. Pest occurs in a few specific area. 2. Pest occurs in same area, year after year. 3. Pest occurs frequently in current season in abundance. 4. Pest occurs in severe form. A1 : 1 A2 : 2		

		A3 : 3		
		A4 : 4		
Objective Question				
13	2013	Which country is the largest producer of raw silk? 1. Japan 2. India 3. China 4. South Korea A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
14	2014	Transfer of Ownership is the example of which utility..... 1. Time utility 2. Place utility 3. Possession utility 4. Form utility A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
15	2015	What happens to the total number of chromosomes during mitotic cell division? 1. gets doubled 2. gets halved 3. remains the same 4. divides into four A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
16	2016	What is the minimum forest cover to be maintained as per the National Forest Policy, 1988? 1. One-half 2. One-third 3. One-fourth 4. Two-third A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
17	2017	Who among the following is known as the "Father of Agronomy"? 1. Stephen Hales 2. Gregor Johann Mendel 3. Peter Decresenzi 4. D N Walia A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
18	2018	Which of the following plant hormones helps in shoot elongation? 1. Auxin 2. Gibberellic acid 3. Absciscic acid 4. Cytokinin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				

19	2019	Select from the following the chemical property of soil..... 1. Colour 2. pH 3. Texture 4. Structure A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

20	2020	The process of separating quality grains from chaff is called as..... 1. Winnowing 2. Threshing 3. Harvesting 4. Tilling A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

21	161001	The people, who consume _____ on regular basis as staple food, are likely to be affected by 'goitre' caused by abnormal hormone secretion from thyroid. 1. Finger millet 2. Sorghum 3. Barnyard millet 4. Pearl millet A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

22	161002		4.0	1.00
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		Which among the following crops is not grouped under sensitive to soil salinity category? 1. Chickpea 2. Pigeonpea 3. Peas 4. Field beans A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
23	161003	Which of the following nutrients is absorbed by plants without any combination with other nutrients? 1. Nitrogen 2. Phosphorus 3. Potassium 4. Sulphur A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
24	161004	The depth of soil up to which plant roots penetrate to draw water and plant nutrients is called 1. Effective soil depth 2. Effective rooting depth 3. Root length 4. Plough layer soil A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
25	161005		4.0	1.00

Which year India celebrated as "The National Year of Millets"?

1. 2023
2. 2022
3. 2019
4. 2018

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26	161006	The concentrations of which amino acids in the grain of the quality protein maize are nearly twice compared to the normal maize? (A). Tryptophan (B). Methionine (C). Cysteine (D). Lysine 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) and (D) only.	4.0	1.00
		A1 : 1 A2 : 2 A3 : 3 A4 : 4		

Objective Question

27	161007	Weed seeds are killed in which phase of composting? 1. Mesophilic phase 2. Second mesophilic phase 3. Thermophilic phase 4. Maturation phase	4.0	1.00
		A1 : 1 A2 : 2 A3 : 3		

		A4 : 4		
Objective Question				
28	161008	What is the safe limit of aflatoxins concentration in kernel of groundnut for direct consumption? 1. 9 ppb 2. 19 ppb 3. 29 ppb 4. 39 ppb A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
29	161009	Which experimental design takes care of the missing value; and ANOVA can be estimated without the use of missing plot technique? 1. RCBD 2. Strip-plot design 3. Latin square design 4. CRD A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
30	161010	Which among the following is the disadvantage of drip irrigation? 1. Soil moisture fluctuates from field capacity to different degrees of extreme dryness 2. It increases salinity hazard to plant 3. It restricts area of root growth 4. It enhances weed infestation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

31161011

4.01.00

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

List I	List II
(Different ploughs)	(Use of ploughs)
(A). Tractor drawn mouldboard plough	(I). Small squares remain unploughed
(B). Animal drawn mouldboard plough	(II). Deep ploughing and inversion
(C). Disc plough	(III). Incorporation of manures, fertilizers and plant residues
(D). Indigenous plough	(IV). Cutting of creeping or spreading grass and inversion

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

32	161012	Which crop is effectively used as an indicator plant for determining permanent wilting point of soil in the laboratory as it depletes the available soil moisture evenly and completely? 1. Sunflower 2. Sorghum 3. Maize 4. Jute A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

33	161013		4.0	1.00
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Which of the following millets contains the highest protein in the grain?

1. Foxtail millet
2. Proso millet
3. Pearl millet
4. Little millet

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34 161014 4.0 1.00

The World's first Natural Farming and Organic Agricultural University is established in which country?

1. Australia
2. Argentina
3. India
4. France

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 161015 4.0 1.00

Desert soils have the characteristics of

(A). They occur in arid climate (both hot and cold), occupying western part of Rajasthan, Gujarat, Haryana and Punjab and cold arid soils in Leh, Ladakh region of Jammu and Kashmir.

(B). In hot dry deserts aeolian action carry sand and deposits in the direction of wind to form thick sandy surface.

(C). They are heavy soils with >10% clay, and very less profile development.

(D). Moderately to strongly alkaline (pH 7.9-9.0), low in organic matter, high in salts, and calcareous

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

36	161016	"Stability series" signifies the weatherability of the common primary minerals. It is proposed by: 1. Jenny (1941) 2. Goldich (1938) 3. Jackson et al. (1964) 4. Joffe (1949) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

37	161017	Examples of tectosilicates in soils are: (A). Quartz (B). Cristobalite (C). Orthoclase (D). Plagioclase Choose the correct answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B), (C) and (D). 3. (A), (C) and (D) only. 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

38	161018	The size (diameter) of silt as per International Union of Soil Sciences (IUSS) is: 1. 0.002 mm 2. 2.0 mm 3. 0.02 mm 4. 0.20 mm	4.0	1.00
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		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

39	161019	(A). Humic acid (HA) is the portion of organic matter which is soluble in alkali, but insoluble in acid. (B). Humic acid (HA) is the portion of organic matter which is soluble in acid, but insoluble in alkali. (C). Fulvic acid (FA) is the portion of organic matter which is soluble in alkali and acid. (D). Humin is the portion of organic matter which is insoluble in both alkali and acid. Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (C) and (D) only. 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

40	161020	Potassium sulphate is a preferred source of K for crops like 1. Tobacco 2. Wheat 3. Rice 4. Sorghum A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

41	161021		4.0	1.00
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- (A). Because of the dominance of the kaolinite mineral, black soils exhibit swell-shrink properties.
- (B). After heavy rains, red soils are highly prone to crusting.
- (C). The kaolinite-dominant red and laterite soils contain the lowest amount of all forms of K.
- (D). Black soils are characterized by high clay content and consequently, high available water holding capacity.

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

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

42	161022	If a soil solution is concentrated four times, then the activity ratio of potassium (K)-calcium (Ca) in solution will 1. Increase eight times 2. Decrease two times 3. Increase two times 4. Decrease four times A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

43	161023	(A). Exchangeable acidity in soil is the acidity associated with exchangeable Al^{3+} and H^+ ions, which can be replaced in a strongly acid soil by an unbuffered salt solution, such as KCl or NaCl. (B). Active acidity in soil is the activity of hydrogen (H^+) ions in the soil solution which is measured and expressed as pH value. (C). Residual/reserve acidity is associated with H^+ and Al^{3+} ions that are bound in non-exchangeable form by clay and organic matter in soils. (D). Total acidity is the sum of exchangeable acidity plus residual acidity in a soil. Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (B), (C) and (D) only. 4. (A), (B), (C) and (D).	4.0	1.00
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A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44 161024

4.0 1.00

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

Assertion (A) : Dehydrogenase activity reflects the total range of the oxidative activity of soil micro-organisms and may be considered a good indicator of the oxidative metabolism in soils.

Reason (R) : Dehydrogenase oxidize soil organic matter by transferring protons and electrons from organic substrates to inorganic acceptors.

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

45 161025

4.0 1.00

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

Assertion (A) : The concepts of quantity (Q), intensity (I) and buffering capacity (Q/I) are useful in describing and measuring the potassium (K) supplying power of soils. The intensity factor is a measure of K in soil solution that is immediately available for absorption by plant root.

Reason (R) : The absorption of K is influenced by the activity of other cations like Ca^{2+} and Mg^{2+} in the soil solution; thus, the potassium activity ratio is used, in place of K concentration alone, to indicate the intensity factor.

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

46161026

4.01.00

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

List-I	List-II
(Indicator)	(Element)
(A). Eriochrome Black T	(I). Iron
(B). Potassium Chromate	(II). Boron
(C). Orthophenanthroline	(III). Chlorine
(D). Azomethine-H	(IV). Calcium

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

47	161027	By which regulation of Registration Committee opines that the insecticide is being introduced for the first time in India, it may, pending any enquiry, register it provisionally for a period of two years 1. Section 9(3) 2. Section 9(3B) 3. Section 9(4) 4. Section 9(4B) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

48	161028		4.0	1.00
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		Abamectin 01.90% EC is registered in India for the purpose of controlling 1. Lepidopteran pest 2. Dipteran pest 3. Mites 4. Nematodes A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
49	161029	In Chlorantraniliprole 0.40% GR formulation, what does GR means 1. Liquid formulation 2. Suspension formulation 3. Solid formulation 4. Greasy formulation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
50	161030	<i>Ampelomyces quisqualis</i> 2.0% WP is registered in India as biopesticide. It is recommended for the control of 1. Powdery mildew 2. Sucking pest 3. Lepidopteran pest 4. Spider mite A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
51	161031		4.0	1.00

For the analysis (detection and quantification) of thermolabile compounds which one of the following is not suitable

1. UPLC
2. LC-MS/MS
3. Spectrophotometer
4. GC-MS

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

52	161032	If Limit of detection (LOD) value of any method is 2 ppm then Limit of quantification (LOQ) value will be in the range of 1. 2-3 ppm 2. 6-7 ppm 3. 8-10 ppm 4. < 2 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

53	161033	What is most suitable for QuEChERS 1. It's a residue analysis technique 2. Sample preparation technique 3. Mass detection technique 4. Sample drawing technique A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

54	161034		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
(Name of pesticide)	(Biological activity)
(A). Dinotefuran	(I). Acaricide
(B). Azoxystrobin	(II). Insecticide
(C). Flufenacet	(III). Herbicide
(D). Dicofol	(IV). Fungicide

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

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

55 161035

4.0

1.00

Thin Layer Chromatography (TLC) is used in the wet laboratory for the purpose of

1. Quantification of mixture
2. Detection of single compound
3. Detection of mixture
4. Quantification of single compound

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

56 161036

4.0

1.00

In which part of neem, major bioactive constituents are present

1. Leaf
2. Bark
3. Root
4. Seed

A1 : 1

		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

57	161037	Plant which is a very good indicator of boron deficiency in an area	4.0	1.00
		1. Rice 2. Cauliflower 3. Brinjal 4. Maize		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

58	161038	Liquid ammonia is used as fertiliser. What per centage of N is present in it	4.0	1.00
		1. 71 2. 65 3. 48 4. 82		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

59	161039	India's estimated water potential from surface flow is	4.0	1.00
		1. 400 Mha m 2. 180 Mha m 3. 70 Mha m 4. 300 Mha m		
		A1 : 1		
		A2 : 2		

A3 : 3

A4 : 4

Objective Question

60	161040	4.0	1.00
For Darcy's law the value of Reynolds number is 1. < 1 2. $1 - 2$ 3. $2 - 3$ 4. > 3 A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

61	161041	4.0	1.00
The unit of intrinsic permeability is 1. LT^{-2} 2. LT^{-1} 3. L^2 4. L^2T A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

62	161042	4.0	1.00
Which of the following method is used to estimate time of concentration 1. CN method 2. Kirpich formula 3. Rational formula 4. Manning's formula A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

63	161043	4.0	1.00
The area under hyetograph represents 1. Rainfall intensity 2. Total rainfall amount 3. Flood flow 4. Runoff volume A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

64	161044	4.0	1.00
Through which of the following states the Yamuna river does not flow 1. Uttarakhand 2. Punjab 3. Haryana 4. Delhi A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

65	161045	4.0	1.00
Jal Shakti Abhiyan programme was started during the year 1. 2022 2. 2021 3. 2020 4. 2019 A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

66	161046	4.0	1.00
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'Bandharas' a traditional water harvesting structure is found in which of the following states

1. Rajasthan
2. Maharashtra
3. Madhya Pradesh
4. Uttar Pradesh

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

67	161047		4.0	1.00
Nearly, how much percentage of grounwater resources is used for irrigation? 1. 62 2. 80 3. 92 4. 56 A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

68	161048		4.0	1.00
What percentage of total water resources is used currently by India's agricultural sector? 1. 70 - 75 2. 75 - 80 3. 80 - 85 4. 85 - 90 A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

69	161049		4.0	1.00
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		The volume of rainwater consumed by the crop is known as 1. Blue water 2. Green water 3. Grey water 4. Virtual water A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

70	161050	The GAP (Ganga Action Plan) - a project to clean up the polluted water of Ganga - plans to intercept and divert municipal sewage falling into the river from 25 large urban conglomerates in which of the followings three states? 1. UP, Haryana and Punjab 2. UP, Bihar and West Bengal 3. Himachal Pradesh, UP and Haryana 4. Odisha, Bihar and West Bengal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

71	1003351	Which of the following committee report on watershed programmes in India "From Hariyali to Neeranchal" has strongly recommended for enhancing allocation on watershed development to the tune of Rs. 10,000/- crores/year? 1. Hanumatha Rao 2. Parthasarathy 3. Mihir Shah 4. Standing Committee on Water Resources A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

72	1003352		4.0	1.00
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Given below are two statements:

Statement (I): In a natural toposequence, overland flow of runoff and its accumulation over the relatively low-lying regions are inevitable.

Statement (II): Direct measurement of overland flow is practically infeasible.

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

73	1003353	Which of the following instrument is not used for measurement of runoff in a micro-watershed? 1. Multi-slot divisor 2. Coschocton wheel sampler 3. Dethridge meter 4. Ramser sampler A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

74	1003354	If H = depth of flow over the crest, m, then the crest thickness of a broad crested weir is 1. $0.2 H$ 2. $0.27 H$ 3. $0.39 H$ 4. $0.5 H$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

75	1003355	Followings are the statements related to PRA techniques in a watershed (A). Help in problem identification (B). Formulate action plans (C). Ensure people's participation (D).Verify, confirm and cross check the findings Choose the correct answer from the options given below with respect to the use of PRA techniques: 1. (A), (B) and (C) only. 2. (B), (C), and (D) only. 3. (A), (B), and (D) only. 4. (A), (B), (C) and (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

76

1003356

4.0

1.00

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

List-I	List-II
(Types of Precipitation)	(Process)
(A).Frontal	(I). Clockwise wind circulation
(B).Extratropical cyclone	(II). Areal extent of 10 km diameter
(C). Anticyclone	(III). Adiabatic cooling
(D). Convective	(IV).Counter-clockwise wind circulation

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

77	1003357	Followings are the statements related to hydrographs (A). The shape of a flood hydrograph is affected by intensity and duration and independent of direction of storm. (B). Basin and storm characteristics control the shape of the rising limb. (C). The surface flow hydrograph is obtained by deducting base flow and interflow from the total storm hydrograph. (D). The Direct Runoff Hydrograph for a given effective rainfall in a catchment is always the same irrespective of when it occurs. Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), and (C) only. 4. (B), and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

78	1003358	Which of the following criteria suitable for conservation bench terrace? 1. Slope < 6%, shallow to deep soil depth, paddy grown on lower portion of slope. 2. Slope < 8%, medium to deep soil depth, banana and other annual crops grown in irrigated condition 3. Slope < 10%, medium to deep soil depth and well drained, paddy grown on lower portion of slope. 4. Slope < 33%, medium to deep soil depth, potato and other vegetables grown. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

79	1003359	If the width of bench terrace is 5 m in a 40% slope with 1/2 : 1 batter slope of riser, then the length of terrace will be: 1. 2666 m 2. 1333 m 3. 1200 m 4. 1600 m A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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A4 : 4

Objective Question

80 1003360

4.0 1.00

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

List-I	List-II
(Soil conservation structures)	(Location of placement)
(A). Brushwood checkdam	(I). Broad gully
(B). Live checkdam	(II). Large gully head
(C). Looseboulder checkdam	(III). Small gully head
(D). Gabion checkdam	(IV). Across rills

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

81 1003361

4.0 1.00

Followings are the statements related to drop spillway

- (A). Headwall extension increases uplift pressure.
- (B). Toewall prevents piping under structure.
- (C). Vertical cutoffs are provided to bring the safe values of line of creep.
- (D). Brick and stone masonry are not able to take tension.

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

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

82

1003362

4.0

1.00

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

List-I	List-II
(Wind erosion parameters)	(Scientist)
(A). Erodibility of soil	(I). Skidmore and Woodruff
(B). Prediction of erosion	(II). Finkel and Noveh
(C). Erosion of force vector	(III). Pasak
(D). Amount of soil moved per unit	(IV). Woodruff and Siddoway

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

83	1003363	4.0	1.00
In which of the following states, the water rates of tubewells are charged on volume basis?			
1. Haryana 2. Punjab 3. Rajasthan 4. Madhya Pradesh			
A1 : 1			
A2 : 2			
A3 : 3			
A4 : 4			

Objective Question

84	1003364	4.0	1.00

In undivided Punjab, canal commands occupied semi-arid and un-inhabited lands were being irrigated by diverting river water through which of the following 'Triple Canal System'.

1. Sidhnai
2. Lower Sohang
3. Lower Jhelum
4. Upper Chenab

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

85	1003365	Arrange year-wise canal projects developed in ascending order (A). Sarda canal (B). Nira left bank canal (C). Nizam sagar project (D). Haveli project Choose the correct answer from the options given below: 1. (B), (A), (C), (D). 2. (D), (A), (C), (B). 3. (C), (B), (D), (A). 4. (A), (C), (D), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

86	1003366		4.0	1.00
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Followings are the statements with respect to dissolved constituents and their functions in water

- (A). Chloride and nitrates are more soluble than carbonates and phosphates.
- (B). Sodium makes water soft.
- (C). High nitrate concentration in drinking water is an indication of pollution.
- (D). Natural water contains < 10 ppm silica

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87	1003367	If the bulk density and particle density of a cultivated soil are 1.2 gm/cm^3 and 2.5 gm/cm^3, respectively, then the porosity of soil is 1. 40% 2. 48% 3. 52% 4. 25% A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

88	1003368	Which of the following is not sufficiently sensitive to be used as an indicator of small changes in water balance. 1. Chemical potential 2. Osmotic potential 3. Diffusion pressure deficit 4. Cell water potential A1 : 1 A2 : 2	4.0	1.00
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		A3 : 3		
		A4 : 4		

Objective Question

89	1003369	Arrange the following crops in ascending order of their water requirements. (A). Pea (B). Wheat (C). Pine apple (D). Banana Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (B), (A), (D), (C). 3. (C), (D), (B), (A). 4. (D), (C), (B), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

90	1003370	Arrange the moisture extraction percentage from root cap to ground surface (A). 10% (B). 20% (C). 30% (D). 40% Choose the correct answer from the options given below: 1. (D), (C), (B), (A). 2. (D), (B), (C), (A). 3. (A), (B), (C), (D). 4. (A), (C), (D), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

91	1003371		4.0	1.00
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If the depth of irrigation is 1.5 m then how much area can be irrigated in 2 cumec day?

1. 17.28 ha
2. 11.52 ha
3. 8.64 ha
4. 3.0 ha

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

92	1003372	Arrange the following soil texture according to excellent to poor with respect to the available water holding capacity for surface irrigation. (A). Clayey (B). Coarse sandy (C). Loamy (D). Clay loam Choose the correct answer from the options given below: 1. (A), (D), (C), (B). 2. (D), (C), (A), (B). 3. (C), (D), (A), (B). 4. (A), (C), (D), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

93	1003373		4.0	1.00
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Which of the following practices to be followed to improve water use in low land rice.

(A). Selecting hard pans in sub-surface depths

(B). Scrupulous land levelling

(C). Growing crops in small blocks

(D). Puddling

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

1. (A), (B) and (D) only.

2. (B), (C) and (D) only.

3. (A), (B), (C) and (D).

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

94	1003374	If the bulk density of the soil in the root zone was 1.5 gm/cm^3, the available moisture holding capacity of the soil 30 cm/m, at 30 cm soil depth the soil moisture content 12%, then the gross irrigation requirement at an field irrigation efficiency of 60% will be 1. 9 cm 2. 3.6 cm 3. 6 cm 4. 10.8 cm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

95	1003375		4.0	1.00
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The irrigation requirement does not include the water which is available to the crop through

- (A). Precipitation
- (B). Soil moisture storage
- (C). Capillary movement of groundwater
- (D). Seepage from surrounding areas

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 1003376

4.0 1.00

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

List-I	List-II
Dial reading in Centibars	Interpretation (Tensiometer)
(A). 50	(I). Nearly saturated
(B). 70	(II). Field capacity
(C). 20	(III). Stress range
(D). 0	(IV). Irrigation range

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

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

97 1003377

4.0 1.00

Given below are two statements:

Statement (I): A feeder canal is built to feed two or more other canals.

Statement (II): Carrier canal serves as both an irrigation canal and a feeder canal.

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

98	1003378	Longest canal in India is 1. Rajasthan Canal 2. Indira Gandhi Canal 3. Ganges Canal 4. Eastern Yamuna Canal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

99	1003379	Cojunctive use of irrigation water means 1. Irrigating rabi and kharif crops 2. Irrigating crops with surface water only 3. Conjunctive use of surface water and hydropower 4. Conjunctive use of both surface water and groundwater A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

100	1003380	Given below are two statements: Statement (I): Rate of recession depends upon the inflow rate, slope of the field, hydraulic roughness and infiltration capacity of soil. Statement (II): Recession will tend to be most rapid when the inflow rate is high, the field slope is steep, the infiltration capacity is high and hydraulic roughness is small. 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 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	4.0	1.00
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Objective Question

101	1003381	Following are the statements related to Tailwater reuse and cutback irrigation (A). Increase application efficiency by reducing runoff losses (B). Improve the effectiveness of surface irrigation (C). Water costs may be reduced by using tailwater (D). No equipment/device is required for tailwater reuse Choose the correct answer from the options given below: (A), (B) and (C) only. (A), (B) and (D) only. (A), (B), (C) and (D). (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

102	1003382		4.0	1.00
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Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A) :In dry soils, the water has a low potential energy and is strongly bound by capillary and absorptive forces to the soil matrix.

Reason (R) : When the potential energy of the soil water drops below a threshold value, the crop is said to water stressed.

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

103	1003383		4.0	1.00
Arrange the following design procedure stepwise for border irrigation method: (A). Compute the time of recession (min) (B). Compute the time of advance to the end of border (min) (C). Collect information related to field characteristics, soil, crop, and water supply (D). Compute the inflow depth at the inlet (m) Choose the correct answer from the options given below: 1. (C), (B), (A), (D). 2. (C), (D), (B), (A). 3. (C), (B), (D), (A). 4. (C), (A), (B), (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

104	1003384		4.0	1.00

Given below are two statements:

Statement (I): Eutrophication can be controlled by preventing inflow of phosphorus rich substances into water body.

Statement (II): Eutrophication can be controlled by avoiding the overuse of fertilizers and proper channelling of agricultural wastes.

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

105	1003385	One ds/m equals to 1. one mmho/cm 2. one mg/l 3. one meq/l 4. one mole/m³ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

106	1003386		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
Soils	Characteristics
(A). Saline Soils	(I). These soils are characterized by EC less than 4.0 dSm^{-1} , pH more than 8.5, ESP more than 15.0.
(B). Saline-Alkali Soils	(II). These soils are characterized by EC more than 4.0 dS m^{-1} , pH less than 8.5 and exchangeable sodium percentage (ESP) less than 15.0
(C). Alkali Soils	(III). These soils are characterized by EC more than 4.0 dSm^{-1} , pH more than 8.5, ESP more than 15.0.
(D). Sodic Soils	(IV). These soils which have an exchangeable sodium percentage (ESP) of more than 15

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107 1003387

4.0 1.00

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).
Assertion (A) : Evaporation of saline groundwater from the soil is a common cause of soil salinisation.

Reason (R) : It is known as capillary salinisation

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

108 1003388

4.0 1.00

Mechanism of salt tolerance under avoidance consists of

- (A). Salt Exclusion
- (B). Salt Extrusion
- (C). Salt Dilution
- (D). Compartmentation of ions

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

109 1003389

4.0 1.00

Given below are two statements:

Statement (I): Varying the nozzle angle from horizontal affects pattern size rather than pattern shape.

Statement (II): Varying the nozzle angle from horizontal affects wetted area rather than pattern shape

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

110 1003390

4.0 1.00

Calculate the required capacity of a sprinkler to apply water at the rate of 1.5 cm/h. Two sprinkler lines 200 m long each with 18 sprinklers are spaced at 11 m interval on each line. The sprinkler lines are spaced at 16 m interval. Also calculate required capacity of sprinkler system.

- 1. 0.73 l/s
- 2. 13.14 l/s
- 3. 0.73 cm³/h
- 4. 26.28 l/s

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
111	1003391	When emitters with higher manufacturers coefficient of variation (C_v) values are used then 1. The highest uniformity will be obtained 2. The emission uniformity decreases as more emitters are added to each plant 3. Accurate emitter manufacturing is not necessary in order to achieve a high degree of system uniformity 4. More emitters per emission point are required to achieve acceptable emission uniformity A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
112	1003392	NRAA stands for 1. National Rainfed Area Authority 2. National Rainfall Area Authority 3. National Rainfed Area Agency 4. National Rainfall Area Agency A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
113	1003393		4.0	1.00

Given below are two statements:

Statement (I): Crop failures are common, yields are not static under rainfed agriculture due to low moisture retention capacity of soils.

Statement (II): Crop failures are common, yields are not static under rainfed agriculture due to high humidity, lower temperature and higher wind velocity.

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

114	1003394	Remote Sensing (A). Remote sensing can help farmers identify areas of their fields that may need additional attention or water, fertilizers or pest management. (B). Remote sensing is a tool used for monitoring the health and growth of crops by analyzing spectral data obtained from satellites or ground-based instruments. (C). Remote sensing is the process of detecting and monitoring the physical characteristics of an area by measuring its reflected and emitted radiation at a distance. (D). Remote sensing is the acquisition of information about an object or phenomenon without making physical contact with the object. 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
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Objective Question

115	1003395		4.0	1.00
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Antitranspirants is any material applied to plant surfaces for reducing water loss from the plants. Arrange the below in sequence.

- (A). Low photosynthetic rate
- (B). Reduce the closure of stomata
- (C). Passive loss of turgor pressure
- (D). Reduce carbon dioxide diffusion into the leaf

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

116	1003396		4.0	1.00
Given below are two statements: Statement (I): Archemedian screw is the most efficient amongst the manually operated water lift. Statement (II): An Archemedian screw is a high head water lifting device. In light of the above statements,choose the <i>most appropriate</i> 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

117	1003397		4.0	1.00

Following are statements related to single-acting reciprocating pump

- (A). The force required to lift the piston is dependent of the diameters of suction and delivery pipes.
- (B). Water is delivered during alternate strokes.
- (C). Water is delivered during each strokes
- (D). During the suction stroke, the pressure of the air in the vessel maintains the flow of water through the delivery pipe.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118 1003398

4.0 1.00

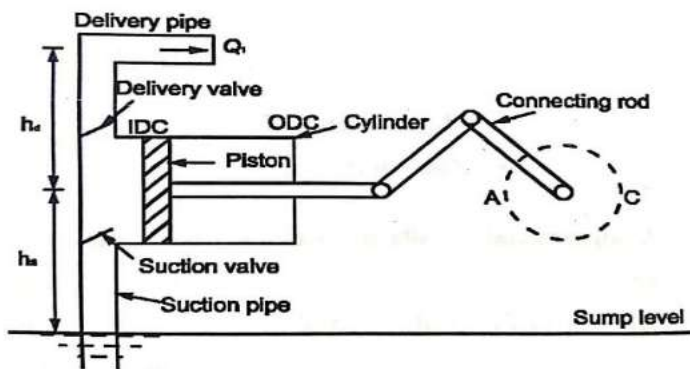


Image shows a single acting reciprocating pump which has one suction pipe and one delivery pipe. Arrange the sequence of the working of a single acting reciprocating pump.

- (A). When the crank is at ODC , the suction stroke is completed
- (B). When the crank rotates clockwise from dead centre (IDC) (from A) to outer dead center (ODC) (i.e., C) the piston moves outward to the right and a vacuum is created on the left side of the piston.
- (C). The delivery stroke is completed when the crank occupies the ODC position.
- (D). When the crank rotates from ODC to IDC (i.e., C to A), the piston moves inward to the left and a high pressure is built up in the cylinder.

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

119 1003399

4.0 1.00

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

List-I	List-II
Methods of artificial recharge	Situation
(A). Spreading method	(I). seepage from natural streams or rivers
(B). Stream augmentation	(II). large area of basin is available and aquifers are unconfined
(C). Pits and shafts	(III). indirect method of artificial recharge involving pumping from aquifer
(D). Induced recharge	(IV). in areas where impervious layers is encountered at shallow depth

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

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

120 1003400

4.0 1.00

Estimate the leaching requirements when the electrical conductivity of the saturation extract of the soil is 11 mmhos/cm at 25% reduction in the field of cotton. The electrical conductivity of irrigation water is 1.5 mmhos/cm.

1. 12.16%
2. 3.4%
3. 1.5%
4. 6.8%

A1 : 1

A2 : 2

A3 : 3

A4 : 4