

PREVIEW QUESTION BANK

Module Name : Water Science and Technology - 71-ENG
Exam Date : 29-Jun-2024 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	201	Movement of DNA from one bacterium to another through a tubular bridge or pilus: 1. Conjugation 2. Transposition 3. Transfection 4. Transduction A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	202	Which of the following is responsible for eliminating toxic oxygen by-products from cells? 1. Mitochondria 2. Golgi complex 3. Peroxisomes 4. Chloroplasts A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	203	A form of multiple parasitism in which a parasite preferentially attacks a host that is already parasitized by another species is known as 1. Cleptoparasitism 2. Ectoparasitoid 3. Obligate parasitism 4. Superparasitism A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
4	204	For mass multiplication of DD-136 nematode, the common host used is 1. Silk moth 2. Fruit sucking moth 3. Codling moth 4. Lesser wax moth A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	205	Chlorpyrifos methyl is effective against stored product insects except 1. <i>Rhizopertha dominica</i> 2. <i>Tribolium castaneum</i> 3. <i>Caryedon serratus</i> 4. <i>Oryzaephilus surinamensis</i> A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	206	Which of the following insects often cause inhalational allergies in human following large emergence of adult insects 1. Stick insects 2. May flies 3. Ear wigs 4. Preying mantis A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

7 207

4.0 1.00

Given below are two statements:

Statement (I): Climate is a weather condition related to smaller areas at a given place and at a given time,

Statement (II): Weather is a condition of atmosphere at a given place and at a given time

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

8 208

4.0 1.00

The local name of cyclone in Phillippines is

1. Hurricane
2. Cyclone
3. Baquio
4. Typhoon

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

9 209

4.0 1.00

Which one of the following are secondary tillage implements?

- (A). Subsoiler
- (B). Cultivator
- (C). Disc harrow
- (D). Wetland plough

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

10 210

_____ is the most suitable, drought resistant and persistent grass?

- 1. *Alylosia sp.*
- 2. *Cenchrus ciliaris*
- 3. *Stylosanthes hamata*
- 4. *Sorghum bicolor*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

11 211

The rainfed area in India is approximately

- 1. 30 mha
- 2. 40 mha
- 3. 57 mha
- 4. 70 mha

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

12	212	Which nutrient is often a limiting factor in agricultural production? 1. Nitrogen 2. Carbon 3. Oxygen 4. Hydrogen A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	-----	---	-----	------

Objective Question

13	213	What is a potential disadvantage of agroforestry systems? 1. Increased soil erosion 2. Decreased carbon sequestration 3. Reduced biodiversity 4. Enhanced susceptibility to pests A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	-----	---	-----	------

Objective Question

14	214	Pungency in mustard oil is due to 1. Amino acid 2. Allyl isothiocyanate 3. Erusic acid 4. Oxalic acid A1 : 1 A2 : 2	4.0	1.00
----	-----	---	-----	------

		A3 : 3		
		A4 : 4		
Objective Question				
15	215	Sesamum belongs to the family 1. Chenopodiaceae 2. Papilionaceae 3. Leguminosae 4. Pedaliaceae A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	216	Dark period is critical in which type of plant? 1. Short day plant 2. Long day plant 3. Day neutral plant 4. All the options A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
17	217	Which of the following is NOT a significant contributor to greenhouse gas emissions from livestock farming? 1. Carbon dioxide 2. Methane 3. Nitrous oxide 4. Ammonia A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

18	218	Fe deficiency is mostly seen in crops growing on 1. Calcareous or alkaline soils 2. Salt affected soils 3. Acidic soils 4. Neutral soils A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	-----	--	-----	------

Objective Question

19	219	EDV (Essentially Derived Varieties) are those which are derived from: 1. crossing two commercially known varieties 2. hybrid introduced from other countries 3. existing variety through genetic engineering or mutation 4. crossing commercially known variety with its wild relative A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	-----	--	-----	------

Objective Question

20	220	What is the role of "companion planting" in agriculture? 1. Enhancing soil fertility through crop rotation 2. Growing different crop species together to deter pests 3. Cultivating plants in hydroponic system 4. Increasing soil compaction through cover cropping A1 : 1 A2 : 2 A3 : 3	4.0	1.00
----	-----	--	-----	------

		A4 : 4		
Objective Question				
21	2601	Given below are two statements: Statement (I): In Indian sub-continent, about one-fifth of total geographical area is affected by drought in every 10 years. Statement (II): In Indian sub-continent, about one-third of total geographical area is affected by drought in every 15 years. 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
Objective Question				
22	2602	Given below are two statements: Statement (I): De Saussure concluded that the carbon contained by plants was derived from the soil. Statement (II): Sir Humphry Davy stated that plants received most of the carbon from atmospheric air. 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
Objective Question				
23	2603		4.0	1.00

Correct sequence of states as per increasing order of plant nutrient (NPK) consumption for the year 2021-22 in

1. Maharashtra < Gujarat < Andhra Pradesh < Telangana < Haryana
2. Gujarat < Maharashtra < Haryana < Andhra Pradesh < Telangana
3. Gujarat < Maharashtra < Telangana < Andhra Pradesh < Haryana
4. Telangana < Andhra Pradesh < Gujarat < Maharashtra < Haryana

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

24	2604	The weed density in a control plot (weedy check) is 50 per sq. m and in a herbicide treated plot 35 per sq. m, calculate weed control efficiency (%). 1. 30.0 2. 42.9 3. 60.0 4. 85.7 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

25	2605	Which of the following principles of system of rice intensification (SRI) largely forced many farmers to disadopt it? (A). Young seedlings and single seedling/hill (B). Wider spacing (C). Mechanical weeding (D). Intermittent irrigation (E). Use of organic manure Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (C) and (E) only. 3. (B), (C) and (D) only. 4. (B), (D) and (E) only.	4.0	1.00
----	------	---	-----	------

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
26	2606	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				
27	2607	Topping and de-suckering are not practised generally for which type of tobacco? 1. Chewing tobacco 2. Cigar tobacco 3. Wrapper tobacco 4. Bidi tobacco A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
28	2608	The operational range for electrical resistance block is 1. 0 to -0.85 bars 2. 0 to -100 bars 3. 0.5 to -50 bars 4. -0.1 to -15 bars A1 : 1	4.0	1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

29 2609

4.0

1.00

Calculate the seed rate of rice in kg/La , if the spacing of hills for transplanting is 20cm x 20cm ; number of seedlings / hill is 2; germination percentage of seeds is 90; purity percentage 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

A4 : 4

Objective Question

30 2610

4.0

1.00

The term variance is used to denote:

1. Standard deviation
2. Square of the standard deviation
3. Square root of the standard deviation
4. Average of differences from the mean

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

31 2611

4.0

1.00

Which of the following types of tobacco has highest nicotine content?

1. *Bidi* tobacco
2. Cigar tobacco
3. Chewing tobacco
4. Cigar wrapper tobacco

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
32	2612	What is the field water-use efficiency in kg/ha-mm of wheat crop, if it yields 4.5 t/ha grain and water requirement is 45 cm? 0.1 10 100 1000 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
33	2613	Which experimental design is a single factor design? - Factorial RCB design - Split-plot design - Latin square design - Strip-plot design A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	2614	Which of the following agenda is not contributed by the International year of Millets 2023 to the UN 2030 Agenda for sustainable development? - Life on land - Decent work and economic growth - Nutrition for the most vulnerable - Responsible consumption and production	4.0	1.00

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
35	2615	The time required to complete hydrolysis of urea when applied in normal soil and alkline soils, respectively is 2-3 days in normal soil, and 4 days in alkaline soil. 1-2 days in normal soil, and 5 days in alkaline soil. 1-2 days in normal soil, and 10 days in alkaline soil. 2-3 days in normal soil, and 7 days in alkaline soil. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
36	2616	Diagnosis and recommendation integrated system (DRIS) approach was developed by: - Olsen - Leibig - Beaufils - Arnon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
37	2617	Clay mineral having largest specific surface area is - Kaolinite - Montmorillonite - Smectite - Illite A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
38	2618	The most dominant soil order in India is: 1. Entisol 2. Alfisol 3. Inceptisol 4. Mollisol A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
39	2619	Minerals containing iron are: (A). Hematite (B). Goethite (C). Sphalerite (D). Magnetite 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				
40	2620		4.0	1.00

Given below are two statements:

Statement (I): Iron deficiency is most common in upland crops, particularly those grown on the calcareous/alkaline soils of arid region.

Statement (II): Molybdenum is associated with nitrogenase and nitrate reductase enzymes and is essential for nitrogen fixing plants and microorganisms.

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

41 2621

4.0

1.00

Solubility of Fe(III) oxides decreases in the order:

- (A). $\alpha\text{-Fe}_2\text{O}_3$ (Hematite)
- (B). $\alpha\text{-FeOOH}$ (Ggoethite)
- (C). $\gamma\text{-Fe}_2\text{O}_3$ (Maghemite)
- (D). $\gamma\text{-FeOOH}$ (Lepidocrocite)

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42 2622

4.0

1.00

The production of single superphosphate (SSP) involves following operations:

(A). The powdered rock phosphate (containing 30%-38% total P_2O_5) is mixed with sulphuric acid (65%-75% H_2SO_4) to form a slurry.

(B). The wet material is subjected to final curing, when some of the slow reactions reach a state of near completion and the excess water evaporates. The curing time is 2-6 weeks.

(C). Solidification of the slurry in a den (denning), where continued reactions and crystallization of monocalcium phosphate take place (time required 0.5 to 4 hours).

(D). If granular SSP is desired, it can be granulated either before or after it is cured.

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

43 2623

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 microorganisms and may be considered a good indicator of the oxidative metabolism in soils.

Reason (R) : Dehydrogenase oxidizes 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

44 2624

4.0 1.00

Most weathered soil order is

1. Inceptisols
2. Vertisols
3. Oxisols
4. Alfisols

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45 2625

4.0 1.00

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

List-I	List-II
(Nutrient element)	(Enzymes)
(A). Copper	(I). Nitrogenase and nitrate reductase
(B). Iron	(II). Ascorbic acid oxidase and polyphenol oxidase
(C). Zinc	(III). Catalase and peroxidase
(D). Molybdenum	(IV). Carbonic anhydrase and dehydrogenase

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

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

46 2626

4.0 1.00

Calcium requirement is highest for:

1. Cereals
2. Legumes
3. Oil seeds
4. Forage crops

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

47 2627

Nicotine is found in tobacco plant and it is used as insecticide. It is a

1. Limonoid
2. Terpenoid
3. Carotenoid
4. Alkaloid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

48 2628

Beardeaux mixture composed of

1. CaSO_4 and CuO
2. CuSO_4 and CuO
3. CuSO_4 and CaO
4. CaSO_4 and CaO

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

49 2629

4.0 1.00

		Imazethapyr is a 1. Selective broad spectrum herbicide 2. Non-selective broad spectrum herbicide 3. Selective herbicide for grasses 4. Selective herbicide for broad leaves A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
50	2630	Ideal range of absorbance for accepting data from spectrophotometer is 1. 0.1-0.5 2. 0-1 3. 0.2-1.5 4. 0.2-0.8 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
51	2631	Jasmolin is found in which of the following plant 1. <i>Tinospora sp.</i> 2. <i>Gimnema sp.</i> 3. <i>Anthocephalas sp.</i> 4. <i>Tanacetum sp.</i> A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
52	2632		4.0	1.00

		Essential oil is mainly comprised of		
		1. Monoterpenes		
		2. Diterpenes		
		3. Limonins		
		4. Acetogenins		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
53	2633	Pungent principle of chilli is	4.0	1.00
		1. Capxanthin		
		2. Capsaicin		
		3. Chalcone		
		4. Capsirubin		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
54	2634	EW formulation of pesticide is a	4.0	1.00
		1. Emulsion		
		2. Solution		
		3. Colloid		
		4. Suspension		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
55	2635		4.0	1.00

		"Matador" is the trade name of which herbicide ? 1. Metsulfuron-methyl 2. Metribuzin 3. Sulfosulfuron 4. Glyphosate A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
56	2636	Solution of 2% concentration is equivalent to 1. 200 ppm 2. 2000 ppm 3. 20000 ppm 4. 200000 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
57	2637	Quality Protein Maize (QPM) is richer in which of the following amino acid than normal maize ? 1. Lysine and Glycine 2. Glycine and Aspartic acid 3. Lysine and Tryptophan 4. Histidine and Proline A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
58	2638		4.0	1.00

		CIB&RC is a Govt. body located at 1. Ghazhibad 2. Faridabad 3. Delhi 4. Gurugram A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
59	2639	The estimated total utilizable surface water resources of India is 1. 433 BCM 2. 690 BCM 3. 1123 BCM 4. 4000 BCM A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
60	2640	Given below are two statements: Statement (I): The slope of mass curve shows the intensities at various time intervals in a storm. Statement (II): Hyetograph is derived from the mass curve. 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	4.0	1.00

		A4 : 4		
Objective Question				
61	2641	Given below are two statements related to peak rate of runoff: Statement (I): The factors related to retardance to flow caused by the effect of surface detention and channel storage considered. Statement (II): The runoff coefficient is dependent only on watershed characteristics. 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
Objective Question				
62	2642	Soil moisture tension in a salt free soil at field capacity depending on soil texture ranges from 7 to 32 atmosphere 0.7 to 7 atmosphere 0.01 to 0.7 atmosphere < 0.01 atmosphere A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
63	2643	Surangam, water harvesting structures are found in - Bellary - Tamil Nadu - Kasargod - Telangana A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
64	2644	Which of the following is a traditional rainwater harvesting technique practiced in rainfed agriculture? 1. Desalination 2. Drip irrigation 3. Contour bunding 4. Sprinkler irrigation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
65	2645	Which of the following irrigation scheduling methods relies on soil moisture measurements to determine when irrigation is needed? 1. Calendar-based scheduling 2. Crop water stress index (CWSI) 3. Pan evaporation method 4. Soil moisture sensors A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
66	2646	What is the term used to describe the process of using vegetation to enhance water drainage and stabilize soil in agricultural landscapes? 1. Terracing 2. Riparian buffers 3. Vegetative filter strips 4. Subsurface drains A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
67	2647	Which factor is NOT a consideration in groundwater management? 1. Rate of groundwater recharge 2. Extraction rate 3. Depth of the water table 4. Surface water availability A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
68	2648	What is the term used to describe the process of lowering the water table around a well due to excessive pumping, resulting in reduced water availability? 1. Aquifer depletion 2. Cone of depression 3. Pumping efficiency 4. Hydraulic fracturing A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
69	2649	What is the primary advantage of pressurized irrigation systems over traditional gravity-based systems? 1. Reduced water use 2. Lower initial investment 3. Higher application efficiency 4. Greater flexibility in crop selection A1 : 1 A2 : 2	4.0	1.00

		A3 : 3		
		A4 : 4		
Objective Question				
70	2650	What is the term used to describe the process of using plants to remove pollutants from soil and water? 1. Phyto sorption 2. Phytoextraction 3. Phytoremediation 4. Phyto stabilization A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
71	1003351	Bhopal lake was constructed by 1. Chola rulers 2. King Krishnaraja 3. King Harihara 4. Pallav dynasty A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
72	1003352		4.0	1.00

Which of the followings are considered under green water source?

- (A). Groundwater
- (B). Pond
- (C). Soil moisture within crop root zone
- (D). Evapotranspiration

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73 1003353

4.0 1.00

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

List-I	List-II
(Name of canal/dam)	(Year of construction)
(A). Upper Ganga canal	(I). 1887
(B). Western Yamuna canal	(II). 1355
(C). Periyar dam	(III). 1873
(D). Sirhind canal	(IV). 1854

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

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

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
74	1003354	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Opportunity cost usually forms the basis for selecting discount rate for calculating B:C ratio. Reason (R) : The opportunity cost of the capital is usually taken as the cutoff rate. 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				
75	1003355	Which of the following plant is generally used as an indicator plant for determining permanent wilting point? - Aalfalfa - Sunflower - Cactus - Casava A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
76	1003356		4.0	1.00

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

Assertion (A) : Tensiometer is not well suited for use in fine textured soils.

Reason (R) : A small part of the available moisture in fine textured soils is held at tensions of less than 1 atmosphere.

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

77	1003357	Followings are some of the points related to soil properties and movements. (A). Maximum water vapour movement in soils occur just before ultimate wilting point is reached. (B). Darcy's law can be applied under unsaturated conditions. (C). The intrinsic permeability is used as the permeability factor independent of the fluid. (D). In fine textured soils, hydraulic conductivity depends almost entirely on structural pores. Choose the correct answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (D) 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

78	1003358		4.0	1.00
----	---------	--	-----	------

Determine the field capacity of a soil for following data:

- (i) Depth of root zone = 1.8 m
 - (ii) Existing moisture = 8%
 - (iii) Dry density of soil = 1450 kg/m³
 - (iv) Quantity of water applied to soil = 650 m³
 - (v) Water lost due to deep percolation and evaporation = 10%
 - (vi) Area to be irrigated = 1000 m²
1. 14.4%
 2. 22.4%
 3. 30.4%
 4. 32.9%

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79	1003359	If total consumptive use of a crop is 125 cm, then find the volume of water required to be diverted from the head works to irrigate area of 1000 ha assuming effective rainfall as 80% of total rainfall (600 mm), application efficiency 50% and conveyance efficiency 70%. 1. 35.7 Mm³ 2. 22 Mm³ 3. 2200 m³ 4. 3571 m³ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

80	1003360	One cumec of water is pumped into a farm distributed system. 0.8 cumec is delivered to a turn-out located 0.9 kilometer distance from the well, Compute the conveyance efficiency. 1. 25% 2. 44.4% 3. 80% 4. 88.9%	4.0	1.00
----	---------	--	-----	------

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
81	1003361	Two tensiometers have been installed in a root profile at a depth of 30 cm and 60 cm. The top one shows a suction of 60 cm of water and the bottom one shows a suction of 40 cm of water. In what direction the water is moving? 1. Upward 2. Downward 3. Both upward and downward 4. Horizontal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
82	1003362	The concept of reference evapotranspiration ET_0 provides information on (A). Evaporation demand of the atmosphere (B). Independent of the type of crop (C). Independent of stage of crop development (D).Independent of the crop management practices Choose the correct answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (D) 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				

83	1003363	The earthwork per hectare in a level terrace of area 2 ha with 2 m width and 4 m depth of cut and 4 m depth of fill will be 1. 12500 m³ 2. 10000 m³ 3. 6250 m³ 4. 5000 m³ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	---	-----	------

Objective Question

84	1003364	Which of the followings are the components of a permanent gully control structure? (A). Embankment (B). Spillway inlet (C). Spillway conduit (D). Spillway outlet 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

85	1003365		4.0	1.00
----	---------	--	-----	------

Given below are two statements:

Statement (I): The width of wind strips for erosion susceptible crops is higher in loam soil compared to loamy sand.

Statement (II): The wind velocity reduction on the leeward side near shelterbelts or windbreaks at 30-40 times the height of the shelterbelts/windbreaks is 20%.

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

86 1003366

4.0 1.00

If the depth of flow and Froude number before hydraulic jump are y_1 and F_1 , after hydraulic jump y_2 and F_2 , respectively, then which of the following formulae are used for sequent depth ratio?

(A). $y_2/y_1 = \left[\frac{1}{2} \sqrt{(1 + 8 F_1^2)} \right] - 1$

(B). $y_2/y_1 = \frac{1}{2} [\sqrt{(1 + 8 F_1^2)} - 1]$

(C). $y_2/y_1 = \left[\frac{1}{2} \sqrt{(1 + 8 F_2^2)} \right] - 1$

(D). $y_2/y_1 = \frac{1}{2} [\sqrt{(1 + 8 F_2^2)} - 1]$

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87 1003367

4.0 1.00

Match **List-I** with **List-II** pertaining to side slope for preliminary design of earthdams

List-I	List-II
(Type of material)	(Upstream and downstream slope)
(A). Homogenous well graded material	(I). 3:1, 2:1
(B). Homogenous coarse silt	(II). 2.5:1, 2:1
(C). Average materials with dam height ≤ 15 m	(III). 2:1, 2:1
(D). Soils which are well graded and can be compacted well	(IV). 3:1, 2.5:1

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

88	1003368	In case of sediment transport by streams, which of the followings is known as bed load?	4.0	1.00
- Suspension + Siltation - Suspension + Surface creep - Saltation + Surface creep - Suspension + Saltation + Surface creep				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

89	1003369		4.0	1.00
----	---------	--	-----	------

Which of the following structural component in a drop spillway prevents piping under the structure?

1. Toe wall
2. Side wall
3. Wing wall
4. Head wall

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

90	1003370	Followings are some of the statements related to geomorphological characteristics of a watershed: (A). Total watershed area is the sum of stream basin and inter-basin area. (B). The area A_u of a basin of order 'u' is the total area projected on a horizontal plane, contributing the overland flow to the streams of given order plus all tributaries of lower order. (C). Stream area ratio is the average basin area of streams of one order to the average area of basins of the next higher order. (D). The ratio of basin area to the square of the basin length is known as form factor. Choose the correct answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (D) 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

91	1003371	Which of the following colour notation is used for land capability class VII in a watershed? 1. Brown 2. Blue 3. Purple 4. Orange A1 : 1	4.0	1.00
----	---------	---	-----	------

A2 : 2

A3 : 3

A4 : 4

Objective Question

92	1003372	Given below are two statements: Statement (I): Evaporation from open water surface can be measured by Atmometers. Statement (II): The evaporation is measured by means of volume balance technique. 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

93	1003373	Which of the following material is not used for seepage control of the stored water in ponds? - Bentonite - Asphalt compounds - Polystyrene sheet - Bituminous materials A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

94	1003374		4.0	1.00
----	---------	--	-----	------

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

List-I	List-II
(Watershed Government programmes)	(Year of launching)
(A). NWDPR	(I). 1983
(B). DDP	(II). 1994
(C). IWDP	(III). 1991
(D). ORPs	(IV). 1987

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

95	1003375	Which of the following method is widely used for baseflow separation in a hydrograph?	4.0	1.00
- Straight line - Fixed base length - Variable slope - Chow's				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

96	1003376		4.0	1.00
----	---------	--	-----	------

In the context of irrigation water measurement, which of the following equations is used to calculate the flow rate (Q) in a rectangular channel with known dimensions?

1. Kutter's equation
2. Hazen-Williams equation
3. Chezy's equation
4. Manning's equation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

97	1003377	Choose the irrigation techniques suitable for reducing water wastage and optimizing water use efficiency in sandy soils: A) Drip irrigation B) Sprinkler irrigation C) Furrow irrigation D) Subsurface irrigation 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. (A), (C) and (D) only.	4.0	1.00
		A1 : 1 A2 : 2 A3 : 3 A4 : 4		

Objective Question

98	1003378		4.0	1.00

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

List-I	List-II
(A). Rapid removal of excess surface water	(I). Subsurface drains
(B). Effective in lowering the water table in saturated soils	(II). French drains
(C). Reduces soil erosion and nutrient leaching	(III). Surface drains
(D). Requires periodic cleaning and maintenance	(IV). Contour drains

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99 1003379

4.0 1.00

Put the following steps of crop evapotranspiration-based irrigation scheduling in the correct sequence:

- (A). Determination of crop coefficients
- (B). Calculation of net irrigation requirement
- (C). Estimation of potential evapotranspiration
- (D). Calculation of water equipment of crop

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

100	1003380	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Implementing variable rate irrigation (VRI) systems in agriculture can optimize water use efficiency and crop yield. Reason (R) : VRI systems enable precise control over water application rates based on spatial variability of soil moisture and crop water requirements. 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

101	1003381	Given below are two statements: Statement (I): Implementing deficit irrigation strategies in agriculture can diminish crop water productivity under water-limited conditions. Statement (II): Deficit irrigation involves deliberately applying less water than the crop's full water requirement during certain growth stages, which can lead to less efficient water use and improved crop yields. 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

102	1003382		4.0	1.00
-----	---------	--	-----	------

In canal water distribution systems, what is the primary function of a canal module?

1. To regulate the flow of water into the canal.
2. To measure the flow rate of water in the canal.
3. To optimize water distribution among different users.
4. To control sedimentation and erosion within the canal.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

103	1003383	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion: Effective irrigation management requires identifying critical stages of crop growth. Reasoning: Critical stages of crop growth are those periods during which water stress can have a significant impact on crop yield. In light of the above statements, choose the <i>correct</i> answer from the options given below. 1. Both (A) and (R) are correct and (R) is the correct explanation of (A). 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). 3. (A) is correct but (R) is not correct. 4. (A) is not correct but (R) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

104	1003384	What is the primary cause of eutrophication in aquatic ecosystems? 1. Industrial pollution 2. Excessive nutrients such as nitrogen and phosphorus 3. Soil erosion 4. Thermal pollution A1 : 1 A2 : 2 A3 : 3	4.0	1.00
-----	---------	--	-----	------

A4 : 4

Objective Question

105	1003385	Which of the following factors can affect the quality of irrigation water? A) Salinity levels B) pH levels C) Presence of heavy metals D) Microbial contamination 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

106	1003386	Arrange the following techniques in the correct order for monitoring soil salinity in the field: A) Calculation of soil salinity sensor. B) Satellite remote sensing for spatial mapping of soil salinity. C) Installation of soil salinity sensors. D) Laboratory analysis of soil samples collected from representative locations. Choose the correct answer from the options given below: 1. (A), (D), (C), (B). 2. (D), (A), (C), (B). 3. (D), (C), (A), (B). 4. (C), (A), (D), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

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) : Salinity stress primarily affects crop growth by disrupting ion balance and inducing osmotic stress.

Reason (R) : Halophytic crops exhibit higher yields than glycophytic crops under saline conditions due to their ability to efficiently exclude sodium ions from their cells.

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	Given below are two statements: Statement (I): Irrigation with saline water can contribute to soil sodicity. Statement (II): Leaching of sodium from underlying layers can cause sodicity in overlying soils. 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 correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

109	1003389		4.0	1.00
-----	---------	--	-----	------

Calculate the flow rate required for a drip irrigation system to irrigate an orchard of one hectare area with a water depth of 216 mm in 6 hours. The drip system will have 50 cm spacing between emitters on the drip lines, and lateral to lateral spacing of 5m. Calculate the discharge of each entity

(A). 100 lit/sec

(B). 9 lit/ hour

(C). 6 m³/min

(D). 3.24 lit/ hour

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

110	1003390	Which of the following practice helps to prevent corrosion and prolong the lifespan of sprinkler system components? 1. Flushing the system with clean water after each irrigation cycle. 2. Applying a protective coating to metal parts exposed to moisture. 3. Increasing the water pressure to dislodge sediment build-up. 4. Using high-quality plastic components instead of metal. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

111	1003391		4.0	1.00
-----	---------	--	-----	------

Given below are two statements:

Statement (I): Drip lines are used to distribute water evenly along the crop rows.

Statement (II): Microtubes are larger diameter tubes that deliver water directly to individual plants.

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

112	1003392	Given below are two statements: Statement (I): Green manure refers to organic materials incorporated into the soil to improve soil structure and fertility. Statement (II): Green manure is primarily used to increase soil compaction and reduce water infiltration rates. 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 correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

113	1003393		4.0	1.00
-----	---------	--	-----	------

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

Assertion (A) : Remote sensing can accurately assess crop health and nutrient levels in rainfed agriculture.

Reason (R) : Remote sensing technology enables the analysis of spectral reflectance from crops, which correlates with their health status and nutrient content.

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

114	1003394	Which of the followings are factors influencing evapotranspiration rates? (A) Temperature (B) Humidity (C) Wind speed (D) Soil texture 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

115	1003395		4.0	1.00
-----	---------	--	-----	------

What is the primary cause of moisture stress in plants?

1. Excessive watering
2. Lack of sunlight
3. Insufficient water supply
4. Density of crops

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

116	1003396	Given below are two statements: Statement (I): The cost of groundwater pumping is primarily influenced by the depth of the aquifer. Statement (II): Pumping water from deeper aquifers generally incurs higher costs due to increased energy requirements and maintenance. 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 correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

117	1003397	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Effective conjunctive water use can mitigate the impacts of droughts, optimize water allocation, and enhance water security in regions facing water scarcity. Reason (R) : Conjunctive water use is a complex approach to water resources management that requires interdisciplinary collaboration and advanced modeling techniques. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below . 1. Both (A) and (R) are correct and (R) is the correct explanation of (A). 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). 3. (A) is correct but (R) is not correct. 4. (A) is not correct but (R) is correct.	4.0	1.00
-----	---------	---	-----	------

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
118	1003398	Arrange the following steps in the correct sequence for the selection of pumps: (A) Analyze the system requirements and operating conditions, including temperature, pressure, and fluid characteristics. (B) Conduct a hydraulic analysis to determine the required flow rate and head for the application. (C) Research and evaluate different pump types and manufacturers based on performance, reliability, and efficiency. (D) Consult with industry experts or pump specialists to gather insights and recommendations. Choose the correct answer from the options given below: (A), (B), (D), (C). (A), (B), (C), (D). (B), (A), (D), (C). (B), (A), (C), (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
119	1003399	The water table in a certain area has been observed to decline by 2 meters over the past year. If the specific yield of the aquifer is 0.15 and the area of influence of pumping is estimated to be 10 hectares, calculate the total volume of water lost from the aquifer due to the declining water table. 300 cubic meters 30,0000 cubic meters 3000 cubic meters 30,000 cubic meters A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
120	1003400	In the context of groundwater development, which factor plays a crucial role in ensuring the sustainability and long-term success of projects in arid regions? 1. Pumping technology efficiency 2. Depth to water table 3. Aquifer recharge rate 4. Integrated water resources management A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00