

PREVIEW QUESTION BANK

Module Name : Soil and Water Conservation Engineering - 40-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	2001	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : A fluidised bed gasifier is most versatile and can handle biomass with high ash content. Reason (R) : Fluidised bed generally contains either inert material or reactive material. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
22	2002	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Noise Induced Hearing Loss (NIHL) is irreversible. Reason (R) : NIHL is even, being greater in lower frequency than higher frequency. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
23	2003		4.0	1.00

Given below are two statements:

Statement (I): The top of the piston heats much more than does the lower skirt

Statement (II): The pistons are made larger at the top to absorb excessive heat released during compression stroke, and are said to have skirt taper.

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

24	2004	Given below are two statements: Statement (I): Premixed combustion is smoother and quieter than diffusion combustion. Statement (II): The longer the ignition delay, the higher percentage of the fuel that burns in premixed combustion and lower the percentage that burns in diffusion combustion. 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

25	2005		4.0	1.00
----	------	--	-----	------

Given below are two statements:

Statement (I): Hydrodynamic lubrication occurs when oil film is thick enough to prevent projections on one surface from contacting those projections on the mating surface.

Statement (II): All bearings in an engine are in hydrodynamic lubrication when the engine is started from rest or when it is coasting to a stop.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26	2006	Most of the gears fail from (A). bending fatigue (B). surface wear (C). stiff housing (D). pitting (E). curved surfaces Choose the correct answer from the options given below: 1. (A), (C) and (D) only. 2. (A), (B) and (D) only. 3. (A), (B), (C) and (D) only. 4. (A), (B), (C) (D) and (E). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

27	2007		4.0	1.00
----	------	--	-----	------

Machine parameters those influence the performance of a combine harvester are

- (A). speed of reel
- (B). speed of threshing cylinder
- (C). extent of vibration
- (D). height of cut
- (E). speed of straw rack

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

28 2008

Choose the correct characteristics of the Darrieus rotor.

- (A). low starting torque
- (B). self-starting
- (C). high speed
- (D). potentially high capital cost
- (E). high efficiency

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

29 2009

4.0 1.00

Which of the following are air heat plate collectors based on absorbing surface?

- (A). flat plate absorber
- (B). sandwich type absorber
- (C). corrugated plate absorber
- (D). overlapped transparent plate absorber
- (E). transpiration absorber

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

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

A1 : 1

A2 : 2

A3 : 3

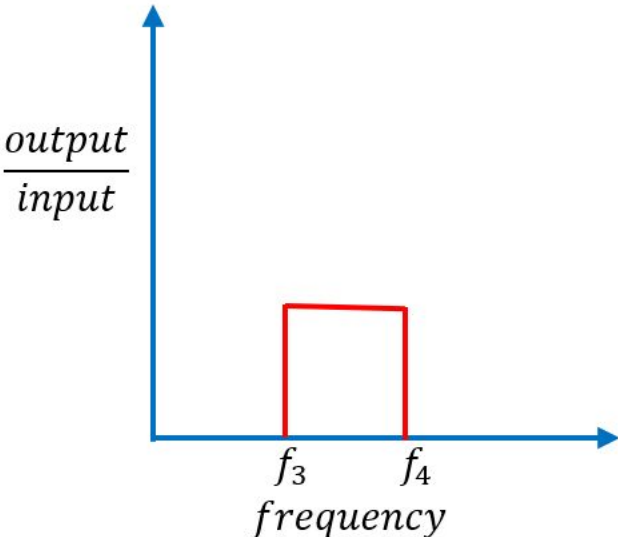
A4 : 4

Objective Question

30	2010	Among the different type of combustion chambers, the peak pressure is the lowest for the 1. Open chamber 2. Precombustion chamber 3. Swirl combustion chamber 4. Auxiliary chamber A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	--	-----	------

Objective Question

31	2011	Range of aspect ratio for high molded tyres 1. 0.50 or less 2. 0.50-0.75 3. 0.75-1.00 4. 1.00 or higher A1 : 1	4.0	1.00
----	------	---	-----	------

29/06/2024, 18:23		133_Live_40_Set2_1-120.html				
		A2 : 2				
		A3 : 3				
		A4 : 4				
Objective Question						
32	2012	In the given figure, the amplitude ratio of output of a filter to the input is plotted against frequency. What is the type of the filter?  1. Low pass filter 2. High pass filter 3. Band pass filter 4. Notch type filter			4.0	1.00
		A1 : 1				
		A2 : 2				
		A3 : 3				
		A4 : 4				
Objective Question						
33	2013	Which of the following is not a type of solar still? 1. Single effect solar still 2. Multiple effect solar still 3. Tilted tray solar still 4. Wick type solar still			4.0	1.00
		A1 : 1				
		A2 : 2				
		A3 : 3				

A4 : 4

Objective Question

34	2014	To minimize ride vibrations, the location of the operator's seat should be 1. Closer to steering wheel 2. Near to the centre of gravity 3. Directly above the rear axle 4. Slightly ahead of the rear axle A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	--	-----	------

Objective Question

35	2015	Which of the following is an obtuse angle-type furrow opener? 1. Shovel type 2. Pointed shoe type 3. Stub runner type 4. Hoe type A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

36	2016	What is the terminal velocity for the wheat chaff? 1. $1.5 - 2.5 \text{ m.s}^{-1}$ 2. $2.5 - 6.0 \text{ m.s}^{-1}$ 3. $6.0 - 9.5 \text{ m.s}^{-1}$ 4. $9.5 - 11.5 \text{ m.s}^{-1}$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

37	2017	Which of the following threshing cylinder is used for producing very fine wheat straw? 1. Spike tooth type 2. Hammer mill type 3. Rasp-bar type 4. Axial flow type A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	--	-----	------

Objective Question

38	2018	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Concave end of the disc harrow gang tends to penetrate more deeply than the convex end. Reason (R) : The radial force, which includes the vertical support force on the disc blade, must pass slightly to the rear of the disc centerline. In light of the above statements, choose the <i>correct</i> answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

39	2019		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 power requirement of a rotary mower is much higher than that of a sickle bar mower of the same width.

Reason (R) : The knives of rotary mower are hinged to the disc or drum so that they can swing back if they hit a rock or other obstruction; centrifugal force keeps the knives in cutting position during normal operation.

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

40 2020

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

Assertion (A) : The rotating counterweight commonly provided on the flywheel of a mower pitman drive does not give complete balancing

Reason (R) : Inertia force of the knife varies as the square of crank speed and as the first power of stroke.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

41 2021

4.0 1.00

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

List-I	List-II
Structure Type	Return Period (Years)
(A). Earth dams having natural spillways	(I). 25
(B). Stock water dams	(II). 25-50
(C). Terrace outlets and vegetated waterways	(III). 15
(D). Field diversions	(IV). 10
	(V). 50-100

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42 2022

A linear reservoir is one in which storage is directly proportional to:

- Inflow
- Outflow
- Reservoir dimensions
- Stage

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

43 2023

4.0 1.00

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

List-I	List-II
(A). Percussion (cable tool) drilling	(I). Unconsolidated formations
(B). Rotary drilling	(II). Consolidated formations
(C). Artesian well	(III). Unconfined aquifer
(D). Perched aquifer	(IV). Confined aquifer
	(V). Semi-confined aquifer

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44 2024

4.0 1.00

Given below are two statements:

Statement (I): Specific speed of the pump is directly proportional to the square root of head.

Statement (II): The specific speed for a single impeller centrifugal pump varies between 300 to 5000.

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

45	2025	Given below are two statements: Statement (I): Water requirement of the crops is lesser than the field irrigation requirement. Statement (II): Field irrigation requirement does not include contribution from other sources except irrigation. 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

462026

4.01.00

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

List-I	List-II
(A). $I=Kt^{-n}$	(I). Philip's equation
(B). $y=at+b(1-e^{-rt})$	(II). USSCS, 1964
(C). $St^{1/2}+At$	(III). Kostiakov's equation
(D). $y=at^a+b$	(IV). Lewis and Milne equation
	(V). Horton equation

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

47	2027	Given below are two statements: Statement (I): Single crop coefficient approach is used for surface irrigation methods. Statement (II): Dual crop coefficient approach is used for micro irrigation methods. 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

48	2028	Given below are two statements: Statement (I): Blaney-Criddle method uses mean temperature and monthly percentage day time hours. Statement (II): Blaney-Criddle method was developed for the humid condition for consumptive use computation. 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

49	2029	Concrete mixture (Cement: Sand: Gravel or broken stone) usually recommended for lining of canals is: 1:2:3 1:3:2 1:3:5 1:3:4	4.0	1.00
----	------	--	-----	------

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

50 2030

4.0 1.00

Given below are two statements:

Statement (I): A channel section is most economical when maximum discharge is obtained for a given cost of construction.

Statement (II): Discharge is maximum when the flow velocity is minimum.

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

51 2031

4.0 1.00

Drip emission uniformity (EU) is calculated using:

1. $100(1.5 - \frac{1.27 C_v}{\sqrt{n}}) \frac{q_a}{q_m}$
2. $100(1.0 - \frac{1.27 C_v}{\sqrt{n}}) \frac{q_m}{q_a}$
3. $100(2.0 - \frac{1.27 C_v}{\sqrt[3]{n}}) \frac{q_a}{q_m}$
4. $100(2.0 - \frac{1.27 C_v}{\sqrt[3]{n}}) \frac{q_m}{q_a}$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

52 2032

4.0 1.00

Leaching requirement (LR) is estimated using

1. $\frac{D_d}{D_i}$
2. $\frac{EC_d}{EC_i}$
3. $\frac{D_i}{D_d}$
4. $\frac{2EC_i}{EC_d}$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

53 2033

Light soils can be irrigated successfully across slope up to:

1. 2 %
2. 3 %
3. 5 %
4. 10 %

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

54 2034

Following are the statements regarding irrigation efficiencies:

- (A). Water conveyance efficiency is associated with the canal network.
- (B). Water application efficiency is related with the irrigation method.
- (C). Economic efficiency is related with the overall performance of the irrigation system.

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

4.0 1.00

A3 : 3

A4 : 4

Objective Question

55	2035	Following are the statements regarding sediment loads: (A). Bed load is associated with the movement of coarse particles along the bed surface through sliding, rolling and saltation. (B). Bed load forms less than 25 % portion of total load. (C). Suspended load of a stream is not measured by sampling the stream flow. 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).	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

56	2036	Time of concentration (T_c) is expressed by the following equation: 1. $0.0195 L^{0.77} S^{-0.385}$ 2. $0.0195 L^{0.77} S^{0.385}$ 3. $0.0195 L^{0.5} S^{0.5}$ 4. $0.0195 L^{0.6} S^{0.5}$	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

57	2037		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 lower and upper limit of the curve number corresponds to 0 and 100

Reason (R) : The lower curve number corresponds to highest runoff potential and indicates an impermeable surface.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

58 2038

4.0 1.00

Following are the statements regarding grassed waterways:

- (A). The Manning's coefficient of roughness is 0.04 for design.
- (B). These are designed to carry maximum runoff from a storm of 10 years recurrence interval.
- (C). These are constructed across the land slope to remove excess water.

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

59 2039

4.0 1.00

The minimum length of shelter belt should be how many times of its height?

1. 12
2. 24
3. 36
4. 48

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

60 2040

4.0 1.00

Compute drainage coefficient if 1 hectare of land is drained and the drainage canal discharges 1 cubic meter of discharge per hour.

1. 1.2 mm
2. 2.4 mm
3. 4.8 mm
4. 7.2 mm

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

61 2041

4.0 1.00

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

List-I	List-II
(A). Janssen's theory	(I). Convection
(B). CAP	(II). Bag storage
(C). Newton's law	(III). Constant humidity
(D). Sensible heating	(IV). Storage structure

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

62	2042	Equation for predicting EMC of agricultural products is given by (A). Kelvin (B). Harkins-Jura (C). Henderson (D). Janssen Choose the correct answer from the options given below: 1. (A) and (C) only. 2. (C) only. 3. (A), (B) and (C) only. 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	------	---	-----	------

Objective Question

63	2043	Given below are two statements: Statement (I): In a deep bin, plane of rupture strikes the opposite side of structure before it meets the grain surface. Statement (II): A grain bin can be classified as deep bin when the depth of grain is greater than the equivalent diameter. 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	4.0	1.00
----	------	--	-----	------

Objective Question

64	2044		4.0	1.00
----	------	--	-----	------

Thermal vapour compression is used in

- (A). Evaporator
- (B). Homogenizer
- (C). Pasteurizer
- (D). Blancher

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

65	2045	Given below are two statements: Statement (I): Majority of the drying of agricultural produce fall under falling rate regime. Statement (II): Spray dryers are commonly used for liquid foods. 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

66	2046		4.0	1.00
----	------	--	-----	------

Ideal elastic behaviour of a material can be explained by

1. Newtonian liquid
2. St. Venant body
3. Hookean body
4. Janssen equation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

67 2047

4.0 1.00

In comparison to other types of conveyors, screw conveyors

1. Require relatively low power and are more susceptible to wear
2. Require relatively high power and are more susceptible to wear
3. Require relatively low power and are less susceptible to wear
4. Require relatively high power and are less susceptible to wear

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

68 2048

4.0 1.00

Major functions of blanching of fruits and vegetables before dehydration and canning include

- (A). Inactivation of enzymes
- (B). Killing of pathogenic microbes
- (C). Softening of tissue
- (D). Cleaning of raw material

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

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

A1 : 1

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
69	2049	Glazing is related to which of the following crop processing? 1. Paddy 2. Wheat 3. Maize 4. Soybean A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
70	2050	Capacity of an air screen cleaner depends on which of the following parameters? (A). Grain bed depth (B). Size of screen surface (C). Feeding mechanism (D). Percentage opening area of screen Choose the correct answer from the options given below: 1. (A), (C) and (D) only. 2. (A) and (C) only. 3. (A), (B), (C) and (D). 4. (B) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
71	1002051		4.0	1.00

The relationship between salinity and chlorinity of water is expressed by Knudsen Formula. The correct form is:

1. $\text{Salinity} = 0.08 + 1.805 \times \text{Chlorinity}$
2. $\text{Salinity} = 0.06 + 1.805 \times \text{Chlorinity}$
3. $\text{Salinity} = 0.05 + 1.805 \times \text{Chlorinity}$
4. $\text{Salinity} = 0.03 + 1.805 \times \text{Chlorinity}$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

72	1002052	Study of the fluid particle in motion can be done by different approaches. Which one is incorrect amongst all? 1. Eulerian approach 2. Approximation approach 3. Lagrangian Approach 4. Geostrophic Approach A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

73	1002053	Hydrologic measurements are done to collect the data related to some watershed. Identify the correct sequence of activities from the list given below: (A). Sensing (B). Recording (C). Translation (D). Transmission Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (D), (B), (C), (A). 3. (A), (B), (D), (C). 4. (C), (B), (D), (A). A1 : 1	4.0	1.00
----	---------	---	-----	------

A2 : 2

A3 : 3

A4 : 4

Objective Question

74	1002054	The sequence of steps commonly followed for hydrologic measurements are: (A). Translation (B). Storage (C). Editing (D). Retrieval 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	4.0	1.00
----	---------	---	-----	------

Objective Question

75	1002055	Which of the following instruments can be of Non-recording type, Weighing type, float type, tipping bucket type ? 1. Balance 2. Evaporimeter 3. Infiltrometer 4. Raingauges A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

76	1002056		4.0	1.00
----	---------	--	-----	------

Match the correct sequence of activities in hydrological cycle

(A). Evaporation from plants surface

(B). Snowfall

(C). Rainfall

(D). Interception

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

77	1002057	Groundwater recharge is directly affected by the following. A. Types of rocks formation B. Storage characteristics C. Extent of aquifer D. Transmission characteristics Choose the correct answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B), (C) and (D) 3. (B) and (C) only 4. (A), (C) and (D) only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

78	1002058		4.0	1.00
----	---------	--	-----	------

Velocity Modified Flow Measurement (VMFM) System measures the velocity of flow in streams. Its working principle is based on:

1. Direct recording
2. Concentration gradient
3. Electromagnetic Sensing
4. Volume Area Method

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79	1002059	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Outliers are points that depart significantly from the trend of the remaining data. Reason (R) : The retention or deletion of these outliers can significantly affect the magnitude of statistical parameters computed from the data. In light of the above statements, choose the <i>correct</i> answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

80	1002060	Unit hydrograph theory has the assumptions as below: Identify the Wrong Assumption 1. The rainfall Intensity is constant. 2. The rainfall is uniformly distributed 3. The hydrograph reflects dynamic characteristics of the watershed 4. The base time of DRH resulting from the excess rainfall of given duration is constant. A1 : 1 A2 : 2	4.0	1.00
----	---------	--	-----	------

		A3 : 3		
		A4 : 4		

Objective Question

81	1002061	One among the following is not an Estimate Limiting Value 1. Probable Maximum Precipitation (PMP) 2. Probable Maximum Storm (PMS) 3. Probable Maximum Flood (PMF) 4. Probable Maximum Runoff (PMR) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

82	1002062	The procedure for determining the probable maximum precipitation over a watershed does have one of the following elements. 1. Depth-Area-Duration Curve 2. Standard Isohyetal Pattern 3. An oriental adjustment factor 4. Critical Standard Duration A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

83	1002063	The runoff coefficient "C" in Rational Formula can assume values in between: 1. $0.05 \leq C \leq 1$ 2. $0.0 \leq C \leq 1$ 3. $0.0 \leq C \leq 0.5$ 4. $0.0 \leq C \leq 0.25$ A1 : 1 A2 : 2 A3 : 3	4.0	1.00
----	---------	--	-----	------

A4 : 4

Objective Question

84	1002064	Designing of a water harvesting Storage Structure has the following sequence: (A). Projection of future water demands (B). Hydrologic Design (C). Structural Design (D). Hydraulic Design Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (B), (D), (C). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

85	1002065	Reservoir Storage estimation by Conic Method has the Following Formula when A represents the area and j the layer no. 1. $S = A_j + A_{j+1} \text{ SQRT}(A_j A_{j+1} + 1/3)$ 2. $S = A_j - A_{j+1} \text{ SQRT}(A_j A_{j+1} + 1/3)$ 3. $S = A_j + A_{j+1} \text{ SQRT}(A_j A_{j+1} - 1/3)$ 4. $S = A_j - A_{j+1} \text{ SQRT}(A_j A_{j+1} - 1/3)$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

86	1002066		4.0	1.00
----	---------	--	-----	------

Designing a piped irrigation system requires estimates of friction losses. It is commonly estimated using one of the following formula.

1. Darcy's Law
2. Newton's Law
3. Darcy-Weisbach Equation
4. Kundsens's Equation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87	1002067	Evapotranspiration is controlled by the following factors in order of their importance. Choose the correct sequence of answer from the options given below.. (A). Availability of moisture at earth's surface (B). Ability of the atmosphere to supply energy to atmosphere (C). Ability of surroundings to transport the water vapour away (D). Type and density of Vegetation Cover 1. (A), (B), (C), (D). 2. (D), (A), (B), (C). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	---	-----	------

Objective Question

88	1002068	The Indus River System contains the following tributaries. 1. Jhelum, Chenab, Chambal 2. Satluj, Jhelam, Chenab 3. Ravi, Beas, Ganga 4. Beas, Satluj, Chambal A1 : 1	4.0	1.00
----	---------	---	-----	------

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
89	1002069	The term GCM is being widely used in Climate Change studies nowa days. It stands for 1. Global Circular Model 2. Global Circulation Model 3. General Circulation Model 4. General Climate Model A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
90	1002070	The proper functioning of the drainage system depends on the following. Identify the correct sequence. (A). Drainage requirements of the crops (B). Soil properties of the drainage affected area (C). Determination of the designed system parameters (D). Field layout and installation Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (B), (D), (C). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
91	1002071		4.0	1.00

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

Assertion (A) : Soil moisture in clay soil limits the rate of infiltration

Reason (R) : Soil moisture causes some of the particles of clay soil to swell and thereby reduce both the pore space and the rate of water movement i.e, infiltration.

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 NOT the correct explanation of (A).
2. Both (A) and (R) are true and (R) is 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

92 1002072

4.0 1.00

Match the Crops given in **List-I** with their Transpiration Ratios given in the **List-II**

CROPS (List-I)	TRANSPIRATION RATIOS (List-II)
(A). Sorghum	(I). 500
(B). Wheat	(II). 650
(C). Potatoes	(III). 250
(D). Maize	(IV). 350

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question					
93	1002073	Evaporation from free water surface was modelled by a famous law: 1. Newton's Law 2. Ohm's Law 3. Dalton's Law 4. Fourier's Law A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00	
Objective Question					
94	1002074	Among the listed factors, which one does not affect the runoff from watersheds substantially 1. Watershed Size 2. Watershed Shape 3. Watershed Slope 4. Watershed Orientation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00	
Objective Question					
95	1002075	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Long narrow watersheds are likely to have lower runoff rates than more compact watersheds of the same size. Reason (R) : The runoff from the former does not concentrate as quickly as it does from the compact areas. In light of the above statements, choose the <i>correct</i> 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	4.0	1.00	

A3 : 3

A4 : 4

Objective Question

96	1002076	The Peninsular rivers of the country cover approximtaley what % of the country's water resources. 1. 8 2. 10 3. 12 4. 14 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

97	1002077	It is projected that India's per capita water availability in the year 2050 will come down to: 1. 1820 cubic meters 2. 1340 cubic meters 3. 1250 cubic meters 4. 1140 cubic meters A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
----	---------	--	-----	------

Objective Question

98	1002078		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 deficit scheduling method of irrigation is applied under restricted water supply where certain stress conditions are allowed.

Reason (R) : The objective is to optimize yields and income by applying the water at critical crop growth stages.

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

99	1002079	Simultaneous use of surface and ground water is commonly referred to as	4.0	1.00
		1. Consumptive Use 2. Consecutive Use 3. Conjunctive Use 4. Comprehensive use.		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

100	1002080	Per capita storage capacity of water in India according to 2021 census is approximately:	4.0	1.00
		1. 210 m³ 2. 215 m³ 3. 220 m³ 4. 225 m³		
		A1 : 1		
		A2 : 2		
		A3 : 3		

A4 : 4

Objective Question

101	1002081	The amount of water which is retained in the soil after free gravity drainage has ceased to exists is referred to as: 1. Saturation Percentage 2. Wilting Percentage 3. Field Capacity 4. Permanent Wilting Point A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

102	1002082	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : A good drainage will increase the microbial decomposition of organic matter. Reason (R) : The plant nutrients like Nitrogen and Phosphorus are released as a result and become readily available. In light of the above statements, choose the <i>correct</i> answer from the options given below. 1. Both (A) and (R) are true and (R) is NOT the correct explanation of (A). 2. Both (A) and (R) are true but (R) is the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

103	1002083	A plot of drawdown of a pumping test and logarithm of time will result into a: 1. Circular curve 2. Parabolic curve 3. Elliptical Curve 4. Straight Line	4.0	1.00
-----	---------	--	-----	------

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

104 1002084

4.0 1.00

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

Assertion (A) : Volute type centrifugal pumps are adopted to a wide range of head discharge conditions as compared to turbine pumps.

Reason (R) : The efficiency of turbine pumps drastically drops if the operating conditions are altered than the rated ones.

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

105	1002085	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The Reflex valves are good for Priming Less pumps. Reason (R) : Reflex valves permit the flow of water in only one direction. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is NOT the correct explanation of (A). - Both (A) and (R) are true but (R) is the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

106	1002086	Rainwater Harvesting Structures are not designed and constructed for specifically discharging one function from the list below: - Enhancing water availability and duration - Trap the Sediment - Drought Proofing - Religious and recreational A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

107	1002087	Desirable characteristics of gravel pack in a tube well construction are listed. One desirable character is wrongly depicted: - It should be clean - The gravel should be smooth and round - It should be hard and insoluble - It should not be well graded A1 : 1 A2 : 2 A3 : 3	4.0	1.00
-----	---------	---	-----	------

A4 : 4

Objective Question

108	1002088	The flow in an open channel is called at steady state when : 1. $dv/dt = 0$ 2. $dv/dx = 0$ 3. $dv/dx = 1$ 4. $dv/dt = 1$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	--	-----	------

Objective Question

109	1002089	Steady state flow to a well in confined aquifer was studied by Dupuit under some assumptions. Identify the correct ones. (A). Flow to the well is steady (B). The aquifer is isotropic and homogeneous (C). The aquifer is not of infinite areal extent (D). The well penetrates the entire aaquifer thickness Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (B), (D) only. 3. (B), (C), (D) only 4. (C), (B), (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

110	1002090		4.0	1.00
-----	---------	--	-----	------

The flow in a rectangular open channel is subcritical. If the channel width gets expanded at a certain section the water surface:

1. at a D/S section will drop
2. at a U/S section will rise
3. No change
4. at a U/S will drop

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

1111002091

4.01.00

Match Specific Surface Area (**List-I**) with Type of Soil (**List-II**)

Specific Surface Area (List-I)	Type of Soil (List-II)
(A). $1.5 \times 10^4 \text{ m}^2/\text{m}^3$	(I). Sand
(B). $1.5 \times 10^5 \text{ m}^2/\text{m}^3$	(II). Fine Sandstone
(C). $1.5 \times 10^9 \text{ m}^2/\text{m}^3$	(III). Montmorlanite clay
(D). $1.5 \times 10^2 \text{ m}^2/\text{m}^3$	(IV). Gravel

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

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

112	1002092		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 formless flume should not be used where water is impounded upstream.

Reason (R) : Danger of undermining poses serious risk to the stability of the structure.

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

113	1002093		4.0	1.00
Border irrigation method : (A). Has high water application efficiency than furrow method (B). Large water streams can be used (C). Adequate surface drainage is possible (D). Labour requirement is high as compared to check basin 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				

Objective Question

114	1002094		4.0	1.00
-----	---------	--	-----	------

Leaching requirement is calculated using the following formula. (D_d and D_i are the depth of drainage and depth of irrigation water)

1. D_d/D_i
2. D_i/D_d
3. $2D_d/D_i$
4. $D_d/0.5D_i$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115	1002095	Role of vegetative cover on runoff generation from the watersheds are: (A). Interception of rainfall and absorbing the energy (B). Retarding soil erosion (C). Physical restraints to soil movement (D). Reduced biological activities of the soil 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

116	1002096		4.0	1.00
-----	---------	--	-----	------

Soil conservation helps to minimize the following:

- (A). Loss of fertile and arable land, impacting crops and livestock production, as well as the economy.
- (B). Pollution and sedimentation flowing in streams and rivers, affecting fish and other species.
- (C). Erosion and environmental degradation and desertification of land.
- (D). Potentially increasing flooding and negatively impacting forest ecosystems.

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

117	1002097	Soil conservation contributes to sustainability and offers some of the following benefits: (A). Improves soil quality and productivity. Increased fertility improves crop yields, reduces the need for chemical fertilizers, and saves money. (B). Optimizes water infiltration. (C). Better filtration increases water storage, preventing soil from drying out. (D). Provides food and shelter. Soil-producing vegetation provides nourishment to all types of animals and offers protection from the elements. Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (B), (D) only 3. (A), (D), (C) only 4. (C), (D), (A) Only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
-----	---------	---	-----	------

Objective Question

118	1002098		4.0	1.00
-----	---------	--	-----	------

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

Assertion (A) : No-till farming protects the soil from moisture loss due to high temperatures because cover crop residue remains on the surface of the soil.

Reason (R) : The residue layer also helps infiltrate water into the soil and increases organic matter and microorganisms further enriching the soil.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

119	1002099		4.0	1.00
-----	---------	--	-----	------

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

Assertion (A) : India experiences climatic extremes such as floods, droughts and other climatic abnormalities that cause crop losses regularly or damages resulting in economic losses to the farmers.

Reason (R) : The wide variations in the climatic conditions across the diverse topography through the length and breadth of the country allow a large number of cropping patterns as well as scope for protected agriculture.

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

120	1002100		4.0	1.00
-----	---------	--	-----	------

The sustainable conservation of natural resources has to be carried out on the following principles:

- (A). An adequate amount of water available in a sustainable manner for future years has to be provided for the population.
- (B). The quality of drinking water has to be maintained at a standard which allows all inhabitants to live in physical and mental well-being.
- (C). The natural resources within the watershed has to be stabilised, protected and kept free from pollution.
- (D). The productivity of resource utilisation has to be increased in an environmentally, economically and also institutionally sustainable manner.

Choose the Correct answer from the options given below:

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4