

PREVIEW QUESTION BANK

Module Name : Soil and Water Conservation Engineering-ENG
Exam Date : 14-Jul-2023 Batch : 14:30-16:30

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

4 2004

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

5 2005

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

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

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

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

Objective Question

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

Objective Question

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

		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

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

Objective Question

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

Objective Question

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

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

12	2012	DBM is a specific insect of	4.0	1.00
		1. Brinjal		
		2. Tomato		
		3. Cabbage		
		4. Bottle gourd		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

13	2013	What is the scientific name of mulberry silkworm?	4.0	1.00
		1. Bombyx mori		
		2. Antherea paphia		
		3. Antheraea assama		
		4. Attacus Ricinii		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

14	2014		4.0	1.00
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Subject matter of economics are want, effort and

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

15 2015

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

16 2016

The oldest known agroforestry systems is

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

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

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

19	2019		4.0	1.00
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Water holding capacity is highest in which of the following soils?

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

20 2020

Certified seed is the progeny of

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

21 101001

The effective field capacity of an agricultural implement is a function of:

- (A) Speed of travel
- (B) Time lost during field operation
- (C) Percentage of rated width actually utilized
- (D) Rated width of the machine

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

22 101002

4.0 1.00

Given below are two statements:

Statement (I) : Fixed costs per hour are inversely proportional to the amount of annual use.

Statement (II) : Operating costs are directly related to the amount of use

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

23 101003

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 efficiency of updraft gasifier is higher than the downdraft gasifier

Reason (R) : In updraft gasifier hot gases pass through entire fuel bed and leave at lower temperatures

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

24	101004	A cultivator of size 11 X 30 cm is being operated at a depth of 10 cm. The shape of furrow cross section is a triangle with tip angle of 90°. If the unit draft for the soil is 25 kN.m^{-2}, determine the draft required for the cultivator. 2.20 kN 2.50 kN 2.75 kN 3.33 kN A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

25	101005	Given below are two statements: Statement (I) : Chisel type tillage tools break up the soil without inverting it. Statement (II) : Disc blades sharpened from the concave side penetrate more readily than disc blades sharpened from convex side. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are true. - Both Statement (I) and Statement (II) are false. Statement (I) is true but Statement (II) is false. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

26 101006

4.0 1.00

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

List-I	List-II
Moul board type	Characteristics
(A) General purpose	(I) Short and relatively broad mould board curved abruptly near the top and gives thorough pulverization
(B) Stubble	(II) Preferred for more sticky soils where it is difficult for mould board to scour well
(C) Sod	(III) Medium curvature, turns the soil gentle and gives medium pulverization
	(IV) Long mould board and gives thorough turning but less pulverization

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

27 101007

4.0 1.00

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

Assertion (A) : A diesel tractor engine will normally have less speed variation for a given change in torque than a comparable gasoline engine

Reason (R) : Diesel tractors are heavier than comparable gasoline engine

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

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

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

28	101008	Liquefaction is dry process of biomass conversion in which liquids are maximized by: 1. Slow heating of feed stock at comparatively high temperature 2. Rapid heating of feed stock at comparatively low temperature 3. Slow heating of feed stock at low temperature 4. Rapid heating of feed stock at comparatively high temperature A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

29	101009	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Retention period of biogas digester should not be less than 2-4 days Reason (R) : Methanogenic bacteria multiply at the slower rate and become double in 2-4 days or even in more days 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
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Objective Question

30	101010	The correct sequence of steps for ethanol production from ligno-cellulogenic material is: (A) Hydrolysis (B) Pre-treatment (C) Distillation (D) Fermentation Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (D), (C), (A), (B). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

31	101011	Consider the following statements (A) Rayleigh scattering of solar radiation takes place when size of particles is much smaller than the wavelength of incident light (B) Total radiation is lesser than global radiation (C) Pyrheliometer is used to measure global solar radiation (D) Angular distance of the sun's rays to the north or south of the equator is known as Zenith angle (E) On equinox days, the sun's declination is 90° Choose the correct answer from the options given below: 1. (A) only. 2. (C) only. 3. (A), (B) and (E) only. 4. (C), (D) and (E) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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A4 : 4

Objective Question

32 101012

4.0 1.00

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

Assertion (A) : Down wind turbines are typically noisier than their upwind counterparts

Reason (R) : Down wind rotors encounter tower shadow once per revolution

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

33 101013

4.0 1.00

What will be the total power from a wind turbine of 100 m diameter, if the total power density in wind stream is 500 W.m^{-3} and maximum efficiency is 40 per cent?

1. 6280 kW
2. 2000 kW
3. 1570 kW
4. 1250 kW

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34 101014

4.0 1.00

The tool used for performance assessment and logical evaluation of avenues for improvement in energy management and audit is:

1. Monitoring and verification
2. Energy pricing
3. Energy budgeting
4. Bench marking

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 101015

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

Assertion (A) : A soil is at its liquid limit if the consistency index of the soil is equal to zero

Reason (R) : The consistency index of a soil is defined as the ratio of liquid limit minus the natural water content to plasticity index of a 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

4.0 1.00

Objective Question

36 101016

4.0 1.00

Given below are two statements:

Statement (I) : Weight transfer from drawbar pull increases the soil reaction against front wheels and decreases the reaction against rear wheels

Statement (II) : For towed wheel axle torque is zero and for self-propelled wheel pull is zero

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

37 101017

High speed cutting elements/ tools are made from:

1. Boron steel
2. High speed steel
3. Stainless steel
4. Malleable cast iron

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

38 101018

A spherical drop of molten metal of radius 2 mm was found to solidify in 10 seconds. A similar drop of radius 4 mm will solidify in how many seconds?

1. 20
2. 31
3. 40
4. 62

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

39 101019

In a petrol engine, the voltage required to jump spark in a given spark-plug gap does not depend on:

1. Compression ratio of the engine
2. Indicated mean effective pressure
3. Speed of the engine
4. Size of the engine

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

40 101020

The air flow rate through the radiator core of an agricultural tractor engine is usually in the range of:

1. 1-5 m.s⁻¹
2. 5-10 m.s⁻¹
3. 10-15 m.s⁻¹
4. 15-20 m.s⁻¹

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

41 101021

4.0 1.00

Given below are two statements:

Statement (I) : An instantaneous unit hydrograph is a direct runoff hydrograph of unit rainfall excess precipitating instantaneously over the catchment.

Statement (II) : In instantaneous unit hydrograph, the intensity of rainfall excess increases and the unit hydrograph becomes more skewed.

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

42 101022

Combination with 1 correct option

- (A) Infiltration is the movement of water through the soil surface.
- (B) The runoff process is not affected by infiltration.
- (C) Infiltration helps in natural ground water recharge.
- (D) Sandy soil will have a larger infiltration capacity than a clay soil.
- (E) The land use does not have influence on infiltration capacity.

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), (D) and (E) only.
4. (A), (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43	101023	The probability P of an event equalled to or exceeded for N number of years record by Weibull formula is given by 1. $P = m/n$ 2. $P = \{m/(N+1)\}$ 3. $P = \{(m+1)/N\}$ 4. $P = (m+1)/(N+1)$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

44101024

4.01.00

Match List-I with List-II

List-I	List-II
(Book/Theory proposed/Characteristic, etc.)	(Author/Thinker/Name of Theory, etc.)
(A) Rainfall data of a station	(I) Plotting position
(B) Exceedence probability of event by an empirical formula	(II) Attenuation
(C) Reduction in peak between inflow and outflow hydrograph	(III) Unit hydrograph
(D) Direct runoff hydrograph resulting from unit depth of rainfall	(IV) Point rainfall

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45	101025	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The dilution method of flow measurement depend upon the continuity principle applied to a tracer. Reason (R) : Dilution method of gauging is based on steady flow and if the flow is unsteady, there will be a change in storage volume in the channel reach and the steady-state continuity equation technique becomes invalid. In light of the above statements, choose the correct answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

46	101026	Which are the layouts of file drainage system ? (A) Grid iron (B) Herringbone (C) Bedding system (D) Interceptor Choose the correct answer from the options given below: (A), (B) and (D) only. (A), (C) and (D) only. (A), (B) and (C) only. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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A4 : 4

Objective Question

47 101027

4.0 1.00

Sequencing type.

Which is the correct sequence of process for unit hydrograph derivation.

- (A) Storm hydrograph preparation
- (B) ER determination
- (C) DRH determination
- (D) Baseflow separation
- (E) UH determination

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

48 101028

4.0 1.00

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

List-I	List-II
(Book/Theory proposed/ Characteristic, etc.)	(Author/Thinker/ Name of Theory, etc.)
(A) Profile method	(I) Seepage control
(B) Channel lining	(II) Volume of cut or fill
(C) Drop structure	(III) Land grading
(D) Four point method	(IV) Conveyance system

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

49 101029

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

Assertion (A) : A straight drop spillway stilling basin completely prevents the soil scour in the downstream channel.

Reason (R) : The stilling basins are normally used when flows are too less than the design value and occur for short duration.

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

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

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

50	101030	The capacity of drop spillway is controlled by 1. Size of drop 2. Size of inlet 3. Size of inlet and apron 4. Size of apron A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

51	101031	Given below are two statements: Statement (I) : Shelterbelt is used for controlling wind erosion. Statement (II) : Shelterbet constitutes the barriers of trees or shrubs. 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
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Objective Question

52	101032		4.0	1.00
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Combination with 1 correct answer

- (A) Hooghoudt's equation gives the relation between the spacing of drains and the height of the water table built up between the drains due to constant rate of irrigation.
- (B) In derivation of Hooghoudt's equation the flow follows the Darcy's law.
- (C) The Hooghoudt's equation holds good for rainfall only.
- (D) The soil is considered to be homogenous in the derivation of Hooghoudt's equation.
- (E) The Hooghoudt's equation is meant for irrigation water only.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

53 101033

4.0 1.00

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

List-I	List-II
(Book/Theory proposed/Characteristic, etc.)	(Author/Thinker/Name of Theory, etc.)
(A) Isohyet	(I) A line joining places of same air pressure at a particular time
(B) Isopleth	(II) Line joining the points on the area having equal time of travel
(C) Isobar	(III) Line joining points of equal rainfall magnitude
(D) Isochrone	(IV) Line on a map through places having equal depths of evapotranspiration

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

54 101034

Which method of irrigation is suitable for wheat?

- Furrow method
- Check basin method
- Border method
- Sub-surface method

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

55	101035	Given below are two statements: Statement (I) : An aquifer found between two impermeable layers is called confined aquifer. Statement (II) : The water in the pores of a confined aquifer is at atmospheric pressure. 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
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Objective Question

56	101036	Which is not the objectives of watershed management programme? - Control damaging runoff - Enhance groundwater recharge - Reduce the rainfall intensity - Moderate floods in downstream area. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

57	101037		4.0	1.00
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Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : The reclamation of alkali soils is achieved by leaching the products of reaction after amendments are added.

Reason (R) : The main objective in alkali soils is to reduce the exchangeable sodium percentage and remove the released sodium salts.

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	101038	Which of the crops are not generally grown under green house? 1. Tomato 2. Capsicum 3. Sugarcane 4. Potato A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

59	101039		4.0	1.00
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The sequence of stages of gully development is

- (A) Initiation
- (B) Healing
- (C) Development
- (D) Stabilisation

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

60 101040

Which is not a passive heating system in the greenhouse?

- 1. Rock bed storage
- 2. North wall
- 3. Latent heat storage material
- 4. Water storage

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

61 101041

4.0 1.00

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

List-I	List-II
(A) Length	(I) Spiral separator
(B) Density	(II) Indented cylinder
(C) Shape	(III) Velvet roll separator
(D) Texture	(IV) Destoner

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

62 101042

A cream separator is used to separate milk into which of the following components?

- Skim milk
- Milk solids
- Water
- Cream

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

63 101043

4.0 1.00

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

Assertion (A) : When the material is dried under constant rate condition, the material temperature exceeds wet bulb temperature of the drying air.

Reason (R) : During constant rate period, moisture is available on the entire surface of the material being dried.

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

64 101044

4.0 1.00

Ultra High Temperature (UHT) processing of milk is performed at :

- (A) Elevated temperature
- (B) Elevated pressure
- (C) Below eutectic temperature
- (D) Reduced pressure conditions

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	101045	Rice bran, once detached from brown rice, deteriorate at a faster rate due to which of the following reason(s)? (A) Breakdown of starch by amylase (B) Hydrolysis of oil by lipase (C) Conversion of FFA into fatty acids (D) Gelatinization of oil by lipase Choose the correct answer from the options given below: (B) and (C) only. (B) only. (A), (B), (C) and (D). (C) and (D) only.	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

66	101046	Transient heat flow method is used to determine - - Thermal conductivity - Specific heat - Roundness - Latent heat	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

67	101047		4.0	1.00
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The antifriction bearings used in belt conveyors results in -

1. High throughput capacity
2. High mechanical efficiency
3. Low stability
4. High friction

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

68 101048

Which among the following are/is a temporary grain storage structure?

- (A) Bunker
- (B) Shed
- (C) Silo
- (D) CAP Structure

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

69 101049

Critical speed is related to which of the following size reduction equipment?

1. Burr mill
2. Hammer mill
3. Jaw crusher
4. Ball mill

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

70 101050

Rubber roll shellers are used for -

- (A) Paddy dehusking
- (B) Paddy polishing
- (C) Millet polishing
- (D) Wheat milling

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

71 1002051

Given below are two statements:

Statement (I) : Aquiclude - A saturated but relatively impermeable material that does not yield appreciable quantities of water to wells.

Statement (II) : A relatively impermeable formation neither containing nor transmitting water.

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

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

72 1002052

To get discharge rate of 456 litres per minute against a total head of 10 m with 60% pump efficiency, the shaft horse power requirement would be -

1. 0.67 hp
2. 1.67 hp
3. 2.67 hp
4. 3.67 hp

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

73 1002053

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

List-I	List-II
(Groundwater recharge techniques)	(Methods / Ways)
(A) Induced recharge	(I) Fracture sealing cementation
(B) Groundwater conservation structure	(II) Bore blasting
(C) Surface spreading technique	(III) Pumping wells
(D) Aquifer modification	(IV) Ditch and furrows

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

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

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

74	1002054	Consider the following statements related to pump speed and important parameters on performance of pump. (A) The head varies as the square of the speed. (B) The capacity varies as the cube of the diameter of an impeller. (C) The brake horse power varies as the square of the speed. (D) The capacity varies directly as the speed. Choose the correct answer from the options given below: (A) and (B) only. (A) and (D) only. (C) and (D) only. (A), (B) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

75	1002055	Given below are two statements: Statement (I) : For a multi-stage pump, the specific speed is calculated on the basis of the head per stage. Statement (II) : In case of a double suction pump, the specific speed is calculated on the basis of square the capacity. In light of the above statements, choose the most appropriate answer from the options given below. - Both Statement (I) and Statement (II) are true. - Both Statement (I) and Statement (II) are false. Statement (I) is true but Statement (II) is false. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2	4.0	1.00
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A3 : 3

A4 : 4

Objective Question

76	1002056	Estimate the average drawdown over an area where 25 million m³ of water has been pumped through a number of uniformly distributed wells. The area is 150 km² and the specific yield of the unconfined aquifer is 25 percent. 0.67 m 1.67 m 2.27 m 2.67 m A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

77	1002057	Consider the statements related to precipitation and analysis. (A) Mass curve of rainfall is a plot of the accumulated precipitation against time, plotted in chronological order. (B) The hyetograph is derived from the mass curve. (C) An isohyet is a line joining points of equal rainfall intensity and duration. (D) The point rainfall is also known as station rainfall. Choose the correct answer from the options given below: (A), (B) and (D) only. (A), (B) and (C) only. (A), (B), (C) and (D). (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

78	1002058	Given below are two statements related to components of hydrograph. Statement (I) : The falling limb is dependent upon the storm and basin characteristics. Statement (II) : The rising limb is independent of the storm characteristics, but entirely dependent 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
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Objective Question

79	1002059	With runoff coefficient of 0.4, rainfall intensity for the duration equal to the time of concentration as 100 mm h^{-1} over an area of 72 hectares would generate peak runoff rate of - $6.0 \text{ m}^3 \text{ s}^{-1}$ $7.5 \text{ m}^3 \text{ s}^{-1}$ $8.0 \text{ m}^3 \text{ s}^{-1}$ $9.0 \text{ m}^3 \text{ s}^{-1}$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

80	1002060		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
(Applications in Hydrology)	(Features / Specific uses)
(A) Reservoir routing	(I) Useful for ungauged catchments
(B) Channel routing	(II) Nash's model
(C) Synthetic hydrograph	(III) Design of spillway capacity
(D) Instantaneous unit hydrograph	(IV) Flood forecasting

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

81 1002061

Given below are two statements related to rainfall intensity-duration frequency relationship.

Statement (I) : In a specified return period and for a given duration, the occurrence of a storm of higher intensity is more likely to occur than a storm of lower intensity.

Statement (II) : The intensity of rainfall is inversely proportional to its duration of occurrence.

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

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

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

82 1002062

4.0 1.00

Consider the statements related to Hydrograph and related parameters.

- (A) The base flow is separated from flood hydrograph.
- (B) A unit hydrograph consists of one unit of direct runoff.
- (C) There is no relation between basin lag time and length of longest water course.
- (D) Constant slope method is used to separate base flow.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

83 1002063

4.0 1.00

Consider the following statements related to erosion.

- (A) Geological erosion has contributed to the formation of our soils.
- (B) Sheet erosion is an advanced stage of rill erosion.
- (C) Water erosion is accelerated by farming and construction activities.
- (D) Shape of slope has no influence on erosion.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

84 1002064

4.0 1.00

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

List-I	List-II
(USLE parameters)	(Features / Specific information)
(A) Rainfall erosivity factor	(I) 1.0 for cultivated fallow
(B) Soil erodibility factor	(II) EI_{30} Index
(C) Crop management factor	(III) 0.5 for contour cultivation
(D) Conservation practice factor	(IV) Runoff plots

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

85 1002065

4.0 1.00

Given below are two statements related to design of gully control structures

Statement (I) : For the structure to be safe against overturning, the ratio of resisting moment to the overturning moment should be less than 1.2

Statement (II) : For the structure to be safe against sliding, the sum of the horizontal forces should be less than the forces resisting sliding.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

86 1002066

From the following pool, arrange them in increasing order of horizontal distance between contour bunds.

(A) VI = 1.2 m and Slope = 3%

(B) VI = 0.6 m and Slope = 2%

(C) VI = 1.0 m and Slope = 4%

(D) VI = 0.9 m and Slope = 2%

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87 1002067

The volume of water that can be stored in farm pond (20 m x 10 m bottom dimensions; 3 m depth and 1.5 : 1 (H : V) side slope) would be -

1. 886 m³

2. 986 m³

3. 1086 m³

4. 1186 m³

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

88	1002068	With reference to spatial resolution, arrange the following sensors in the order of coarse resolution to fine resolution. (A) WiFS (B) VHRR (C) LISS - III (D) LISS - I Choose the correct answer from the options given below: (A), (B), (C), (D). (A), (B), (D), (C). (B), (A), (C), (D). (B), (A), (D), (C). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

89	1002069	Given below are two statements: Statement (I) : Apron is one of the important component of drop structure. Statement (II) : Hydraulic jump is connected with end sill design in drop structure. In light of the above statements, choose the most appropriate answer from the options given below. - Both Statement (I) and Statement (II) are true. - Both Statement (I) and Statement (II) are false. Statement (I) is true but Statement (II) is false. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

90 1002070

4.0 1.00

Consider the statements related to principles of watershed management.

- (A) Management tasks should be multi-disciplinary based.
- (B) There should be rigidity in management plan.
- (C) Watershed management work plan should be framed with strong institutional support.
- (D) The management work and planning in watershed should be handled by self help groups only.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

91 1002071

4.0 1.00

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

List-I	List-II
(Land Capability Class)	(Best Suitability)
(A) Class I	(I) Suitable for permanent vegetation
(B) Class V	(II) Suitable for wildlife and recreation
(C) Class VII	(III) Suitable for intensive cultivation
(D) Class VIII	(IV) Suitable for permanent forest and vegetation and restricted for grazing

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

92 1002072

Arrange the following hydrologic units in the decreasing order based on its size.

- (A) Micro watershed
- (B) Sub watershed
- (C) Milli watershed
- (D) Mini watershed

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

93 1002073

In a particular watershed, the bifurcation ratio and order of the main stream (trunk order) are 3.0 and 4 respectively. Then, the number of II order streams in watershed are -

- 1. 6
- 2. 7
- 3. 8
- 4. 9

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

94 1002074

4.0 1.00

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

List-I	List-II
(Erosion, Causes and forms)	(Best control measures)
(A) Concentrated runoff	(I) Sodding
(B) Lack of protection causes erosion	(II) Drainage improvement
(C) Poor drainage promotes gullies and foundation failure	(III) Cross drain
(D) Steep road gradient causes track erosion	(IV) Waterway

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

95 1002075

Consider the statements related to land levelling design methods.

- In land levelling job, the volume of cut is generally more than the volume of fill.
- Plane method of land levelling design method is largely a trial and error method.
- The most commonly adopted land levelling design in small scale jobs is Plan inspection method.
- The contour adjustment method of land levelling design consists of a trial and error adjustment of the contour lines.

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

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

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 1002076

The power transmitted through a pipe is (where w = Specific weight in N/m^3 , and Q = Discharge in m^3/s)

1. $w \times Q \times H$
2. $w \times Q \times hf$
3. $w \times Q (H - hf)$
4. $w \times Q (H + hf)$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

97 1002077

The flow in which the velocity vector is identical in magnitude and direction at every point, for any given instant, is known as :

1. One dimensional flow
2. Uniform Flow
3. Steady flow
4. Non Uniform flow

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)**.

The type and size of the roughness element of a channel is responsible for obstructing the flow velocity

Assertion (A) : Manning's coefficient of roughness 'n' increases with the size of roughness element

Reason (R) : The channel roughness is directly proportional to the channel roughness element.

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

99	1002079	According to Chezy's formula, the discharge through an open channel is (where A = Area of flow, C = Chezy's constant, m = Hydraulic mean depth, and i = Uniform slope in bed) 1. $A \times \sqrt{(m \times i)}$ 2. $C \times \sqrt{(m \times i)}$ 3. $AC \times \sqrt{(m \times i)}$ 4. $mi \times \sqrt{(A \times C)}$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

100	1002080		4.0	1.00
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Match the **correct** option in first group with the options in second group.

Group 1	Group 2
(A) Reynold's No.	(I) Critical flow
(B) Froude No.	(II) Laminar flow
(C) Steady Flow	(III) Flow velocity constant with space
(D) Uniform Flow	(IV) Flow velocity constant with time

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

101 1002081

The total depth of water, for complete growth of a crop is called?

- Triangle
- Delta
- Duty of Water
- Rotation Period

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

102 1002082

4.0 1.00

Different types of water are found affecting the Soil - Plant - Water Interactions. Appropriately match the types of water in group 1 with the condition in Group 2.

Group 1	Group 2
(A) Hygroscopic Water	(I) Interconnected Pore Spaces
(B) Gravity Drained Water	(II) Aquifers
(C) Capillary Water	(III) Water Molecules
(D) Total Available Water	(IV) Root Zone

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

103 1002083

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

Assertion (A) : Some aquifer properties are responsible for storage and transmission characteristics of the same in the groundwater flow.

Reason (R) : Permeability and Porosity are the property of a geological formation that do not represents its water storage capacity?

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

104	1002084	Which zone contains water that is under molecular attraction? 1. Zone of rock fracture 2. Zone of rock flowage 3. Zone of Saturation 4. Zone of Aeration A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

105	1002085	The flow through porous medium is governed by certain principles. Henry Darcy, based on his empirical studies postulated the famous Darcy's Law. Darcy's law is valid when the flow is ? 1. Laminar and steady 2. Non-Uniform 3. Turbulent 4. Both laminar and turbulent A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

106	1002086		4.0	1.00
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The per capita water availability in India is reducing due to:

- (A) Siltation of bodies of water due to denudation of the vegetational cover in the hills and catchment areas.
- (B) Dumping of various types of pollutants into our water bodies, reducing the usability of the available water.
- (C) Cultivation of hybrid varieties of paddy, wheat, cotton, sugarcane and tobacco which consume more water.
- (D) Evaporational loss of water stored in large reservoirs and loss by seepage in long canal systems.

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

- 1. (A), (B), are correct but (C) and (D) are incorrect
- 2. All options (A), (B), (C), and (D) are correct
- 3. All options (A), (B), (C), (D) are incorrect
- 4. (A), (B), are incorrect but (C) and (D) are correct

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107 1002087

What is the field irrigation requirement (FIR)?

- 1. Amount of water required to meet the field irrigation requirements plus water lost in conveyance through the canal system
- 2. The water required to meet the evaporation needs of a crop
- 3. Amount of water required to be delivered at the field to meet evapotranspiration and leaching needs
- 4. Amount of water required to meet the net irrigation requirements plus water lost due to surface runoff and percolation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

108 1002088

The correct expression of the Annual Intensity of irrigation (AII) is ?

1. Cultivable Command Area/Gross Irrigated Area
2. Net Irrigated Area/Cultivable Command Area
3. Cultivable Command Area/Net Irrigated Area
4. Gross Irrigated Area/Cultivable Command Area

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

109 1002089

An irrigation project is classified as a major project when the CCA involved in the project is more than

1. 2000 ha
2. 3000 ha
3. 5000 ha
4. 10000 ha

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

110 1002090

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

Assertion (A) : Advances in the science and art of irrigation warrants more precise control over quantity of water applied.

Reason (R) : Excess withdrawal of water from source may deprive the crops at their most critical time of water need.

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.

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

111 1002091

4.0 1.00

Given below are two groups. Match the correct options in group 1 with the correct option in group 2 having exact similarity of function.

Group 1	Group 2
(A) Natural Drainage Channel	(I) Reservoir
(B) Artificial Water Storage	(II) Aquifer
(C) Artificial Recharge	(III) River
(D) Natural Recharge Storage	(IV) Recharge Shaft

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

112 1002092

4.0 1.00

Match the correct options in Group 1 with Group 2

Group 1	Group 2
(A) Acidity in soil	(I) Anhydrous ammonia
(B) Maximum N content	(II) Ammonium sulfate
(C) Microbes increase phosphate solubility	(III) Ammonium carbonate
(D) Urea hydrolysis	(IV) Pseudomonas

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

113 1002093

If the soil textural class has clay content more than 45 %, then it is called?

- Sandy Clay
- Silty clay Loam
- Sandy Clay Loam
- Clay

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

114 1002094

4.0 1.00

The relation between Transmissibility (T) and Permeability (K) for an aquifer of depth d can be given by the expression as _____.

1. $K = T.d$
2. $T = K.d$
3. $T = K.\log d$
4. $T = \ln (Kd)$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115 1002095

Gully erosion is a type of soil erosion. What is the side slope of G3 Gully class?

1. 8-15 %
2. 15 %
3. More than 15 %
4. Less than 15 %

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

116 1002096

One of the following is not a common type of Greenhouse erected in our country:

1. Saw tooth Greenhouse
2. Irregular/uneven span greenhouse
3. Quanset greenhouse
4. Lean to type greenhouse

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

117 1002097

4.0 1.00

Which of the following is not an advantage of protected cultivation?

- (A) Large increase in the yield
- (B) Low water productivity
- (C) Significant reduction in nutrients and chemicals
- (D) Round the year production

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

1. (A), (B) are correct but (C), (D) are incorrect
2. (A), (C) are correct but (B) and (D) are incorrect
3. (A), (C) and D are correct but (B) is wrong
4. All are incorrect

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118 1002098

4.0 1.00

Green houses provide many benefits by using different techniques over uncover cultivation. Match the options in Group 1 with the options in Group 2 which have a direct/indirect relationship amongst them.

Group 1	Group 2
(A) Higher water productivity	(I) Plastic Mulching
(B) Prevention of weed growth	(II) Nano Urea
(C) Accelerate uptake of nutrients	(III) Green House Structure
(D) Regulated soil evaporation, controlled climate (i.e. Temp. and RH)	(IV) Drip irrigation and In-situ moisture conservation

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

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) : Now a days, High density poly ethylene (HDPE) is commonly used for covering the Green houses.

Reasoning (R) : High density poly ethylene (HDPE) is strong. High density poly ethylene (HDPE) is durable and long lasting. High density poly ethylene (HDPE) is highly flexible. High density poly ethylene (HDPE) can also provide Ultraviolet protection.

In light of the above statements, choose the **correct** 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

120 1002100

4.0 1.00

One amongst the following is not the BIS code for Greenhouses

1. IS : 15827 : 2009
2. IS : 14462 : 1997
3. IS : 15907 : 2010
4. IS : 15907 : 280

A1 : 1

A2 : 2

A3 : 3

A4 : 4