

National Testing Agency

Question Paper Name :	Soil and Water Conservation Engineering 23rd Sep 2020 Shift 2 Set 2
Subject Name :	Soil and Water Conservation Engineering
Creation Date :	2020-09-23 19:33:41
Duration :	120
Total Marks :	480
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes

Soil and Water Conservation Engineering

Group Number :	1
Group Id :	71087043
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	480
Is this Group for Examiner? :	No

Part A General Knowledge

Section Id :	710870127
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	80
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870127
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 7108705101 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following crops is a commercial crop in Punjab and Haryana but is a subsistence crop in Orissa?

1. Tea
2. Cotton
3. Rubber
4. Rice

Options :

71087020401. 1
71087020402. 2
71087020403. 3
71087020404. 4

Question Number : 2 Question Id : 7108705102 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following are the two most important wheat-growing zones of the country?

- A. Ganga-Satluj plains in the north-west
- B. Deltaic regions
- C. Black soil region of the Deccan
- D. Plains of north-east

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

- 1. Only A and B
- 2. Only B and C
- 3. Only C and D
- 4. Only A and C

Options :

- 71087020405. 1
- 71087020406. 2
- 71087020407. 3
- 71087020408. 4

Question Number : 3 Question Id : 7108705103 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Indian agriculture is typically characterized as

- 1. Land surplus, labour scarce economy
- 2. Land surplus, labour surplus economy
- 3. Land scarce, labour surplus economy
- 4. Land scarce, labour scarce economy

Options :

- 71087020409. 1

71087020410. 2

71087020411. 3

71087020412. 4

Question Number : 4 Question Id : 7108705104 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following countries is the main rival of India in tea export?

1. China
2. Japan
3. Germany
4. Sri Lanka

Options :

71087020413. 1

71087020414. 2

71087020415. 3

71087020416. 4

Question Number : 5 Question Id : 7108705105 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement A: MSP is declared by the government every year to provide incentives to the farmers for raising the production of crops.

Statement B: Buffer stock is created to distribute food grains in the deficit areas and among the poorer strata of the society at the lower price than the market price.

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

1. Both Statement A and Statement B are correct
2. Both Statement A and Statement B are incorrect
3. Statement A is correct but Statement B is incorrect
4. Statement A is incorrect but Statement B is correct

Options :

- 71087020417. 1
- 71087020418. 2
- 71087020419. 3
- 71087020420. 4

Question Number : 6 Question Id : 7108705106 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following is a global association of nations of the world to help cooperation in international law, security, economic development and social equity?

1. United Nations Organization
2. International Monetary Fund
3. World Bank
4. World Health Organization

Options :

- 71087020421. 1
- 71087020422. 2
- 71087020423. 3
- 71087020424. 4

Question Number : 7 Question Id : 7108705107 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under the Ganga Action Plan Phase II, pollution abatement works are being taken up in how many towns?

- 1. 57
- 2. 65
- 3. 52
- 4. 69

Options :

- 71087020425. 1
- 71087020426. 2
- 71087020427. 3
- 71087020428. 4

Question Number : 8 Question Id : 7108705108 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following statements is **incorrect**?

- 1. The highest number of pigs in the world are found in India
- 2. Uttar Pradesh provides largest amount of pork
- 3. Assam has the largest number of pork producing pigs
- 4. Pork constitutes about 7.6% of the total meat produced in India

Options :

- 71087020429. 1
- 71087020430. 2
- 71087020431. 3
- 71087020432. 4

Question Number : 9 Question Id : 7108705109 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which type of N-fertilizer is suitable for water-logged soils?

- 1. Zinc Phosphate
- 2. Ammonium Sulphate
- 3. Calcium
- 4. Potassium Nitrate

Options :

- 71087020433. 1
- 71087020434. 2
- 71087020435. 3
- 71087020436. 4

Question Number : 10 Question Id : 7108705110 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

The famous Bailadila range of hills in the Bastar district of Chhattisgarh is famous for its

- 1. Bauxite deposits
- 2. Manganese deposits
- 3. Copper deposits
- 4. High-grade haematite deposits

Options :

- 71087020437. 1

71087020438. 2

71087020439. 3

71087020440. 4

Question Number : 11 Question Id : 7108705111 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

A farmer wishes to start a 100 sq. m rectangular vegetable garden. Since he has only 30m barbed wire, he fences three sides of the garden letting his house compound wall act as the fourth side fencing. What is the dimension of the garden?

1. 15 m x 6.67m

2. 20 m x 5 m

3. 30 m x 3.33 m

4. 40 m x 2.5 m

Options :

71087020441. 1

71087020442. 2

71087020443. 3

71087020444. 4

Question Number : 12 Question Id : 7108705112 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

In which one of the following industries, the consumption of natural rubber is the largest?

1. Auto tyres and tubes

2. Footwear

3. Dipped goods

4. Latex foam

Options :

- 71087020445. 1
- 71087020446. 2
- 71087020447. 3
- 71087020448. 4

Question Number : 13 Question Id : 7108705113 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following countries was the partner country of 34th Surajkund International Crafts Fair held in Haryana?

- 1. China
- 2. Nepal
- 3. Bhutan
- 4. Uzbekistan

Options :

- 71087020449. 1
- 71087020450. 2
- 71087020451. 3
- 71087020452. 4

Question Number : 14 Question Id : 7108705114 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Nobel laureate Abhijit Vinayak Banerjee was conferred the honorary Doctor of Letters (D. Litt.) by which University?

- 1. University of Delhi
- 2. University of Kolkata
- 3. University of Mumbai
- 4. University of Hyderabad

Options :

- 71087020453. 1
- 71087020454. 2
- 71087020455. 3
- 71087020456. 4

Question Number : 15 Question Id : 7108705115 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Where is the headquarters of European Union?

- 1. Geneva, Switzerland
- 2. Washington D.C., USA
- 3. New York, US
- 4. Brussels, Belgium

Options :

- 71087020457. 1
- 71087020458. 2
- 71087020459. 3
- 71087020460. 4

Question Number : 16 Question Id : 7108705116 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following would be deficient if one finds high somatic cell count in the cow's milk?

- 1. Butterfat
- 2. Whey protein
- 3. Casein
- 4. Trace minerals

Options :

- 71087020461. 1
- 71087020462. 2
- 71087020463. 3
- 71087020464. 4

Question Number : 17 Question Id : 7108705117 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Who was the first administrator-statesman to attempt planning as a means for economic development?

- 1. C. Rajagopalachari
- 2. V. T. Krishnamachari
- 3. M. Viswesvarayya
- 4. Sir C. P. Ramaswami Aiyar

Options :

- 71087020465. 1
- 71087020466. 2
- 71087020467. 3
- 71087020468. 4

Question Number : 18 Question Id : 7108705118 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Amazon rainforest span over nine countries. In August 2019, in which country did a deadly fire broke out in the Amazon forest?

- 1. Brazil
- 2. Venezuela
- 3. Colombia
- 4. Argentina

Options :

- 71087020469. 1
- 71087020470. 2
- 71087020471. 3
- 71087020472. 4

Question Number : 19 Question Id : 7108705119 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Economic liberalization in India started with

- 1. Sustainable changes in industrial licensing policy
- 2. The convertibility of the Indian Rupee
- 3. Significant reduction of tax rates
- 4. Changes in procedural formalities for FDI

Options :

- 71087020473. 1
- 71087020474. 2
- 71087020475. 3
- 71087020476. 4

Question Number : 20 Question Id : 7108705120 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The term 'Delimitation' which was in news recently is associated with which process?

- 1. Fixing the limit of Income tax
- 2. Fixing limits of Affordable housing
- 3. Fixing limits of Territorial constituencies
- 4. Fixing limits of Chairpersons salary

Options :

- 71087020477. 1

71087020478. 2
 71087020479. 3
 71087020480. 4

Part B Core Agricultural Engineering and Technology

Section Id :	710870128
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870128
Question Shuffling Allowed :	Yes

**Question Number : 21 Question Id : 7108705121 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
 Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
 Correct Marks : 4 Wrong Marks : 1**

Major constituents of gunmetal are

1. Copper and Tin
2. Copper and Phosphorous
3. Phosphorous and Manganese
4. Copper and Cobalt

Options :

71087020481. 1
 71087020482. 2

71087020483. 3

71087020484. 4

Question Number : 22 Question Id : 7108705122 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The bevel angle of an agricultural disc is measured using a

1. Micrometer
2. Compass
3. Vernier Caliper
4. Combination set

Options :

71087020485. 1

71087020486. 2

71087020487. 3

71087020488. 4

Question Number : 23 Question Id : 7108705123 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The biogas requirement per person per day for cooking is about

1. 50 l
2. 100 l
3. 225 l
4. 500 l

Options :

71087020489. 1

71087020490. 2

71087020491. 3

71087020492. 4

Question Number : 24 Question Id : 7108705124 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The dimension of angular acceleration is

1. LT^{-2}
2. T^{-2}
3. LT^{-1}
4. L^2T^{-2}

Options :

71087020493. 1
71087020494. 2
71087020495. 3
71087020496. 4

Question Number : 25 Question Id : 7108705125 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A direct-acting pressure relief valve is used in the circuit operating at

1. High Volume Flow Rate
2. Low Pressure
3. High Pressure and High Volume
4. Low Volume Low Flow Rate

Options :

71087020497. 1
71087020498. 2
71087020499. 3
71087020500. 4

Question Number : 26 Question Id : 7108705126 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The commonly used seed metering system on a maize planter is

1. Fluted roller
2. Internal double run
3. Inclined plate with cells
4. Cup feed mechanism

Options :

71087020501. 1

71087020502. 2

71087020503. 3

71087020504. 4

Question Number : 27 Question Id : 7108705127 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In an agricultural operation, UAV is most suitable for

1. Seeding
2. Mechanical weeding
3. Spaying
4. Land Levelling

Options :

71087020505. 1

71087020506. 2

71087020507. 3

71087020508. 4

Question Number : 28 Question Id : 7108705128 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Feed capacity of a 3 bottom 35cm mould board plough operating at a speed of 3km per hour with a field efficiency of 70% is

1. 1.05 ha/hr
2. 0.22 ha/hr
3. 0.10 ha/hr
4. 0.70 ha/hr

Options :

71087020509. 1
71087020510. 2
71087020511. 3
71087020512. 4

Question Number : 29 Question Id : 7108705129 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Disc angle in a standard disc plough is

1. 12-15 degrees
2. 15-22 degrees
3. 32-40 degrees
4. 42-45 degrees

Options :

71087020513. 1
71087020514. 2
71087020515. 3
71087020516. 4

Question Number : 30 Question Id : 7108705130 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Safe noise level (dB) for an agricultural worker is

1. 80
2. 100
3. 120
4. 140

Options :

71087020517. 1
71087020518. 2
71087020519. 3
71087020520. 4

Question Number : 31 Question Id : 7108705131 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following statements is true with respect to sieve analysis of soil samples?

1. $D_{60} < D_{10}$
2. $D_{60} > D_{10}$
3. $D_{60} = D_{10}$
4. None of the above

Options :

71087020521. 1
71087020522. 2
71087020523. 3
71087020524. 4

Question Number : 32 Question Id : 7108705132 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

On a specific energy diagram, two depths of flow for a particular specific energy are known as

1. Normal depth
2. Critical depth
3. Alternate depths
4. Variable depths

Options :

71087020525. 1
 71087020526. 2
 71087020527. 3
 71087020528. 4

Question Number : 33 Question Id : 7108705133 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

For a rectangular channel, 'd' is the depth and 'B' is the base width. The channel section will be the most hydraulically efficient when

1. $B = 4d$
2. $B = 2d$
3. $B = d$
4. $2B = d$

Options :

71087020529. 1
 71087020530. 2
 71087020531. 3
 71087020532. 4

Question Number : 34 Question Id : 7108705134 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following formulae is used to estimate the peak rate of runoff from an area?

1. William's formula
2. Manning's formula
3. Chézy's formula
4. Rational formula

Options :

- 71087020533. 1
- 71087020534. 2
- 71087020535. 3
- 71087020536. 4

Question Number : 35 Question Id : 7108705135 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following could be measured with lysimeters?

1. Interception losses
2. Flow velocity in a stream
3. Flow rate in pipes
4. Evapotranspiration

Options :

- 71087020537. 1
- 71087020538. 2
- 71087020539. 3
- 71087020540. 4

Question Number : 36 Question Id : 7108705136 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The time of concentration in an area is determined by using the relationship proposed by

1. Wischmeier and Smith
2. Blaney and Criddle
3. Darcy and Weisbach
4. Kirpitch

Options :

- 71087020541. 1
- 71087020542. 2
- 71087020543. 3
- 71087020544. 4

Question Number : 37 Question Id : 7108705137 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Contour bunds are recommended for areas where

1. Rainfall is low and soil is light
2. Rainfall is high and soil is light
3. Rainfall is light and soil is heavy
4. None of the above

Options :

- 71087020545. 1
- 71087020546. 2
- 71087020547. 3
- 71087020548. 4

Question Number : 38 Question Id : 7108705138 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Soil taxonomy deals with which one of the following?

1. Principles of Soil Classification
2. Principles of Agricultural Taxation
3. Principles of Soil degradation
4. Principles of Soil Conservation

Options :

71087020549. 1
71087020550. 2
71087020551. 3
71087020552. 4

Question Number : 39 Question Id : 7108705139 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is NOT a type of storage in dams?

1. Regular storage
2. Temporary storage
3. Dead storage
4. Live storage

Options :

71087020553. 1
71087020554. 2
71087020555. 3
71087020556. 4

Question Number : 40 Question Id : 7108705140 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is the most efficient method of irrigation?

1. Drip irrigation
2. Furrow irrigation
3. Check basin irrigation
4. Sprinkler Irrigation

Options :

71087020557. 1
71087020558. 2
71087020559. 3
71087020560. 4

Question Number : 41 Question Id : 7108705141 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The sphericity of a grain having length, breadth, thickness (8mm, 4mm, 2mm respectively) is

1. 0.4
2. 0.5
3. 0.6
4. 0.7

Options :

71087020561. 1
71087020562. 2
71087020563. 3
71087020564. 4

Question Number : 42 Question Id : 7108705142 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The most important factor which affects the shelf-life of food products is

1. Moisture content
2. Water activity
3. Fat content
4. Protein content

Options :

- 71087020565. 1
- 71087020566. 2
- 71087020567. 3
- 71087020568. 4

Question Number : 43 Question Id : 7108705143 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What quantities of pineapple juice (having 15% sugar content) and sugar syrup (having 40% sugar content) are needed to produce 50 kg of fruit squash containing 20% sugar?

1. 40 kg pineapple juice and 10 kg sugar syrup
2. 30 kg pineapple juice and 20 kg sugar syrup
3. 25 kg pineapple juice and 25 kg sugar syrup
4. 20 kg pineapple juice and 30 kg sugar syrup

Options :

- 71087020569. 1
- 71087020570. 2
- 71087020571. 3
- 71087020572. 4

Question Number : 44 Question Id : 7108705144 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following separators are used for separation of materials based on their relative length?

1. Disk separator and Indented cylinder separator
2. Spiral and Disk separator
3. Disk and Cyclone separator
4. Spiral and Specific gravity separator

Options :

71087020573. 1
71087020574. 2
71087020575. 3
71087020576. 4

Question Number : 45 Question Id : 7108705145 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In stainless steel 316 (18/10), the 18/10 represents

1. 18% Ni and 10% Cr
2. 18% Cr and 10% Cu
3. 18% Cu and 10% Al
4. 18% Cr and 10% Ni

Options :

71087020577. 1
71087020578. 2
71087020579. 3
71087020580. 4

Question Number : 46 Question Id : 7108705146 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Index organism for commercial processing of canned products is

1. *Campylobacter jejuni*
2. *Clostridium perfringens*
3. *Clostridium botulinum*
4. *Staphylococcus aureus*

Options :

- 71087020581. 1
- 71087020582. 2
- 71087020583. 3
- 71087020584. 4

Question Number : 47 Question Id : 7108705147 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In cold regions, where could the deposition of water occur in metal storage containers?

1. Bottom
2. Top
3. Centre
4. Throughout the container

Options :

- 71087020585. 1
- 71087020586. 2
- 71087020587. 3
- 71087020588. 4

Question Number : 48 Question Id : 7108705148 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is the most important objective of process control?

1. To reduce variability in final product
2. To utilize resources effectively
3. To maximize production
4. To reduce contamination

Options :

71087020589. 1

71087020590. 2

71087020591. 3

71087020592. 4

Question Number : 49 Question Id : 7108705149 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Inverse transducer converts

1. Solar energy to any form of energy
2. Electrical to any form of energy
3. Mechanical energy to electrical energy
4. Mechanical energy to light

Options :

71087020593. 1

71087020594. 2

71087020595. 3

71087020596. 4

Question Number : 50 Question Id : 7108705150 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In India, which of the following sets the permissible limits of additives in fruit beverages?

- A. FSSAI
- B. Fruit Products Order
- C. BIS

Select the most appropriate answer from the options given below?

- 1. A and B
- 2. B only
- 3. A only
- 4. C only

Options :

- 71087020597. 1
- 71087020598. 2
- 71087020599. 3
- 71087020600. 4

Question Number : 51 Question Id : 7108705151 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Biogas can be utilized effectively for cooking, lighting, operating engines and power generation applications.

Statement II: Bio digestion process can be done only on wet fermentation.

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.

Options :

- 71087020601. 1
- 71087020602. 2
- 71087020603. 3
- 71087020604. 4

Question Number : 52 Question Id : 7108705152 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements:

Statement I: Fluidized bed gasification system can handle a wide range of high moisture feedstocks.

Statement II: Fluidization is the key concept to high throughput and low turndown ratio (TDR).

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

Options :

71087020605. 1

71087020606. 2

71087020607. 3

71087020608. 4

Question Number : 53 Question Id : 7108705153 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements:

Statement I: Temperature of carbonization plays an important role in deciding the quality of charcoal.

Statement II: The calorific value of producer gas can be affected by the chemical composition of the feedstock, air velocity, thickness of bed and particle size of the feed.

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.

Options :

71087020609. 1

71087020610. 2

71087020611. 3

71087020612. 4

Question Number : 54 Question Id : 7108705154 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Arrange in sequence the steps involved in designing a solar PV powered water pumping system.

- A. Determine the size and number of PV modules required.
- B. Determine the solar radiation available at the given location.
- C. Determine the total dynamic head.
- D. Determine the amount of water required per day.
- E. Determine the hydraulic energy required per day to pump the required amount of water.

Choose the correct answer from the options given below:

- 1. A, B, C, D & E
- 2. B, C, D, E & A
- 3. C, E, A, B & D
- 4. D, C, E, B & A

Options :

- 71087020613. 1
- 71087020614. 2
- 71087020615. 3
- 71087020616. 4

Question Number : 55 Question Id : 7108705155 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List - I	List - II
A. Efficiency of flat plate collector	I. 6-10%
B. Optical efficiency of concentrating collector	II. 15-25%
C. Collection efficiency of solar pond	III. 40%
D. Efficiency of CdTe Solar cell	IV. 65%

Choose the correct answer from the options given below:

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

Options :

71087020617. 1
 71087020618. 2
 71087020619. 3
 71087020620. 4

Question Number : 56 Question Id : 7108705156 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The maximum theoretical power co-efficient in a wind rotor is

1. 0.593
2. 0.953
3. 27/16
4. 0.35

Options :

71087020621. 1
 71087020622. 2
 71087020623. 3

71087020624. 4

Question Number : 57 Question Id : 7108705157 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion A: Enzymes are usually protein substances which act as biocatalysts.

Reason R: Enzymes lower the activation energy of the reaction.

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.

Options :

71087020625. 1

71087020626. 2

71087020627. 3

71087020628. 4

Question Number : 58 Question Id : 7108705158 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements:

Statement I: In primary batteries, the chemical reactions are non-reversible.

Statement II: For vehicle propulsion, lead-acid batteries are preferred due to their higher specific energy.

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.

Options :

71087020629. 1

71087020630. 2

71087020631. 3

71087020632. 4

Question Number : 59 Question Id : 7108705159 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List - I	List - II
A. Stroboscope	I. Flue gas analysis
B. Psychrometer	II. Light
C. Fyrite	III. R.P.M.
D. Luxmeter	IV. Humidity

Choose the correct answer from the options given below:

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

Options :

71087020633. 1

71087020634. 2

71087020635. 3

71087020636. 4

Question Number : 60 Question Id : 7108705160 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Arrange the steps involved in the Critical Path Method in sequence

- A. Determine the sequence of activities
- B. Specify the individual activities
- C. Estimate activity completion time
- D. Draw the network diagram
- E. Identify the critical path

Choose the correct answer from the options given below:

- 1. A, B, D, E, C
- 2. B, A, D, C, E
- 3. C, B, A, E, D
- 4. D, B, A, C, E

Options :

- 71087020637. 1
- 71087020638. 2
- 71087020639. 3
- 71087020640. 4

Question Number : 61 Question Id : 7108705161 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Tensiometers installed are used for measuring

- 1. Wilting point
- 2. Capillary potential
- 3. Osmatic potential
- 4. Diffusivity

Options :

- 71087020641. 1
- 71087020642. 2
- 71087020643. 3
- 71087020644. 4

Question Number : 62 Question Id : 7108705162 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Arrange the following crops in increasing order of effective root zone depth

- A. Sugarcane
- B. Rice
- C. Maize
- D. Wheat

Choose the correct answer from the options given below:

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

Options :

- 71087020645. 1
- 71087020646. 2
- 71087020647. 3
- 71087020648. 4

Question Number : 63 Question Id : 7108705163 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In open channel flow, if the depth of flow is the same at every section of the channel, then the flow is known as

1. Unsteady flow
2. Uniform flow
3. Varied flow
4. Gradually varied flow

Options :

71087020649. 1
71087020650. 2
71087020651. 3
71087020652. 4

Question Number : 64 Question Id : 7108705164 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion A: After 1978, irrigation projects in India are classified on the basis of culturable command area

Reason R: Major Irrigation projects have a culturable command area greater than 5000 ha.

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.

Options :

71087020653. 1
71087020654. 2

71087020655. 3

71087020656. 4

Question Number : 65 Question Id : 7108705165 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The value of transmissibility (litres per day per meter) for an irrigation well must be equal to or greater than

1. 200
2. 20
3. 2000
4. 20,000

Options :

71087020657. 1

71087020658. 2

71087020659. 3

71087020660. 4

Question Number : 66 Question Id : 7108705166 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The flow in a border strip is a case of spatially varied

1. steady open channel flow with decreasing discharge.
2. unsteady open channel flow with decreasing discharge.
3. steady open channel flow with increasing discharge.
4. unsteady open channel flow with increasing discharge.

Options :

71087020661. 1

71087020662. 2

71087020663. 3

71087020664. 4

Question Number : 67 Question Id : 7108705167 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The most common cladding/covering material used for a poly house is:

1. 100 micron PVC film.
2. 200 micron UV stabilized polyfilm.
3. 200 micron HDPE film.
4. 100 micron HDPE film.

Options :

71087020665. 1
71087020666. 2
71087020667. 3
71087020668. 4

Question Number : 68 Question Id : 7108705168 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Secondary salinization occurs in:

1. Irrigated Command in Arid region only.
2. Irrigated Command in Semi-Arid Region only.
3. Both Irrigated command in Arid and Semi-arid Regions.
4. Irrigated Command in Humid region only.

Options :

71087020669. 1
71087020670. 2
71087020671. 3
71087020672. 4

Question Number : 69 Question Id : 7108705169 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List - I	List - II
A. Mass curve	I. Always a falling curve
B. Thiessen method	II. Relationship between accumulated rainfall and time
C. DAD curve	III. Average rainfall depth over an area
D. Hyetograph	IV. Graph between rainfall intensity and time

Choose the correct answer from the options below:

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

Options :

71087020673. 1

71087020674. 2

71087020675. 3

71087020676. 4

Question Number : 70 Question Id : 7108705170 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Triangular Irrigation Network (TIN) is a

1. Raster data
2. Vector data
3. Transportation data
4. None of the above

Options :

71087020677. 1

71087020678. 2

71087020679. 3

71087020680. 4

Part C Soil and Water Conservation Engineering

Section Id :	710870129
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870129
Question Shuffling Allowed :	Yes

Question Number : 71 Question Id : 7108705171 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Correction for rainfall data inconsistency at a station can be made using the technique of

1. Mass curve
2. Double mass curve
3. Histogram
4. Rating curve

Options :

- 71087020681. 1
- 71087020682. 2
- 71087020683. 3
- 71087020684. 4

Question Number : 72 Question Id : 7108705172 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Design of temporary soil conservation structures is based on a return period of

1. 10 years
2. 15 years
3. 20 years
4. 25 years

Options :

- 71087020685. 1
- 71087020686. 2
- 71087020687. 3
- 71087020688. 4

Question Number : 73 Question Id : 7108705173 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hourly variation of rainfall can be estimated using data from

1. Non-recording rain gauge
2. Tipping bucket rain gauge
3. Standard rain gauge
4. Symons rain gauge

Options :

71087020689. 1
71087020690. 2
71087020691. 3
71087020692. 4

Question Number : 74 Question Id : 7108705174 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If a soil has void ratio as 40 %, its porosity will be

1. Less than 40 %
2. More than 40 %
3. Equal to 40 %
4. Equal to 60 %

Options :

71087020693. 1
71087020694. 2
71087020695. 3
71087020696. 4

Question Number : 75 Question Id : 7108705175 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A soil medium with the same permeability in all directions is called

1. Anisotropic soil medium
2. Isotropic soil medium
3. Unique soil medium
4. Heterogenous soil medium

Options :

71087020697. 1
71087020698. 2
71087020699. 3
71087020700. 4

Question Number : 76 Question Id : 7108705176 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In the terminology of pumps, the term NPSH stands for

1. Net Pumping Suction Head
2. Net Positive Specific Head
3. Net Positive Suction Head
4. Net Pressure Specific Head

Options :

71087020701. 1
71087020702. 2
71087020703. 3
71087020704. 4

Question Number : 77 Question Id : 7108705177 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

On specific energy curve for open channel flow, in the sub-critical zone, as the depth of flow increases, the specific energy

1. Decreases
2. Remains same
3. Increases
4. Will be a constant

Options :

71087020705. 1
71087020706. 2
71087020707. 3
71087020708. 4

Question Number : 78 Question Id : 7108705178 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The available water to the plant is dependent on the moisture content at

1. Field capacity and wilting point
2. Field capacity and saturation level
3. Saturation level and wilting point
4. Field capacity alone

Options :

71087020709. 1
71087020710. 2
71087020711. 3
71087020712. 4

Question Number : 79 Question Id : 7108705179 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT a mode of sediment transport?

1. Suspension
2. Saltation
3. Modulation
4. Surface creep

Options :

71087020713. 1
71087020714. 2
71087020715. 3
71087020716. 4

Question Number : 80 Question Id : 7108705180 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sediment delivery ratio is expressed as a ratio between

1. Sediment yield and gross soil erosion
2. Gross soil erosion and sediment yield
3. Gross soil erosion and twice sediment yield
4. Twice sediment yield and gross soil erosion

Options :

71087020717. 1
71087020718. 2
71087020719. 3
71087020720. 4

Question Number : 81 Question Id : 7108705181 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In a closed contour map, the contour of large elevation being enclosed by a lesser elevation contour indicates

1. Valley
2. River
3. Hillock
4. Ridge

Options :

71087020721. 1
71087020722. 2
71087020723. 3
71087020724. 4

Question Number : 82 Question Id : 7108705182 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The cup-type current meter is also called

1. Vertical axis current meter
2. Horizontal axis current meter
3. Inclined axis current meter
4. Anemometer

Options :

71087020725. 1
71087020726. 2
71087020727. 3
71087020728. 4

Question Number : 83 Question Id : 7108705183 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

In the SCS curve number method, a curve number of about 100 indicates

1. Average infiltration
2. Most pervious surface
3. Most impervious surface
4. Semi-pervious

Options :

71087020729. 1

71087020730. 2

71087020731. 3

71087020732. 4

Question Number : 84 Question Id : 7108705184 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of maximum watershed relief to the perimeter of the watershed is called

1. Relative relief
2. Relief ratio
3. Watershed slope
4. Shape factor

Options :

71087020733. 1

71087020734. 2

71087020735. 3

71087020736. 4

Question Number : 85 Question Id : 7108705185 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of irrigation water needed by the crop to its root zone storage capacity is called

1. Application efficiency
2. Distribution efficiency
3. Storage efficiency
4. Water use efficiency

Options :

71087020737. 1

71087020738. 2

71087020739. 3

71087020740. 4

Question Number : 86 Question Id : 7108705186 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Surge irrigation is a technically advanced form of

1. Border irrigation
2. Basin irrigation
3. Pressurized irrigation
4. Furrow irrigation

Options :

71087020741. 1

71087020742. 2

71087020743. 3

71087020744. 4

Question Number : 87 Question Id : 7108705187 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Rain-guns are similar to

1. Drip irrigation
2. Sprinkler irrigation
3. Basin irrigation
4. Subsurface irrigation

Options :

71087020745. 1
71087020746. 2
71087020747. 3
71087020748. 4

Question Number : 88 Question Id : 7108705188 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Sodic soils are also called

1. Saline soils
2. Alkaline soils
3. Red soils
4. Black soils

Options :

71087020749. 1
71087020750. 2
71087020751. 3
71087020752. 4

Question Number : 89 Question Id : 7108705189 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hooghoudt's equation is generally used for the design of

1. Tile drainage
2. Mole drainage
3. Furrow irrigation
4. Surface drainage

Options :

71087020753. 1
71087020754. 2
71087020755. 3
71087020756. 4

Question Number : 90 Question Id : 7108705190 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hydrologic design of a sub-surface drainage system is done to determine

1. Drain depth and spacing
2. Peak discharge rate
3. Drain pipe size
4. Drainage density

Options :

71087020757. 1
71087020758. 2
71087020759. 3
71087020760. 4

Question Number : 91 Question Id : 7108705191 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Watershed management is

1. The same as area development
2. Development of land and water resources of the watershed
3. Development of economy of population in the watershed
4. The practice of conservation of soil

Options :

71087020761. 1

71087020762. 2

71087020763. 3

71087020764. 4

Question Number : 92 Question Id : 7108705192 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio of watershed area to the area of the circle of water perimeter is called

1. Circularity ratio
2. Elongation ratio
3. Compactness coefficient
4. Form factor

Options :

71087020765. 1

71087020766. 2

71087020767. 3

71087020768. 4

Question Number : 93 Question Id : 7108705193 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Froude number is expressed as a ratio of

1. Inertial force to viscous force
2. Inertial force to gravity force
3. Viscous force to inertial force
4. Gravity force to inertial force

Options :

71087020769. 1
71087020770. 2
71087020771. 3
71087020772. 4

Question Number : 94 Question Id : 7108705194 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

As compared to a fan shaped watershed, the fern shaped watershed produces

1. Quick and higher peak runoff
2. Quick and lower peak runoff
3. Delayed and lower peak runoff
4. Delayed and higher peak runoff

Options :

71087020773. 1
71087020774. 2
71087020775. 3
71087020776. 4

Question Number : 95 Question Id : 7108705195 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following scales is the largest?

1. 1:10
2. 2:100
3. 3:1000
4. 4:4000

Options :

71087020777. 1
71087020778. 2
71087020779. 3
71087020780. 4

Question Number : 96 Question Id : 7108705196 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Direct runoff includes surface runoff and interflow

Statement II: Direct runoff hydrograph is produced by surface runoff only

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

Options :

71087020781. 1
71087020782. 2
71087020783. 3
71087020784. 4

Question Number : 97 Question Id : 7108705197 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Number of outlets in the watershed	I.	Zero
B.	Time-Area histogram	II.	Synthetic unit hydrograph
C.	Curve number of perfect sandy soil	III.	One
D.	Snyder's method	IV.	Clark model of IUH

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

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

Options :

71087020785. 1
 71087020786. 2
 71087020787. 3
 71087020788. 4

Question Number : 98 Question Id : 7108705198 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **reason R**

Assertion A: In a watershed when two streams of 2nd order meet, they form a stream of 3rd order

Reason R: The bifurcation ratio is the ratio of number of 2nd order streams to that of 3rd order streams

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 and **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

Options :

71087020789. 1

71087020790. 2

71087020791. 3

71087020792. 4

Question Number : 99 Question Id : 7108705199 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Random ditch system	I.	Surface drainage
B.	Bio-drainage	II.	Tile spacing
C.	Hooghoudt's equation	III.	Depth of drained water per day
D.	Drainage coefficient	IV.	Tree plantation

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

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

Options :

71087020793. 1
 71087020794. 2
 71087020795. 3
 71087020796. 4

Question Number : 100 Question Id : 7108705200 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Mean length of streams of an order will increase with the order of streams

Statement II: Horton's law of stream lengths is related with stream length ratio

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

Options :

71087020797. 1

71087020798. 2

71087020799. 3

71087020800. 4

Question Number : 101 Question Id : 7108705201 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Fan-shaped watersheds produce relatively higher peak runoff rate

Statement II: Fan-shaped watersheds have relatively higher circularity ratio

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

Options :

71087020801. 1
 71087020802. 2
 71087020803. 3
 71087020804. 4

Question Number : 102 Question Id : 7108705202 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Unit hydrograph theory	I.	Current meter
B.	Streamflow measurement	II.	Straight-line method
C.	Time of concentration	III.	Kirpich formula
D.	Baseflow separation	IV.	Sherman

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

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

Options :

71087020805. 1
 71087020806. 2
 71087020807. 3
 71087020808. 4

Question Number : 103 Question Id : 7108705203 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Watershed management programs should start with problem identification

Statement II: Soil and water conservation is an important aspect of watershed management

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

Options :

- 71087020809. 1
- 71087020810. 2
- 71087020811. 3
- 71087020812. 4

Question Number : 104 Question Id : 7108705204 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Flow net is drawn between stream lines and equipotential lines

Statement II: Stream line and equipotential lines are parallel to each other

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

Options :

71087020813. 1

71087020814. 2

71087020815. 3

71087020816. 4

Question Number : 105 Question Id : 7108705205 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: The order of the watershed is the order of the stream at the outlet

Statement II: First - order streams are generally found near the watershed divide

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

Options :

71087020817. 1

71087020818. 2

71087020819. 3

71087020820. 4

Question Number : 106 Question Id : 7108705206 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Antecedent moisture content is based on last week's rainfall

Statement II: A higher value of curve number indicates more runoff from a watershed

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

Options :

- 71087020821. 1
- 71087020822. 2
- 71087020823. 3
- 71087020824. 4

Question Number : 107 Question Id : 7108705207 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Bifurcation ratio will be the same for two watersheds with same areas

Statement II: Bifurcation ratio depends on the length of the stream

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

Options :

- 71087020825. 1
- 71087020826. 2
- 71087020827. 3
- 71087020828. 4

Question Number : 108 Question Id : 7108705208 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: A fourth-order watershed has a bifurcation ratio of 3. The number of streams of the first order for this watershed are 27.

Statement II: Bifurcation ratio is the ratio of number of streams of an order to that of the next lower order

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

Options :

71087020829. 1

71087020830. 2

71087020831. 3

71087020832. 4

Question Number : 109 Question Id : 7108705209 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: A unit hydrograph is a direct runoff hydrograph of 1 cm effective rainfall

Statement II: The peak runoff rate of a 2-hour unit hydrograph will be less than that of a 4-hour unit hydrograph

In the 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

Options :

71087020833. 1

71087020834. 2

71087020835. 3

71087020836. 4

Question Number : 110 Question Id : 7108705210 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Stream order is an important property of watershed morphology

Statement II: Stream length varies with stream order

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

Options :

71087020837. 1

71087020838. 2

71087020839. 3

71087020840. 4

Question Number : 111 Question Id : 7108705211 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **reason R**

Assertion A: On the watershed scale, the runoff cannot be more than the rainfall

Reason R: Runoff occurs in channels up to the watershed outlet

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 and **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

Options :

- 71087020841. 1
- 71087020842. 2
- 71087020843. 3
- 71087020844. 4

Question Number : 112 Question Id : 7108705212 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Mole ploughing is used for sub-surface drainage

Statement II: Tile drainage system is used for sub-surface drainage

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

Options :

71087020845. 1

71087020846. 2

71087020847. 3

71087020848. 4

Question Number : 113 Question Id : 7108705213 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **reason R**

Assertion A: A sandy soil has more infiltration capacity than that of clay soil

Reason R: Sandy soil has a higher void ratio than that of clay soil

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

Options :

71087020849. 1

71087020850. 2

71087020851. 3

71087020852. 4

Question Number : 114 Question Id : 7108705214 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Topographic map	I.	Recording type of rain gauge
B.	Tipping bucket	II.	Time of concentration
C.	Peak runoff rate	III.	1:50000 scale
D.	Kirpich formula	IV.	Rational formula

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

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

Options :

71087020853. 1

71087020854. 2

71087020855. 3

71087020856. 4

Question Number : 115 Question Id : 7108705215 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Watershed management encompasses which of the following activities for natural resource management?

- A. Soil erosion is reduced
- B. Directly increase employment
- C. Water availability is increased
- D. Floods are controlled
- E. Road network is increased

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

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

Options :

71087020857. 1

71087020858. 2

71087020859. 3

71087020860. 4

Question Number : 116 Question Id : 7108705216 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Reservoir routing	I.	Continuity equation
B.	Wedge storage	II.	Goodrich method
C.	Hydrologic flood routing	III.	Bernard (1935)
D.	Distribution hydrograph	IV.	Channel routing

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

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

Options :

71087020861. 1
 71087020862. 2
 71087020863. 3
 71087020864. 4

Question Number : 117 Question Id : 7108705217 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **reason R**

Assertion A: Synthetic unit hydrograph is prepared for ungauged watershed

Reason R: Synthetic unit hydrograph is prepared by using physiographical features of the watershed

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

Options :

71087020865. 1

71087020866. 2

71087020867. 3

71087020868. 4

Question Number : 118 Question Id : 7108705218 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Land capability classification is important for watershed management. Which of the following are true with respect to land capability classification?

- A. Land capability classes I to VIII are cultivable
- B. Land capability classes I to IV are cultivable
- C. Land capability classes V to VII need treatment for proper cultivation
- D. Class I land does not have serious problems
- E. Class VIII land cannot be put to cultivation

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

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

Options :

- 71087020869. 1
- 71087020870. 2
- 71087020871. 3
- 71087020872. 4

Question Number : 119 Question Id : 7108705219 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Runoff rate and time	I.	Hyetograph
B.	Runoff intensity and time	II.	Blaney-Criddle method
C.	Rainfall accumulation and time	III.	Hydrograph
D.	Evapotranspiration	IV.	Mass curve

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

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

Options :

71087020873. 1

71087020874. 2

71087020875. 3

71087020876. 4

Question Number : 120 Question Id : 7108705220 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I		List II	
A.	Stream flow measurement	I.	Slope-area method
B.	Stage-discharge relationship	II.	Peak runoff rate
C.	Cook's method	III.	Rating curve
D.	Probability of exceedance	IV.	Weibull's method

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

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

Options :

71087020877. 1
 71087020878. 2
 71087020879. 3
 71087020880. 4