

# National Testing Agency

<b>Question Paper Name :</b>	Forestry Agroforestry 17th September Shift 2
<b>Subject Name :</b>	Forestry Agroforestry
<b>Creation Date :</b>	2021-09-17 18:54:52
<b>Duration :</b>	120
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<b>Display Marks:</b>	Yes

## Forestry Agroforestry

<b>Group Number :</b>	1
<b>Group Id :</b>	190889134
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	480
<b>Is this Group for Examiner? :</b>	No

## Part A: General Knowledge

<b>Section Id :</b>	190889326
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory

<b>Number of Questions :</b>	20
<b>Number of Questions to be attempted :</b>	20
<b>Section Marks :</b>	80
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	190889366
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 19088915382 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

Which of the following is the device used to measure the power and speed of the wind?

1. Avometer
2. Anemometer
3. Airometer
4. Aviontimeter

**Options :**

- 19088961421. 1
- 19088961422. 2
- 19088961423. 3
- 19088961424. 4

**Question Number : 2 Question Id : 19088915383 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

Optical fibre used the concept of which of the following?

1. Reflection
2. Refraction
3. Total internal reflection
4. Total internal refraction

**Options :**

19088961425. 1

19088961426. 2

19088961427. 3

19088961428. 4

**Question Number : 3 Question Id : 19088915384 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Yellow vein mosaic is the viral disease of which of the following plants?

1. Ladyfinger
2. Papaya
3. Sugarcane
4. Banana

**Options :**

19088961429. 1

19088961430. 2

19088961431. 3

19088961432. 4

**Question Number : 4 Question Id : 19088915385 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following organ(s) is affected by Mumps disease?

1. Entire body
2. Skin
3. Eye
4. Parotid

**Options :**

19088961433. 1

19088961434. 2

19088961435. 3

19088961436. 4

**Question Number : 5 Question Id : 19088915386 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is the chemical name of vitamin B<sub>2</sub>?

1. Riboflavin
2. Calciferol
3. Pyridoxin
4. Niacin

**Options :**

19088961437. 1

19088961438. 2

19088961439. 3

19088961440. 4

**Question Number : 6 Question Id : 19088915387 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is not the input unit of the computer?

1. Mouse
2. Keyboard
3. Screen
4. Scanner

**Options :**

19088961441. 1

19088961442. 2

19088961443. 3

19088961444. 4

**Question Number : 7 Question Id : 19088915388 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The digital computer operates on which of the following principle?

1. Measurement
2. Calculation
3. Logical
4. Electrification

**Options :**

19088961445. 1

19088961446. 2

19088961447. 3

19088961448. 4

**Question Number : 8 Question Id : 19088915389 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The non-cooperation movement of Gandhiji was launched in which of the following year?

1. 1915
2. 1922
3. 1920
4. 1930

**Options :**

19088961449. 1

19088961450. 2

19088961451. 3

19088961452. 4

**Question Number : 9 Question Id : 19088915390 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

An Islamic revivalist movement named Wahabi movement was founded by which of the following person?

1. Sian Saheb
2. Syed Ahmed
3. Haji Shariat-Allah
4. DaduMian

**Options :**

19088961453. 1

19088961454. 2

19088961455. 3

19088961456. 4

**Question Number : 10 Question Id : 19088915391 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is considered as the “Magna Carta of England Education in India”?

1. Hunter education commission
2. Lord Macaulay’s Minute
3. Wood’s Despatch
4. Thomas Babington Macaulay

**Options :**

19088961457. 1

19088961458. 2

19088961459. 3

19088961460. 4

**Question Number : 11 Question Id : 19088915392 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following nutrient does not come under the ambit of 'macro-nutrients in Soil Health Card?

1. Nitrogen
2. Zinc
3. Phosphorous
4. Potassium

**Options :**

19088961461. 1

19088961462. 2

19088961463. 3

19088961464. 4

**Question Number : 12 Question Id : 19088915393 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Cole crops, root crops and legumes come under the ambit of which of the following?

1. Olericulture
2. Pomology
3. Viticulture
4. Arboriculture

**Options :**

19088961465. 1

19088961466. 2

19088961467. 3

19088961468. 4

**Question Number : 13 Question Id : 19088915394 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The study of individual trees, shrubs, vines, and perennial woody plants is known as which of the following?

1. Turf management
2. Arboriculture
3. Pomology
4. Viticulture

**Options :**

19088961469. 1

19088961470. 2

19088961471. 3

19088961472. 4

**Question Number : 14 Question Id : 19088915395 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The ministry is implementing MIDH (Mission for Integrated Development of Horticulture) with effect from which of the following year?

1. 2012-13
2. 2019-20
3. 2015-16
4. 2014-15

**Options :**

19088961473. 1

19088961474. 2

19088961475. 3

19088961476. 4

**Question Number : 15 Question Id : 19088915396 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



The interaction of soils with living things, particularly plants are well known as which of the following?

1. Edaphology
2. Pedology
3. Soil zoology
4. Pedogenesis

**Options :**

19088961477. 1

19088961478. 2

19088961479. 3

19088961480. 4

**Question Number : 16 Question Id : 19088915397 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following systems has also incorporated social aspects in itself?

1. Landscaping
2. Permaculture
3. Horticulture
4. Forest gardening

**Options :**

19088961481. 1

19088961482. 2

19088961483. 3

19088961484. 4

**Question Number : 17 Question Id : 19088915398 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What do you term the phenomenon whereby the specific gene is added to the plant for producing a desirable phenotype?

1. Genetic manipulation
2. Genetic recombination
3. Genetic modification
4. Genetic hybridisation

**Options :**

19088961485. 1

19088961486. 2

19088961487. 3

19088961488. 4

**Question Number : 18 Question Id : 19088915399 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the focus of the participatory plant breeding program?

1. Scientists
2. Plants
3. Environment
4. Farmers

**Options :**

19088961489. 1

19088961490. 2

19088961491. 3

19088961492. 4

**Question Number : 19 Question Id : 19088915400 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

How do you term the form of agriculture, in which, industrialized production of crops and animal products takes place?

1. Manufactured agriculture
2. Modern agriculture
3. Industrial agriculture
4. Mechanistic agriculture

**Options :**

19088961493. 1

19088961494. 2

19088961495. 3

19088961496. 4

**Question Number : 20 Question Id : 19088915401 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Micro-irrigation fund of Rs. 5.000 crore has been placed with which of the following organization?

1. NABARD
2. IDBI
3. SBI
4. RRBs

**Options :**

19088961497. 1

19088961498. 2

19088961499. 3

19088961500. 4

## **Part B Core : Natural Resource Management-I**

**Section Id :** 190889327

**Section Number :** 2

**Section type :** Online

<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	190889367
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 21 Question Id : 19088915402 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Digital Interpretation of forest data for the entire country has been done by Forest Survey of India, Dehradun from which cycle of assessment?

1. Fifth
2. Eighth
3. Ninth
4. Tenth

**Options :**

19088961501. 1

19088961502. 2

19088961503. 3

19088961504. 4

**Question Number : 22 Question Id : 19088915403 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

As per ISFR 2019, the area (sq km) under moderate dense forest is

1. 3, 04, 499
2. 3, 08, 472
3. 3, 12, 684
4. 3, 16, 359

**Options :**

19088961505. 1

19088961506. 2

19088961507. 3

19088961508. 4

**Question Number : 23 Question Id : 19088915404 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Match List I with List II**

<b>List I</b>	<b>List II</b>
<b>Act</b>	<b>Year</b>
A. National Green Tribunal Act	I. 2002
B. Biodiversity Act	II. 2010
C. The Environment (Protection) Act	III. 1991
D. The Public Liability Insurance act	IV. 1986

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

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

**Options :**

19088961509. 1

19088961510. 2

19088961511. 3

19088961512. 4

**Question Number : 24 Question Id : 19088915405 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In India, the CGS of measurement was adopted in the year:

1. August, 1947
2. January, 1950
3. October, 1962
4. June, 1972

**Options :**

19088961513. 1

19088961514. 2

19088961515. 3

19088961516. 4

**Question Number : 25 Question Id : 19088915406 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The 'Bidi' is a thin cigarette or mini-cigar filled with tobacco flake and commonly wrapped in leaves of:

1. *Bauhinia vahlii*
2. *Grewia optiva*
3. *Diospyros melanoxylon*
4. *Terminalia tomentosa*

**Options :**

19088961517. 1

19088961518. 2

19088961519. 3

19088961520. 4

**Question Number : 26 Question Id : 19088915407 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Under Atamnirbhar Bharat Abhiyan, import duty on bamboo has been increased/decreased to encourage domestic use of bamboo

1. No change
2. 5 to 15%
3. 10 to 25%
4. 15 to 50%

**Options :**

19088961521. 1

19088961522. 2

19088961523. 3

19088961524. 4

**Question Number : 27 Question Id : 19088915408 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the phases of Indian forest transition in the correct sequence.

- A. Deforestation phase
- B. Agriculture stabilization phase
- C. Afforestation phase
- D. Conservation and sustainable management

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

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

**Options :**

19088961525. 1

19088961526. 2

19088961527. 3

19088961528. 4

Question Number : 28 Question Id : 19088915409 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

List I	List II
International Day	Date and Month
A. Earth day	I. 22 May
B. Biodiversity day	II. 21 March
C. Environment day	III. 5 June
D. International day of forests	IV. 22 April

Choose the correct answer from the options given below

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

Options :

19088961529. 1  
19088961530. 2  
19088961531. 3  
19088961532. 4

Question Number : 29 Question Id : 19088915410 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Under Kyoto Protocol, developing countries (non-annex 1 country) are eligible for:

1. Emission trading only
2. Joint Implementation only
3. Clean Development Mechanism only
4. Emission trading and Clean development Mechanism

Options :

19088961533. 1  
19088961534. 2  
19088961535. 3



19088961536. 4

**Question Number : 30 Question Id : 19088915411 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement I:** Van Dhan Yojana or Van Dhan Scheme an initiative targeting livelihood generation for tribal gatherers was launched in 2015

**Statement II:** Major objective of Van Dhan Yojana or Van Dhan Scheme of GOI was to transforming tribals into entrepreneurs

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 :**

19088961537. 1

19088961538. 2

19088961539. 3

19088961540. 4

**Question Number : 31 Question Id : 19088915412 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following statement is correct about maximum thermometer and minimum thermometer in Stevenson screen?

1. Both are placed vertically
2. Both are placed horizontally
3. Maximum thermometer is placed horizontally and minimum thermometer vertically
4. Both are placed at  $30^{\circ}$  angle with horizontal

**Options :**

19088961541. 1

19088961542. 2

19088961543. 3

19088961544. 4

**Question Number : 32 Question Id : 19088915413 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which clouds are associated with Nor'wester shower?

1. Nimbostratus clouds
2. Cumulonimbus clouds
3. Altostratus clouds
4. Noctilucent clouds

**Options :**

19088961545. 1

19088961546. 2

19088961547. 3

19088961548. 4

**Question Number : 33 Question Id : 19088915414 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Who invented Barometer?

1. Edmand Halley
2. Benedetto Castelli
3. Evangelista Torricelli
4. Galileo Galilei

**Options :**

19088961549. 1

19088961550. 2

19088961551. 3

19088961552. 4

**Question Number : 34 Question Id : 19088915415 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following climatic phenomena brings rainfall in Tamil Nadu from November to January ?

1. South west monsoon
2. North east monsoon
3. Nor'wester shower
4. Western disturbances

**Options :**

19088961553. 1

19088961554. 2

19088961555. 3

19088961556. 4

**Question Number : 35 Question Id : 19088915416 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the normal date of onset of monsoon in Kerala ?

1. May 25
2. June 1
3. June 15
4. June 29

**Options :**

19088961557. 1

19088961558. 2

19088961559. 3

19088961560. 4

**Question Number : 36 Question Id : 19088915417 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the full form of IMD ?

1. India Meteorological Department
2. Indian Metrology Department
3. Indian Meteorological Division
4. International Meteorological Department

**Options :**

19088961561. 1

19088961562. 2

19088961563. 3

19088961564. 4

**Question Number : 37 Question Id : 19088915418 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the value of one knot in km/h?

1. 1.301
2. 1.609
3. 1.852
4. 3.000

**Options :**

19088961565. 1

19088961566. 2

19088961567. 3

19088961568. 4

**Question Number : 38 Question Id : 19088915419 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Read the statements below:

- A. Latitudes are parallel to each other.
- B. Longitudes are parallel to each other.
- C. International date line is approximately on or near  $180^\circ$  longitude.
- D.  $0^\circ$  latitude is called equator.

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

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

**Options :**

19088961569. 1

19088961570. 2

19088961571. 3

19088961572. 4

**Question Number : 39 Question Id : 19088915420 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the following according to increasing wind speed.

- A. Cyclonic Storm
- B. Deep Depression
- C. Depression
- D. Low Pressure

Choose the *correct* answer from the options given below

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

**Options :**

19088961573. 1

19088961574. 2

19088961575. 3

19088961576. 4

**Question Number : 40 Question Id : 19088915421 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which law states that the wavelength of maximum intensity of radiation emitted by a black body is inversely proportional to its absolute temperature?

1. Planck's Law
2. Stefan-Boltzman's Law
3. Kirchoff's Law
4. Wein's Displacement Law

**Options :**

19088961577. 1

19088961578. 2

19088961579. 3

19088961580. 4

**Question Number : 41 Question Id : 19088915422 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is NOT a form of precipitation?

1. Rain
2. Dew
3. Snow
4. Virga

**Options :**

19088961581. 1

19088961582. 2

19088961583. 3

19088961584.4

**Question Number : 42 Question Id : 19088915423 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

List I	List II
Atmospheric phenomena	Meteor class
A. Rainbow	I. Hydrometeor
B. Dust storm	II. Electrometeor
C. Thunderstorm	III. Photometeor
D. Snowfall	IV. Lithometeor

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

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

**Options :**

19088961585.1

19088961586.2

19088961587.3

19088961588.4

**Question Number : 43 Question Id : 19088915424 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the value of environmental lapse rate at troposphere?

1.  $10\text{ }^{\circ}\text{C km}^{-1}$
2.  $6.5\text{ }^{\circ}\text{C km}^{-1}$
3.  $4.5\text{ }^{\circ}\text{C km}^{-1}$
4.  $3.5\text{ }^{\circ}\text{C km}^{-1}$

**Options :**

19088961589. 1

19088961590. 2

19088961591. 3

19088961592. 4

**Question Number : 44 Question Id : 19088915425 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**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 :** Polar regions of the earth get nearly six-month day and six-month night in a year.

**Reason R :** Day and night occur due to rotation of the earth on its own axis.

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 :**

19088961593. 1

19088961594. 2

19088961595. 3

19088961596. 4

**Question Number : 45 Question Id : 19088915426 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



Select the correct statements from the following:

- A. Prevailing westerlies are related to Ferrel cell.
- B. Trade winds are related to Hadley cell.
- C. Prevailing westerlies are related to Hadley cell.
- D. Polar cell gives rise to polar easterlies.

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

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

**Options :**

19088961597. 1

19088961598. 2

19088961599. 3

19088961600. 4

**Question Number : 46 Question Id : 19088915427 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Who wrote the book "Talking environment"?

- 1. Sunita Narayan
- 2. Al Gore
- 3. R. K. Pachauri
- 4. Vandana Shiva

**Options :**

19088961601. 1

19088961602. 2

19088961603. 3

19088961604. 4

**Question Number : 47 Question Id : 19088915428 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which decade considered as United Nation's "Decade of Biodiversity"?

1. 2001-2010
2. 2011-2020
3. 1991-2000
4. 1981-1990

**Options :**

19088961605. 1

19088961606. 2

19088961607. 3

19088961608. 4

**Question Number : 48 Question Id : 19088915429 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the major component of flyash?

1.  $\text{Al}_2\text{O}_3$
2.  $\text{K}_2\text{O}$
3.  $\text{Fe}_2\text{O}_3$
4.  $\text{SiO}_2$

**Options :**

19088961609. 1

19088961610. 2

19088961611. 3

19088961612. 4

**Question Number : 49 Question Id : 19088915430 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In which device corona discharge occurs?

1. Wet scrubber
2. Thermal precipitator
3. Catalytic precipitator
4. Electrostatic precipitator

**Options :**

19088961613. 1

19088961614. 2

19088961615. 3

19088961616. 4

**Question Number : 50 Question Id : 19088915431 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which type of forest has maximum area in India?

1. Tropical moist deciduous forest
2. Tropical wet evergreen forest
3. Tropical dry deciduous forest
4. Tropical semi evergreen forest

**Options :**

19088961617. 1

19088961618. 2

19088961619. 3

19088961620. 4

**Question Number : 51 Question Id : 19088915432 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is the form of total amount of water present in soil?

1. Chresard
2. Echard
3. Hollard
4. Morrard

**Options :**

19088961621. 1

19088961622. 2

19088961623. 3

19088961624. 4

**Question Number : 52 Question Id : 19088915433 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In which of the following system “Double digging” method is used?

1. Bio-intensive agriculture
2. Deforestation
3. Afforestation
4. Water conservation

**Options :**

19088961625. 1

19088961626. 2

19088961627. 3

19088961628. 4

**Question Number : 53 Question Id : 19088915434 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is permissible sound level at day time in commercial areas (dBA)?

1. 75
2. 65
3. 55
4. 50

**Options :**

19088961629. 1

19088961630. 2

19088961631. 3

19088961632. 4

**Question Number : 54 Question Id : 19088915435 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is an absorbing solution used for the sampling of SO<sub>2</sub> from ambient air in the respirable dust sampler (RDS)?

1. Sodium hydroxide and sodium arsenite
2. Potassium tetrachloro mercurate (TCM)
3. 1% KI in 0.1 M Phosphate buffer
4. 0.1N Sulphuric acid

**Options :**

19088961633. 1

19088961634. 2

19088961635. 3

19088961636. 4

**Question Number : 55 Question Id : 19088915436 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is the dominant source of NO<sub>x</sub> in the atmosphere?

1. Thermal NO<sub>x</sub>
2. Fuel NO<sub>x</sub>
3. Atmospheric reactions
4. Photochemical smog

**Options :**

19088961637. 1

19088961638. 2

19088961639. 3

19088961640. 4

**Question Number : 56 Question Id : 19088915437 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If the organic carbon content of a soil profile with a depth of 125 cm is 0.2%, the SOC stock density of the profile will be (assume bulk density =  $1.5 \text{ Mg m}^{-3}$ )

1.  $250 \text{ t ha}^{-1}$
2.  $25 \text{ t km}^{-2}$
3.  $37.5 \text{ t km}^{-2}$
4.  $37.5 \text{ t ha}^{-1}$

**Options :**

19088961641. 1

19088961642. 2

19088961643. 3

19088961644. 4

**Question Number : 57 Question Id : 19088915438 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Flux of water through a saturated soil column depends on

1. Hydraulic conductivity of soil column only
2. Hydraulic gradient of the soil column only
3. Amount of water supplied to the soil column only
4. Both hydraulic conductivity and hydraulic gradient of soil column

**Options :**

19088961645. 1

19088961646. 2

19088961647. 3

19088961648. 4

**Question Number : 58 Question Id : 19088915439 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If wind speed increases by three times, the erosive energy of the wind regime will be increased by a factor of

1. One
2. Three
3. Six
4. Nine

**Options :**

19088961649. 1

19088961650. 2

19088961651. 3

19088961652. 4

**Question Number : 59 Question Id : 19088915440 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If the size of a nanoparticle is decreased by two times, the surface-to-volume ratio of the nanoparticle will

1. Increase by two times
2. Remain the same
3. Decrease by two times
4. Increase by eight times

**Options :**

19088961653. 1

19088961654. 2

19088961655. 3

19088961656. 4

**Question Number : 60 Question Id : 19088915441 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

When a monochromatic light of a characteristic wavelength is passed through a medium, the absorbance of the light by the medium depends on

1. Concentration of the medium only
2. Path length of the medium only
3. Both on path length and concentration of the medium
4. Intensity and wavelength of the light

**Options :**

19088961657. 1

19088961658. 2

19088961659. 3

19088961660. 4

**Question Number : 61 Question Id : 19088915442 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In soil structural evaluation study, it is often said 'Aggregation is flocculation **plus**'. This '**plus**' refers to:

1. settling
2. arrangement
3. sedimentation
4. cementation

**Options :**

19088961661. 1

19088961662. 2

19088961663. 3

19088961664. 4

**Question Number : 62 Question Id : 19088915443 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



Which of the following statements about forms of precipitation are true?

- A. Drizzle is fairly uniform precipitation composed exclusively of fine drops
- B. In drizzle, drops must be very close together
- C. Drops larger than drizzle form rain
- D. Small drops can also form rain when drops are widely apart

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

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

**Options :**

19088961665. 1

19088961666. 2

19088961667. 3

19088961668. 4

**Question Number : 63 Question Id : 19088915444 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Isotopes of an atom do NOT have

- 1. the same number of electrons
- 2. the same number of protons
- 3. the same number of neutrons
- 4. the same total number of electrons & protons

**Options :**

19088961669. 1

19088961670. 2

19088961671. 3

19088961672. 4

**Question Number : 64 Question Id : 19088915445 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

SI unit of Energy is Joule. If the dimensions of mass, length and time are M, L and T, respectively, then dimension of Energy is

1.  $M^1L^1T^{-2}$
2.  $M^2L^2T^{-2}$
3.  $M^2L^2T^{-1}$
4.  $M^1L^2T^{-2}$

**Options :**

19088961673. 1

19088961674. 2

19088961675. 3

19088961676. 4

**Question Number : 65 Question Id : 19088915446 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the atmosphere layer where most of weather phenomena occurs?

1. Stratosphere
2. Mesosphere
3. Ozonosphere
4. Troposphere

**Options :**

19088961677. 1

19088961678. 2

19088961679. 3

19088961680. 4

**Question Number : 66 Question Id : 19088915447 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following models simulates soil water flow processes?

1. SWAT
2. HYDRUS
3. MIKE SHE
4. CROPWAT

**Options :**

19088961681. 1

19088961682. 2

19088961683. 3

19088961684. 4

**Question Number : 67 Question Id : 19088915448 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

For a soil being compacted, which of the following statement/statements are true?

- A. Bulk density of the soil increases
- B. Macropore volume of the soil decreases
- C. Micropore volume decreases
- D. Mesopore volume of soil increases

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

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

**Options :**

19088961685. 1

19088961686. 2

19088961687. 3

19088961688. 4

**Question Number : 68 Question Id : 19088915449 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**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 :** Map coordinate system is the result of projection of geographic coordinate system

**Reason R :** Projection is a mathematical transformation of three-dimensional Earth into two-dimensional flat surface (paper)

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 :**

19088961689. 1

19088961690. 2

19088961691. 3

19088961692. 4

**Question Number : 69 Question Id : 19088915450 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

<b>List I</b>	<b>List II</b>
<b>(Physical parameter)</b>	<b>(SI Unit)</b>
A. Work	I. Megagram per cubic meter
B. Momentum	II. Meter
C. Density	III. Joule
D. Wavelength	IV. kg.m/s

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

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

**Options :**

19088961693. 1

19088961694. 2

19088961695. 3

19088961696. 4

**Question Number : 70 Question Id : 19088915451 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is the India's first satellite launched in space?

1. Rohini
2. Kalpana
3. INSAT
4. Aryabhata

**Options :**

19088961697. 1

19088961698. 2

19088961699. 3

19088961700. 4

## **Part C : Forestry Agroforestry**

<b>Section Id :</b>	190889328
<b>Section Number :</b>	3
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes

**Sub-Section Number :** 1  
**Sub-Section Id :** 190889368  
**Question Shuffling Allowed :** Yes

**Question Number : 71 Question Id : 19088915452 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

Phenotypically superior tree is known as

1. Candidate Tree
2. Elite Tree
3. Plus Tree
4. Check Tree

**Options :**

19088961701. 1  
19088961702. 2  
19088961703. 3  
19088961704. 4

**Question Number : 72 Question Id : 19088915453 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

The growth hormones usually applied for rooting in cuttings is

1. Gibberellins
2. Auxins
3. Cytokinins
4. Ethylene

**Options :**

19088961705. 1  
19088961706. 2  
19088961707. 3  
19088961708. 4

**Question Number : 73 Question Id : 19088915454 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The process of maturation of apical meristem is called

1. Topophysis
2. Cyclophysis
3. Periphysis
4. Phosphorilation

**Options :**

19088961709. 1

19088961710. 2

19088961711. 3

19088961712. 4

**Question Number : 74 Question Id : 19088915455 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The donor plant in which vegetative propagules are derived is called

1. Ramet
2. Clone
3. Ortet
4. Gamet

**Options :**

19088961713. 1

19088961714. 2

19088961715. 3

19088961716. 4

**Question Number : 75 Question Id : 19088915456 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The ratio of genetic variation to phenotypic variation is

1. Narrow sense heritability
2. Broad sense heritability
3. Family heritability
4. Additive heritability

**Options :**

19088961717. 1

19088961718. 2

19088961719. 3

19088961720. 4

**Question Number : 76 Question Id : 19088915457 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**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 :** An exotic tree is grown outside its natural range

**Reason R :** *Populus ciliata* grown in the Himalayas is an exotic species in India

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 :**

19088961721. 1

19088961722. 2

19088961723. 3

19088961724. 4

**Question Number : 77 Question Id : 19088915458 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**



**Correct Marks : 4 Wrong Marks : 1**

The height and volume of a tree are 24.8 m and  $0.392 \text{ m}^3$ , respectively. The diameters of the tree at the height of 1 m, 1.37 m, 5 m, 10 m and 15 m above the ground level are 15.8 cm, 15.0 cm, 10.5 cm, 4.5 cm and 2.8 cm, respectively.

Artificial Form Factor is

1. 0.62
2. 0.72
3. 0.83
4. 0.93

**Options :**

19088961725. 1

19088961726. 2

19088961727. 3

19088961728. 4

**Question Number : 78 Question Id : 19088915459 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What would be the value of the basal area (in  $\text{cm}^2/\text{ha}$ ) of a standing tree having a girth of 24 cm at breast height?

1. 45.8
2. 80.7
3. 153.9
4. 314.2

**Options :**

19088961729. 1

19088961730. 2

19088961731. 3

19088961732. 4

**Question Number : 79 Question Id : 19088915460 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

An observer is standing at a distance of 15m from a tree, with an instrument Spiegel Relascope to measure the diameter of the tree. What would be the diameter if bands covered by the stem were band 1 and band 2 narrow bands?

1. 7.5 cm
2. 15 cm
3. 30 cm
4. 45 cm

**Options :**

19088961733. 1

19088961734. 2

19088961735. 3

19088961736. 4

**Question Number : 80 Question Id : 19088915461 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The volume of 8-feet long log with 4-feet girth would be (follow quarter-girth method)

1. 12 cft
2. 8 cft
3. 16 cft
4. 32 cft

**Options :**

19088961737. 1

19088961738. 2

19088961739. 3

19088961740. 4

**Question Number : 81 Question Id : 19088915462 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Tree species recommended for afforestation of sand dune areas in arid climates are

1. *Acacia nilotica*, *Dalbergia sissoo*, *Ailanthus excelsa*
2. *Acacia nilotica*, *Acacia tortalis*, *Pongamia pinnata*
3. *Acacia tortalis*, *Acacia leucophloea*, *Acacia Senegal*
4. *Acacia catechu*, *Acacia nilotica*, *Dalbergia sissoo*

**Options :**

19088961741. 1

19088961742. 2

19088961743. 3

19088961744. 4

**Question Number : 82 Question Id : 19088915463 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Pink disease in eucalyptus is caused by

1. *Cercospora eucalypti*
2. *Cylindrocladium clavatum*
3. *Corticium salmonicolor*
4. *Jassus indicus*

**Options :**

19088961745. 1

19088961746. 2

19088961747. 3

19088961748. 4

**Question Number : 83 Question Id : 19088915464 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Ideal and widely accepted practice in forest management is to adopt a combination of

1. Physical and technical rotation
2. Financial rotation and technical rotation
3. Maximum volume production and financial rotation
4. Management objectives and ownership

**Options :**

19088961749. 1

19088961750. 2

19088961751. 3

19088961752. 4

**Question Number : 84 Question Id : 19088915465 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The interaction between various nutrient elements and changes in a forest over time along with the growth and various requirements of the species which is always in a state of change, is called

1. Forest stand dynamics
2. Bio-geo-chemical cycles
3. Stand development
4. Plant succession

**Options :**

19088961753. 1

19088961754. 2

19088961755. 3

19088961756. 4

**Question Number : 85 Question Id : 19088915466 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

<b>List I</b>	<b>List II</b>
<b>(Method)</b>	<b>(Formulae)</b>
A. Howard's modification	I. $Y=Y+Z/c.c$
B. Simmon's modification	II. $Y=8V/3r$
C. Swiss method	III. $Y=\{2r/r^2-x^2\} \times V$
D. Schneider's formula	IV. $p=400/Nd$

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

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

**Options :**

19088961757. 1

19088961758. 2

19088961759. 3

19088961760. 4

**Question Number : 86 Question Id : 19088915467 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

<b>List I</b>	<b>List II</b>
<b>(Species)</b>	<b>(Threatened category)</b>
A. Arabian ostrich	I. Endangered
B. Sloth bear	II. Critical Endangered
C. Giant Panda	III. Extinct
D. Siberian Tiger	IV. Vulnerable

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

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

**Options :**

19088961761. 1

19088961762. 2

19088961763. 3

19088961764. 4

**Question Number : 87 Question Id : 19088915468 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In which year the 'Project Snow Leopard' (PSL) was launched in India to promote an inclusive and participatory approach to conserve snow leopards and their habitat?

1. 1999

2. 2005

3. 2009

4. 2015

**Options :**

19088961765. 1

19088961766. 2

19088961767. 3

19088961768. 4

**Question Number : 88 Question Id : 19088915469 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement I:** Genetic drift tends to decrease variation either by fixing or losing alleles

**Statement II:** Genetic drift is a consequence of a large breeding population

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 :**

19088961769. 1

19088961770. 2

19088961771. 3

19088961772. 4

**Question Number : 89 Question Id : 19088915470 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Arrange the steps of tree improvement program in proper sequence

- A. Determination of species or geographic resources within a species
- B. Mass Production of Improved Individuals
- C. Determination of the amount, kind, and causes of variation
- D. Development and maintaining broad genetic base population
- E. A packaging of desired qualities of improved individuals

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

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

**Options :**

19088961773. 1

19088961774. 2

19088961775. 3

19088961776. 4

**Question Number : 90 Question Id : 19088915471 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement I:** CFCs are responsible for about 12% of total greenhouse effect.

**Statement II:** The concentration of CFCs in the atmosphere is less than 5 ppm.

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

**Options :**

19088961777. 1

19088961778. 2

19088961779. 3

19088961780. 4

**Question Number : 91 Question Id : 19088915472 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



Arrange the GHGs i.e CFC; CH<sub>4</sub>; CO<sub>2</sub>; N<sub>2</sub>O according to their percent (%) contribution to global warming

1. CFC > CH<sub>4</sub> > N<sub>2</sub>O > CO<sub>2</sub>
2. CO<sub>2</sub> > CH<sub>4</sub> > CFC > N<sub>2</sub>O
3. CO<sub>2</sub> > CFC > CH<sub>4</sub> > N<sub>2</sub>O
4. CFC > N<sub>2</sub>O > CO<sub>2</sub> > CH<sub>4</sub>

**Options :**

19088961781. 1

19088961782. 2

19088961783. 3

19088961784. 4

**Question Number : 92 Question Id : 19088915473 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match **List I** (the class/ description) with **List II** (colour coding) for biomedical waste of the following:

<b>List I</b>	<b>List II</b>
<b>(Class/ description)</b>	<b>(Colour coding)</b>
A. Type A, Class 1 (Human anatomical)	I. Yellow
B. Type A, Class 2 (Animal anatomical, infected)	II. Blue
C. Type A, Class 3b (Laboratory waste)	III. Red
D. Type B, Class 1 (Animal anatomical, non infected)	IV. Orange

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

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

**Options :**

19088961785. 1

19088961786. 2

19088961787. 3

19088961788. 4

**Question Number : 93 Question Id : 19088915474 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is true for a negatively skewed frequency distribution curve?

1. Mean > Median > Mode
2. Mean < Median < Mode
3. Mean = Median = Mode
4. Mean = Median > Mode

**Options :**

19088961789. 1

19088961790. 2

19088961791. 3

19088961792. 4

**Question Number : 94 Question Id : 19088915475 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In a population of 100 people, the median age was 32 with standard deviation of 4. After 4 years, what would be the median and standard deviation for same population?

1. Median will remain same, SD will increase
2. Both Median and SD will increase
3. Neither Median nor SD will increase
4. Median will increase, SD will remain same

**Options :**

19088961793. 1

19088961794. 2

19088961795. 3

19088961796. 4

**Question Number : 95 Question Id : 19088915476 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Read the following statements:

**Statement I:** Ozone is a triatomic form of oxygen in the stratosphere

**Statement II:** It acts as a protectant by absorbing the dangerous UV radiations

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

1. Only Statement I is correct
2. Only Statement II is correct.
3. Statement I is correct and Statement II is incorrect.
4. Both Statement I and Statement II are correct.

**Options :**

19088961797. 1

19088961798. 2

19088961799. 3

19088961800. 4

**Question Number : 96 Question Id : 19088915477 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement I:** GPS is a satellite based navigation system that provides continuous, real time, 3-dimensional location, velocity and time worldwide.

**Statement II:** GPS is a Unites States of America owned utility that provides users with positioning, navigation and timing (PNT) services.

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 :**

19088961801. 1

19088961802. 2

19088961803. 3

19088961804. 4

**Question Number : 97 Question Id : 19088915478 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

One Acre is equal to

1. 40 m × 40 m
2. 40 m × 36 m
3. 100 m × 40 m
4. 200 m × 50 m

**Options :**

19088961805. 1

19088961806. 2

19088961807. 3

19088961808. 4

**Question Number : 98 Question Id : 19088915479 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The criterion / indicator (s) to estimate the usefulness of capital investment in an agroforestry enterprise is

1. Internal Rate of Return (IRR) only
2. Land Expectation Value (LEV) only
3. Benefit Cost ratio (B:C) only
4. Internal Rate of Return (IRR) and Benefit Cost ratio (B:C)

**Options :**

19088961809. 1

19088961810. 2

19088961811. 3

19088961812. 4

**Question Number : 99 Question Id : 19088915480 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement I:** Usually species-specific mycorrhizal associations in forest trees are available in nature.

**Statement II:** Such associations are beneficial in the mobilization and release of nutrients in soil.

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 :**

19088961813. 1

19088961814. 2

19088961815. 3

19088961816. 4

**Question Number : 100 Question Id : 19088915481 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Successful example of commercial crops grown as inter crop in forest plantations or natural forests are

- A. Turmeric (*Curcuma longa*)
- B. Black pepper (*Piper longum*)
- C. Green cardamom (*Elettaria cardamomum*)
- D. Bengal cardamom (*Ammomum aromaticum*)

Choose the *correct* answer from the options given below

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

**Options :**

19088961817. 1

19088961818. 2

19088961819. 3

19088961820. 4

**Question Number : 101 Question Id : 19088915482 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**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 :** Presence of trees in agroforestry has both positive and negative effect on the water budget of soil

**Reason R :** Reduced Vapour Pressure Deficit, litter layers acting as barriers and buffering effect of shade on temperature are common in agroforestry system.

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 :**

19088961821. 1

19088961822. 2

19088961823. 3

19088961824. 4

**Question Number : 102 Question Id : 19088915483 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Leucaena fodder is NOT preferred because of high content of

1. Protein
2. Tannin
3. Gums
4. Fibre

**Options :**

19088961825. 1

19088961826. 2

19088961827. 3

19088961828. 4

**Question Number : 103 Question Id : 19088915484 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following effect(s) is/are due to tree-crop interaction?

1. Complimentary only
2. Supplementary only
3. Competitive only
4. Complementary, Supplementary and Competitive

**Options :**

19088961829. 1

19088961830. 2

19088961831. 3

19088961832. 4

**Question Number : 104 Question Id : 19088915485 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Current state of knowledge of carbon sequestration (CS) in agroforestry is in the state of solid-liquid-gas stage resulting low number of carbon projects because of

- A. Poor scientific credibility
- B. Lack of uniformity methodology of estimating CS
- C. Big gap between estimated CS and potential and practically realizable CS potential
- D. Higher budgetary estimates of CS, a limitation to qualify for the project funding

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

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

**Options :**

19088961833. 1

19088961834. 2

19088961835. 3

19088961836. 4

**Question Number : 105 Question Id : 19088915486 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



The government of India is committed to nationally determined contributions in Paris declaration

- A. Reduction in intensity of its fossil fuel emission
- B. Producing electricity from non-fossil sources
- C. Generating additional C sinks through additional forest and tree cover
- D. Realizing clean energy

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

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

**Options :**

19088961837. 1

19088961838. 2

19088961839. 3

19088961840. 4

**Question Number : 106 Question Id : 19088915487 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Cultivation of Kuth (*Saussurea lappa*) and Black caraway (*Bunium persicum*) has been taken up by the farmers in -

- 1. Jammu and Kashmir only
- 2. Uttrakhand only
- 3. Himachal Pradesh only
- 4. Jammu and Kashmir and Himachal Pradesh

**Options :**

19088961841. 1

19088961842. 2

19088961843. 3

19088961844. 4

**Question Number : 107 Question Id : 19088915488 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

An anti-hypertensive drug obtained from *Rauwolfia serpentina* contains

1. Rutin
2. Reserpine
3. Tanol
4. Quinine

**Options :**

19088961845. 1

19088961846. 2

19088961847. 3

19088961848. 4

**Question Number : 108 Question Id : 19088915489 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The determination of essential oils in aromatic crops is done through

1. Thin layer chromatography
2. Steam distillation
3. Super critical fluid extraction
4. Extraction with solvents

**Options :**

19088961849. 1

19088961850. 2

19088961851. 3

19088961852. 4

**Question Number : 109 Question Id : 19088915490 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Highly purified cellulose used in the manufacture of rayon and yarns is derived through the process of

- A. Viscose method
- B. Nitrocellulose method
- C. Cuprammonium method
- D. Cellulose acetate method

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

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

**Options :**

19088961853. 1

19088961854. 2

19088961855. 3

19088961856. 4

**Question Number : 110 Question Id : 19088915491 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Examples of commonly existing parasitic plants in forest areas include

- 1. *Lantana camara* and *Ipomea carnea*
- 2. *Cuscuta reflexa* and *Loranthus micranthus*
- 3. *Clerodendron infortunatum* and *Indigofera tinctoria*
- 4. *Lantana camara* and *Rubus ellipticus*

**Options :**

19088961857. 1

19088961858. 2

19088961859. 3

19088961860. 4

**Question Number : 111 Question Id : 19088915492 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The Indian Forest Act, 1927 was amended in 1948 and is the main legislation dealing with forests in India. It has

1. 13 Chapters and 78 Sections
2. 13 Chapters and 86 Sections
3. 17 Chapters and 78 Sections
4. 17 Chapters and 86 Sections

**Options :**

19088961861. 1

19088961862. 2

19088961863. 3

19088961864. 4

**Question Number : 112 Question Id : 19088915493 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The first Indian National Forest Policy of 1894 enacted under the pre-independent era came into existence on the basis of a report submitted by Dr. Voelker. The title of the report was

1. "Improvement of Indian forest"
2. "Improvement of Indian agriculture"
3. "Improvement of Indian forest and agriculture"
4. "Improvement of Indian forest and wildlife"

**Options :**

19088961865. 1

19088961866. 2

19088961867. 3

19088961868. 4

**Question Number : 113 Question Id : 19088915494 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

For the continuing causes of plant succession, which of the given options could replace 'X' to complete the following series?

Migration → Establishment → \_\_\_X\_\_\_ → Competition → Reaction

1. Climate and Physiographic
2. Grouping and Ecesis
3. Grouping and Aggression
4. Scree and Allogenic

**Options :**

19088961869. 1

19088961870. 2

19088961871. 3

19088961872. 4

**Question Number : 114 Question Id : 19088915495 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II of the following sub-groups of forest type as per Champion and Seth (1968)

List I	List II
A. Sub-group 1B	I. Northern tropical semi-evergreen forests
B. Sub-group 2B	II. Northern tropical wet evergreen forests
C. Sub-group 3B	III. Tidal swamp forests
D. Sub-group 4B	IV. South Indian Moist Deciduous Forests

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

**Options :**

19088961873. 1

19088961874. 2

19088961875. 3

19088961876. 4

**Question Number : 115 Question Id : 19088915496 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Most consistent indicator of site quality is

1. Tree Height
2. Tree Diameter
3. Tree Volume
4. Crown Diameter

**Options :**

19088961877. 1

19088961878. 2

19088961879. 3

19088961880. 4

**Question Number : 116 Question Id : 19088915497 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is a non-leguminous nitrogen fixing species?

1. *Alnus nitida*
2. *Leucaena leucocephala*
3. *Pongamia pinnata*
4. *Robinia pseudoacacia*

**Options :**

19088961881. 1

19088961882. 2

19088961883. 3

19088961884. 4

**Question Number : 117 Question Id : 19088915498 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Lignotubers are commonly found in

1. Poplar
2. Leucaena
3. Eucalyptus
4. Willow

**Options :**

19088961885. 1

19088961886. 2

19088961887. 3

19088961888. 4

**Question Number : 118 Question Id : 19088915499 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match **List I** with **List II** of the following to meet the tangible and intangible needs

List I	List II
A. Basic needs	I. Industrial Forestry
B. Commercial need	II. Social Forestry
C. Ecological revival	III. Conservation Forestry
D. Ecological security	IV. Restoration Forestry

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

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

**Options :**

19088961889. 1

19088961890. 2

19088961891. 3

19088961892. 4

**Question Number : 119 Question Id : 19088915500 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following trees is different from others?

1. Safeda
2. Poplar
3. Chirpine
4. Babool

**Options :**

19088961893. 1

19088961894. 2

19088961895. 3

19088961896. 4

**Question Number : 120 Question Id : 19088915501 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Watershed management treatment starts from

1. Downside of the watershed
2. Top of the watershed
3. Water harvesting site
4. Forest area

**Options :**

19088961897. 1

19088961898. 2

19088961899. 3

19088961900. 4