APOnline Limited

Notations:

Is this Group for Examiner?:

Examiner permission:

1.Options shown in green color and with ✓ icon are correct.

2.Options shown in red color and with * icon are incorrect.

Question Paper Name :	Paper III General Forestry I 26th Sep 2023
Question i aper ivanie.	Shift 2
Subject Name :	Paper III General Forestry I
Actual Answer Key :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter:	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

No

Cant View

Paper III General Forestry I

Section type :	Online
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Section Negative Marks: 0.33

Enable Mark as Answered Mark for Review and

Yes Clear Response:

Maximum Instruction Time: 0

Is Section Default?: null

Question Number: 1 Question Id: 630680386685 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which among the micronutrient is essential for plant growth and metabolism.

Options:

- 1. * Potassium
- 2. * Calcium
- 3. **✓** Manganese
- 4. * Magnesium

Question Number: 2 Question Id: 630680386686 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The forests that predominantly have a limited number of conifer species beside few deciduous genera, and occupy around 17% of the Earth's land surface in the circumpolar belt of the far Northern Hemisphere with long and very cold winters, are called _____ forests.

semi-evergreen

2. **✓** boreal

3. ****** cloud

4. * sub-alpine

Question Number: 3 Question Id: 630680386687 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following ecological processes that occur in forests.

	Organism 1	Organism 2
A) Commensalism	1)+	1) -
B) Amensalism	2) +	2)+
C) Predation	3)+	3) 0
D) Mutualism	4) -	4) 0

Options:

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

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

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

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

Question Number: 4 Question Id: 630680386688 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following ecological pyramids is always upright in a forest?

Options:

- 1. * Pyramid of number of individuals
- 2. * Pyramid of number of species
- 3. ✓ Pyramid of energy
- 4. * Pyramid if biomass

Question Number: 5 Question Id: 630680386689 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

As per the 'Global Forest Resource Assessment' (GFRA) report 2020 given by FAO, the top two countries with respect to forest area in the world are:

Options:

- 1. **✓** Russia and Brazil
- 2. * Russia and Canada
- 3. **Canada and USA**
- 4. W USA and Brazil

Question Number: 6 Question Id: 630680386690 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following authors and succession theorie

A) Clements	(1) Polyclimax theory
B) Tansley	(2) Climax pattern and vegetation gradation theory
C) Aubreville	(3) Mosaic theory
D) Whittaker	(4) Climatic climax theory

Options:

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

Question Number: 7 Question Id: 630680386691 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

'Ecesis' is process of succession that represents:

Options:

- 1. * migration of plants and animals to a new habitat
- 2. * reaction of plants and animals to a new habitat
- 3. * plants and animals refuse the new habitat
- 4. ✓ establishment of plants and animals in a new habitat

Question Number: 8 Question Id: 630680386692 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33 All trees present outside the recorded forest area (RFA) irrespective of their number and patch size, are termed as: **Options:** 1. * forest cover 2. v trees outside forest 3. * tree cover 4. * agroforestry Question Number: 9 Question Id: 630680386693 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** A forest plant grown from seed, that attains a height of around six inches and has a few leaves, is called a _____. **Options:** 1. ****** tree 2. * sapling 3. ✓ seedling 4. * pole Question Number: 10 Question Id: 630680386694 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** In Pinus roxburghii forests, natural regeneration is encouraged by following _____ system.

2. * clear-felling

1. * high forest

- 3. * coppice
- 4. ✓ Punjab shelterwood

Question Number: 11 Question Id: 630680386695 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct option based on the following statements.

- 1) The vegetation where regeneration status is > 80% is given green colour
- 2) The vegetation where regeneration status is < 20% is given red colour

Options:

- 1. * Only statement 2 is correct
- 2. ✓ Only statement 1 is correct
- 3. * Both statements 1 and 2 are correct
- 4. * Both statements 1 and 2 are incorrect

Question Number: 12 Question Id: 630680386696 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The forest crop is renewed by which of the following?

- A) Natural regeneration
- B) Afforestation
- C) Agroforestry
- D) Reforestation

- 1. * A, C, and D
- 2. **B**, C, and D
- 3. **✓** A, B, and D

4. * A, B, C, and D

Question Number: 13 Question Id: 630680386697 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Bamboo forests are regenerated by adopting a felling cycle of:

Options:

- 1. **4** 6-9 years
- 2. **4** 3-4 years
- 3. ***** 10-12 years
- 4. ***** 15-16 years

Question Number: 14 Question Id: 630680386698 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following are tending operations often done in a forest?

- A) Weeding
- B) Improvement felling
- C) Clear felling
- D) Girdling

Options:

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

Question Number: 15 Question Id: 630680386699 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Tending operations and maintenance of crops in a forest is carried out as per the procedure laid out in its working plan, which aims for:

Options:

- 1. * regular yield
- 2. * progressive yield
- 3. ✓ sustained yield
- 4. * productive yield

Question Number: 16 Question Id: 630680386700 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct statements with respect to weed control measures in forests.

- A) Prevent the spread of weed seed by human activities, by keeping agricultural and forest machinery and objects clean.
- B) Combat the spreading of weeds by using basic treatment such as ploughing, disking, tilling, etc.
- C) Remove weeds by using flame and superheated steam.
- D) Use any soils and sowing of any multi-crop seeds.

Options:

- 1. * Statements A, B and D are correct
- 2. * Statements A, D and C are correct
- 3. ✓ Statements A, B and C are correct
- 4. Statements B, C and D are correct

Question Number: 17 Question Id: 630680386701 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33
In South India which insect is used to control Opuntia spp, a weed, in thorn forests?
Options:
1. * Orthezia insignis
2. * Cosmopterix pulchrimella
3. ✓ Dactylopius coccus
4. * Estigmena chinensis
Question Number : 18 Question Id : 630680386702 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
The interval in years between successive thinning are called
Options :
1. * thinning process
2. * thinning intensity
3. * free thinning
4. ✓ thinning cycle
Question Number : 19 Question Id : 630680386703 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Taungya cultivation originated in
Options :
1. * America
2. * India
3. ✓ Burma

4. * Africa

Question Number: 20 Question Id: 630680386704 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following is NOT the basis of classification of agroforestry systems as given by Nair (1987)?

Options:

- 1. ✓ History of the system (land use in the past)
- 2. * The structure of the system (composition and arrangement of components)
- 3. * Function of the system (role and output of components)
- 4. Ecological spread (ecological zone where system exists)

Question Number: 21 Question Id: 630680386705 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Alley cropping is also called _____.

Options:

- 1. * tree-grain cropping
- 2. ✓ hedge-row intercropping
- 3. * relay cropping
- 4. * shifting cultivation

Question Number: 22 Question Id: 630680386706 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following basis of classification with their respective principles.

Basis of Classification	Principle	
A) Structural	1)Level of input management (high or low inputs), commercial goals and, intensity and scale of management (subsistence, commercial etc.)	
B) Physiognomic	2)Land use pattern in the course of adoption of agroforestry	
C) Land use	3)Composition and arrangement of components	
D) Socio-economic	4)Character of vegetation e.g., xeromorphic etc.	

Options:

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

Question Number: 23 Question Id: 630680386707 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following types of agroforestry systems with their respective time and temporal sequence of crops.

Type of Agroforestry system	Crop's temporal and time sequence
A) Concomitant	When different crops grow in a land together at one time, like pastures and trees
B) Interpolated	2) When different components stay together for some period, like Taungya
C) Coincident	When annual crops are grown under perennials, like wheat under populus.
4) When different components occupy the spandifferent time, like home gardens.	

Options:

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

Question Number: 24 Question Id: 630680386708 Is Question Mandatory: No Calculator:

None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 $\,$

Correct Marks: 1 Wrong Marks: 0.33

Match the following based on the functional classification of agroforestry systems.

Agroforestry system	Example
A) Productive	1) Soil conservation
B) Protective	2) Hedge-row cropping
C) Multipurpose	Rearing of animals and fishes along with trees

Options:

1. **A**-1, B-2, C-3

2. * A-3, B-2, C-1

3. * A-1, B-3, C-2

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

Question Number: 25 Question Id: 630680386709 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

Which of the following is NOT a tropical/subtropical multipurpose tree in India?

Options:

1. **Section** Grewia optiva

2. ✓ Betula utilis

3. * Bauhinia variegata

4. * Leucaena leucocephala

Question Number: 26 Question Id: 630680386710 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

As per the India State of Forest Report (ISFR) 2021, trees outside forests (TOF) are the main source of wood produced in the country, especially from the agroforestry sector. Which state is leading in extent of TOF (in area).

Options:

- 1. **Maharashtra**
- 2. * Andhra Pradesh

3.

- Odisha
- 4. * Uttar Pradesh

Question Number: 27 Question Id: 630680386711 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Ailanthus excelsa is a fast-growing fodder tree that could be propagated in association with forage and food crops widely grown in the Indian Peninsula. What is its common name?

Options:

- 1. * Kadamb, Cadamba
- 2. Whistling tree, Junglisaru
- 3. * Kapok tree, Silk-cotton tree
- 4. Tree of Heaven, Ardu

Question Number: 28 Question Id: 630680386712 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following trees are NOT temperate agroforestry trees in India?

- A) Abies pindrow
- B) Juglans regia
- C) Robinia pseudocassia
- D) Picea smithiana

- 1. **8** B and C
- 2. * A and B
- 3. ***** B and D
- 4. VD and A

Question Number: 29 Question Id: 630680386713 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

In an agroforestry system, soil productivity is enhanced due to:

- A) Decreased soil organic matter
- B) Addition of Nitrogen in the soil if leguminous plants are grown
- C) Maintain soil organic matter
- D) Promote more open nutrient cycling.

Options:

- 1. * A and B
- 2. **%** A and C
- 3. * B and D
- 4. VB and C

Question Number: 30 Question Id: 630680386714 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following trees does NOT enhance nitrogen in soil, and thus soil productivity being a non-nitrogen fixing species?

Options:

- 1. * Caragana
- 2. * Luecaena
- 3. **✓** Populus
- 4. * Faidherbia

Question Number: 31 Question Id: 630680386715 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

In an agroforestry system, soil health is maintained by which of the following?

- A) Decreasing biological components of soil
- B) Increasing or stabilising physical components of soil
- C) Improve chemical components in the soil in favour of plants

Options:

- 1. * Only A
- 2. **✓** Only B and C
- 3. * Only B
- 4. * Only A and C

Question Number: 32 Question Id: 630680386716 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following benefit soil health in agroforestry practices?

- A) Improved soil nutrient availability and soil fertility due to the presence of trees in the system
- B) Suppressed soil microbial dynamics
- C) Incorporation of trees in agroforestry to enhance soil organic carbon

Options:

- 1. **✓** A and C
- 2. * A, B and C
- 3. ***** B and C
- 4. * A and B

Question Number: 33 Question Id: 630680386717 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following ecozones with agroforestry systems that are primarily used to improve the habitat.

A) Tropical soil productivity	1) Agrisilvi, silvihorti and silvipasture
B) Arid lands soil productivity	2) Multistorey cropping agrisilvisulture
C) Hill region soil productivity	3) Shelter belts
D) Wetlands	4) Alley cropping

Options:

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

Question Number: 34 Question Id: 630680386718 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The National Commission on Agriculture was founded in August 1970 under the Ministry of Agriculture. It released its final report in fifteen parts in 1976 under _____. It has _____ chapters in _____ parts.

Options:

- 1. * NR Mirdha; 65; 16
- 2. * T Murthy; 69; 15
- 3. **V** NR Mirdha; 69; 15
- 4. * T Murthy; 65; 16

Question Number: 35 Question Id: 630680386719 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Social Forestry programme was launched in

Options:

- 1. Seventh five year plan
- 2. Sixth five year plan
- 3. **✓** Fifth five year plan
- 4. Eighth five year plan

Question Number: 36 Question Id: 630680386720 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following is a/are basic objective(s) of National Forest Policy 1988?

- A) Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs.
- B) Increasing area under agriculture to mitigate food and oil shortage.
- C) Meeting the requirements of fuel-wood, fodder, minor forest produce and small timber of the rural and tribal populations
- D) Ignoring the productivity of forests to meet essential national needs.

Options:

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

Question Number: 37 Question Id: 630680386721 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

Joint Forest Management Committees (JFMC) and Eco-Development Committees (EDC) were formed in JFM:

A.because rural communities are equal partners in the protection and management of forests

B.because forest departments were not able to handle JFM objectives adequately

C.because both members and non-members control the management of forest and community lands

D.to decrease the influence of all people in the objectives of management of their local forests E.to develop local leadership for bigger role in future

Which of the following statements are correct?

Options:

- 1. * Only statements A, B and D are correct
- 2. * Only statements B, D and E are correct
- 3. * Only statements C, D and E are correct
- 4. ✓ Only statements A, C and E are correct

Question Number: 38 Question Id: 630680386722 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Identify the correct option from among the following, that specifies the area to be kept under forest cover in India as per the 'National Forest Policy 1988'.

- 1. * One-fourth of the total land area of the country under forest or tree cover, in which the hills and in mountainous regions should aim to maintain one-third of the area under such cover.
- 2. * 37% of total land area of the country under forest or tree cover in which the hills and in mountainous regions should aim to maintain 75% of the area under such cover.
- 3. ✓ One-third of the total land area of the country under forest or tree cover in which the hills and in mountainous regions should aim to maintain two-third of the area under such cover.
- 4. * 37% of total land area of the country under forest or tree cover in which the hills and in mountainous regions should aim to maintain 50% of the area under such cover.

Question Number: 39 Question Id: 630680386723 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct option based on the following.

JFM guidelines 2002 proposed capacity building for recognising importance of NTFP management in good forest areas through:

- A) Their non-destructive harvesting in accordance with working plans.
- B) Unequal sharing of economic benefits as per the agreement done by Forest department and people community at the beginning of project.
- C) Institutional reforms
- D) Strengthening the set-up of NTFP management

Options:

- 1. ***** A, B and C
- 2. **A**, C and D
- 3. **8** B, C and D
- 4. * A, B, C, and D

Question Number: 40 Question Id: 630680386724 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct option based on the following.

Guidelines by MOEFCC for strengthening the Joint Forest Management Programmes included:

- A) Methods of legal backup to the JFM committees
- B) Proposed conditions to promote participation of women, certain threshold criteria were proposed for JFMCs
- C) Proposed Micro Plan preparation methods for both new working plan and existing working plan areas.
- D) Suggested to reinvest 35% of the share of village community and of the forest department in forest for regeneration of resources.
- E) Proposed concurrent monitoring at Division and State level. Evaluation at interval of 5 years at division level and 6 years at state level.

Options:

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

Question Number: 41 Question Id: 630680386725 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

A democratic, decentralised and transparent local institution of forest and forest fringe dwelling communities, that is part of the Gram Sabha fully or partially, and set up as per the provisions of applicable JFM rules/guidelines of the state outside the protected areas and their buffer zones, is called:

Options:

- 1. * Executive Committee
- 2. * Eco-Development Committee
- 3. ✓ Joint Forest Management Committee
- 4. Forest Development Committee

Question Number: 42 Question Id: 630680386726 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct option based on the following.

Various committees are constituted in any JFM programme so that:

- A) Rural communities are equal partners in the protection and management of forests
- B) Both members and non-members have control on the management of forest lands and community lands.
- C) They develop forest resources for sustainable use, but don't claim direct benefits from it.

D) Local leadership for bigger role in future is developed. **Options:** 1. ***** A, B and C 2. **8** B, C and D 3. **✓** A, B and D 4. **8** B and A Question Number: 43 Question Id: 630680386727 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** Select the correct answer from among the given options. The odour in polluted water is removed by: A) desorption B) decantation C) degasifier D) activated carbon **Options:** 1. **A**, B, and C 2. * A, B, and D

3. ***** B, C, and D

4. **✓** A, C, and D

Question Number: 44 Question Id: 630680386728 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Select the correct answer from among the given options.

Water pollution is caused by:
A) agricultural waste
B) natural gases in the air
C) sewer and domestic waste
D) forest fires
Options:
1. * A and B
2. * B and C
3. ✓ A and C
4. * C and D
Question Number : 45 Question Id : 630680386729 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Which of the following is an example of 'non-point' source of water pollution?
Options:
1. ** Sewer overflow
2. * Oil spill
3. * Industrial waste
4. ✓ Nutrients
Question Number : 46 Question Id : 630680386730 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Excess 'Fluoride' pollution in water can cause on its regular consumption
Options:
1. ✔ fluorosis

- 2. * migraine 3. * lung disease 4. * muscle pains Question Number: 47 Question Id: 630680386731 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** A nephelometer can be used to measure the in polluted water. **Options:** 1. * colour of the water 2. * odour in the water 3. ✓ suspended particles in water 4. * gases in the water Question Number: 48 Question Id: 630680386732 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** For determination of average annual precipitation in a catchment or basin, the best accurate method is: **Options:** 1. * Arithmetical method 2. * Thiessen's mean method
- 4. None of these

3. V Isohyetal method

Question Number: 49 Question Id: 630680386733 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

Understanding of relationships between hydrological and biological processes at different scales to improve water security, enhance biodiversity and further opportunities for sustainable development by lessening ecological threats and maximising greater harmony within catchment processes, is called:

Options:

- 1. * ground water hydrology
- 2. * hydroinformatics
- 3. * hydrogeology
- 4. ✓ ecohydrology

Question Number: 50 Question Id: 630680386734 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following hydrological events and their measurement method/ the factors they depend on.

Hydrological event	Measurement and/or dependent upon
A) Inconsistency of rainfall data	1) Topography
B) Runoff	2) Temperature
C) Evaporation	Double mass curve technique

- 1. * A-1, B-2, C-3
- 2. 🗸 A-3, B-1, C-2
- 3. * A-3, B-2, C-1
- 4. * A-2, B-3, C-1

Question Number: 51 Question Id: 630680386735 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following hydrological events and their respective measurement methods._

Hydrological event	Measurement
A) Hydrological cycle	1) Kirpich formula
B) Evapotranspiration	2) Blaney Criddle method
C) Time of concentration	3) Water budget equation

Options:

1. ***** A-3, B-1, C-2

2. * A-2, B-3, C-1

3. ***** A-1, B-2, C-3

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

Question Number: 52 Question Id: 630680386736 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following stream hierarchy and their numbers in India.

Stream hierarchy	Number
A) Water resources region	1) 35
B) Basins	2) 112
C) Catchments	3) 3257
D) Watersheds	4) 6

Options:

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

Question Number: 53 Question Id: 630680386737 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

The delineation of Water Resource Regions into their subsequent division and subdivisions is - Basin, Catchment, Watershed, Sub watershed and Micro-watershed. Arrange them in decreasing order of their size.

- 1. * Catchment > Basin > Watershed > Sub watershed > Micro-watershed
- 2. * Watershed > Basin > Catchment > Micro-watershed > Sub watershed
- 3. ✓ Basin > Catchment > Watershed > Sub watershed > Micro-watershed
- 4. * Catchments > Watershed > Basin > Sub watershed > Micro-watershed

Question Number : 54 Question Id : 630680386738 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
The number assigned to Water Resource Region in which all drainage flow into the Arabian Sea except Indus drainage, as suggested by Dr. AN Khosla in 1949, is
Options:
1. * 2
2. * 4
3. ✓ 5
4. * 6
Question Number : 55 Question Id : 630680386739 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
The initial stage of water erosion in any watershed is
Options:
1. * rill erosion
2. % gully erosion
3. * sheet erosion
4. ✔ splash erosion
Question Number : 56 Question Id : 630680386740 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33

In Sal (Shorea Robusta) climax forests of India, Xylia xylocarpa species is regenerating dominantly.

Options:

This succession represents:

- 1. * climatic succession
- 2. ✓ edaphic succession
- 3. * climax succession
- 4. * retrogressive succession

Question Number: 57 Question Id: 630680386741 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

'Good regeneration' in forests where constituent species have long seed interval is obtained by

Options:

- 1. * selection system
- 2. ✓ clear-felling system
- 3. * high forest system
- 4. ✓ shelterwood system

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number: 58 Question Id: 630680386742 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following trees species is a promising agroforestry tree species for humid, tropical lowland climatic zone and plant has characteristic phyllodes and flowers are decandrous and pentamerous?

- 1. * Acacia nilotica
- 2. Acacia mangium

- 3. * Acacia catechu
- 4. * Casuarina equisetifolia

Question Number: 59 Question Id: 630680386743 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following agroforestry trees is NOT known to cause allelopathy or toxicity in the soil?

Options:

- 1. * Eucalyptus
- 2. * Leucaena
- 3. * Gmelina
- 4. **✓** Populus

Question Number : 60 Question Id : 630680386744 Is Question Mandatory : No Calculator :

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements related to the objective of the National Agricultural Policy 1976, in order to facilitate the establishment of prosperous egalitarian rural society is/are correct?

- A) Adequate supply of goods and services to sustain a rising standard of living.
- B) Sufficient employment and income opportunities for the masses.

- 1. ✓ Both statements A and B are correct
- 2. * Only statement A is correct
- 3. * Only statement B is correct
- 4. * Neither statement A nor B is correct

Question Number: 61 Question Id: 630680386745 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Main elements of the National Agricultural Policy 1976 include:

- A) Reordering of the agrarian structure should not get high priority.
- B) Extensive utilisation of land.
- C) Personal cultivation to ensure adequate attention to land, and for increased productivity and production should be discouraged.
- D) Efforts should be made to detect all surplus land for distribution to the landless and marginal farmers, priority being given to the landless particularly Harijan, tribal and backward communities.

Choose the correct option below

Options:

- 1. All the statements are correct
- 2. ✓ Only statement D is correct
- 3. * Statements B, C and D are correct
- 4. * Only statement A is correct

Question Number: 62 Question Id: 630680386746 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Main elements for animal husbandry in National Agricultural Policy 1976 include:

- A) For improving the productivity of cattle and buffaloes scientific methods of breeding should be adopted.
- B) Adequate feeds and fodders resources should be provided.
- C) Animal health cover should not be given priority.
- D) Animal management practices should be given less priority.

Choose the correct statements

- 1. * Statements A and D are correct
- 2. ✓ Statements C and D are correct
- 3. Statements B and C are correct
- 4. Statements A and B are correct

Question Number: 63 Question Id: 630680386747 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

Which of the following statements endorses the focus of National Agricultural policy 1976 on forestry sector?

- A) To meet the requirements of goods, i.e., industrial wood for forest-based industries, defence, communications, and other public purposes.
- B) To provide small timber, fuelwood, and fodder for the rural community.
- C) To ignore for the time being, the present and future demands for protective and recreative functions of the forests.
- D) To clearly indicate the inter-relationship of forest economy with rural and tribal economy.
- E) Employment, rights of user and involvement of the local people should not be the priority.

Options:

- 1. ✓ Statements A, B and D are correct
- 2. * Statements A, B and E are correct
- 3. * Statements C, E and D are correct
- 4. * Statements B, C and E are correct

Question Number: 64 Question Id: 630680386748 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

'Eutrophication' a natural process of water pollution is caused by which of the following?

- A) Disposing untreated industrial sewage into water bodies.
- B) Disposing human and animal wastes into water bodies.
- C) Release of excessive oxygen by pollutants in the water bodies.
- D) Disposing agriculture wastes especially fertilisers into water bodies.

Options:

- 1. **A** A, B and C
- 2. **A**, B and D
- 3. **8** B, C and D
- 4. * A, C and D

Question Number: 65 Question Id: 630680386749 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements is/are correct?

- A) The mass rainfall curve is a plot between the accumulated rainfall at a station as ordinate and time as abscissa, plotted in chronological order.
- B) The hyetograph is the graphical representation of rainfall versus time.

Options:

- 1. * Only statement B is correct
- 2. * Both statements A and B are incorrect
- 3. ✓ Only statement A is correct
- 4. * Both statements A and B are correct

Question Number: 66 Question Id: 630680386750 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements are correct?

- A) Runoff coefficient is the ratio of runoff to rainfall intensity.
- B) It is a larger value for areas with high infiltration and low runoff, and higher for permeable, well vegetated areas.
- C) Runoff coefficient is regulated by vegetation composition, surface coverage, slope and soil type.
- D) It is used in the rational method to calculate the quantity of water that the drainage system needs to handle.

Options:

- 1. ✓ Only statements C and D are correct
- 2. * Only statements A, B and C are correct
- 3. * Only statements A and B are correct
- 4. * Only statements B, C and D are correct

Question Number: 67 Question Id: 630680386751 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The range and average size (in hectare) of a micro-watershed in India is ______ and ______, respectively.

Options:

- 1. ✓ 500–1500; 1000
- 2. * 1000–2000; 1500
- 3. * 1000–1500; 750
- 4. * 2000–3000; 2500

Question Number: 68 Question Id: 630680386752 Is Question Mandatory: No Calculator:

None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Several tuberous roots occur in a cluster at the base of the stem. This kind of adventitious root
modification is called
Options:
1. * moniliform
2. * annulated
3. ✔ fasciculated
4. ** nodulose
Overtion Number CO Overtion Id. C20C0020C7F2 to Overtion Mandatows No Coloulators
Question Number : 69 Question Id : 630680386753 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
is NOT an example of aerial modification of stem in plants.
Options:
1. * Stem-tendril
2. ✓ Corm
3. * Thorn
4. * Phylloclade
Question Number : 70 Question Id : 630680386754 Is Question Mandatory : No Calculator :
None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Correct Marks : 1 Wrong Marks : 0.33
A flower without calyx and corolla is known as:
Options:
1. * hermaphrodite
2. ✓ achlamydeous

3. * monochlamydeous
4. * monoecious
Question Number : 71 Question Id : 630680386755 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
All the dead tissues lying outside the active cork cambium constitute
Options:
1. * pith
2. ** secondary phloem
3. * secondary xylem
4. ✓ bark
Question Number : 72 Question Id : 630680386756 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
serve for conduction of water and mineral salts from the roots to the leaves.
Options :
1. * Companion cells
2. ✓ Vessels and tracheids
3. * Sieve tubes
4. * Phloem parenchymas
Question Number : 73 Question Id : 630680386757 Is Question Mandatory : No Calculator :

Correct Marks: 1 Wrong Marks: 0.33

None Response Time : N.A Think Time : N.A Minimum Instruction Time : $\bf 0$

is the type of vascular bundle arrangement, where the xylem and phloem lie together on
the same radius.
Options :
1. ** Concentric
2. ** Bicollateral
3. * Radial
4. ✓ Collateral
Question Number: 74 Question Id: 630680386758 Is Question Mandatory: No Calculator:
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Parenchyma form a 'wing-like' sheath around pores. This arrangement is called
Options :
1. * vasicentric
2. ✓ aliform
3. * apotracheal
4. * banded
Question Number : 75 Question Id : 630680386759 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33

Kindly match the anatomical characteristics of wood with the species

Column A	Column B
a. Included phloem	1. Aquilaria agallocha
b. Ripple marks	2. Shorea robusta
c. Ring porous	3. Pterocarpus santalinus
d. Spiral grain	4. Dalbergia sissoo
e. Interlock grain	5. Tectona grandis

Options:

- 1. **✓** a-1; b-4; c-5; d-3; e-2
- 2. * a-3; b-1; c-5; d-2; e-4
- 3. * a-3; b-2; c-5; d-1; e-4
- 4. * a-3; b-1; c-2; d-5; e-4

 $Question\ Number: 76\ Question\ Id: 630680386760\ Is\ Question\ Mandatory: No\ Calculator:$

None Response Time : N.A Think Time : N.A Minimum Instruction Time : $\bf 0$

Correct Marks: 1 Wrong Marks: 0.33

_____ is a method where a branch is alternately covered and exposed along its length.

- 1. * Tongue layering
- 2. * Tool layering
- 3. **✓** Serpentine layering
- 4. * Chinese layering

Question Number: 77 Question Id: 630680386761 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Correct Marks : 1 Wrong Marks : 0.33
Inarching is also known as
Options :
1. * stone grafting
2. ✓ approach grafting
3. * epicotyl grafting
4. * bud grafting
Question Number : 78 Question Id : 630680386762 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Adiantum caudatum is propagated by
Options :
1. ✔ leaf-tip and rhizome
2. * gemmae
3. * gootee
4. * cutting
Question Number : 79 Question Id : 630680386763 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Mutations that occur and suddenly appear as a chance in the branch of a plant, are called
Options:
1. * sectorial chimera
2. * mericlinal chimera

- 3. * graft chimera
- 4. **✓** bud sport

Question Number: 80 Question Id: 630680386764 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Pulsation theory was given by:

Options:

- 1. **✓** JC Bose
- 2. * Harry Beevers
- 3. * Christine Beveridge
- 4. * Frederick Blackman

Question Number: 81 Question Id: 630680386765 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which instrument is used to demonstrate the rate of transpiration current?

Options:

- 1. * Darwin's potometer
- 2. ✓ Ganong potometer
- 3. * Garreau potometer
- 4. * Farmer's potometer

Question Number: 82 Question Id: 630680386766 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The potential energy of water relative to pure free water is called
Options:
1. * osmotic pressure
2. * osmotic potential
3. * water pressure
4. ✓ water potential
Question Number : 83 Question Id : 630680386767 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
refers to a situation in which a crop needs more of a given nutrient, yet has shown no
deficiency symptoms.
Options:
1. * Stunting
2. * Dotting
3. ✔ Hidden hunger
4. * Shedding
Overtion Number 204 Overtion Id. C20C0020C7C0 In Overtion Mandatons Ale Calculators
Question Number : 84 Question Id : 630680386768 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Which of the following elements' deficiency becomes evident first in younger leaves?
Options:
1. * Nitrogen
2. * Potassium
3. * Phosphorus

4. VIron

Question Number: 85 Question Id: 630680386769 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks : 1 Wrong Marks : 0.33** Black necrosis of young leaves and terminal buds is caused by deficiency of -____ nutrient. **Options:** 1. * phosphorus 2. * potassium 3. ✓ boron 4. * silicon Question Number: 86 Question Id: 630680386770 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks : 1 Wrong Marks : 0.33** Based on the given assertion and reason, select the correct option. Assertion (A): Chlorosis caused by sulphur is observed in mature and young leaves. Reason (R): Sulphur is not easily mobilised to the younger leaves. **Options:** 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. * Both A and R are false.

Question Number: 87 Question Id: 630680386771 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Who gave the scheme of glycolysis?

Options:

- 1. * Joseph Priestly, Otto Meyerhof, and J Parnas
- 2. **✓** Gustav Embden, Otto Meyerhof, and J Parnas
- 3. * Jan Ingenhousz, Gustav Embden, Otto Meyerhof
- 4. * Joseph Priestly, Jan Ingenhousz, Gustav Embden

Question Number: 88 Question Id: 630680386772 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The ratio of the volume of CO_2 released to the volume of O_2 taken during respiration is called:

Options:

- 1. * fermentation quotient
- 2. * efficiency of fermentation
- 3. * efficiency of respiration
- 4. ✓ respiratory quotient

Question Number: 89 Question Id: 630680386773 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following

Column A	Column B
a. Mesobiotic	1. Fungus
b. Powdery mildew	2. Dodder
c. Phanerogamic plant parasites	3. Virus
d. Khaira disease	4. Abiotic
e. Algae	5. Red rust of mango

Options:

1. **a**-4; b-1; c-5; d-2; e-3

2. * a-3; b-1; c-5; d-2; e-4

3. **✓** a-3; b-1; c-2; d-4; e-5

4. * a-3; b-1; c-2; d-5; e-4

Question Number: 90 Question Id: 630680386774 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Based on the given assertion and reason, select the correct option.

Assertion (A):

Leaf Web Blight is by Rhizoctonia solani.

Reason (R):

The infected adjoining leaves get joined together by the fungal hyphae

- 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. * Both A and R are false.

Question Number: 91 Question Id: 630680386775 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Based on the given assertion and reason, select the correct option.

Assertion (A):

Compound interest diseases, the rate of increase is mathematically analogous to compound interest in money.

Reason (R):

Secondary inoculum plays a vital role in the development of epidemics in such diseases.

Options:

- 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. * Both A and R are false.

Question Number: 92 Question Id: 630680386776 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The Nagoya Protocol deals with:

- 1. * legally binding framework for transboundary exchange of zoo animals
- 2. * legally binding framework for transboundary migratory species
- 3. * legally binding framework for regulating the transboundary movement of living modified

organisms

4. \checkmark legally binding framework for access to genetic resources and the fair and equit	table sharing
of the benefits arising from their use	

Question Number: 93 Question Id: 630680386777 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The convention concerning the Protection of the World Cultural and Natural Heritage, was adopted by UNESCO in _____.

Options:

- 1. * 1976
- 2. * 1974
- 3. 🗸 1972
- 4. * 1978

Question Number: 94 Question Id: 630680386778 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The International Plant Protection Convention Secretariat is hosted at _____.

Options:

- 1. **✓** Rome, Italy
- 2. * Cambridge, United Kingdom
- 3. * Geneva, Switzerland
- 4. * New York, USA

Question Number: 95 Question Id: 630680386779 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements is NOT true with regard to CITES?

Options:

- 1. * It is a convention on International Trade in Endangered Species of Wild Fauna and Flora.
- 2. * CITES was drafted as a result of a resolution adopted in 1963 at a meeting of IUCN.
- 3. ✓ On 1 July 1977, CITES came into force.
- 4. * CITES is legally binding on parties.

Question Number: 96 Question Id: 630680386780 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements is/are NOT correct with respect to the Ramsar Convention on Wetlands?

- i. The convention was adopted in the Iranian city of Ramsar in 1971.
- ii. The convention came into force in 1976.
- iii. Total number of contracting parties is 172.
- iv. India is a signatory to Ramsar since 1981.

Options:

- 1. Vii and iv
- 2. * i and iv
- 3. * ii and iii
- 4. * i, iii and iv

Question Number: 97 Question Id: 630680386781 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

World Wildlife Fund was established in:

- 1. * April, 1960
- 2. **April**, 1961
- 3. * April, 1962
- 4. * April, 1963

Question Number: 98 Question Id: 630680386782 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

The theoretical maximum production of new individuals under ideal conditions with no ecological limiting factors is known as:

Options:

- 1. * vital index
- 2. * clutch size
- 3. **✓** maximum natality
- 4. * fertility rate

Question Number: 99 Question Id: 630680386783 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The pattern of mortality with age is best illustrated by:

- 1. ✓ survivorship curve
- 2. * survival rate
- 3. * potential mortality
- 4. * breeding time

Question Number: 100 Question Id: 630680386784 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Large mammals exhibit which of the following survivorship curves?

Options:

- 1. * Highly concave curve
- 2. * Diagonal curve
- 3. ✓ Highly convex curve
- 4. * Straight line

Question Number: 101 Question Id: 630680386785 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

The degree with which a species is restricted in distribution to one kind of community is called:

Options:

- 1. **✓** fidelity
- 2. ** rare
- 3. * seldom present
- 4. * endemic

Question Number: 102 Question Id: 630680386786 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Based on the give assertion and reason, select the correct option.

Assertion:

An age pyramid has a broad base.

Reason:

Rapidly growing young population, with high birth rate and population growth is exponential.

Options:

- 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. * Both A and R are false.

Question Number: 103 Question Id: 630680386787 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Plants that complete their life cycle in a single favourable season, and remain dormant during unfavourable conditions in the form of seed, are known as:

Options:

- 1. * phanerophytes
- 2. ✓ therophytes
- 3. * chamaephytes
- 4. * geophytes

Question Number: 104 Question Id: 630680386788 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

The minimum size of the quadrat is determined by:

- 1. * definite area
- 2. * line-transect
- 3. ✓ species area curve

4. * belt-transect

Question Number: 105 Question Id: 630680386789 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Community unit theory put forward by Whittaker is also called:

Options:

1. * consociation unit theory

2. ✓ association unit theory

3. * fasciation unit theory

4. * principle of species individuality

Question Number: 106 Question Id: 630680386790 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Match the following

Column A	Column B
a. Chhattisgarh	1. Lushei
b. Assam	2. Cholanaikkan
c. Kerala	3. Bhunjia Tribe
d. Mizoram	4. Karbi
e. Jharkhand	5. Munda

- 1. ***** a-4; b-1; c-5; d-2; e-3
- 2. * a-3; b-1; c-5; d-2; e-4

3. ✓ a-3; b-4; c-2; d-1; e-5

4. * a-3; b-1; c-2; d-5; e-5

Question Number: 107 Question Id: 630680386791 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

ITDP stands for:

Options:

- 1. * Integral Tribal Development Project
- 2. * Integral Tribal Development Plan
- 3. * Integrated Tribal Development Plan
- 4. ✓ Integrated Tribal Development Programme

Question Number: 108 Question Id: 630680386792 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Who gave the theory of totemism?

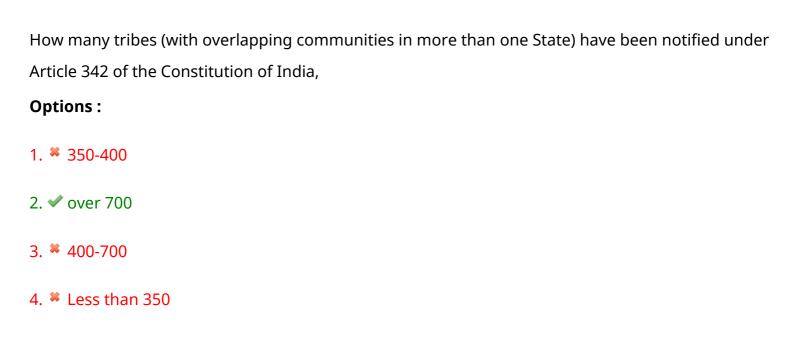
Options:

- 1. **V** Émile Durkheim
- 2. * Robert Lowie
- 3. * Franz Boas
- 4. Margret Mead

Question Number: 109 Question Id: 630680386793 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33



 $Question\ Number: 110\ Question\ Id: 630680386794\ Is\ Question\ Mandatory: No\ Calculator: 110\ Question\ Mandator: 110\ Question\ Manda$

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33

Which of the following statements is NOT true with respect to Forest Rights Act, 2006. It deals with_____

- i. Forest dwelling Schedule Tribe
- ii. Other traditional forest dwellers
- iii. Cut-off date is prior to 13/12/2005
- iv. Seven generations should have resided in the forest.

Options:

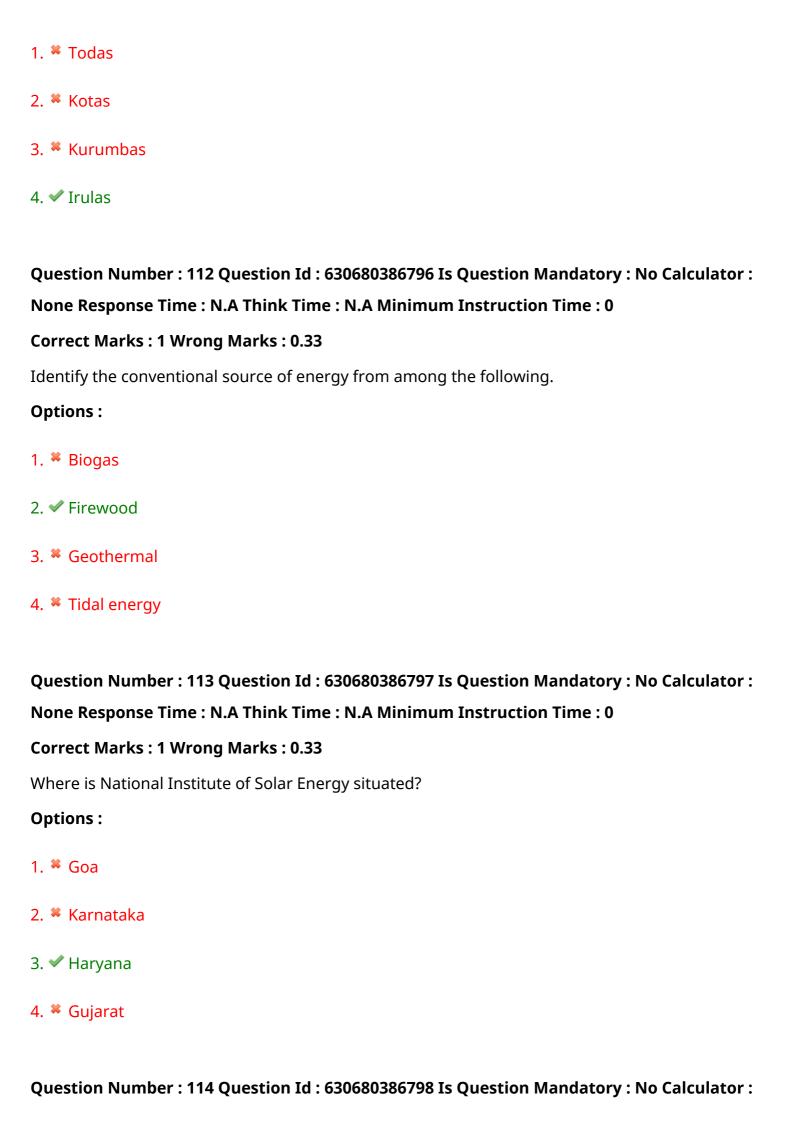
- 1. **%** i
- 2. × ii
- 3. **%** iii
- 4. **✓** iv

Question Number: 111 Question Id: 630680386795 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which tribal community is engaged in extraction of snake venom at Madras Crocodile Bank?



None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
The National Solar Mission (NSM) was launched on:
Options :
1. * 11 January 2012
2. * 11 January 2011
3. ✓ 11 January 2010
4. * 11 January 2009
Question Number : 115 Question Id : 630680386799 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Where is Sardar Swaran Singh National Institute of Bio-Energy located?
Options :
1. ✓ Punjab
2. * Uttarakhand
3. * Himachal Pradesh
4. * Uttar Pradesh
Question Number : 116 Question Id : 630680386800 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Project aims at synchronising electricity produced from renewable sources, such as
solar and wind, with conventional power stations in the grid.
Options:
1. * Yellow Energy Corridor
2. * Blue Energy Corridor

- 3. * Orange Energy Corridor
- 4. ✓ Green Energy Corridor

Question Number: 117 Question Id: 630680386801 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Identify the ore for extracting iron from among the following.

Options:

- 1. ✓ Haematite
- 2. * Pyrolusite
- 3. * Psilomelane
- 4. * Stibnite

Question Number: 118 Question Id: 630680386802 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Identify a precious non-metallic mineral from among the following.

Options:

- 1. Silver
- 2. **%** Gold
- 3. V Diamond
- 4. * Platinum

Question Number: 119 Question Id: 630680386803 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Corundum is a crystalline form of:
Options :
1. * zinc carbonate
2. ✓ aluminium oxide
3. * aluminium carbonate
4. * zinc hydroxide
Overtion Number : 420 Overtion Id.: C20C0020C004 To Overtion Mandatows : No Calculators :
Question Number: 120 Question Id: 630680386804 Is Question Mandatory: No Calculator:
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Cassiterite is an ore of
Options :
1. * tungsten
2. ✓ tin
3. * molybdenum
4. * vanadium
Question Number : 121 Question Id : 630680386805 Is Question Mandatory : No Calculator :
None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Correct Marks : 1 Wrong Marks : 0.33
is the process of separating ore minerals from gangue.
Options:
1. * Mining
2. * Prospecting
3. * Refining
4. ✓ Beneficiation

Question Number: 122 Question Id: 630680386806 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following is often referred to as hard coal?

Options:

- 1. **✓** Anthracite
- 2. * Bituminous
- 3. * Lignite
- 4. Subbituminous

Question Number: 123 Question Id: 630680386807 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Identify the INCORRECT statement(s) with regard to open cast mining.

- i. It is also called open-pit mining.
- ii. Mineral or ore deposits are found very deep down in the earth.
- iii. It is also called quarries when they produce building materials and dimension stone.

Options:

- 1. ³⁸ i
- 2. **√** ii
- 3. **¾** iii
- 4. * i and iii

Question Number: 124 Question Id: 630680386808 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

is used when the metal of interest is associated with sediment in a stream bed or floodplain.
Options:
1. * Underground mining
2. * Surface mining
3. ✓ Placer mining
4. * In situ mining
Question Number : 125 Question Id : 630680386809 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Materials left over after the process of separating the valuable fraction from the uneconomic fraction (gangue) of an ore are called:
Options:
1. ✔ tailings
2. ** smelts
3. * gangue
4. * dirt
Question Number : 126 Question Id : 630680386810 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
is a procedure of creating fractures in rocks and rock formations by injecting fluid into
cracks to force them further open.
Options:
1. * Drilling
2. * Cracking
3.

✓ Fracking
4. * Holing
Question Number : 127 Question Id : 630680386811 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
CSIR-Central Institute of Mining and Fuel Research is situated at
Options :
1. % Chhattisgarh
2. * Odisha
3. % Karnataka
4. ✔ Jharkhand
Question Number : 128 Question Id : 630680386812 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Which of the following statements is NOT true with respect to churn drilling?
i.Also known as percussion drills.
ii.Sludge deposits are taken at 1.5 m interval.
iii.It is suitable for testing extremely hard formations.
Options :
1. * i
2. * ii
3. ✔ iii
4. 🗱 ii and iii

Question Number: 129 Question Id: 630680386813 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** The C: N ratio of cultivated soils ranges from: **Options:** 1. **4** 8:1 to 15:1 2. ***** 10:1 to 12:1 3. **3** 20:1 to 30:1 4. **4** 4:1 to 9:1 Question Number: 130 Question Id: 630680386814 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks : 1 Wrong Marks : 0.33** ____ is the process of converting ammonia to nitrate. **Options:** 1. **✓** Nitrification 2. * Assimilation 3. * Ammonification 4. * Denitrification Question Number: 131 Question Id: 630680386815 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** As per India State of the Forest Report (ISFR) 2021, the total carbon stock in forest is estimated as: **Options:** 1. ***** 10,204 million tonnes

2. * 9204 million tonnes

3. * 8204 million tonnes

4. 7204 million tonnes

Question Number: 132 Question Id: 630680386816 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statements is/are NOT true with respect to Calvin cycle?

i.Plants fix carbon primarily into 3-phosphoglycerate.

ii.Carbon fixation into 3-phosphoglycerate is called Calvin cycle.

iii. Observations relating to Calvin cycle were first made by de Saussure in 1804.

Options:

- 1. * i
- 2. × ii
- 3. **✓** iii
- 4. * i and ii

Question Number: 133 Question Id: 630680386817 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following statement(s) is true with respect to formation of saline alkali soils?

i.Low pH and high proportion of exchangeable aluminium and hydrogen.

ii.Dominant in kaolinite and illite types of clay minerals.

iii.Found in arid and semiarid regions..

- 1. * i
- 2. × ii
- 3. **✓** iii

4. * i and iii

Question Number: 134 Question Id: 630680386818 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

According to the fifth edition of Wastelands Atlas – 2019, what is the extent of the wastelands of India?

Options:

- 1. 57.88 million hectares
- 2. ✓ 55.76 million hectares
- 3. * 56.60 million hectares
- 4. \$ 53.95 million hectares

Question Number: 135 Question Id: 630680386819 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Exchangeable sodium percentage of saline alkali soil is:

Options:

- 1. ✓ greater than 15%
- 2. * between 10% and 15%
- 3. * between 8% and 10%
- 4. * less than 8%

Question Number: 136 Question Id: 630680386820 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Which of the following crops is highly salt tolerant?

Options:
1. * Sunhemp
2. * Pea
3. * Linseed
4. ✔ Barley
Question Number : 137 Question Id : 630680386821 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Based on the given assertion and reason, select the correct option.
Assertion (A):
Gypsum is added to acidic soil.
Reason (R):
Gypsum lowers the ESP to desired value.
Options :
1. South A and R are true, and R is the correct explanation of A.
2. Soth A and R are true, but R is not the correct explanation of A.
3. ✔ A is false but R is true.
4. * A is true but R is false
Question Number : 138 Question Id : 630680386822 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Saltation, suspension and surface creep are three basic stages of
Options:
1. * geological erosion

2. wind erosion 3. * water erosion 4. * biotic erosion Question Number: 139 Question Id: 630680386823 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** Erosion because of the kinetic energy of falling raindrops is called . . **Options:** 1. * rill erosion 2. ✓ splash erosion 3. ***** gully erosion 4. * sheet erosion Question Number: 140 Question Id: 630680386824 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** The time taken for the runoff to reach from the remotest point of the watershed to the outlet is called: **Options:** 1. * run off lag coefficient 2. * runoff coefficient time 3. **v** time of concentration 4. * time lag coefficient

Question Number: 141 Question Id: 630680386825 Is Question Mandatory: No Calculator:

None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
is a set of characteristics curve that describe the rainfall characteristics specific to the
region.
Options:
1. * Peak-Flow
2. ✔ Intensity-Duration-Frequency
3. * Peak-Erodibility
4. * Peak-Intensity-Flow
Question Number : 142 Question Id : 630680386826 Is Question Mandatory : No Calculator
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Permanent gully control structures are designed for a period of years.
Options :
1. * 5 to 10
2. * 10 to 20
3. * 20 to 25
4. ✓ 25 to 50
Question Number : 143 Question Id : 630680386827 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
is a series of broad channel or embankments constructed at suitable spacing along the
graded gentle slopes.
Options:
1. ✓ Continuous trench

2. * In-line trench 3. * Contour trench 4. * Staggered trench Question Number: 144 Question Id: 630680386828 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** is/are widely used to estimate runoff from small-to medium-sized watersheds. **Options:** 1. Soil-vegetation land use 2. * Antecedent moisture conditions 3. ✓ SCS curve-number 4. Soil antecedent moisture Question Number: 145 Question Id: 630680386829 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 **Correct Marks: 1 Wrong Marks: 0.33** Identify the temperate small fruit from among the following. **Options:** 1. * Apple 2. **✓** Strawberry 3. * Pear 4. * Peach

Question Number: 146 Question Id: 630680386830 Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks : 1 Wrong Marks : 0.33
Apple was introduced by Captain Lee in 1865 at
Options:
1. ✔ Himachal Pradesh
2. * Jammu and Kashmir
3. * Uttarakhand
4. * Arunachal Pradesh
Question Number : 147 Question Id : 630680386831 Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
Cardamom belongs to the family of:
Options:
1. * Piperaceae
2. ✓ Zingiberaceae
3. * Umbelliferae
4. * Apiaceae
Question Number : 148 Question Id : 630680386832 Is Question Mandatory : No Calculator :
None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0.33
ICAR-Indian Institute of Spices Research is situated at:
Options:
1. ✓ Kerala
2. * Karnataka
3. * Assam

4. * Meghalaya

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Cashew is native of:

Options:

- 1. **X** India
- 2. **✓** Brazil
- 3. * Burma
- 4. * Madagascar

Question Number: 150 Question Id: 630680386834 Is Question Mandatory: No Calculator:

None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0.33

Elaeis guineensis is commonly known as:

- 1. **Coconut**
- 2. * Areca nut
- 3. **✓** African oil palm
- 4. * Cacao