

National Testing Agency

Question Paper Name :	Seed Science and Technology 23rd Sep 2020 Shift 2 Set 2
Subject Name :	Seed Science and Technology
Creation Date :	2020-09-23 19:33:32
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Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes

Seed Science and Technology

Group Number :	1
Group Id :	7108704
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	480
Is this Group for Examiner? :	No

Part A General Knowledge

Section Id :	71087010
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20

Number of Questions to be attempted : 20
Section Marks : 80
Display Number Panel : Yes
Group All Questions : Yes
Mark As Answered Required? : Yes
Sub-Section Number : 1
Sub-Section Id : 71087010
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 710870421 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701681. 1
- 7108701682. 2
- 7108701683. 3
- 7108701684. 4

Question Number : 2 Question Id : 710870422 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

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

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

Options :

- 7108701685. 1
- 7108701686. 2
- 7108701687. 3
- 7108701688. 4

Question Number : 3 Question Id : 710870423 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Indian agriculture is typically characterized as

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

Options :

- 7108701689. 1

7108701690. 2

7108701691. 3

7108701692. 4

Question Number : 4 Question Id : 710870424 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

Options :

7108701693. 1

7108701694. 2

7108701695. 3

7108701696. 4

Question Number : 5 Question Id : 710870425 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

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

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

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

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

Options :

- 7108701697. 1
- 7108701698. 2
- 7108701699. 3
- 7108701700. 4

Question Number : 6 Question Id : 710870426 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701701. 1
- 7108701702. 2
- 7108701703. 3
- 7108701704. 4

Question Number : 7 Question Id : 710870427 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701705. 1
- 7108701706. 2
- 7108701707. 3
- 7108701708. 4

Question Number : 8 Question Id : 710870428 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701709. 1
- 7108701710. 2
- 7108701711. 3
- 7108701712. 4

Question Number : 9 Question Id : 710870429 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701713. 1
- 7108701714. 2
- 7108701715. 3
- 7108701716. 4

Question Number : 10 Question Id : 710870430 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701717. 1

7108701718. 2

7108701719. 3

7108701720. 4

Question Number : 11 Question Id : 710870431 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

1. 15 m x 6.67m
2. 20 m x 5 m
3. 30 m x 3.33 m
4. 40 m x 2.5 m

Options :

7108701721. 1

7108701722. 2

7108701723. 3

7108701724. 4

Question Number : 12 Question Id : 710870432 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

1. Auto tyres and tubes
2. Footwear
3. Dipped goods
4. Latex foam

Options :

7108701725. 1

7108701726. 2

7108701727. 3

7108701728. 4

Question Number : 13 Question Id : 710870433 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

1. China

2. Nepal

3. Bhutan

4. Uzbekistan

Options :

7108701729. 1

7108701730. 2

7108701731. 3

7108701732. 4

Question Number : 14 Question Id : 710870434 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

1. University of Delhi

2. University of Kolkata

3. University of Mumbai

4. University of Hyderabad

Options :

- 7108701733. 1
- 7108701734. 2
- 7108701735. 3
- 7108701736. 4

Question Number : 15 Question Id : 710870435 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Where is the headquarters of European Union?

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

Options :

- 7108701737. 1
- 7108701738. 2
- 7108701739. 3
- 7108701740. 4

Question Number : 16 Question Id : 710870436 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701741. 1
- 7108701742. 2
- 7108701743. 3
- 7108701744. 4

Question Number : 17 Question Id : 710870437 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701745. 1
- 7108701746. 2
- 7108701747. 3
- 7108701748. 4

Question Number : 18 Question Id : 710870438 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701749. 1
- 7108701750. 2
- 7108701751. 3
- 7108701752. 4

Question Number : 19 Question Id : 710870439 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Economic liberalization in India started with

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

Options :

- 7108701753. 1
- 7108701754. 2
- 7108701755. 3
- 7108701756. 4

Question Number : 20 Question Id : 710870440 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

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

Options :

- 7108701757. 1

7108701758.2
7108701759.3
7108701760.4

Part B Core Crop Sciences-I

Section Id :	71087011
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	71087011
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 710870441 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The translation process occurs in association with which one of the following?

1. Plastids
2. ER
3. Mitochondria
4. Ribosome and RNA

Options :

7108701761.1
7108701762.2

7108701763. 3

7108701764. 4

Question Number : 22 Question Id : 710870442 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

E. R. Sears produced 21 monosomics in which one of the following wheat varieties?

1. Einkorn
2. Chinese spring
3. Khorasan
4. Red spring

Options :

7108701765. 1

7108701766. 2

7108701767. 3

7108701768. 4

Question Number : 23 Question Id : 710870443 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Name the small cDNA sequence that represents a unique segment of an active gene

1. SNPs
2. snRNAs
3. ESTs
4. Contigs

Options :

7108701769. 1

7108701770. 2

7108701771. 3

7108701772. 4

Question Number : 24 Question Id : 710870444 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following species of *Cajanus* is used to introgress salt tolerance in the cultivated species of *Cajanus*?

1. *Cajanus scaraboides*
2. *Cajanus lanceolatus*
3. *Cajanus platicarpus*
4. *Cajanus albicans*

Options :

- 7108701773. 1
- 7108701774. 2
- 7108701775. 3
- 7108701776. 4

Question Number : 25 Question Id : 710870445 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under IPR, what protects the intellectual property created by inventors ?

1. Copy right
2. Patents
3. Trade marks
4. Registered design

Options :

- 7108701777. 1
- 7108701778. 2
- 7108701779. 3
- 7108701780. 4

Question Number : 26 Question Id : 710870446 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The world's most inventory of the global conservation status of biological species is being maintained by

1. WWF
2. IUCN
3. MAB
4. IBWL

Options :

7108701781. 1

7108701782. 2

7108701783. 3

7108701784. 4

Question Number : 27 Question Id : 710870447 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A: Pod corn	I: <i>Zea mays</i> var. <i>everta</i>
B: Pop corn	II: <i>Zea mays</i> var. <i>ceratina</i>
C: Wax corn	III: <i>Zea mays</i> var. <i>tunicata</i>
D: Flint corn	IV: <i>Zea mays</i> var. <i>indurata</i>

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

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

Options :

7108701785. 1
7108701786. 2
7108701787. 3
7108701788. 4

Question Number : 28 Question Id : 710870448 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
(Species)	(Chromosome number)
A: <i>Linum usitatissimum</i>	I: n = 18
B: <i>Cicer arietinum</i>	II: n = 7
C: <i>Brassica nigra</i>	III: n = 8
D: <i>Lens esculenta</i>	IV: n = 15

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

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

Options :

7108701789. 1
 7108701790. 2
 7108701791. 3
 7108701792. 4

Question Number : 29 Question Id : 710870449 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
(Crop)	(Isolation distance for certified seed production)
A: Hybrid rice	I: 400 m
B: Johnson Grass	II: 800 m
C: Sesame	III: 100 m
D: Carrot	IV: 50 m

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

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

Options :

7108701793. 1
 7108701794. 2
 7108701795. 3
 7108701796. 4

Question Number : 30 Question Id : 710870450 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Adventive embryony is an example of

1. Vegetative propagation
2. Amphimixis
3. Agamospermy
4. Parthinogamy

Options :

- 7108701797. 1
- 7108701798. 2
- 7108701799. 3
- 7108701800. 4

Question Number : 31 Question Id : 710870451 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Loss in vigour due to inbreeding is more visible in

1. Self-pollinated species
2. Cross-pollinated species
3. Apomictic species
4. Monoecious species.

Options :

- 7108701801. 1
- 7108701802. 2
- 7108701803. 3
- 7108701804. 4

Question Number : 32 Question Id : 710870452 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If two individuals with a genotype AaBb are crossed, what proportion of the offsprings will be of genotype aabb?

1. $\frac{1}{2}$
2. $\frac{1}{4}$
3. $\frac{1}{8}$
4. $\frac{1}{16}$

Options :

- 7108701805. 1
- 7108701806. 2
- 7108701807. 3
- 7108701808. 4

Question Number : 33 Question Id : 710870453 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Requirements for Marker Assisted Backcross Breeding are

- A. High heritability
- B. Tightly linked marker with target gene
- C. Flanking markers
- D. Multi-location trial

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

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

Options :

7108701809. 1

7108701810. 2

7108701811. 3

7108701812. 4

Question Number : 34 Question Id : 710870454 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Chi-square test has the following applications

A. Test of segregation

B. Selection of genotype

C. Detection of genotype

D. Developing ANOVA table

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

1. B, D and E only

2. A, C and E only

3. B, C and D only

4. A, C and D only

Options :

7108701813. 1

7108701814. 2

7108701815. 3

7108701816. 4

Question Number : 35 Question Id : 710870455 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Requirements for AFLP marker are

- A. Random primers
- B. Restriction enzymes
- C. Adaptors
- D. PCR
- E. Short sequence repeats

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

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

Options :

- 7108701817. 1
- 7108701818. 2
- 7108701819. 3
- 7108701820. 4

Question Number : 36 Question Id : 710870456 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

For breeding high-quality chapati wheat in India we prefer

- A. Soft wheat
- B. Hard wheat
- C. *Triticum aestivum*
- D. *Triticum durum*
- E. *Triticum dicoccum*

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

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

Options :

- 7108701821. 1
- 7108701822. 2
- 7108701823. 3
- 7108701824. 4

Question Number : 37 Question Id : 710870457 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Evidence for DNA as genetic material was obtained in which of the following experiments?

- A. Avery, McLeod and McCarty experiment
- B. Griffith Experiment
- C. Conrat and Singer experiment
- D. Watson and Crick experiment
- E. Hershey and Chase experiment

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

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

Options :

- 7108701825. 1
- 7108701826. 2
- 7108701827. 3
- 7108701828. 4

Question Number : 38 Question Id : 710870458 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

A population consisted of the following genotypes in the given numbers

160-Heterozygotes

20-Homozygous recessive

320-Homozygous dominants

What would be the frequency of dominant allele?

1. 10%
2. 40%
3. 32%
4. 80%

Options :

- 7108701829. 1
- 7108701830. 2
- 7108701831. 3
- 7108701832. 4

Question Number : 39 Question Id : 710870459 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The non-random association of alleles at different loci in a given population is referred to as

1. Linkage disequilibrium
2. Linkage equilibrium
3. Mendelian population
4. QTL analysis

Options :

- 7108701833. 1
- 7108701834. 2
- 7108701835. 3

7108701836. 4

Question Number : 40 Question Id : 710870460 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Non-Mendelian inheritance includes

1. Maternal effect only
2. Maternal effect and epigenetic inheritance only
3. Epigenetic and extranuclear inheritance only
4. Maternal effect, Epigenetic and extranuclear inheritance only

Options :

7108701837. 1

7108701838. 2

7108701839. 3

7108701840. 4

Question Number : 41 Question Id : 710870461 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Morgan discovered linkage when studying two genes in which of the following in Drosophila?

1. X-chromosome
2. Y-chromosome
3. Autosomes
4. Cytoplasm

Options :

7108701841. 1

7108701842. 2

7108701843. 3

7108701844. 4

Question Number : 42 Question Id : 710870462 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Kary Banks Mullis invented PCR and received Nobel Prize in

1. Physics
2. Chemistry
3. Biology
4. Medicine

Options :

- 7108701845. 1
- 7108701846. 2
- 7108701847. 3
- 7108701848. 4

Question Number : 43 Question Id : 710870463 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Antibiotic resistance genes are mostly used as what kind of markers?

1. Selectable
2. Scorable
3. Countable
4. Molecular

Options :

- 7108701849. 1
- 7108701850. 2
- 7108701851. 3
- 7108701852. 4

Question Number : 44 Question Id : 710870464 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Expanded form of RAPD is

1. Randomly Amplified Polymorphic DNA
2. Random Amplification of Polymorphic DNA
3. Randomly Amplification of Polymorphic DNA
4. Random Amplified Polymorphic DNA

Options :

- 7108701853. 1
- 7108701854. 2
- 7108701855. 3
- 7108701856. 4

Question Number : 45 Question Id : 710870465 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hybrid between plasmid and phage lambda chromosome are known as

1. Plasmid vector
2. Cosmid vector
3. Fosmid vector
4. Binary vector

Options :

- 7108701857. 1
- 7108701858. 2
- 7108701859. 3
- 7108701860. 4

Question Number : 46 Question Id : 710870466 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

DUS testing is necessary for

- A. Certification of a variety
- B. Release and notification of a variety
- C. Protection of a variety

Select the **most appropriate** answer from the options given below:

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

Options :

- 7108701861. 1
- 7108701862. 2
- 7108701863. 3
- 7108701864. 4

Question Number : 47 Question Id : 710870467 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

CSTL is located at

- 1. New Delhi
- 2. Lucknow
- 3. Patna
- 4. Varanasi

Options :

- 7108701865. 1
- 7108701866. 2
- 7108701867. 3

7108701868. 4

Question Number : 48 Question Id : 710870468 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Two line system of hybrid seed production is possible in

1. CMS
2. GMS
3. TGMS
4. CGMS

Options :

- 7108701869. 1
- 7108701870. 2
- 7108701871. 3
- 7108701872. 4

Question Number : 49 Question Id : 710870469 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Seed multiplication ratio of paddy is

1. 1:60
2. 1:80
3. 1:40
4. 1:100

Options :

- 7108701873. 1
- 7108701874. 2
- 7108701875. 3
- 7108701876. 4

Question Number : 50 Question Id : 710870470 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following are certified classes of seeds under the Seeds Act?

- A. Breeder Seed
- B. Foundation Seed
- C. Certified Seed
- D. Nucleus Seed
- E. Quality declared seed

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

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

Options :

- 7108701877. 1
- 7108701878. 2
- 7108701879. 3
- 7108701880. 4

Question Number : 51 Question Id : 710870471 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Cross pollinated crop

- A. Sunflower
- B. Cabbage
- C. Chow-Chow
- D. Groundnut
- E. Moth Bean

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

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

Options :

- 7108701881. 1
- 7108701882. 2
- 7108701883. 3
- 7108701884. 4

Question Number : 52 Question Id : 710870472 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Grow-out test for seed certification is compulsory in hybrids of

- A. Tomato
- B. Brinjal
- C. Castor
- D. Maize
- E. Pearl millet

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

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

Options :

- 7108701885. 1
- 7108701886. 2
- 7108701887. 3
- 7108701888. 4

Question Number : 53 Question Id : 710870473 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Provision of 'Seed Register' is provided in

- 1. Seed Bill
- 2. PPV & FR Act
- 3. Seed Control Order
- 4. Seeds Act

Options :

- 7108701889. 1
- 7108701890. 2
- 7108701891. 3

7108701892. 4

Question Number : 54 Question Id : 710870474 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following rules are followed by ISTA for determining seed viability of a seed lot?

1. Four replications of 100 seeds each
2. Three replications of 50 seeds each
3. Four replications of 50 seeds each
4. Three replications of 100 seeds each

Options :

7108701893. 1

7108701894. 2

7108701895. 3

7108701896. 4

Question Number : 55 Question Id : 710870475 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

To break the dormancy and to enhance germination in orthodox seeds, the chemical stimuli used is

1. Sulphuric acid
2. Potasium nitrate
3. TTC
4. Formazane

Options :

7108701897. 1

7108701898. 2

7108701899. 3

7108701900. 4

Question Number : 56 Question Id : 710870476 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The Germination Value (GV) of tree seeds is calculated using the formula

1. $GV = PV \times MDG$
2. $GV = T \times PV$
3. $GV = PV \times B$
4. $GV = MDG \times T$

Options :

- 7108701901. 1
- 7108701902. 2
- 7108701903. 3
- 7108701904. 4

Question Number : 57 Question Id : 710870477 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Loose smut is the seed borne disease in

1. Paddy
2. Wheat
3. Maize
4. Sorghum

Options :

- 7108701905. 1
- 7108701906. 2
- 7108701907. 3
- 7108701908. 4

Question Number : 58 Question Id : 710870478 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Leaf spot is the seed borne disease in

1. Sesame
2. Groundnut
3. Castor
4. Linseed

Options :

- 7108701909. 1
- 7108701910. 2
- 7108701911. 3
- 7108701912. 4

Question Number : 59 Question Id : 710870479 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements:

Statement I: Under the PPV&FR Act, a variety with Bt-gene can be registered

Statement II: Under the PPV&FR Act, a variety with RIP-gene (Ribosomal Inhibitory Protein) can be registered

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 :

- 7108701913. 1

7108701914. 2

7108701915. 3

7108701916. 4

Question Number : 60 Question Id : 710870480 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

According to India's Patent Law, a patent has a time limit of

1. 15 years

2. 20 years

3. 7 years

4. 9 years

Options :

7108701917. 1

7108701918. 2

7108701919. 3

7108701920. 4

Question Number : 61 Question Id : 710870481 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Name the global initiative which is aimed at to establish a multilateral system of access and benefit sharing of Plant Genetic Resources through SMTA

1. Bioversity International

2. Commission on Genetic Resources for Food and Agriculture

3. Global Plan of Action

4. International Treaty for PGRFA

Options :

7108701921. 1

7108701922. 2

7108701923. 3

7108701924. 4

Question Number : 62 Question Id : 710870482 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The most successful technique to conserve pollen grains of plant species is

1. Organic solvent method
2. Desiccation freeze drying
3. Cryopreservation
4. Low temperature storage (-20⁰ C)

Options :

7108701925. 1

7108701926. 2

7108701927. 3

7108701928. 4

Question Number : 63 Question Id : 710870483 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

While breeding for abiotic resistance in legumes, drought tolerance and heat tolerance traits can be obtained from which one of the following *Vigna species*?

1. *Vigna radiate*
2. *Vigna aconitifolia*
3. *Vigna riukuensis*
4. *Vigna tenucauli*

Options :

7108701929. 1

7108701930. 2

7108701931. 3

7108701932. 4

Question Number : 64 Question Id : 710870484 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following crops is a rich source of calcium, iron and niacin?

1. Finger millet
2. Chickpea
3. Lima bean
4. Redgram

Options :

7108701933. 1

7108701934. 2

7108701935. 3

7108701936. 4

Question Number : 65 Question Id : 710870485 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Among the edible legume plants, which one of the following legumes possesses glandular hairs and secretes oxalic and malic acids?

1. *Vicia faba*
2. *Cajanus cajan*
3. *Vigna mungo*
4. *Cicer arietinum*

Options :

7108701937. 1

7108701938. 2

7108701939. 3

7108701940. 4

Question Number : 66 Question Id : 710870486 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which part of *Elaeis guineensis* fruit contains the maximum amount of oil?

1. Mesocarp
2. Endocarp
3. Endosperm
4. Exocarp

Options :

- 7108701941. 1
- 7108701942. 2
- 7108701943. 3
- 7108701944. 4

Question Number : 67 Question Id : 710870487 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under the **ITPGRFA**, the specified number of food and fodder crops which can be exchanged when executing **SMTA** is

1. 95 food crops and 35 fodder crops
2. 24 food crops and 15 fodder crops
3. 132 food crops and 29 fodder crops
4. 35 food crops and 29 fodder crops

Options :

- 7108701945. 1
- 7108701946. 2
- 7108701947. 3
- 7108701948. 4

Question Number : 68 Question Id : 710870488 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Among the following types of rice, which form of rice possesses more of dextrin in its endosperm?

1. Wild rice
2. Glutinous rice
3. Parboiled rice
4. Hand pound rice

Options :

- 7108701949. 1
- 7108701950. 2
- 7108701951. 3
- 7108701952. 4

Question Number : 69 Question Id : 710870489 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Name the tool which is used to assess the plant genetic diversity which reduces the large set of variables into a smaller set of 'artificial / uncorrelated' variables.

1. Cluster analysis
2. PCA
3. Mahalanobis D^2 analysis
4. Cladogram

Options :

- 7108701953. 1
- 7108701954. 2
- 7108701955. 3
- 7108701956. 4

Question Number : 70 Question Id : 710870490 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

In which of the following crops species, allogamy is effected by the process called 'tripping'?

1. *Medicago sativa*
2. *Clitoria ternatea*
3. *Desmanthus tortuosum*
4. *Macroptelium atropurpureum*

Options :

7108701957. 1
7108701958. 2
7108701959. 3
7108701960. 4

Part C Seed Science and Technology

Section Id :	71087012
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	71087012
Question Shuffling Allowed :	Yes

Question Number : 71 Question Id : 710870491 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Stolon	I. Turmeric
B. Corm	II. Bermuda grass
C. Rhizome	III. Liliium
D. Bulb	IV. Gladiolus

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

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

Options :

7108701961. 1
7108701962. 2
7108701963. 3
7108701964. 4

Question Number : 72 Question Id : 710870492 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Blind seed	I. <i>Gloeotina temulenta</i>
B. Embryoless seed	II. Mechanical injury leading to arrest of primary shoot meristem
C. Bald-head	III. Seed with emerged radicle
D. Chitted seed	IV. <i>Megastignus spermatrophus</i>

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

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

Options :

7108701965. 1
 7108701966. 2
 7108701967. 3
 7108701968. 4

Question Number : 73 Question Id : 710870493 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Evolution of dormancy, from the primitive to the most advanced form is

- A. Physiological dormancy
- B. Dormancy caused by seed coverings
- C. Dormancy imposed by the seed coat
- D. Dormancy due to under developed embryo
- E. Dormancy caused by seed coverings and its combination with physiological dormancy

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

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

Options :

- 7108701969. 1
- 7108701970. 2
- 7108701971. 3
- 7108701972. 4

Question Number : 74 Question Id : 710870494 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Pearl millet is highly cross-pollinated crop.

Reason R: Pearl millet is protogynous and anemophilic crop.

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 :

7108701973. 1

7108701974. 2

7108701975. 3

7108701976. 4

Question Number : 75 Question Id : 710870495 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

Assertion A: In groundnut, more than three generation system (including Breeder Seed) is used for seed multiplication

Reason R: The Seed Multiplication Ratio (SMR) of groundnut is 1:8.

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 :

7108701977. 1

7108701978. 2

7108701979. 3

7108701980. 4

Question Number : 76 Question Id : 710870496 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Chances of occurrence of outcrossed seeds is more in case of brinjal hybrid seeds.

Statement II: Chances of occurrence of selfed seeds is more in case of hybrid TPS.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

- 7108701981. 1
- 7108701982. 2
- 7108701983. 3
- 7108701984. 4

Question Number : 77 Question Id : 710870497 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Sunflower	I. Detasseling
B. Maize	II. Bud pollination
C. Paddy	III. Supplementary pollination
D. Cabbage	IV. GA spray

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

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

Options :

7108701985. 1
7108701986. 2
7108701987. 3
7108701988. 4

Question Number : 78 Question Id : 710870498 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Air seeding	I. Slurry comprising seed mulch and fertilizer
B. Hydro seeding	II. Pre-germinated seed suspension in a viscous gel
C. Fluid drilling	III. Sowing seeds using a pneumatic seeder
D. Water seeding	IV. Broadcasting pre-imbibed seeds from aircraft

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

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

Options :

7108701989. 1
 7108701990. 2
 7108701991. 3
 7108701992. 4

Question Number : 79 Question Id : 710870499 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: In scalper, scalping screen is set at flat slope for the best separation

Statement II: In air screen separator, separation screen is set at steep slope for the best separation.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

7108701993. 1

7108701994. 2

7108701995. 3

7108701996. 4

Question Number : 80 Question Id : 710870500 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Specific gravity separator is used for grading groundnut pods.

Reason R: Minimum weight differences exist in groundnut pods of similar sizes.

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 :

7108701997. 1

7108701998. 2

7108701999. 3

7108702000. 4

Question Number : 81 Question Id : 710870501 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Excessive air volume reduces the separation performance of specific gravity separator

Reason R: Excessive air volume results in the movement of seed mass to the downhill side of the deck.

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 :

7108702001. 1

7108702002. 2

7108702003. 3

7108702004. 4

Question Number : 82 Question Id : 710870502 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Arrange the processing equipments for processing paddy seeds in correct order

- A. Treater
- B. Cylinder separator
- C. Stoner
- D. Scalper
- E. Air screen separator

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

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

Options :

- 7108702005. 1
- 7108702006. 2
- 7108702007. 3
- 7108702008. 4

Question Number : 83 Question Id : 710870503 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Peroxidase test	I. Paddy
B. KOH test	II. Soybean
C. Ferrous sulphate test	III. Lupinus
D. Lugol's test	IV. Sorghum

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

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

Options :

7108702009. 1
7108702010. 2
7108702011. 3
7108702012. 4

Question Number : 84 Question Id : 710870504 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The most reactive free radical involved in seed ageing

1. Superoxide radical
2. Hydroxyl radical
3. Singlet oxygen
4. Peroxide free radical

Options :

- 7108702013. 1
- 7108702014. 2
- 7108702015. 3
- 7108702016. 4

Question Number : 85 Question Id : 710870505 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In basic seed viability equation ($V=K_i-p/\sigma$), ' σ ' stands for

1. One unit of probit viability percentage
2. Time for viability to fall by one probit
3. Standard deviation of viability drop over one unit time
4. Initial viability of seed lot at $p=0$ days

Options :

- 7108702017. 1
- 7108702018. 2
- 7108702019. 3
- 7108702020. 4

Question Number : 86 Question Id : 710870506 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Jack fruit seed is a recalcitrant seed.

Reason R: Recalcitrant seed can't be dried to low moisture content (<7-9%).

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 :

- 7108702021. 1
- 7108702022. 2
- 7108702023. 3
- 7108702024. 4

Question Number : 87 Question Id : 710870507 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The concept of using somatic embryos as a substitute for natural seeds was introduced by

1. Murashige
2. Kitto
3. Steward
4. Gray

Options :

- 7108702025. 1
- 7108702026. 2
- 7108702027. 3
- 7108702028. 4

Question Number : 88 Question Id : 710870508 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In the case of pollen,

- A. Exine exhibits a protective role
- B. Exine synthesis and patterning are under saprophytic control
- C. Intine is largely composed of sporopollenin
- D. Intine wall synthesis is largely under the control of the microspore cytoplasm

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

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

Options :

7108702029. 1

7108702030. 2

7108702031. 3

7108702032. 4

Question Number : 89 Question Id : 710870509 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

Assertion A: The ploidy in the endosperm often reaches beyond 100C at maturity.

Reason R: Endoreduplication occurs in metabolically highly active cells.

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 :

- 7108702033. 1
- 7108702034. 2
- 7108702035. 3
- 7108702036. 4

Question Number : 90 Question Id : 710870510 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following chemicals inhibit seed germination?

1. Cyanide
2. Nitric oxide
3. Abscisic acid
4. Hydrogen peroxide

Options :

- 7108702037. 1
- 7108702038. 2
- 7108702039. 3
- 7108702040. 4

Question Number : 91 Question Id : 710870511 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

During hybrid seed production of cotton, the distance between the parental line blocks should be

1. 3 meters
2. 5 meters
3. 30 meters
4. 50 meters

Options :

- 7108702041. 1
- 7108702042. 2
- 7108702043. 3
- 7108702044. 4

Question Number : 92 Question Id : 710870512 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Separation of mature melon fruit from the plant through the formation of abscission layer between stem and fruit stalk is referred to as

1. Fruit slip
2. Pedicel slip
3. Stem slip
4. Full slip

Options :

- 7108702045. 1
- 7108702046. 2
- 7108702047. 3
- 7108702048. 4

Question Number : 93 Question Id : 710870513 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Generally, wet soils with high organic content are avoided for pea seed production.

Reason R: Manganese deficiency in pea leads to 'Marsh Spot'.

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 and **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 :

7108702049. 1

7108702050. 2

7108702051. 3

7108702052. 4

Question Number : 94 Question Id : 710870514 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

During hybrid seed production of cucumber, male flowers in the female line are suppressed by using

1. GA7
2. Ethrel
3. Silver nitrate
4. GA4

Options :

- 7108702053. 1
- 7108702054. 2
- 7108702055. 3
- 7108702056. 4

Question Number : 95 Question Id : 710870515 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Milo cytoplasm	I. Onion
B. Tift 23A	II. Rice
C. S-cytoplasm	III. Pearl millet
D. WA Cytoplasm	IV. Sorghum

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

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

Options :

7108702057. 1

7108702058. 2

7108702059. 3

7108702060. 4

Question Number : 96 Question Id : 710870516 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

You have Lot A of 500kg seeds with 50% germination and Lot B seeds with 90% germination. How much of Lot B seeds must be blended with Lot A to get a Lot of seeds with 80% germination?

1. 500 kg
2. 1000 kg
3. 1500 kg
4. 2000 kg

Options :

7108702061. 1
7108702062. 2
7108702063. 3
7108702064. 4

Question Number : 97 Question Id : 710870517 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

Assertion A: The separation principle of air screen separator and the indent cylinder are the same but the precision/accuracy of the indent cylinder is better.

Reason R: The screen openings of the indent cylinder are provided with ribs shouldering.

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 :

7108702065. 1

7108702066. 2

7108702067. 3

7108702068. 4

Question Number : 98 Question Id : 710870518 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Any off-types which were not found to cause contamination at the time of recording field counts, but those which may cause contamination later must be included in the estimation of off-type %.

Statement II: If the percentages of contaminants found in a count are more than the maximum permissible limit, but less than twice the permissible limit, then the second count should be taken.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

7108702069. 1

7108702070. 2

7108702071. 3

7108702072. 4

Question Number : 99 Question Id : 710870519 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: A rouged out plant that is at its vegetative stage, if found in the seed field should be counted and included in the estimation of the contaminant percentage.

Statement II: If any part of the seed field is not meeting the isolation requirements, then the entire field has to be rejected.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

7108702073. 1

7108702074. 2

7108702075. 3

7108702076. 4

Question Number : 100 Question Id : 710870520 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

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

Correct Marks : 4 Wrong Marks : 1

Given below are two statements related to genebank standards for orthodox seeds:

Statement I: For active collection, samples should be stored under refrigeration at 5-10°C and relative humidity of 15±3 per cent.

Statement II: Regeneration should be carried out when the viability drops below 75% of the initial viability.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

- 7108702077. 1
- 7108702078. 2
- 7108702079. 3
- 7108702080. 4

Question Number : 101 Question Id : 710870521 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A researcher is planning to conduct a CD test to detect differences in the vigour of seed lots. Before incubation, he would like to use seeds equilibrated to 75% at 20°C. A saturated solution of which one of the following salts should be used?

1. Potassium chloride
2. Sodium chloride
3. Magnesium chloride
4. Lithium chloride

Options :

7108702081. 1
 7108702082. 2
 7108702083. 3
 7108702084. 4

Question Number : 102 Question Id : 710870522 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Grain borer	<i>I. Acanthoscelides obtectus</i>
B. Khapra beetle	<i>II. Sitotroga cerealella</i>
C. Angoumois grain moth	<i>III. Trogoderma granarium</i>
D. Bean weevil	<i>IV. Rhyzopertha dominica</i>

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

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

Options :

7108702085. 1
 7108702086. 2
 7108702087. 3
 7108702088. 4

Question Number : 103 Question Id : 710870523 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is NOT a "non-enzymatic antioxidant"?

1. Ascorbate (Vitamin-C)
2. Glutathione (GSH)
3. Tocopherol (Vitamin-E)
4. Catalase (CATs)

Options :

- 7108702089. 1
- 7108702090. 2
- 7108702091. 3
- 7108702092. 4

Question Number : 104 Question Id : 710870524 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

During the seed production of green pea varieties, excessive nitrogen application leads to a seed abnormality called

1. Hollow heart
2. Marsh spot
3. Bleaching
4. Full slip

Options :

- 7108702093. 1
- 7108702094. 2
- 7108702095. 3
- 7108702096. 4

Question Number : 105 Question Id : 710870525 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The designated disease of sunflower is caused by

1. *Claviceps microcephala*
2. *Sphacelia sorghi*
3. *Plasmopara halstedii*
4. *Sclerospora graminicola*

Options :

- 7108702097. 1
- 7108702098. 2
- 7108702099. 3
- 7108702100. 4

Question Number : 106 Question Id : 710870526 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The phage-plaque method is designed for detection of

1. Insect pathogen
2. Fungal pathogen
3. Virus
4. Bacterial pathogen

Options :

- 7108702101. 1
- 7108702102. 2
- 7108702103. 3
- 7108702104. 4

Question Number : 107 Question Id : 710870527 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

NaOH seed soak method is used to detect the seeds infected with

1. *Claviceps microcephala*
2. *Tilletia tritici*
3. *Neovossia horrida*
4. *Ustilago tritici*

Options :

- 7108702105. 1
- 7108702106. 2
- 7108702107. 3
- 7108702108. 4

Question Number : 108 Question Id : 710870528 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What is the sequence of steps in disease transmission of loose smut of barley, from infected seeds?

- A. Mycelium in embryo
- B. Smut spores
- C. Infection of healthy flowers
- D. Mycelium growth
- E. Seed germination

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

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

Options :

- 7108702109. 1
- 7108702110. 2

7108702111. 3

7108702112. 4

Question Number : 109 Question Id : 710870529 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. Total cost	I. Wages
B. Fixed cost	II. Unit price multiplied by the quantity of the product sold
C. Total revenue	III. The sum of variable cost and fixed cost
D. Variable cost	IV. Interest

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

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

Options :

7108702113. 1

7108702114. 2

7108702115. 3

7108702116. 4

Question Number : 110 Question Id : 710870530 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Arrange in sequence, the steps in the process for new product development

- A. Idea generation
- B. Prototype development
- C. Test marketing
- D. Concept development and testing
- E. Commercialization

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

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

Options :

- 7108702117. 1
- 7108702118. 2
- 7108702119. 3
- 7108702120. 4

Question Number : 111 Question Id : 710870531 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Price elasticity of demand for seed is always a positive value.

Statement II: Seed price and seed demand are not inversely related.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

7108702121. 1

7108702122. 2

7108702123. 3

7108702124. 4

Question Number : 112 Question Id : 710870532 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: The objective of seed marketing is to satisfy the needs and interests of the farmer.

Statement II: The objective of seed sale is to satisfy the needs and interests of the seed producer.

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 correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

7108702125. 1

7108702126. 2

7108702127. 3

7108702128. 4

Question Number : 113 Question Id : 710870533 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

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

Assertion A: Global seed market is projected to exceed USD 130 billion by 2022.

Reason R: Exponential increase in food demand from the expanding global population leads to release of new varieties and hybrids that bring more sophisticated technology to farmers.

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 :

- 7108702129. 1
- 7108702130. 2
- 7108702131. 3
- 7108702132. 4

Question Number : 114 Question Id : 710870534 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

If the working sample size for physical purity analysis in onion is 8g, what will be the size of the submitted sample?

1. 40g
2. 80g
3. 160g
4. 800g

Options :

- 7108702133. 1
- 7108702134. 2

7108702135. 3

7108702136. 4

Question Number : 115 Question Id : 710870535 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What will be the heterogeneity value of a seed lot, if the expected (theoretical) variance and actual variance among samples analysed in respect of germination is 10% and 20%, respectively?

1. 0.7
2. 1.0
3. 0.3
4. 0.5

Options :

7108702137. 1

7108702138. 2

7108702139. 3

7108702140. 4

Question Number : 116 Question Id : 710870536 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In purity analysis, a component is reported as 'Trace' when its weight is

1. < 0.01%
2. < 0.5%
3. < 0.05%
4. < 0.1%

Options :

7108702141. 1

7108702142. 2

7108702143. 3

7108702144. 4

Question Number : 117 Question Id : 710870537 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The recommended test for verification of cultivars in wheat is

1. Phenol colour test
2. Fluorescence test
3. Lugol's solution test
4. Peroxidase test

Options :

7108702145. 1

7108702146. 2

7108702147. 3

7108702148. 4

Question Number : 118 Question Id : 710870538 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	List II
A. UPOV convention	I. 2002
B. PPV&FR Act	II. 1961
C. DIP Act	III. 2001
D. Biological Diversity Act	IV. 1914

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

Options :

7108702149. 1

7108702150. 2

7108702151. 3

7108702152. 4

Question Number : 119 Question Id : 710870539 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Arun develops a female pearl millet inbred CMS-1 and protects it under the PPV & FR Act. Gopal has developed and protected a male pearl millet inbred R-1 under the same Act. Raju develops a pearl millet hybrid H-1 using CMS-1 and R-1.

For commercialization of H-1, one has to obtain the authorization from:

1. Arun and Gopal
2. Raju and Arun
3. Gopal and Raju
4. Arun, Raju and Gopal

Options :

- 7108702153. 1
- 7108702154. 2
- 7108702155. 3
- 7108702156. 4

Question Number : 120 Question Id : 710870540 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

PPV & FR Authority can issue compulsory licensing to any protected variety

1. Immediately from the date of protection
2. One year after the date of protection
3. Two years after the date of protection
4. Three years after the date of protection

Options :

- 7108702157. 1
- 7108702158. 2
- 7108702159. 3
- 7108702160. 4