

## Banaras Hindu University

**Question Paper Name:** 356 21st May 2019 Shift 2  
**Subject Name:** 356  
**Creation Date:** 2019-05-22 09:29:48  
**Duration:** 120  
**Total Marks:** 360  
**Display Marks:** Yes  
**Share Answer Key With Delivery Engine:** Yes  
**Actual Answer Key:** Yes

### MSc in Plant Biotechnology

**Group Number :** 1  
**Group Id :** 65898835  
**Group Maximum Duration :** 0  
**Group Minimum Duration :** 120  
**Revisit allowed for view? :** No  
**Revisit allowed for edit? :** No  
**Break time:** 0  
**Group Marks:** 360

### MSc in Plant Biotechnology

**Section Id :** 65898848  
**Section Number :** 1  
**Section type :** Online  
**Mandatory or Optional:** Mandatory  
**Number of Questions:** 120  
**Number of Questions to be attempted:** 120  
**Section Marks:** 360  
**Display Number Panel:** Yes  
**Group All Questions:** No

**Sub-Section Number:** 1  
**Sub-Section Id:** 65898858  
**Question Shuffling Allowed :** Yes

**Question Number : 1 Question Id : 6589884034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes**  
**Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes**

**Correct Marks : 3 Wrong Marks : 1**

**Question Label : Multiple Choice Question**

The interactions between the nonpolar molecules in a polar solvent are called

.....

**Options :**

1. hydrophobic interactions

2. Hydrophilic interactions
3. vanderwaal interaction
4. Electrovalant interactions

Question Number : 2 Question Id : 6589884035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which form of DNA has the longest pitch ?

Options :

1. B-DNA
2. A-DNA
3. C-DNA
4. Z-DNA

Question Number : 3 Question Id : 6589884036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Most of the biological oxidations occur without direct participation of oxygen :

Options :

1. True
2. False
3. No process like biological oxidation
4. In biological system only chemical reduction occur

Question Number : 4 Question Id : 6589884037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The role of Rec A protein is .....

Options :



1. Homologous recombination
2. Initiation of DNA replication
3. Synthesis of lagging strand
4. Increase the processivity of DNA Pol III

Question Number : 5 Question Id : 6589884038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The DNA polymerase III has ..... exonuclease activities.

Options :

1. 3' - 5'
2. 5' - 3'
3. 3' - 3'
4. 5' - 5'

Question Number : 6 Question Id : 6589884039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Assume two conditions – 1. crossing over present and 2. Absent, during cell division, the two alleles of a gene will segregate during ..... and ....., respectively.

Options :

1. Anaphase II and Anaphase I
2. Anaphase I and Anaphase II
3. Prophase I and Anaphase II
4. Prophase II and Anaphase I

Question Number : 7 Question Id : 6589884040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Examples of hexaploid crops / species are.....

Options :

1. Bread wheat, Chrysanthemum, triticale, oat
2. Bread wheat, sugarcane, strawberry, oat
3. Bread wheat, Chrysanthemum, strawberry, oat
4. Bread wheat, cotton, peanut, triticale

Question Number : 8 Question Id : 6589884041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Triticale is cross between ..... wheat and rye.

Options :

1. Auto-Tetraploid
2. Allo-Tetraploid
3. Auto-Hexaploid
4. Allo-Hexaploid

Question Number : 9 Question Id : 6589884042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In genetic engineering, a chimera is :

Options :

1. a plasmid that contains foreign DNA
2. an enzyme that links DNA molecules
3. a virus that infects bacteria
4. a fungi

Question Number : 10 Question Id : 6589884043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question



Gene for gene hypothesis states that :

Options :

1. For each resistance gene in the host there is a corresponding gene for virulence in the pathogen conferring resistance and vice versa
2. For each resistance gene in the host there is a corresponding gene for avirulence in the pathogen conferring resistance and vice versa
3. For each resistance gene in the host there is a corresponding gene for aggressiveness in the pathogen conferring resistance and vice versa
4. For each resistance gene in the host there is a corresponding gene for non-aggressiveness in the pathogen conferring resistance and vice versa

Question Number : 11 Question Id : 6589884044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Assembling multiple desirable genes from multiple parents into a single genotype for specific trait is known as :

Options :

1. Multiple resistance
2. Multiline variety
3. Gene interaction
4. Gene pyramiding

Question Number : 12 Question Id : 6589884045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Nuclear Polyhedrosis Virus is a major disease of .....

Options :

1. Silk worm
2. Aphid
3. Jassid
4. Maggot

Question Number : 13 Question Id : 6589884046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following is fumigant and stomach action :

Options :

1. Imidacloprid
2. Thiomethoexon
3. Indoxacarb
4. Spinosad

Question Number : 14 Question Id : 6589884047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following is major pest of paddy ?

Options :

1. *Chilo infescutellus*
2. *Sitophilus oryzae*
3. *Nilparvata lugens*
4. *Atherigona saccata*

Question Number : 15 Question Id : 6589884048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Pheromones are synthesized by :

Options :

1. Thoracic gland
2. Neuro secretory cell
3. Glandular epidermal cells
4. All of the three



Question Number : 16 Question Id : 6589884049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Molting hormone is secreted by :

Options :

1. Corpora allata
2. Brain
3. Neuro secretory cell
4. Prothoracic gland

Question Number : 17 Question Id : 6589884050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Cultivation of *lathyrus* in paddy field is an example of :

Options :

1. Multiple cropping
2. Relay cropping
3. Intercropping
4. Mixed cropping

Question Number : 18 Question Id : 6589884051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The sub-1 gene has been introgressed in mega varieties of :

Options :

1. Rice
2. Wheat
3. Pigeonpea

4. Maize

Question Number : 19 Question Id : 6589884052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The food or fortified food product that not only supplements the diet but also assists in treating or preventing disease (apart from anemia), so provides medical benefits, such products are known as .....

Options :

1. Pharmaceuticals
2. Ultraceuticals
3. Cosmeceutical
4. Nutraceuticals

Question Number : 20 Question Id : 6589884053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

If the two genes (A & B) are linked under *cis* condition and a single crossing over occur between these two genes in all the microspore mother cell, what will be the %age of pollens having Ab recombinant ?

Options :

1. 100
2. 25
3. 50
4. 10

Question Number : 21 Question Id : 6589884054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In honeybees the males are :

Options :



1. XX
2. XY
3. Haploid
4. Tetraploid

Question Number : 22 Question Id : 6589884055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

XYZ system of hybrid seed production is done in which crop ?

Options :

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

Question Number : 23 Question Id : 6589884056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

For rapid generation advancement (RGA) without selection in a self pollinated crop is .....

Options :

1. Pedigree method
2. Pure line method
3. Backcross method
4. Single Seed Decent method

Question Number : 24 Question Id : 6589884057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The process of transfer of useful genes from exotic or wild types into agronomically acceptable background is called as .....

Options :

1. Recurrent selection
2. Reverse genetics
3. Pre-breeding
4. Transgressive breeding

Question Number : 25 Question Id : 6589884058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Ratna variety of mango is developed from the cross of :

Options :

1. Neelam × Alphonso
2. Alphonso × Neelam
3. Neelam × Dashehari
4. Dashehari × Neelam

Question Number : 26 Question Id : 6589884059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of following is non-climacteric fruit ?

Options :

1. Mango
2. Apple
3. Banana
4. Litchi

Question Number : 27 Question Id : 6589884060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1



Question Label : Multiple Choice Question

Fruit of coconut is :

Options :

1. Berry
2. Drupe
3. Nut
4. Pome

Question Number : 28 Question Id : 6589884061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Gladiolus is commercially propagated by :

Options :

1. Corms
2. Bulbs
3. Stem Cuttings
4. Rhizomes

Question Number : 29 Question Id : 6589884062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Pungency in Radish is due to :

Options :

1. Solanin
2. Capcisin
3. Isothiocinate
4. Calcium acetate

Question Number : 30 Question Id : 6589884063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Mycorrhiza is an association between :

Options :

1. Bacterial and fungi
2. Algae and roots of higher plants
3. Fungi and roots of higher plants
4. None of three

Question Number : 31 Question Id : 6589884064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Denitrification is more in

Options :

1. Well drained soils
2. Water logged soils
3. Heavy soils
4. Light soils

Question Number : 32 Question Id : 6589884065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Generally in plant cell the mitochondria has the ..... pH, cytosol has  
..... pH and lysosomes has ..... pH.

Options :

1. 8, 7.2, 4.7
2. 7.2, 8, 4.7
3. 4.7, 7.2, 8
4. 4.7, 8, 7.2



Question Number : 33 Question Id : 6589884066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The Indian seed act was enacted in which year :

Options :

1. 1966
2. 1967
3. 1968
4. 1969

Question Number : 34 Question Id : 6589884067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Golden yellow color of tag is representative of which class of seed ?

Options :

1. Foundation seed
2. Certified seed
3. Registered seed
4. Breeder seed

Question Number : 35 Question Id : 6589884068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In certified seed the minimum standard for germination percentage of soybean :

Options :

1. 70%
2. 80%
3. 90%

4. 60%

Question Number : 36 Question Id : 6589884069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Minimum isolation distance (in meters: M) in hybrid bajra for foundation seed :

Options :

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

Question Number : 37 Question Id : 6589884070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Particle size analysis in a soil sample is performed based on the principle of :

Options :

1. Stoke's law
2. Laplace equation
3. Bray law
4. Atterberg's principle

Question Number : 38 Question Id : 6589884071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Formation of well defined ephemeral channels caused by silt-laden runoff is  
manifestation of :

Options :

1. Gully erosion



2. Rill erosion
3. Sheet erosion
4. Stream bank erosion

Question Number : 39 Question Id : 6589884072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The classical book 'Origins of Mendelism' was written by :

Options :

1. Carl Corrense
2. R. C. Olby
3. T. H. Morgan
4. Hugo de Vries

Question Number : 40 Question Id : 6589884073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Cyanobacteria is :

Options :

1. *Azolla*
2. *Azospirillum*
3. Blue green algae
4. Rhizobium

Question Number : 41 Question Id : 6589884074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Among following, the element that can accumulate in plants without exhibiting toxicity symptoms is :

Options :

1. Nitrogen

2. Potassium
3. Phosphorus
4. Sulphur

Question Number : 42 Question Id : 6589884075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

If the values of a set are measured in cms, the unit of variance will be :

Options :

1. No unit
2. cm
3.  $\text{cm}^2$
4.  $\text{cm}^3$

Question Number : 43 Question Id : 6589884076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

If all observed frequencies of classes are same as expected, the value of chi-square is :

Options :

1. 1
2.  $\infty$  (infinity)
3. Zero
4. None of the three

Question Number : 44 Question Id : 6589884077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The following genotypes are found in a population :

AA – 70; Aa – 50; aa – 20



Options :

1.  $A = 0.63$  and  $a = 0.36$
2.  $A = 0.68$  and  $a = 0.32$
3.  $A = 0.32$  and  $a = 0.68$
4.  $A = 0.7$  and  $a = 0.3$

Question Number : 45 Question Id : 6589884078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Error sum of square in RBD as compared to CRD using the same material is :

Options :

1. More
2. Less
3. Equal
4. Not comparable

Question Number : 46 Question Id : 6589884079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Homogeneity of several variances can be tested by :

Options :

1. Bartlett's test,
2. Fisher's exact test
3. F-test
4. t-test

Question Number : 47 Question Id : 6589884080 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Mendel did not observed linkage because :

Options :

1. Synapsis
2. Independent assortment
3. Mutation
4. Crossing over

Question Number : 48 Question Id : 6589884081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The dihybrid  $F_2$  ratio of marking gene action is :

Options :

1. 12 : 3 : 1
2. 9 : 6 : 1
3. 13 : 3
4. 14 : 2

Question Number : 49 Question Id : 6589884082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Barnase Barstar system is known for :

Options :

1. Male sterility
2. Self incompatibility
3. Open pollination
4. Self pollination

Question Number : 50 Question Id : 6589884083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following chemical enhances *vir* gene expression ?

Options :



1. Cyanidin
2. Glutennin
3. Acetosyringone
4. Dextran

Question Number : 51 Question Id : 6589884084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Under *in-vitro* propagation method, bipolar development of plant initiation is called as :

Options :

1. Organogenesis
2. Embryogenesis
3. Callogenesis
4. Androgenesis

Question Number : 52 Question Id : 6589884085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A satellite DNA is one which is .....

Options :

1. Present in satellite chromosome
2. Present in B Chromosome
3. very large arrays of tandem repeating DNA
4. Usually present in euchromatin region

Question Number : 53 Question Id : 6589884086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

RNAi is used for .....

Options :

1. Gene silencing
2. Over expression of gene
3. Transcriptional inactivation
4. Removal of introns

Question Number : 54 Question Id : 6589884087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In the gametophytic self-incompatibility the S-locus products are .....

Options :

1. Synthesized after the completion of meiosis
2. Synthesized before the completion of meiosis
3. Synthesized before the flower development in sporophytic cells
4. Synthesized after the double fertilization.

Question Number : 55 Question Id : 6589884088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In the *Agrobacterium* mediated gene transfer, the foreign gene is inserted in T-DNA because :

Options :

1. It naturally has multiple cloning site
2. It carries gene required for virulence
3. The T-DNA has flanking sequences which help in integrating in host DNA
4. It has multiple origin for replicating in two different organisms

Question Number : 56 Question Id : 6589884089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes



Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

If you want to do the fingerprinting of a species, which DNA based marker you will use :

Options :

1. SSR
2. STS
3. RAPD
4. AFLP

Question Number : 57 Question Id : 6589884090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Set of closely related genes or genetic markers that are inherited as a single unit is :

Options :

1. cistron
2. gene families
3. Haplotype
4. Haploid

Question Number : 58 Question Id : 6589884091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following conditions does not favour denaturation of double-stranded DNA ?

Options :

1. heating to 100 degrees Celsius
2. adding high concentration of sodium chloride
3. decreasing the ionic strength of the solution

4. treatment with alkali to raise the pH to 10

Question Number : 59 Question Id : 6589884092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The development of embryo from male gamete without fertilization is known as .....

Options :

1. Androgenic haploids
2. Gynogenic haploids
3. Apospory
4. Apogamy

Question Number : 60 Question Id : 6589884093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

For maintaining genetic purity of a variety, the Hardy-Weinberg equilibrium is applied in :

Options :

1. Wheat
2. Chickpea
3. Rice
4. Maize

Question Number : 61 Question Id : 6589884094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The majority of DNA synthesis occurs during ..... phase of cell cycle.

Options :

1. S



2. G1

3. G2

4. M

Question Number : 62 Question Id : 6589884095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The number of chromosomes ( $2n$ ) in rice is .....

Options :

1. 14

2. 18

3. 24

4. 30

Question Number : 63 Question Id : 6589884096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The number of chromosomes ( $2n$ ) in wheat (*Triticum durum*) is .....

Options :

1. 14

2. 28

3. 42

4. 56

Question Number : 64 Question Id : 6589884097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Commercially grown single cross hybrids are .....

Options :

1. homozygous and homogenous
2. heterozygous and homogenous
3. homozygous and heterogenous
4. heterozygous and heterogenous

Question Number : 65 Question Id : 6589884098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Polycistronic mRNA is generally produced in .....

Options :

1. Eukaryotes
2. Both prokaryotes and eukaryotes
3. Prokaryotes
4. Neither in prokaryotes nor eukaryotes

Question Number : 66 Question Id : 6589884099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

..... is a sequence in ..... where RNA polymerase initially binds .

Options :

1. Promoter, DNA
2. Promoter, RNA
3. Enhancer, DNA
4. Enhancer, RNA

Question Number : 67 Question Id : 6589884100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question



In a field of one hectare if you want to apply 100 kg nitrogen and 100 kg potash. The amount of urea and murate of potash needed is ..... kg and ..... kg respectively.

Options :

1. 217, 166
2. 166, 217
3. 625, 150
4. 150, 625

Question Number : 68 Question Id : 6589884101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In DNA, the linkage between sugar and base is known as ..... bond.

Options :

1. Phosphor-di-ester
2. Hydrogen
3. N-glycosidic
4. Ester

Question Number : 69 Question Id : 6589884102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The RNA primer during replication is synthesized by ..... enzyme.

Options :

1. RNA polymerase
2. RNA primase
3. DNA polymerase
4. DNA primase

Question Number : 70 Question Id : 6589884103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The role of *i* gene in *Lac* operon is .....

Options :

1. Synthesis of lactose
2. Synthesis of inducer
3. Synthesis of repressor
4. Synthesis of allo-lactose

Question Number : 71 Question Id : 6589884104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Meiosis is important for :

Options :

1. Growth
2. Repair
3. Reproduction
4. Disease resistance

Question Number : 72 Question Id : 6589884105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The percentage of Ab gametes produced by a heterozygote with these two genes in *trans* condition and the two genes are linked with a distance of 20 cM will be .....

Options :

1. 10
2. 20



3. 30

4. 40

Question Number : 73 Question Id : 6589884106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A cross was made between two parents differing for two independent genes (each with two alleles A/a and B/B'), Gene A is dominant over a, and Gene B is co-dominant over B'. In the F<sub>2</sub> generation the phenotypic segregating ratio obtained will be .....

Options :

1. 9:3:3:1

2. 9:7

3. 1:2:1:3:6:3

4. 3:1

Question Number : 74 Question Id : 6589884107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In a callus culture :

Options :

1. increasing level of cytokinin to a callus induces shoot formation and increasing level of auxin promote root formation

2. increasing level of auxin to a callus induces shoot formation and increasing level of cytokinin promote root formation

3. auxins and cytokinins are not required

4. only auxin is required for root and shoot formation

Question Number : 75 Question Id : 6589884108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Bordeaux mixture is :

Options :

1. Mercury fungicide
2. Copper fungicide
3. Sulphur fungicide
4. None of the three

Question Number : 76 Question Id : 6589884109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Little leaf of brinjal is caused by :

Options :

1. Bacteria
2. Virus
3. Phytoplasma
4. Nematode

Question Number : 77 Question Id : 6589884110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Synthetic mRNA AGAGAGAGAG ..... produces polypeptide which incorporated Arginine and Glutamate. AAGAAGAAGAAG ..... produces polypeptide which incorporated Arginine, along with other amino acids. The code for Arginine is :

Options :

1. GAG
2. AAG
3. AGA
4. GAA

Question Number : 78 Question Id : 6589884111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1



Question Label : Multiple Choice Question

How can we get a haploid plant ?

Options :

1. Organ culture
2. Embryo culture
3. Anther culture
4. Tissue culture

Question Number : 79 Question Id : 6589884112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The first nucleotide of nascent mRNA has ..... phosphate(s).

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 80 Question Id : 6589884113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The amino acid is linked to t-RNA by ..... bond.

Options :

1. Ester
2. Phosphor-di-ester
3. Glycosidic
4. peptide

Question Number : 81 Question Id : 6589884114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

DNA of mitochondria is generally .....

Options :

1. Linear
2. single copy
3. single stranded
4. Circular

Question Number : 82 Question Id : 6589884115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Who identified the killing effect of bacteria *Bacillus thuringiensis* on a Mediterranean flour moth in 1911 ?

Options :

1. Michael Faraday
2. Enrico Fermi
3. James Clerk
4. Ernst Berliner

Question Number : 83 Question Id : 6589884116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The cultivation of vegetable in soil less aqueous medium is called :

Options :

1. Molecular Farming
2. Tissue Culture
3. Hydroponics
4. Meri-culture

Question Number : 84 Question Id : 6589884117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1



Question Label : Multiple Choice Question

In general, biologically active form of Abscisic Acid is :

Options :

1. Cis-Abscisic Acid
2. Trans-Abscisic Acid
3. Alpha-Abscisic Acid
4. Beta-Abscisic Acid

Question Number : 85 Question Id : 6589884118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which gene transfer technique involves the use of a fatty bubble to carry a gene into a somatic cell ?

Options :

1. Biolistic method
2. Liposome mediated
3. Electroporation
4. *In-situ* injection

Question Number : 86 Question Id : 6589884119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

If one cell has AT contents 40%, what will be the percentage of Guanine residue ?

Options :

1. 60%
2. 15%
3. 30%
4. Guanine residue cannot be calculated

Question Number : 87 Question Id : 6589884120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A cesium chloride will separate DNA molecules on the basis of :

Options :

1. absorption
2. resorption
3. density
4. adhesion

Question Number : 88 Question Id : 6589884121 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In the study of one experiment it was found that the value of  $T_m$  for DNA is  $= 40^\circ\text{C}$ . If the cell has 20% GC at the above  $T_m$ , then what will be value of ' $T_m$ ' if the GC% increases to 60% ?

Options :

1. Remain same
2. Increases
3. Decreases
4. Cannot be compared

Question Number : 89 Question Id : 6589884122 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following is *not* relevant to recombinant DNA safety guidelines in India ?

Options :

1. IBSC
2. RCGM
3. GEAC
4. NBPGR



Question Number : 90 Question Id : 6589884123 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The process of finding relative position of gene on the chromosome :

Options :

1. Gene tracing
2. Gene mapping
3. Gene walking
4. Chromosome walking

Question Number : 91 Question Id : 6589884124 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Proteins isolated from bacteria that catalyze specific cleavage of DNA are :

Options :

1. Restriction enzymes
2. Bacteriophage enzymes
3. Methylating enzymes
4. Telomerases

Question Number : 92 Question Id : 6589884125 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A small, circular DNA molecule used as a vector to transmit foreign DNA is a :

Options :

1. Plasmid
2. Prion
3. Liposome
4. Lipofection

Question Number : 93 Question Id : 6589884126 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The Ti plasmid is generally used to genetically engineer :

Options :

1. Bacteria
2. Plants
3. Fungi
4. Animals

Question Number : 94 Question Id : 6589884127 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following enzymes can be described as a DNA dependent RNA polymerase ?

Options :

1. Primase
2. DNA polymerase III
3. DNA polymerase I
4. Reverse transcriptase

Question Number : 95 Question Id : 6589884128 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which of the following statements regarding a double helical molecule of DNA is true ?

Options :

1. All hydroxyl groups pentoses are involved in linkages
2. Bases are perpendicular to the axis
3. Each strand is identical
4. Each strand has parallel, 5' to 3' direction



Question Number : 96 Question Id : 6589884129 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

..... is a multi locus marker.

Options :

1. SSR
2. AFLP
3. CAPS
4. RFLP

Question Number : 97 Question Id : 6589884130 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A plant called *Rauwolfia serpentina* is under the threat of extinction. To save this plant, which technique is highly useful ?

Options :

1. Genetic engineering
2. DNA fingerprinting
3. Hybridoma technology
4. *in vitro* culture

Question Number : 98 Question Id : 6589884131 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A clone is a group of organisms produced by :

Options :

1. asexual method and genetically similar
2. asexual method and genetically dissimilar
3. sexual method and genetically similar
4. sexual method and genetically dissimilar

Question Number : 99 Question Id : 6589884132 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Expression vectors are those which .....

Options :

1. produce protein products
2. used for genomic libraries
3. used for chromosome synthesis
4. used for fingerprinting

Question Number : 100 Question Id : 6589884133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Somatic embryos are :

Options :

1. embryos developed from zygote after fertilization
2. embryos developed from egg without fertilization
3. embryo like structure developed from the cells of callus
4. embryo developed by ovules

Question Number : 101 Question Id : 6589884134 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Meristem culture helps in developing :

Options :

1. hybrid plants
2. virus free plants
3. disease resistant plants
4. tall plants



Question Number : 102 Question Id : 6589884135 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

DNA, a term used in recombinant DNA technology means :

Options :

1. competitive DNA
2. chemical DNA
3. complex DNA
4. complementary DNA

Question Number : 103 Question Id : 6589884136 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A part of nucleic acid used to find a gene by hybridization is called :

Options :

1. vector
2. clone
3. probe
4. cybrid

Question Number : 104 Question Id : 6589884137 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

A segment of DNA that reads from the same forward and backward is called :

Options :

1. palindromic DNA
2. complementary DNA
3. plasmid DNA
4. copy DNA

Question Number : 105 Question Id : 6589884138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Resistance to ring spot viruses in papaya was developed by :

Options :

1. Somatic hybridization
2. Invitro mutagenesis
3. Antisense RNA technology
4. Somaclonal variation

Question Number : 106 Question Id : 6589884139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Which one of the following RNA molecules is involved in regulation of gene expression ?

Options :

1. miRNA
2. 23S RNA
3. 5S RNA
4. tRNA

Question Number : 107 Question Id : 6589884140 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The absence of sigma factor in RNA polymerase :

Options :

1. affects elongation only
2. blocks initiation only
3. affects both initiation and elongation
4. does not affect transcription



Question Number : 108 Question Id : 6589884141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The *Rht* mutations in wheat that were pivotal for 'Green Revolution' cause reduction in plant height due to impairment in :

Options :

1. gibberellic acid biosynthesis pathway
2. gibberellic acid signaling pathway
3. auxin biosynthetic pathway
4. auxin response pathway

Question Number : 109 Question Id : 6589884142 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

An organism with the genotype AABbCcDD is selfed. The four genes are independently assorting. What proportion of the progeny will show the genotype AAbbccDD ?

Options :

1.  $1/4$
2.  $1/16$
3.  $1/64$
4.  $1/256$

Question Number : 110 Question Id : 6589884143 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Pre-germination cold treatment to break dormancy is called :

Options :

1. Scarification
2. Stratification
3. Dormancy break
4. Vernalization

Question Number : 111 Question Id : 6589884144 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The number of moles of solute per kilogram of solvent (not solution) is referred to as :

Options :

1. Molarity
2. Molality
3. Mole fraction
4. None of the three

Question Number : 112 Question Id : 6589884145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Tetrazolium chloride commonly used in seed viability testing; indicates :

Options :

1. Cellular respiration
2. Intact cellular ultra-structure
3. Seed germination
4. None of the three

Question Number : 113 Question Id : 6589884146 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The Ames test is used to :

Options :

1. detect bacterial viruses
2. determine the rate of DNA replication
3. examine the potency of antibiotics



4. measure the mutagenic effects of various chemical compounds

Question Number : 114 Question Id : 6589884147 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The technique used in genome editing is :

Options :

1. Antisense RNA
2. Site directed mutagenesis
3. epigenome modification
4. CRISPR - Cas 9

Question Number : 115 Question Id : 6589884148 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Genomic libraries consists of ?

Options :

1. Fragments of genomic DNA
2. Fragments of cDNA
3. Fragments of RNA
4. Fragments of Proteins

Question Number : 116 Question Id : 6589884149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The number of different types of tRNAs required is less than the number of codon because of .....

Options :

1. Wobble pairing
2. Triplet codon
3. Unambiguous nature of codon

#### 4. Strict Watson-Crick Pairing

Question Number : 117 Question Id : 6589884150 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

Transfer of genetic material from one bacterial cell to another by means of virus particles is called .....

Options :

1. Transduction
2. Sexduction
3. Conjugation
4. Transformation

Question Number : 118 Question Id : 6589884151 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The exchange of non-sister chromatides of homologous chromosomes is known as .....

Options :

1. Reciprocal translocation
2. Recombination
3. Inversion
4. Non-reciprocal translocation

Question Number : 119 Question Id : 6589884152 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

In the B-form of DNA the pentose sugar is, ..... endo and ..... exo deoxy sugar.

Options :

1. 2', 3'
2. 3', 2'



3. 2', 2'

4. 3', 3'

Question Number : 120 Question Id : 6589884153 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :  
No Control Enable : Yes

Correct Marks : 3 Wrong Marks : 1

Question Label : Multiple Choice Question

The transcription of lac operon is negatively regulated by :

Options :

1. Repressor

2. cAMP

3. lactose

4. allo-lactose