

# National Testing Agency

|                                                |                                             |
|------------------------------------------------|---------------------------------------------|
| <b>Question Paper Name :</b>                   | Plant Pathology 23rd Sep 2020 Shift 2 Set 2 |
| <b>Subject Name :</b>                          | Plant Pathology                             |
| <b>Creation Date :</b>                         | 2020-09-23 19:33:33                         |
| <b>Duration :</b>                              | 120                                         |
| <b>Total Marks :</b>                           | 480                                         |
| <b>Display Marks:</b>                          | Yes                                         |
| <b>Share Answer Key With Delivery Engine :</b> | Yes                                         |
| <b>Actual Answer Key :</b>                     | Yes                                         |

## Plant Pathology

|                                      |         |
|--------------------------------------|---------|
| <b>Group Number :</b>                | 1       |
| <b>Group Id :</b>                    | 7108706 |
| <b>Group Maximum Duration :</b>      | 0       |
| <b>Group Minimum Duration :</b>      | 120     |
| <b>Show Attended Group? :</b>        | No      |
| <b>Edit Attended Group? :</b>        | No      |
| <b>Break time :</b>                  | 0       |
| <b>Group Marks :</b>                 | 480     |
| <b>Is this Group for Examiner? :</b> | No      |

## Part A General Knowledge

|                                |           |
|--------------------------------|-----------|
| <b>Section Id :</b>            | 71087016  |
| <b>Section Number :</b>        | 1         |
| <b>Section type :</b>          | Online    |
| <b>Mandatory or Optional :</b> | Mandatory |
| <b>Number of Questions :</b>   | 20        |

|                                              |          |
|----------------------------------------------|----------|
| <b>Number of Questions to be attempted :</b> | 20       |
| <b>Section Marks :</b>                       | 80       |
| <b>Display Number Panel :</b>                | Yes      |
| <b>Group All Questions :</b>                 | Yes      |
| <b>Mark As Answered Required? :</b>          | Yes      |
| <b>Sub-Section Number :</b>                  | 1        |
| <b>Sub-Section Id :</b>                      | 71087016 |
| <b>Question Shuffling Allowed :</b>          | Yes      |

**Question Number : 1 Question Id : 710870661 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 :**

7108702641. 1  
7108702642. 2  
7108702643. 3  
7108702644. 4

**Question Number : 2 Question Id : 710870662 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 :**

- 7108702645. 1
- 7108702646. 2
- 7108702647. 3
- 7108702648. 4

**Question Number : 3 Question Id : 710870663 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 :**

- 7108702649. 1

7108702650. 2

7108702651. 3

7108702652. 4

**Question Number : 4 Question Id : 710870664 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 :**

7108702653. 1

7108702654. 2

7108702655. 3

7108702656. 4

**Question Number : 5 Question Id : 710870665 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 :**

7108702657. 1

7108702658. 2

7108702659. 3

7108702660. 4

**Question Number : 6 Question Id : 710870666 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 :**

- 7108702661. 1
- 7108702662. 2
- 7108702663. 3
- 7108702664. 4

**Question Number : 7 Question Id : 710870667 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 :**

- 7108702665. 1
- 7108702666. 2
- 7108702667. 3
- 7108702668. 4

**Question Number : 8 Question Id : 710870668 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

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

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

**Options :**

7108702669. 1  
7108702670. 2  
7108702671. 3  
7108702672. 4

**Question Number : 9 Question Id : 710870669 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 :**

7108702673. 1  
7108702674. 2  
7108702675. 3  
7108702676. 4

**Question Number : 10 Question Id : 710870670 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 :**

7108702677. 1

7108702678. 2

7108702679. 3

7108702680. 4

**Question Number : 11 Question Id : 710870671 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 :**

7108702681. 1

7108702682. 2

7108702683. 3

7108702684. 4

**Question Number : 12 Question Id : 710870672 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 :**



7108702685. 1  
7108702686. 2  
7108702687. 3  
7108702688. 4

**Question Number : 13 Question Id : 710870673 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 34<sup>th</sup> Surajkund International Crafts Fair held in Haryana?

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

**Options :**

7108702689. 1  
7108702690. 2  
7108702691. 3  
7108702692. 4

**Question Number : 14 Question Id : 710870674 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 :**

- 7108702693. 1
- 7108702694. 2
- 7108702695. 3
- 7108702696. 4

**Question Number : 15 Question Id : 710870675 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 :**

- 7108702697. 1
- 7108702698. 2
- 7108702699. 3
- 7108702700. 4

**Question Number : 16 Question Id : 710870676 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 :**

- 7108702701. 1
- 7108702702. 2
- 7108702703. 3
- 7108702704. 4

**Question Number : 17 Question Id : 710870677 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 :**

- 7108702705. 1
- 7108702706. 2
- 7108702707. 3
- 7108702708. 4

**Question Number : 18 Question Id : 710870678 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 :**

- 7108702709. 1
- 7108702710. 2
- 7108702711. 3
- 7108702712. 4

**Question Number : 19 Question Id : 710870679 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 :**

- 7108702713. 1
- 7108702714. 2
- 7108702715. 3
- 7108702716. 4

**Question Number : 20 Question Id : 710870680 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 :**

- 7108702717. 1

7108702718. 2  
7108702719. 3  
7108702720. 4

## Part B Core Crop Sciences-II

|                                       |           |
|---------------------------------------|-----------|
| Section Id :                          | 71087017  |
| 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 :                      | 71087017  |
| Question Shuffling Allowed :          | Yes       |

**Question Number : 21 Question Id : 710870681 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**

Spatial arrangement of individuals of the population is called as

1. Dispersion
2. Density
3. Population
4. Distribution

**Options :**

7108702721. 1  
7108702722. 2

7108702723. 3

7108702724. 4

**Question Number : 22 Question Id : 710870682 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 an external feeder on stored products?

1. *Plodia interpunctella*
2. *Cylas formicarius*
3. *Lasioderma serricorne*
4. *Sitophilus oryzae*

**Options :**

7108702725. 1

7108702726. 2

7108702727. 3

7108702728. 4

**Question Number : 23 Question Id : 710870683 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**

Telea form larva is present in

1. *Ichneumonidae*
2. *Tenthredinidae*
3. *Scleiaridae*
4. *Tachinidae*

**Options :**

7108702729. 1

7108702730. 2

7108702731. 3

7108702732. 4

**Question Number : 24 Question Id : 710870684 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 first scientific account of the lac insect was published in the year

1. 1782
2. 1872
3. 1827
4. 1754

**Options :**

7108702733. 1  
7108702734. 2  
7108702735. 3  
7108702736. 4

**Question Number : 25 Question Id : 710870685 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 has no fumigant action?

1. Aluminium phosphide
2. Magnesium phosphide
3. Bromadiolone R
4. Phosphamidon

**Options :**

7108702737. 1  
7108702738. 2  
7108702739. 3  
7108702740. 4

**Question Number : 26 Question Id : 710870686 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**

When host is parasitized by two or more species of parasitoids/parasites, the relationship is called

1. Super parasitism
2. Hyper parasitism
3. Multiple parasitism
4. Simple parasitism

**Options :**

7108702741. 1

7108702742. 2

7108702743. 3

7108702744. 4

**Question Number : 27 Question Id : 710870687 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 field cum storage pest?

1. *Cylas formicarius*
2. *Oryzaephilus surinamensis*
3. *Callosobruchus chinensis*
4. *Phytorimaea operculella*

**Options :**

7108702745. 1

7108702746. 2

7108702747. 3

7108702748. 4

**Question Number : 28 Question Id : 710870688 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 total number of eggs laid by a female during the entire life is called as

1. Fecundity
2. Natality
3. Fidelity
4. Voltinity

**Options :**

7108702749. 1  
7108702750. 2  
7108702751. 3  
7108702752. 4

**Question Number : 29 Question Id : 710870689 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**

Osmoregulatory cells found in the epithelium of the abdominal gills of aquatic insects are called

1. Urocytes
2. Trophocytes
3. Mycetocytes
4. Chloride cells

**Options :**

7108702753. 1  
7108702754. 2  
7108702755. 3  
7108702756. 4

**Question Number : 30 Question Id : 710870690 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

In a honey bee's digestive system, the ripening of honey takes place in the

1. Proventriculus
2. Stomocleum
3. Hepatic caecum
4. Rectum and anal glands

**Options :**

7108702757. 1  
7108702758. 2  
7108702759. 3  
7108702760. 4

**Question Number : 31 Question Id : 710870691 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**

Potential parasitoid of *Paracoccus marginatus* is

1. *Encarsia guadeloupae*
2. *Chrysoperla zastrowi sillemi*
3. *Goniozus nephantidis*
4. *Acerophagus papaya*

**Options :**

7108702761. 1  
7108702762. 2  
7108702763. 3  
7108702764. 4

**Question Number : 32 Question Id : 710870692 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**

Gause's hypothesis in the ecological study is closely related to

1. Predation
2. Mutualism
3. Competition
4. Parasitism

**Options :**

7108702765. 1  
7108702766. 2  
7108702767. 3  
7108702768. 4

**Question Number : 33 Question Id : 710870693 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 Destructive Insect Pests Act called "DIPA" was passed in the year

1. 1920
2. 1924
3. 1924
4. 1934

**Options :**

7108702769. 1  
7108702770. 2  
7108702771. 3  
7108702772. 4

**Question Number : 34 Question Id : 710870694 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 vector for the papaya mosaic virus is

1. *Aphis gossypii*
2. *Aphis craccivora*
3. *Myzus persicae*
4. *Acerophagus papaya*

**Options :**

7108702773. 1  
7108702774. 2  
7108702775. 3  
7108702776. 4

**Question Number : 35 Question Id : 710870695 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 vector of the rice tungro disease is

1. *Nilaparvata lugens*
2. *Nephotettix nigropictus*
3. *Cofana spectra*
4. *Breveria reli*

**Options :**

7108702777. 1  
7108702778. 2  
7108702779. 3  
7108702780. 4

**Question Number : 36 Question Id : 710870696 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**

Plant parasitic nematodes are

1. Vertebrates
2. Invertebrates
3. Arthropods
4. Annelids

**Options :**

7108702781. 1  
7108702782. 2  
7108702783. 3  
7108702784. 4

**Question Number : 37 Question Id : 710870697 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**

*Globodera rostochiensis* is a major problem in

1. Sweet potato
2. Potato
3. Wheat
4. Beet root

**Options :**

7108702785. 1  
7108702786. 2  
7108702787. 3  
7108702788. 4

**Question Number : 38 Question Id : 710870698 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**

Nematodes can be extracted from soil using

1. Mystifier technique
2. Fenwick can
3. Cobb's decanting and sieving
4. Fenwick can and sugar flotation

**Options :**

- 7108702789. 1
- 7108702790. 2
- 7108702791. 3
- 7108702792. 4

**Question Number : 39 Question Id : 710870699 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**

Terminal spindle-shaped root galls in rice are caused by

1. *Heterodera oryzae*
2. *Meloidogyne incognita*
3. *Meloidogyne graminicola*
4. *Meloidogyne hapla*

**Options :**

- 7108702793. 1
- 7108702794. 2
- 7108702795. 3
- 7108702796. 4

**Question Number : 40 Question Id : 710870700 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**

*Romanomermis culicivorax* is a parasite of

1. Snails
2. Mosquitoes
3. Grasshoppers
4. Bats

**Options :**

7108702797. 1  
7108702798. 2  
7108702799. 3  
7108702800. 4

**Question Number : 41 Question Id : 710870701 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**

Ideal winnowing and salt water treatment is the best method to control

1. *Anguina tritici*
2. *Aphelenchoides* spp.
3. *Meloidogyne* spp.
4. *Pratylenchus* spp.

**Options :**

7108702801. 1  
7108702802. 2  
7108702803. 3  
7108702804. 4

**Question Number : 42 Question Id : 710870702 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**

Nematodes used for insect control are

1. *Steinernema*
2. *Rhabdids*
3. *Diplogstrids*
4. *Seinura* spp.

**Options :**

7108702805. 1  
7108702806. 2  
7108702807. 3  
7108702808. 4

**Question Number : 43 Question Id : 710870703 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**

Nematodes can be preserved for a long period in formaldehyde at a concentration (%) of

1. 1-2
2. 2-4
3. 4-6
4. 6-8

**Options :**

7108702809. 1  
7108702810. 2  
7108702811. 3  
7108702812. 4

**Question Number : 44 Question Id : 710870704 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**



Dorylaimid group of nematodes are vectors of

1. Viroids
2. Plant viruses
3. Phytoplasmas
4. Bacteria

**Options :**

7108702813. 1  
7108702814. 2  
7108702815. 3  
7108702816. 4

**Question Number : 45 Question Id : 710870705 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**

White tip disease of rice is caused by

1. *Aphelenchus avenae*
2. *Globodera rostochiensis*
3. *Aphelenchoides besseyi*
4. *Aphelenchoides arachidis*

**Options :**

7108702817. 1  
7108702818. 2  
7108702819. 3  
7108702820. 4

**Question Number : 46 Question Id : 710870706 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**

Theo H.M. Smits is known for his contribution for completing first sequenced whole genome of

1. *Erwinia amylovora*
2. *Bacillus subtilis*
3. *Klebsiella pneumoniae*
4. *Xanthomonas oryzae* pv *oryzae*

**Options :**

7108702821. 1  
7108702822. 2  
7108702823. 3  
7108702824. 4

**Question Number : 47 Question Id : 710870707 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**

Chemical reaction occurring while preparing Bordeaux mixture

1.  $\text{CuSO}_4 + \text{Ca(OH)}_2 = \text{CuO}_2 + \text{CaSO}_4$
2.  $\text{CuSO}_4 + \text{Ca(OH)}_2 = \text{CuO} + \text{CaSO}_4 + \text{H}_2\text{O}$
3.  $\text{CuSO}_4 + \text{Ca(OH)}_2 = \text{Cu(OH)}_2 + \text{H}_2\text{S}$
4.  $\text{CuSO}_4 + \text{Ca(OH)}_2 = \text{Cu(OH)}_2 + \text{CaSO}_4$

**Options :**

7108702825. 1  
7108702826. 2  
7108702827. 3  
7108702828. 4

**Question Number : 48 Question Id : 710870708 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**

Components required to prepare chestnut compound is

1. Copper sulphate and ammonium carbonate
2. Copper hydroxide and ammonium carbonate
3. Copper sulphate and ammonium chloride
4. Copper sulphate and ammonium nitrate

**Options :**

7108702829. 1

7108702830. 2

7108702831. 3

7108702832. 4

**Question Number : 49 Question Id : 710870709 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 first R gene identified in 1992 was in which one of the following crops?

1. Tomato
2. Maize
3. Potato
4. Paddy

**Options :**

7108702833. 1

7108702834. 2

7108702835. 3

7108702836. 4

**Question Number : 50 Question Id : 710870710 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 signal molecule(s) involved in ISR is/are

1. Jasmonic acid only
2. Salicylic acid only
3. Ethylene only
4. Jasmonic acid and ethylene

**Options :**

7108702837. 1

7108702838. 2

7108702839. 3

7108702840. 4

**Question Number : 51 Question Id : 710870711 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**

Exogenous stimulant favouring Striga seed germination is

1. Salicylic acid
2. Lipopolysaccharide
3. Coumarins
4. Glucosamine

**Options :**

7108702841. 1

7108702842. 2

7108702843. 3

7108702844. 4

**Question Number : 52 Question Id : 710870712 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 hallucinogenic mushroom used by Mexicans in religious functions is

1. *Psilocybe cubensis*
2. *Fomitopsis officinalis*
3. *Amanita muscaria*
4. *Boletus edulis*

**Options :**

7108702845. 1  
7108702846. 2  
7108702847. 3  
7108702848. 4

**Question Number : 53 Question Id : 710870713 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**

High-efficiency particulates air filter is seen in

1. BOD incubator
2. Laminar flow
3. Bio reactor
4. Refrigerator

**Options :**

7108702849. 1  
7108702850. 2  
7108702851. 3  
7108702852. 4

**Question Number : 54 Question Id : 710870714 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 NPR-1 gene that coordinates both ISR and SAR is active at

1. Oligomeric form
2. Monomeric form
3. Dimeric form
4. *Hirsutella thompsonii*

**Options :**

7108702853. 1  
7108702854. 2  
7108702855. 3  
7108702856. 4

**Question Number : 55 Question Id : 710870715 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**

Hyperparasite of powdery mildew pathogens is

1. *Verticillium leccani*
2. *Ampelomyces quisqualis*
3. *Darluca filum*
4. *Hirsutella thompsonii*

**Options :**

7108702857. 1  
7108702858. 2  
7108702859. 3  
7108702860. 4

**Question Number : 56 Question Id : 710870716 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 correct sequence of events associated with indirect ELISA is

1. Antigen - Unlabelled primary antibody - Enzyme labelled secondary antibody
2. Labelled primary antibody - Antigen- Enzyme labelled secondary antibody
3. Antigen - Labelled primary antibody - Enzyme labelled secondary antibody
4. Unlabelled primary antibody - Antigen - Enzyme labelled secondary antibody

**Options :**

7108702861. 1

7108702862. 2

7108702863. 3

7108702864. 4

**Question Number : 57 Question Id : 710870717 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**

Mobile DNA segments capable of moving between prokaryotes and eukaryotes are known as

1. Transposons
2. Plasmids
3. Episomes
4. Chromatin

**Options :**

7108702865. 1

7108702866. 2

7108702867. 3

7108702868. 4

**Question Number : 58 Question Id : 710870718 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**

Organic Sulphur based fungicide with nematicidal and fumigant action is

1. Ferbam
2. Vapam
3. Nabam
4. Thiram

**Options :**

7108702869. 1  
7108702870. 2  
7108702871. 3  
7108702872. 4

**Question Number : 59 Question Id : 710870719 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**

Selective medium used to isolate *Trichoderma* from soil was identified by

1. Kloepper
2. Elad and Chet
3. Grente
4. Menzies

**Options :**

7108702873. 1  
7108702874. 2  
7108702875. 3  
7108702876. 4

**Question Number : 60 Question Id : 710870720 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 active principle with antifungal activity in Bordeaux mixture is

1. Copper sulphate
2. Calcium sulphate
3. Copper hydroxide
4. Calcium hydroxide

**Options :**

7108702877. 1

7108702878. 2

7108702879. 3

7108702880. 4

**Question Number : 61 Question Id : 710870721 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**

Central Muga Eri Research and Training Institute is in

1. Manipur
2. Assam
3. West Bengal
4. Odisha

**Options :**

7108702881. 1

7108702882. 2

7108702883. 3

7108702884. 4

**Question Number : 62 Question Id : 710870722 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 queen of textiles is

1. Cotton
2. Wool
3. Silk
4. Linen

**Options :**

7108702885. 1  
7108702886. 2  
7108702887. 3  
7108702888. 4

**Question Number : 63 Question Id : 710870723 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:** Chowki rearing refers to the rearing of young silkworm larvae under a controlled microclimate

**Statement II:** *Antheraea proylei* is a cross between *A. pernyi* and *A. roylei*.

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 :**

7108702889. 1  
7108702890. 2  
7108702891. 3

7108702892. 4

**Question Number : 64 Question Id : 710870724 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**

When can an entire branch containing leaves be fed to the larvae of *Bombyx mori*?

1. Neonate
2. 2<sup>nd</sup> instar
3. 3<sup>rd</sup> instar
4. 4<sup>th</sup> and 5<sup>th</sup> instar

**Options :**

7108702893. 1

7108702894. 2

7108702895. 3

7108702896. 4

**Question Number : 65 Question Id : 710870725 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:** Tiger band disease is a native of India and it infects oak Tasar silkworm

**Statement II:** Tiger band disease of silkworm attacks all Indian silkworm species.

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 :**

- 7108702897. 1
- 7108702898. 2
- 7108702899. 3
- 7108702900. 4

**Question Number : 66 Question Id : 710870726 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 known as the tasar silkworm?

- 1. *Antheraea proylei*
- 2. *Antheraea assamensis*
- 3. *Samia ricini*
- 4. *Antheraea mylitta*

**Options :**

- 7108702901. 1
- 7108702902. 2
- 7108702903. 3
- 7108702904. 4

**Question Number : 67 Question Id : 710870727 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 process of rearing, which one of the following oviposits most on a plain smooth surface?

- 1. Mulberry silkworm
- 2. Eri silkworm
- 3. Oak Tasar silkworm
- 4. Tasar silkworm

**Options :**

7108702905. 1  
7108702906. 2  
7108702907. 3  
7108702908. 4

**Question Number : 68 Question Id : 710870728 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**

| <b>List I</b>              | <b>List II</b>  |
|----------------------------|-----------------|
| A. Cultivation of mulberry | I. Trashing     |
| B. Silk route              | II. Hatching    |
| C. Egg                     | III. Emergence  |
| D. Moth                    | IV. Moriculture |

Choose the correct answer from the options given below

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

**Options :**

7108702909. 1  
7108702910. 2  
7108702911. 3  
7108702912. 4

**Question Number : 69 Question Id : 710870729 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**

| <b>List I</b> | <b>List II</b>   |
|---------------|------------------|
| A. Grasserie  | I. Fungal hyphae |
| B. Pebrina    | II. Polyhedral   |
| C. Flacherie  | III. Oval spores |
| D. Muscardine | IV. Bacteria     |

Choose the correct answer from the options given below

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

**Options :**

7108702913. 1

7108702914. 2

7108702915. 3

7108702916. 4

**Question Number : 70 Question Id : 710870730 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:** Chromosome number in *Antheraea roylei* is  $n = 31$

**Statement II:** Chromosome numbers in *Antheraea mylitta* is  $n = 21$

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 :**

7108702917. 1

7108702918. 2

7108702919. 3

7108702920. 4

## Part C Plant Pathology

|                                              |           |
|----------------------------------------------|-----------|
| <b>Section Id :</b>                          | 71087018  |
| <b>Section Number :</b>                      | 3         |
| <b>Section type :</b>                        | Online    |
| <b>Mandatory or Optional :</b>               | Mandatory |
| <b>Number of Questions :</b>                 | 50        |
| <b>Number of Questions to be attempted :</b> | 50        |
| <b>Section Marks :</b>                       | 200       |
| <b>Display Number Panel :</b>                | Yes       |
| <b>Group All Questions :</b>                 | Yes       |
| <b>Mark As Answered Required? :</b>          | Yes       |
| <b>Sub-Section Number :</b>                  | 1         |
| <b>Sub-Section Id :</b>                      | 71087018  |

**Question Shuffling Allowed :**

Yes

**Question Number : 71 Question Id : 710870731 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**

Peach leaf curl pathogen is related to

1. Uninucleate mycelium, uninucleate ascospore
2. Binucleate mycelium, uninucleate ascospore
3. Uninucleate mycelium, binucleate ascospore
4. Binucleate mycelium, binucleate ascospore

**Options :**

7108702921. 1

7108702922. 2

7108702923. 3

7108702924. 4

**Question Number : 72 Question Id : 710870732 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**



Identify the correct statements from the following:

- A. Mesosome is the inward protrusion of the plasma membrane
- B. 70S prokaryotic ribosome has 40S and 60S subunits
- C. Plasmid determines 'F' factor
- D. Prokaryotic DNA is associated with histones
- E. Mesosomes are responsible for septum formation

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

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

**Options :**

- 7108702925. 1
- 7108702926. 2
- 7108702927. 3
- 7108702928. 4

**Question Number : 73 Question Id : 710870733 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**

Bacteria that use inorganic compounds as an energy source are known as

1. Autotrophs
2. Heterotrophs
3. Lithotrophs
4. Photolithotrophs

**Options :**

7108702929. 1  
7108702930. 2  
7108702931. 3  
7108702932. 4

**Question Number : 74 Question Id : 710870734 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 virus that forms minichromosomes in the host nucleus is

1. CaMV
2. TMV
3. BBTV
4. RTV

**Options :**

7108702933. 1  
7108702934. 2  
7108702935. 3  
7108702936. 4

**Question Number : 75 Question Id : 710870735 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**

Citrus exocortis viroid belongs to the genus

1. Pospiviroid
2. Cocaoviroid
3. Coleviroid
4. Pelamoviroid

**Options :**

7108702937. 1  
7108702938. 2  
7108702939. 3  
7108702940. 4

**Question Number : 76 Question Id : 710870736 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**

'SIMCAST' computer simulation model is used to forecast

1. Late blight of potato
2. Early blight of potato
3. Wheat stripe rust
4. Southern corn blight

**Options :**

7108702941. 1  
7108702942. 2  
7108702943. 3  
7108702944. 4

**Question Number : 77 Question Id : 710870737 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 trap crops for *Striga asiatica*?

- A. Cotton
- B. Peanut
- C. Sorghum
- D. Maize
- E. Sudangrass

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

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

**Options :**

- 7108702945. 1
- 7108702946. 2
- 7108702947. 3
- 7108702948. 4

**Question Number : 78 Question Id : 710870738 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 stimulant in the root exudates of tobacco which induces the germination of *Orobanche* seeds

1. Bezopyran derivatives
2. Methyl bromide
3. Allyl alcohol
4. Dazomet

**Options :**

7108702949. 1  
7108702950. 2  
7108702951. 3  
7108702952. 4

**Question Number : 79 Question Id : 710870739 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**

Bordeaux mixture was reported for the first time, for the management of

1. *Plasmopara viticola*
2. *Phytophthora infestans*
3. *Peronospora parasitica*
4. *Pythium aphanidermatum*

**Options :**

7108702953. 1  
7108702954. 2  
7108702955. 3  
7108702956. 4

**Question Number : 80 Question Id : 710870740 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**

Identify the wrong pair of virus vector

1. Rye grass mosaic virus - Eriophyid mites
2. Zucchini yellow mosaic virus - White fly
3. Barley yellow mosaic virus - *Polymyxa graminis*
4. Tomato spotted wilt virus - Thrips

**Options :**

7108702957. 1

7108702958. 2

7108702959. 3

7108702960. 4

**Question Number : 81 Question Id : 710870741 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**

Symptoms of clubroot of crucifers are

- A. Older plants fail to produce marketable heads
- B. Club shaped swellings on the root
- C. Pale green to yellowish leaves
- D. Wilting in the middle of hot sunny days
- E. Galls appear on the stem

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

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

**Options :**

- 7108702961. 1
- 7108702962. 2
- 7108702963. 3
- 7108702964. 4

**Question Number : 82 Question Id : 710870742 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**

Small, low molecular weight ribonucleic acids that can infect plant cells; replicate themselves and cause diseases are known as

1. Virus
2. Phage
3. Bacteria
4. Viroids

**Options :**

7108702965. 1  
7108702966. 2  
7108702967. 3  
7108702968. 4

**Question Number : 83 Question Id : 710870743 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 technique that allows an almost infinite amplification of a segment of DNA for which a primer is available

1. ELISA
2. PCR
3. ISEM
4. GC-MS

**Options :**

7108702969. 1  
7108702970. 2  
7108702971. 3  
7108702972. 4

**Question Number : 84 Question Id : 710870744 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 belongs to the kingdom chromista?

1. *Plasmodiophora*
2. *Polymyxa*
3. *Spongospora*
4. *Phytophthora*

**Options :**

7108702973. 1  
7108702974. 2  
7108702975. 3  
7108702976. 4

**Question Number : 85 Question Id : 710870745 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 was the first R gene to be identified?

1. PTO
2. *Xa21*
3. *Cf9*
4. HM1

**Options :**

7108702977. 1  
7108702978. 2  
7108702979. 3  
7108702980. 4

**Question Number : 86 Question Id : 710870746 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**

Movement of virulent mutant alleles among different field populations is called

1. Genotype flow
2. Gene flow
3. Genetics drift
4. Gene for gene

**Options :**

7108702981. 1  
7108702982. 2  
7108702983. 3  
7108702984. 4

**Question Number : 87 Question Id : 710870747 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**

Powdery mildew of rose is caused by

1. *Uncinula*
2. *Sphaerotheca*
3. *Erysiphe*
4. *Podosphaera*

**Options :**

7108702985. 1  
7108702986. 2  
7108702987. 3  
7108702988. 4

**Question Number : 88 Question Id : 710870748 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 typical blue stain fungus?

1. *Polyporus*
2. *Ganoderma*
3. *Ceratocystis*
4. *Penicillium*

**Options :**

7108702989. 1  
7108702990. 2  
7108702991. 3  
7108702992. 4

**Question Number : 89 Question Id : 710870749 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which of the following is the correct order of elimination of plant pathogens from soil, seeds and other propagative organs following exposure of 30 minutes of heat?

1. Zoosporic fungi < bacteria and fungi < viruses
2. Bacteria and fungi < zoosporic fungi < viruses
3. Viruses < zoosporic fungi
4. Bacteria and fungi < viruses < zoosporic fungi

**Options :**

7108702993. 1  
7108702994. 2  
7108702995. 3  
7108702996. 4

**Question Number : 90 Question Id : 710870750 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 year 1966, the first systemic fungicides discovered were

1. Benomyl
2. Oxathiins
3. Fosetyl - Al
4. Triazoles

**Options :**

7108702997. 1  
7108702998. 2  
7108702999. 3  
7108703000. 4

**Question Number : 91 Question Id : 710870751 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**

Molecules produced by the pathogen which induces a response in host is

1. Protein
2. Elicitor
3. Phytoalexin
4. Toxin

**Options :**

7108703001. 1  
7108703002. 2  
7108703003. 3  
7108703004. 4

**Question Number : 92 Question Id : 710870752 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 classical example in controlling a plant disease by use of suppressive soils is

1. Late blight of potato
2. Redgram wilt
3. Tundu disease of wheat
4. Take-all of wheat

**Options :**

7108703005. 1  
7108703006. 2  
7108703007. 3  
7108703008. 4

**Question Number : 93 Question Id : 710870753 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 dsDNA virus?

1. Cauliflower mosaic virus
2. Bean golden mosaic virus
3. Rice tungro virus
4. Soybean chlorotic mottle virus

**Options :**

7108703009. 1  
7108703010. 2  
7108703011. 3  
7108703012. 4

**Question Number : 94 Question Id : 710870754 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 group of races and biotypes of a pathogen species that can infect only plants within a certain host genus or species is called

1. Biovar
2. Forma specialis
3. Pathotypes
4. Pathovar

**Options :**

7108703013. 1  
7108703014. 2  
7108703015. 3  
7108703016. 4

**Question Number : 95 Question Id : 710870755 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 swollen tip of hypha or the germ tube that facilitates attachment and penetration of the host by a fungus is termed as

1. Haustorium
2. Conidium
3. Appressorium
4. Sporodochium

**Options :**

7108703017. 1  
7108703018. 2  
7108703019. 3  
7108703020. 4

**Question Number : 96 Question Id : 710870756 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**

Symptoms that appear as black, sunken leaves, stem or fruit lesions and are caused by fungi that produce their asexual spores in an acervulus

1. Lesion
2. Anthracnose
3. Stripe
4. Streak

**Options :**

7108703021. 1  
7108703022. 2  
7108703023. 3  
7108703024. 4

**Question Number : 97 Question Id : 710870757 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 number of aphids caught from the field are tested for the presence of virus serologically, with

1. ISEM
2. PCR
3. GC-MS
4. ELISA

**Options :**

7108703025. 1  
7108703026. 2  
7108703027. 3  
7108703028. 4

**Question Number : 98 Question Id : 710870758 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 "Microorganism are pathogenic only if they are toxigenic" was concluded for the first time by

1. Smith
2. Gaumann
3. Koch
4. Burriel

**Options :**

7108703029. 1  
7108703030. 2  
7108703031. 3  
7108703032. 4

**Question Number : 99 Question Id : 710870759 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**

Mycoplasma Like Organisms (MLO's) constantly present in the phloem of plants were first discovered by

1. Nocard
2. A.E. Mayer
3. T.O. Diener
4. Doi

**Options :**

7108703033. 1  
7108703034. 2  
7108703035. 3  
7108703036. 4

**Question Number : 100 Question Id : 710870760 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 phenomenon of resistance through hypersensitivity was reported by

1. Gaumann
2. Vanderplank
3. Flor
4. Erickson

**Options :**

7108703037. 1  
7108703038. 2  
7108703039. 3  
7108703040. 4

**Question Number : 101 Question Id : 710870761 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**

TMV is a

1. ssRNA virus
2. ssDNA virus
3. Bacteriophage
4. dsDNA virus

**Options :**

7108703041. 1  
7108703042. 2  
7108703043. 3  
7108703044. 4

**Question Number : 102 Question Id : 710870762 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**

Partial, quantitative and polygenic is

1. Horizontal resistance
2. Vertical resistance
3. Oligogenic resistance
4. Monogenic resistance

**Options :**

7108703045. 1  
7108703046. 2  
7108703047. 3  
7108703048. 4

**Question Number : 103 Question Id : 710870763 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**

Grassy shoot disease (GSD) was first noticed in

1. Myanmar
2. Sudan
3. Sri Lanka
4. India

**Options :**

7108703049. 1  
7108703050. 2  
7108703051. 3  
7108703052. 4

**Question Number : 104 Question Id : 710870764 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**

YMV of soybean is transmitted by

1. Aphids
2. Thrips
3. Leafhoppers
4. Whiteflies

**Options :**

7108703053. 1  
7108703054. 2  
7108703055. 3  
7108703056. 4

**Question Number : 105 Question Id : 710870765 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 process of self fertilization of fungi is known as

1. Spermatization
2. Automixis
3. Somatogamy
4. Amphimixis

**Options :**

7108703057. 1  
7108703058. 2  
7108703059. 3  
7108703060. 4

**Question Number : 106 Question Id : 710870766 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 severity of clubroot disease of crucifers can be reduced by the application of

1. Fertilizers
2. Gypsum
3. FYM
4. Lime

**Options :**

7108703061. 1  
7108703062. 2  
7108703063. 3  
7108703064. 4

**Question Number : 107 Question Id : 710870767 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 gummosis disease caused by *Phytophthora palmivora* in citrus is identified by observing

1. Root knot
2. Chlorosis
3. Death of shoot tip
4. Oozing of gum

**Options :**

7108703065. 1  
7108703066. 2  
7108703067. 3  
7108703068. 4

**Question Number : 108 Question Id : 710870768 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**

Green ear is the characteristic symptom produced by

1. *Claviceps purpurea*
2. *Plasmopara viticola*
3. *Sclerospora graminicola*
4. *Pseudoperonospora cubensis*

**Options :**

7108703069. 1  
7108703070. 2  
7108703071. 3  
7108703072. 4

**Question Number : 109 Question Id : 710870769 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 management of ergot of bajra may be possible by adoption of

- A. Spray of copper oxy chloride + zineb
- B. Long crop rotations
- C. Soaking seeds in 20% salt solution

Select the most appropriate answer from the following options:

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

**Options :**

7108703073. 1  
7108703074. 2  
7108703075. 3

7108703076. 4

**Question Number : 110 Question Id : 710870770 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 many fungi, vegetative hyphae of the same colony or of two colonies of the same spores coming in contact with each other, often fuse and the fusion is called as

1. Parasexualism
2. Heteroploidy
3. Hyphal anastomosis
4. Vegetative incompatibility

**Options :**

7108703077. 1  
7108703078. 2  
7108703079. 3  
7108703080. 4

**Question Number : 111 Question Id : 710870771 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**

Physiological specialization in stem rust of wheat was shown by

1. Erickson
2. Stackman
3. Nelson
4. Orton

**Options :**

7108703081. 1  
7108703082. 2  
7108703083. 3  
7108703084. 4

**Question Number : 112 Question Id : 710870772 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**

*Hemileia vastatrix* causes

1. Yellow rust of wheat
2. Bean rust
3. Coffee rust
4. Sunflower rust

**Options :**

7108703085. 1  
7108703086. 2  
7108703087. 3  
7108703088. 4

**Question Number : 113 Question Id : 710870773 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 established that nucleic acid is an infectious agent in plant viruses?

1. Gibbs and Harrison
2. Gierer and Schramm
3. Bawden and Pire
4. W M Stanley

**Options :**

7108703089. 1  
7108703090. 2  
7108703091. 3  
7108703092. 4

**Question Number : 114 Question Id : 710870774 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**

Plant viruses move from cell to cell through

1. Plasmodesmata
2. Lenticels
3. Cuticles
4. Stomata

**Options :**

7108703093. 1

7108703094. 2

7108703095. 3

7108703096. 4

**Question Number : 115 Question Id : 710870775 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**

Viroids were discovered by

1. Kassanis
2. Doi
3. Diener
4. Prusiner

**Options :**

7108703097. 1

7108703098. 2

7108703099. 3

7108703100. 4

**Question Number : 116 Question Id : 710870776 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**



Complete root phanerogamic parasites are

1. *Cuscuta* spp.
2. *Striga*
3. Mistletoes
4. *Orobanche*

**Options :**

7108703101. 1  
7108703102. 2  
7108703103. 3  
7108703104. 4

**Question Number : 117 Question Id : 710870777 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 likely reason for the development of resistance against pesticides in insect damaging crops is

1. Directed mutations
2. Genetic recombinations
3. Acquired heritable changes
4. Random mutations

**Options :**

7108703105. 1  
7108703106. 2  
7108703107. 3  
7108703108. 4

**Question Number : 118 Question Id : 710870778 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**

Correct sequence of spore formation in *Puccinia graminis* f.sp. *tritici* is

1. Aeciospore - Teliospores - Uredospores - Basidiospores - Spermatia
2. Teliospores - Aeciospore - Uredospores - Basidiospores - Spermatia
3. Spermatia - Aeciospore - Uredospores - Teliospores - Basidiospores
4. Basidiospores - Spermatia- Uredospores -Aeciospore - Teliospores

**Options :**

7108703109. 1

7108703110. 2

7108703111. 3

7108703112. 4

**Question Number : 119 Question Id : 710870779 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 causal agent of heart rot of coconut palm?

1. Algae
2. Protozoa
3. Virus
4. Fungus

**Options :**

7108703113. 1

7108703114. 2

7108703115. 3

7108703116. 4

**Question Number : 120 Question Id : 710870780 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**

Basal body of the flagellum of gram-positive bacterium consists of

1. Two rings
2. Three rings
3. Four rings
4. Six rings

**Options :**

7108703117. 1

7108703118. 2

7108703119. 3

7108703120. 4