

# National Testing Agency

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

## Nematology

<b>Group Number :</b>	1
<b>Group Id :</b>	7108707
<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>	71087019
<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>	71087019
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 710870781 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 :**

- 7108703121. 1
- 7108703122. 2
- 7108703123. 3
- 7108703124. 4

**Question Number : 2 Question Id : 710870782 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 :**

- 7108703125. 1
- 7108703126. 2
- 7108703127. 3
- 7108703128. 4

**Question Number : 3 Question Id : 710870783 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 :**

- 7108703129. 1



7108703130. 2

7108703131. 3

7108703132. 4

**Question Number : 4 Question Id : 710870784 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 :**

7108703133. 1

7108703134. 2

7108703135. 3

7108703136. 4

**Question Number : 5 Question Id : 710870785 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 :**

- 7108703137. 1
- 7108703138. 2
- 7108703139. 3
- 7108703140. 4

**Question Number : 6 Question Id : 710870786 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 :**

- 7108703141. 1
- 7108703142. 2
- 7108703143. 3
- 7108703144. 4

**Question Number : 7 Question Id : 710870787 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 :**

- 7108703145. 1
- 7108703146. 2
- 7108703147. 3
- 7108703148. 4

**Question Number : 8 Question Id : 710870788 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

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

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

**Options :**

7108703149. 1

7108703150. 2

7108703151. 3

7108703152. 4

**Question Number : 9 Question Id : 710870789 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 :**

7108703153. 1

7108703154. 2

7108703155. 3

7108703156. 4

**Question Number : 10 Question Id : 710870790 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 :**

7108703157. 1



7108703158. 2

7108703159. 3

7108703160. 4

**Question Number : 11 Question Id : 710870791 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 :**

7108703161. 1

7108703162. 2

7108703163. 3

7108703164. 4

**Question Number : 12 Question Id : 710870792 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 :**

7108703165. 1  
7108703166. 2  
7108703167. 3  
7108703168. 4

**Question Number : 13 Question Id : 710870793 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 :**

7108703169. 1  
7108703170. 2  
7108703171. 3  
7108703172. 4

**Question Number : 14 Question Id : 710870794 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 :**

- 7108703173. 1
- 7108703174. 2
- 7108703175. 3
- 7108703176. 4

**Question Number : 15 Question Id : 710870795 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 :**

- 7108703177. 1
- 7108703178. 2
- 7108703179. 3
- 7108703180. 4

**Question Number : 16 Question Id : 710870796 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 :**

- 7108703181. 1
- 7108703182. 2
- 7108703183. 3
- 7108703184. 4

**Question Number : 17 Question Id : 710870797 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 :**

- 7108703185. 1
- 7108703186. 2
- 7108703187. 3
- 7108703188. 4

**Question Number : 18 Question Id : 710870798 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 :**

- 7108703189. 1
- 7108703190. 2
- 7108703191. 3
- 7108703192. 4

**Question Number : 19 Question Id : 710870799 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 :**

- 7108703193. 1
- 7108703194. 2
- 7108703195. 3
- 7108703196. 4

**Question Number : 20 Question Id : 710870800 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 :**

- 7108703197. 1

7108703198. 2

7108703199. 3

7108703200. 4

## Part B Core Crop Sciences-II

<b>Section Id :</b>	71087020
<b>Section Number :</b>	2
<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>	71087020
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 21 Question Id : 710870801 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 :**

7108703201. 1

7108703202. 2



7108703203. 3

7108703204. 4

**Question Number : 22 Question Id : 710870802 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 :**

7108703205. 1

7108703206. 2

7108703207. 3

7108703208. 4

**Question Number : 23 Question Id : 710870803 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 :**

7108703209. 1

7108703210. 2

7108703211. 3

7108703212. 4

**Question Number : 24 Question Id : 710870804 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 :**

- 7108703213. 1
- 7108703214. 2
- 7108703215. 3
- 7108703216. 4

**Question Number : 25 Question Id : 710870805 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 :**

- 7108703217. 1
- 7108703218. 2
- 7108703219. 3
- 7108703220. 4

**Question Number : 26 Question Id : 710870806 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 :**

- 7108703221. 1
- 7108703222. 2
- 7108703223. 3
- 7108703224. 4

**Question Number : 27 Question Id : 710870807 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 :**

- 7108703225. 1
- 7108703226. 2
- 7108703227. 3
- 7108703228. 4

**Question Number : 28 Question Id : 710870808 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 :**

7108703229. 1  
7108703230. 2  
7108703231. 3  
7108703232. 4

**Question Number : 29 Question Id : 710870809 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 :**

7108703233. 1  
7108703234. 2  
7108703235. 3  
7108703236. 4

**Question Number : 30 Question Id : 710870810 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 :**

- 7108703237. 1
- 7108703238. 2
- 7108703239. 3
- 7108703240. 4

**Question Number : 31 Question Id : 710870811 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 :**

- 7108703241. 1
- 7108703242. 2
- 7108703243. 3
- 7108703244. 4

**Question Number : 32 Question Id : 710870812 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 :**

- 7108703245. 1
- 7108703246. 2
- 7108703247. 3
- 7108703248. 4

**Question Number : 33 Question Id : 710870813 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 :**

- 7108703249. 1
- 7108703250. 2
- 7108703251. 3
- 7108703252. 4

**Question Number : 34 Question Id : 710870814 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 :**

7108703253. 1  
7108703254. 2  
7108703255. 3  
7108703256. 4

**Question Number : 35 Question Id : 710870815 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 :**

7108703257. 1  
7108703258. 2  
7108703259. 3  
7108703260. 4

**Question Number : 36 Question Id : 710870816 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 :**

- 7108703261. 1
- 7108703262. 2
- 7108703263. 3
- 7108703264. 4

**Question Number : 37 Question Id : 710870817 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 :**

- 7108703265. 1
- 7108703266. 2
- 7108703267. 3
- 7108703268. 4

**Question Number : 38 Question Id : 710870818 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 :**

- 7108703269. 1
- 7108703270. 2
- 7108703271. 3
- 7108703272. 4

**Question Number : 39 Question Id : 710870819 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 oryzicola*
2. *Meloidogyne incognita*
3. *Meloidogyne graminicola*
4. *Meloidogyne hapla*

**Options :**

- 7108703273. 1
- 7108703274. 2
- 7108703275. 3
- 7108703276. 4

**Question Number : 40 Question Id : 710870820 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 :**

- 7108703277. 1
- 7108703278. 2
- 7108703279. 3
- 7108703280. 4

**Question Number : 41 Question Id : 710870821 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 :**

- 7108703281. 1
- 7108703282. 2
- 7108703283. 3
- 7108703284. 4

**Question Number : 42 Question Id : 710870822 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 :**

- 7108703285. 1
- 7108703286. 2
- 7108703287. 3
- 7108703288. 4

**Question Number : 43 Question Id : 710870823 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 :**

- 7108703289. 1
- 7108703290. 2
- 7108703291. 3
- 7108703292. 4

**Question Number : 44 Question Id : 710870824 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 :**

7108703293. 1  
7108703294. 2  
7108703295. 3  
7108703296. 4

**Question Number : 45 Question Id : 710870825 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 :**

7108703297. 1  
7108703298. 2  
7108703299. 3  
7108703300. 4

**Question Number : 46 Question Id : 710870826 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 :**

7108703301. 1  
7108703302. 2  
7108703303. 3  
7108703304. 4

**Question Number : 47 Question Id : 710870827 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 :**

7108703305. 1  
7108703306. 2  
7108703307. 3  
7108703308. 4

**Question Number : 48 Question Id : 710870828 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 :**

7108703309. 1

7108703310. 2

7108703311. 3

7108703312. 4

**Question Number : 49 Question Id : 710870829 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 :**

7108703313. 1

7108703314. 2

7108703315. 3

7108703316. 4

**Question Number : 50 Question Id : 710870830 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 :**

7108703317. 1  
7108703318. 2  
7108703319. 3  
7108703320. 4

**Question Number : 51 Question Id : 710870831 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 :**

7108703321. 1  
7108703322. 2  
7108703323. 3  
7108703324. 4

**Question Number : 52 Question Id : 710870832 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 :**

7108703325. 1  
7108703326. 2  
7108703327. 3  
7108703328. 4

**Question Number : 53 Question Id : 710870833 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 :**

7108703329. 1  
7108703330. 2  
7108703331. 3  
7108703332. 4

**Question Number : 54 Question Id : 710870834 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 :**

7108703333. 1  
7108703334. 2  
7108703335. 3  
7108703336. 4

**Question Number : 55 Question Id : 710870835 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 :**

7108703337. 1  
7108703338. 2  
7108703339. 3  
7108703340. 4

**Question Number : 56 Question Id : 710870836 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 :**

- 7108703341. 1
- 7108703342. 2
- 7108703343. 3
- 7108703344. 4

**Question Number : 57 Question Id : 710870837 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 :**

- 7108703345. 1
- 7108703346. 2
- 7108703347. 3
- 7108703348. 4

**Question Number : 58 Question Id : 710870838 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 :**

7108703349. 1  
7108703350. 2  
7108703351. 3  
7108703352. 4

**Question Number : 59 Question Id : 710870839 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 :**

7108703353. 1  
7108703354. 2  
7108703355. 3  
7108703356. 4

**Question Number : 60 Question Id : 710870840 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 :**

7108703357. 1  
7108703358. 2  
7108703359. 3  
7108703360. 4

**Question Number : 61 Question Id : 710870841 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 :**

7108703361. 1  
7108703362. 2  
7108703363. 3  
7108703364. 4

**Question Number : 62 Question Id : 710870842 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 :**

- 7108703365. 1
- 7108703366. 2
- 7108703367. 3
- 7108703368. 4

**Question Number : 63 Question Id : 710870843 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 :**

- 7108703369. 1
- 7108703370. 2
- 7108703371. 3



7108703372. 4

**Question Number : 64 Question Id : 710870844 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 :**

- 7108703373. 1
- 7108703374. 2
- 7108703375. 3
- 7108703376. 4

**Question Number : 65 Question Id : 710870845 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 :**

- 7108703377. 1
- 7108703378. 2
- 7108703379. 3
- 7108703380. 4

**Question Number : 66 Question Id : 710870846 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 :**

- 7108703381. 1
- 7108703382. 2
- 7108703383. 3
- 7108703384. 4

**Question Number : 67 Question Id : 710870847 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 :**

7108703385. 1  
7108703386. 2  
7108703387. 3  
7108703388. 4

**Question Number : 68 Question Id : 710870848 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 :**

7108703389. 1  
7108703390. 2  
7108703391. 3  
7108703392. 4

**Question Number : 69 Question Id : 710870849 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. Grassierie	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 :**

7108703393. 1

7108703394. 2

7108703395. 3

7108703396. 4

**Question Number : 70 Question Id : 710870850 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 :**

- 7108703397. 1
- 7108703398. 2
- 7108703399. 3
- 7108703400. 4

## Part C Nematology

<b>Section Id :</b>	71087021
<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>	71087021

**Question Shuffling Allowed :**

Yes

**Question Number : 71 Question Id : 710870851 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**

Gene silencing also known as RNAi, is considered to be the oldest defence mechanism employed by

A. Prokaryotes

B. Eukaryotes

C. Viruses

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

**Options :**

- 7108703401. 1
- 7108703402. 2
- 7108703403. 3
- 7108703404. 4

**Question Number : 72 Question Id : 710870852 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**

*Heterodera cajani* was first reported from India as

1. *Heterodera schachtii* in 1971
2. *Heterodera trifolii* in 1967
3. *Heterodera trifolii* in 1971
4. *Heterodera glycines* in 1967



**Options :**

- 7108703405. 1
- 7108703406. 2
- 7108703407. 3
- 7108703408. 4

**Question Number : 73 Question Id : 710870853 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**

*Caenorhabditis elegans* genome was published in the year

- 1. 1997
- 2. 2000
- 3. 1998
- 4. 1999

**Options :**

- 7108703409. 1
- 7108703410. 2
- 7108703411. 3
- 7108703412. 4

**Question Number : 74 Question Id : 710870854 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 type species of root knot nematodes (*Meloidogyne* spp.) is

- 1. *Meloidogyne incognita*
- 2. *Meloidogyne africana*
- 3. *Meloidogyne javanica*
- 4. *Meloidogyne exigua*

**Options :**

- 7108703413. 1

7108703414. 2

7108703415. 3

7108703416. 4

**Question Number : 75 Question Id : 710870855 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**

Second stage juveniles of root knot and cyst nematode can be easily distinguished by

1. Body length
2. Tail length and shape
3. Stylet length
4. Hyaline tail region

**Options :**

7108703417. 1

7108703418. 2

7108703419. 3

7108703420. 4

**Question Number : 76 Question Id : 710870856 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 Entomopathogenic Nematodes (EPN), an Infective Juvenile (IJ) is equivalent to

1. 2<sup>nd</sup> stage juvenile
2. 3<sup>rd</sup> stage juvenile
3. 1<sup>st</sup> stage juvenile
4. 4<sup>th</sup> stage juvenile

**Options :**

7108703421. 1

7108703422. 2

7108703423. 3

7108703424. 4

**Question Number : 77 Question Id : 710870857 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 Aphelenchida, the nerve ring encircles

1. Anterior part of esophagus
2. Middle part of esophagus
3. Intestine
4. Post median part of esophagus and intestine

**Options :**

- 7108703425. 1
- 7108703426. 2
- 7108703427. 3
- 7108703428. 4

**Question Number : 78 Question Id : 710870858 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**

Pore aperture (size) of 500 mesh sieve is

1. 26  $\mu\text{m}$
2. 38  $\mu\text{m}$
3. 42  $\mu\text{m}$
4. 45  $\mu\text{m}$

**Options :**

- 7108703429. 1
- 7108703430. 2
- 7108703431. 3
- 7108703432. 4



**Question Number : 79 Question Id : 710870859 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

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

List I	List II
A. Digitate tail	I. <i>Hirschmanniella</i> spp.
B. Mucro	II. <i>Meloidogyne incognita</i>
C. Punctations	III. <i>Helicotylenchus</i> sp.
D. Rectal glands	IV. <i>Meloidogyne hapla</i>

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

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

**Options :**

7108703433. 1  
7108703434. 2  
7108703435. 3  
7108703436. 4

**Question Number : 80 Question Id : 710870860 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 true about muscle and nerve association, in nematodes?

1. Muscle innervates its branches to nerve
2. Nerve innervates muscles
3. Both send their branches to one another
4. Muscle and nerves are rarely associated

**Options :**

- 7108703437. 1
- 7108703438. 2
- 7108703439. 3
- 7108703440. 4

**Question Number : 81 Question Id : 710870861 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**

Live nematodes can be distinguished from dead nematodes using

- 1. Nile Blue B
- 2. Toluidine blue
- 3. New Blue R
- 4. Acid fuchsin

**Options :**

- 7108703441. 1
- 7108703442. 2
- 7108703443. 3
- 7108703444. 4

**Question Number : 82 Question Id : 710870862 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**

*Meloidogyne* species known as cryophil is

- 1. *M. enterolobii*
- 2. *M. exigua*
- 3. *M. naasi*
- 4. *M. graminicola*

**Options :**

- 7108703445. 1
- 7108703446. 2

7108703447. 3

7108703448. 4

**Question Number : 83 Question Id : 710870863 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 important abiotic factor that regulates nematode biology in a given ecosystem is

1. Soil pH
2. Soil organic matter
3. Soil texture
4. Soil temperature

**Options :**

7108703449. 1

7108703450. 2

7108703451. 3

7108703452. 4

**Question Number : 84 Question Id : 710870864 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**

Image of a specimen produced by the Stereo Binocular Microscope is

1. True and vertical
2. True and inverted
3. False and vertical
4. False and inverted

**Options :**

7108703453. 1

7108703454. 2

7108703455. 3

7108703456. 4



**Question Number : 85 Question Id : 710870865 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 nematode that is highly dependent on host root diffusates for hatching?

1. *Heterodera glycines*
2. *Globodera pallida*
3. *Meloidogyne naasi*
4. *Heterodera cajani*

**Options :**

- 7108703457. 1
- 7108703458. 2
- 7108703459. 3
- 7108703460. 4

**Question Number : 86 Question Id : 710870866 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**

Phase of the bacterial symbiont of entomopathogenic nematode for biocontrol ability

1. Phase I alone
2. Phase II alone
3. Both Phase I and II
4. Log phase

**Options :**

- 7108703461. 1
- 7108703462. 2
- 7108703463. 3
- 7108703464. 4

**Question Number : 87 Question Id : 710870867 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**

Variance value is calculated as the sum of

1. Deviations from overall mean of the set of data divided by degree of freedom
2. Squared deviations from overall mean of the set of data divided by degree of freedom
3. Overall mean of the set of data divided by degree of freedom
4. Squared deviations from overall mean of the set of data divided by given 'n' number observations

**Options :**

- 7108703465. 1
- 7108703466. 2
- 7108703467. 3
- 7108703468. 4

**Question Number : 88 Question Id : 710870868 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**

Means of two independent samples can be compared by

1. F Test
2. Z Test
3. t test
4. Chi square test

**Options :**

- 7108703469. 1
- 7108703470. 2
- 7108703471. 3
- 7108703472. 4

**Question Number : 89 Question Id : 710870869 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**

*Bursaphelenchus xylophilus* has been introduced from

1. Australia to Asia
2. Europe to Asia
3. Africa to Asia
4. America to Asia

**Options :**

7108703473. 1  
7108703474. 2  
7108703475. 3  
7108703476. 4

**Question Number : 90 Question Id : 710870870 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**

Number of plant-parasitic nematode species described so far

1. 4100
2. 10,000
3. 20,000
4. >26,000

**Options :**

7108703477. 1  
7108703478. 2  
7108703479. 3  
7108703480. 4

**Question Number : 91 Question Id : 710870871 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**



Nematode mobility is fastest when the ratio of particle diameter to nematode length is

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

**Options :**

- 7108703481. 1
- 7108703482. 2
- 7108703483. 3
- 7108703484. 4

**Question Number : 92 Question Id : 710870872 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**

*Caenorhabditis elegans* contains nearly

1. >2000 cells
2. 2000 cells
3. 1500 cells
4. 1000 cells

**Options :**

- 7108703485. 1
- 7108703486. 2
- 7108703487. 3
- 7108703488. 4

**Question Number : 93 Question Id : 710870873 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**

'Uninucleate giant cell' is induced in the host tissue upon infection by

1. *Rotylenchulus reniformis*
2. *Rotylenchulus macrodoratus*
3. *Rotylenchulus parvus*
4. *Rotylenchulus borealis*

**Options :**

- 7108703489. 1
- 7108703490. 2
- 7108703491. 3
- 7108703492. 4

**Question Number : 94 Question Id : 710870874 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 index utilizes the nematode colonizer-persister scale?

1. Shannon-Weiner's Diversity index
2. Simpson's Dominance index
3. Tom Bonger's Maturity index
4. Sorenson's Similarity index

**Options :**

- 7108703493. 1
- 7108703494. 2
- 7108703495. 3
- 7108703496. 4

**Question Number : 95 Question Id : 710870875 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 nematode genome contains the least number of protein-coding genes?

1. *Meloidogyne incognita*
2. *Meloidogyne hapla*
3. *Pratylenchus coffeae*
4. *Globodera pallida*

**Options :**

7108703497. 1  
7108703498. 2  
7108703499. 3  
7108703500. 4

**Question Number : 96 Question Id : 710870876 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**

Uninucleate syncytium condition is observed in cyst species of

1. *Punctodera*
2. *Cryphodera*
3. *Dolichodera*
4. *Cactodera*

**Options :**

7108703501. 1  
7108703502. 2  
7108703503. 3  
7108703504. 4

**Question Number : 97 Question Id : 710870877 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 osmotic pressure of nematodes is equivalent to

1. 50-100 mM KCl
2. 50-100 mM NaCl
3. 50-100  $\mu$ M KCl
4. 50-100  $\mu$ M NaCl

**Options :**

7108703505. 1  
7108703506. 2  
7108703507. 3  
7108703508. 4

**Question Number : 98 Question Id : 710870878 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**

Chromosome number of *Meloidogyne graminicola* is

1.  $2n=36$
2.  $2n=14$
3.  $2n=32$
4.  $2n=30$

**Options :**

7108703509. 1  
7108703510. 2  
7108703511. 3  
7108703512. 4

**Question Number : 99 Question Id : 710870879 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

If carbofuran (Furadan 3G) @ 1.5 kg. a.i/ha is to be applied, the amount of commercial product required for application in two acres of nematode infested field is about

1. 20kg
2. 33kg
3. 40kg
4. 45kg

**Options :**

7108703513. 1  
7108703514. 2  
7108703515. 3  
7108703516. 4

**Question Number : 100 Question Id : 710870880 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

If Fluensulfone (Nimitz 2GR) @ 1.0 kg a.i. /ha is to be applied, the amount of commercial product required for one acre is about

1. 15kg
2. 20kg
3. 30kg
4. 33kg

**Options :**

7108703517. 1  
7108703518. 2  
7108703519. 3  
7108703520. 4

**Question Number : 101 Question Id : 710870881 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**

Analytical specificity is defined as

1. The minimum number of copies reliably detected by the assay
2. The intended purpose of the assay
3. Agreement between sample replicates, both within an assay run and between independent assay runs, when tested by the same laboratory
4. The degree to which the assay does not detect (amplify) other pathogens

**Options :**

- 7108703521. 1
- 7108703522. 2
- 7108703523. 3
- 7108703524. 4

**Question Number : 102 Question Id : 710870882 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 involved in post-transcriptional gene silencing (PTGS)?

1. T-DNA
2. R-gene
3. RNAi
4. CRISPR-Cas 9

**Options :**

- 7108703525. 1
- 7108703526. 2
- 7108703527. 3
- 7108703528. 4

**Question Number : 103 Question Id : 710870883 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**



Expression of a housekeeping gene in real time PCR would be an example of a

1. Control
2. Standard
3. Exogenous normalizing variable
4. Endogenous normalizing variable

**Options :**

- 7108703529. 1
- 7108703530. 2
- 7108703531. 3
- 7108703532. 4

**Question Number : 104 Question Id : 710870884 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 phylum Nematoda, the primitive nervous system is embedded in

1. Somatic musculature
2. Interchordal zone
3. Epidermis
4. Pseudocoelom

**Options :**

- 7108703533. 1
- 7108703534. 2
- 7108703535. 3
- 7108703536. 4

**Question Number : 105 Question Id : 710870885 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 multistage process that evaluates an assay's fit for the intended purpose is called

1. Validation
2. QA / QC
3. Accreditation
4. QC / QA

**Options :**

7108703537. 1  
7108703538. 2  
7108703539. 3  
7108703540. 4

**Question Number : 106 Question Id : 710870886 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

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

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

List I	List II
A. <i>Trichodorus primitivus</i>	I. California grapevine fanleaf virus
B. <i>Anguina tritici</i>	II. Tobacco Rattle virus
C. <i>Ditylenchus dipsaci</i>	III. <i>Dilophospora alopecuris</i>
D. <i>Xiphinema index</i>	IV. <i>Clavibacter michiganensis</i> subsp. <i>insidiosus</i>

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

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

**Options :**

7108703541. 1  
7108703542. 2  
7108703543. 3

7108703544. 4

**Question Number : 107 Question Id : 710870887 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 function of the median bulb of the esophagus in a nematode is to

1. Maintain the pseudo coelomic pressure in the nematode body
2. Prevent unwanted entry of harmful materials inside the body and throw out undigested food from the body
3. Control stomal movement while feeding or ingestion
4. Transfer gland secretions involved in infection and ingestion of plant nutrients

**Options :**

- 7108703545. 1
- 7108703546. 2
- 7108703547. 3
- 7108703548. 4

**Question Number : 108 Question Id : 710870888 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**

Nematode species of international quarantine significance in India are

1. *Radopholus similis*, *Aphelenchoides besseyi*, *Bursaphelenchus xylophilus*
2. *Ditylenchus dipsaci*, *Heterodera glycines*, *Bursaphelenchus xylophilus*
3. *Ditylenchus angustus*, *Heterodera glycines*, *Bursaphelenchus xylophilus*
4. *Ditylenchus myceliophagus*, *Heterodera glycines*, *Bursaphelenchus xylophilus*

**Options :**

- 7108703549. 1
- 7108703550. 2
- 7108703551. 3
- 7108703552. 4



**Question Number : 109 Question Id : 710870889 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**

*Mi-1.2*, a single dominant gene confers resistance to

1. *Meloidogyne incognita*, *Meloidogyne javanica*, *Macrosiphum euphorbiae*, *Meloidogyne hapla*
2. *Meloidogyne incognita*, *Meloidogyne javanica*, *Meloidogyne arenaria*, *Macrosiphum euphorbiae*, *Bemisia tabaci*
3. *Meloidogyne incognita*, *Meloidogyne hapla*, *Meloidogyne arenaria*, *Bemisia tabaci*
4. *Meloidogyne incognita*, *Meloidogyne hapla*, *Meloidogyne arenaria*, *Macrosiphum euphorbiae*, *Bemisia tabaci*

**Options :**

7108703553. 1

7108703554. 2

7108703555. 3

7108703556. 4

**Question Number : 110 Question Id : 710870890 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**

An immune response to *Rotylenchulus reniformis* has been reported in which of the following cotton species?

1. *Gossypium barbadense*
2. *Gossypium hirsutum*
3. *Gossypium arboreum*
4. *Gossypium longicalyx*

**Options :**

7108703557. 1

7108703558. 2

7108703559. 3

7108703560. 4

**Question Number : 111 Question Id : 710870891 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 secrete molecules called 'effectors' that are produced by

1. Dorsal gland, sub-ventral glands, cuticle, phasmids
2. Dorsal gland, sub-ventral glands, cuticle, amphids
3. Dorsal gland, sub-ventral glands, S-E pore, amphids
4. Dorsal gland, sub-ventral glands, hypodermal glands, amphids

**Options :**

- 7108703561. 1
- 7108703562. 2
- 7108703563. 3
- 7108703564. 4

**Question Number : 112 Question Id : 710870892 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 possess specialized structures that are essential for penetration and feeding to promote parasitism in plants

1. Lip, amphid, esophageal glands
2. Stylet, amphid, esophageal glands
3. Stoma, amphid, esophageal glands
4. Stylet, esophageal glands, intestine

**Options :**

- 7108703565. 1
- 7108703566. 2
- 7108703567. 3
- 7108703568. 4



**Question Number : 113 Question Id : 710870893 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**

Size of protein entering into nematode stylet

1. <40 kDa
2. 40 kDa
3. 60 kDa
4. 100 kDa

**Options :**

7108703569. 1  
7108703570. 2  
7108703571. 3  
7108703572. 4

**Question Number : 114 Question Id : 710870894 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 destructive root-lesion nematode species infecting tea is

1. *Pratylenchus indicus*
2. *Pratylenchus neglectus*
3. *Pratylenchus capsici*
4. *Pratylenchus loosi*

**Options :**

7108703573. 1  
7108703574. 2  
7108703575. 3  
7108703576. 4

**Question Number : 115 Question Id : 710870895 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 root knot nematode formerly known as *Meloidogyne mayaguensis* is a junior synonym of

1. *Meloidogyne paranaensis*
2. *Meloidogyne fallax*
3. *Meloidogyne chitwoodi*
4. *Meloidogyne enterolobii*

**Options :**

- 7108703577. 1
- 7108703578. 2
- 7108703579. 3
- 7108703580. 4

**Question Number : 116 Question Id : 710870896 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**

Large dorylaimids with long life span, low reproduction rates, low metabolic activity, and slow movement are placed in the colonizer-persister series of

1. c-p 2
2. c-p 3
3. c-p 4
4. c-p 5

**Options :**

- 7108703581. 1
- 7108703582. 2
- 7108703583. 3
- 7108703584. 4

**Question Number : 117 Question Id : 710870897 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**

Nematode species that has reportedly shown the longest period of dormancy is

1. *Anguina agrostis*
2. *Anguina tritici*
3. *Ditylenchus dipsaci*
4. *Heterodera avenae*

**Options :**

7108703585. 1  
7108703586. 2  
7108703587. 3  
7108703588. 4

**Question Number : 118 Question Id : 710870898 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**

Dimensions of a mature female of *Meloidogyne* spp. is about

1. 700  $\mu\text{m}$  x 400  $\mu\text{m}$
2. 1500  $\mu\text{m}$  x 800  $\mu\text{m}$
3. 2000  $\mu\text{m}$  x 1000  $\mu\text{m}$
4. 2500  $\mu\text{m}$  x 1500  $\mu\text{m}$

**Options :**

7108703589. 1  
7108703590. 2  
7108703591. 3  
7108703592. 4

**Question Number : 119 Question Id : 710870899 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 formation of an eggshell, the layer that is formed first is

1. Lipid layer
2. Chitinous layer
3. Vitelline layer
4. Uterine layer

**Options :**

- 7108703593. 1
- 7108703594. 2
- 7108703595. 3
- 7108703596. 4

**Question Number : 120 Question Id : 710870900 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 NOT a property of real-time PCR assays?

1. Incorporates dyes that bind double-stranded DNA
2. Incorporates an internal hydrolysis probe
3. Can be performed at a single temperature with no requirement of specialized instrumentation
4. Can be interpreted as a plus / minus result or as a quantitative result

**Options :**

- 7108703597. 1
- 7108703598. 2
- 7108703599. 3
- 7108703600. 4