

## 5 Nematology ICAR SEPT 2022

Topic:- GEN KNOW COMMON PHD

1) Colour of the tag used on certified seed bags is[Question ID = 16958][Question Description = 101\_221\_GKD\_SEP22\_Q01]

1. Blue [Option ID = 37829]
2. Purple [Option ID = 37830]
3. White [Option ID = 37831]
4. Golden Yellow [Option ID = 37832]

2) Following are the statements regarding the Usar soil -

- A. It is reclaimed by adding lime.
- B. This soil has pH more than seven.
- C. Paddy crop can be grown in this soil.

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

[Question ID = 16959][Question Description = 102\_221\_GKD\_SEP22\_Q02]

1. A and B only [Option ID = 37833]
2. B and C only [Option ID = 37834]
3. C only [Option ID = 37835]
4. A only [Option ID = 37836]

3) When total utility of a commodity increases, marginal utility will be

[Question ID = 16960][Question Description = 103\_221\_GKD\_SEP22\_Q03]

1. Negative but increasing  
[Option ID = 37837]
2. Positive but decreasing  
[Option ID = 37838]
3. Constant  
[Option ID = 37839]
4. Either positive or negative  
[Option ID = 37840]

4) Where is the headquarter of International Fund for Agriculture Development located?

[Question ID = 16961][Question Description = 104\_221\_GKD\_SEP22\_Q04]

1. Vienna, Austria  
[Option ID = 37841]
2. Rome, Italy  
[Option ID = 37842]
3. New York, USA  
[Option ID = 37843]
4. Berlin, Germany  
[Option ID = 37844]

5) Mid-Oceanic Ridges are one of the important divisions of the ocean floor. In this respect, point out the incorrect statement regarding the 'Mid-Oceanic Ridges'. [Question ID = 16962][Question Description = 105\_221\_GKD\_SEP22\_Q05]

1. It is the largest mountain chain on the surface of the earth [Option ID = 37845]
2. It is a series of interconnected chain within the ocean. [Option ID = 37846]
3. It is characterised by a central rift system [Option ID = 37847]
4. The rift system at the crest is the zone of very low volcanic activity. [Option ID = 37848]

6) Consider the following facts about the union territory of India and point out the one which is incorrect in relation to union territory. [Question ID = 16963][Question Description = 106\_221\_GKD\_SEP22\_Q06]

1. These are the areas under the direct control of central government. [Option ID = 37849]
2. Also known as the 'centrally administered territories. [Option ID = 37850]

3. These territories constitute a conspicuous departure from the unitary feature of India. [Option ID = 37851]
4. There is no uniformity in their administrative systems. [Option ID = 37852]

**7) Variety of flora and fauna are found in the different types of forest in India. In this regard, species of trees like teak, *sal shisham*, *sandalwood*, etc. are found in which of the following type of forests in India?**[Question ID = 16964][Question Description = 107\_221\_GKD\_SEP22\_Q07]

1. Tropical evergreen forests [Option ID = 37853]
2. Tropical thorn forests [Option ID = 37854]
3. Tropical deciduous forests [Option ID = 37855]
4. Montane forests [Option ID = 37856]

**8) The Marginal Preference Theory of consumption behaviour was proposed by**

**[Question ID = 16965][Question Description = 108\_221\_GKD\_SEP22\_Q08]**

1. Armstrong  
[Option ID = 37857]
2. J.K.Hicks  
[Option ID = 37858]
3. Neumann  
[Option ID = 37859]
4. Edmund Cannon  
[Option ID = 37860]

**9) Point out the incorrect statements regarding the service sector in India.**[Question ID = 16966][Question Description = 109\_221\_GKD\_SEP22\_Q09]

1. It is the highest contributor to GDP [Option ID = 37861]
2. It requires skilled labour [Option ID = 37862]
3. It is the fastest growing sector [Option ID = 37863]
4. It is restricted to very few sectors. [Option ID = 37864]

**10) Consider the statements regarding the agriculture sector in India and point out the incorrect statement.**[Question ID = 16967][Question Description = 110\_221\_GKD\_SEP22\_Q10]

1. Agriculture sector is the largest employer of workforce [Option ID = 37865]
2. It has contributed to the Gross Value Added (GVA) [Option ID = 37866]
3. Growth in allied sectors is the major drivers of overall growth in the sector. [Option ID = 37867]
4. Minimum Support Price (MSP) policy is used as to promote crop uniformity. [Option ID = 37868]

**11) In case of related goods, the cross elasticity of demand is**[Question ID = 16968][Question Description = 111\_221\_GKD\_SEP22\_Q11]

1. Low [Option ID = 37869]
2. High [Option ID = 37870]
3. Zero [Option ID = 37871]
4. Unity [Option ID = 37872]

**12) With reference to organic farming in India, consider the following statements :**

- A. The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- B. The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- C. Sikkim has become India's first fully organic state.

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

**[Question ID = 16969][Question Description = 112\_221\_GKD\_SEP22\_Q12]**

1. A and B only  
[Option ID = 37873]
2. B and C only  
[Option ID = 37874]
3. C only  
[Option ID = 37875]
4. A, B and C

[Option ID = 37876]

13) With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following falls under the Conservation Agriculture ?

- A. Avoiding the monoculture practices.
- B. Adopting minimum tillage.
- C. Avoiding the cultivation of plantation crops.
- D. Using crop residues to cover soil surface.
- E. Adopting spatial and temporal crop sequencing/ crop rotations.

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

[Question ID = 16970][Question Description = 113\_221\_GKD\_SEP22\_Q13]

- 1. A, C and D only [Option ID = 37877]
- 2. B, C, D and E only [Option ID = 37878]
- 3. B, D and E only [Option ID = 37879]
- 4. A, B, C and E only [Option ID = 37880]

14) Consumers are likely to get a variety of goods in which kind of market competition[Question ID = 16971][Question Description = 114\_221\_GKD\_SEP22\_Q14]

- 1. Monopoly [Option ID = 37881]
- 2. Duopoly [Option ID = 37882]
- 3. Oligopoly [Option ID = 37883]
- 4. Monopolistic [Option ID = 37884]

15) What is the correct chronological order of the following laws enacted for the conservation and protection of environment ?

- A. Environment (Protection) Act.
- B. Water (Prevention & Control of Pollution) Act.
- C. Air (Prevention & Control of pollution) Act.
- D. National Green Tribunal Act.

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

[Question ID = 16972][Question Description = 115\_221\_GKD\_SEP22\_Q15]

- 1. B, C, A, D [Option ID = 37885]
- 2. A, B, C, D [Option ID = 37886]
- 3. C, B, A, D [Option ID = 37887]
- 4. D, C, B, A [Option ID = 37888]

16) The scientific study of soil is[Question ID = 16973][Question Description = 116\_221\_GKD\_SEP22\_Q16]

- 1. Earth Study [Option ID = 37889]
- 2. Soil Science [Option ID = 37890]
- 3. Pedology [Option ID = 37891]
- 4. Soil Chemistry [Option ID = 37892]

17) *Triticum aestivum*, the common bread wheat is -

[Question ID = 16974][Question Description = 117\_221\_GKD\_SEP22\_Q17]

- 1. Tetraploid

[Option ID = 37893]

- 2. Hexaploid

[Option ID = 37894]

- 3. Haploid

[Option ID = 37895]

- 4. Diploid

[Option ID = 37896]

18) Sectoral inflation refers to[Question ID = 16975][Question Description = 118\_221\_GKD\_SEP22\_Q18]

- 1. Running inflation [Option ID = 37897]

2. Comprehensive inflation [Option ID = 37898]
3. Sporadic inflation [Option ID = 37899]
4. Creeping inflation [Option ID = 37900]

**19) Keynes Liquidity trap refers to[Question ID = 16976][Question Description = 119\_221\_GKD\_SEP22\_Q19]**

1. Speculative demand for money [Option ID = 37901]
2. Transactions motive of money is inelastic [Option ID = 37902]
3. Precautionary motive of money is inelastic [Option ID = 37903]
4. Transactions motive of money is constant [Option ID = 37904]

**20) A business is solvent if[Question ID = 16977][Question Description = 120\_221\_GKD\_SEP22\_Q20]**

1. Total receipts exceed total expenditures [Option ID = 37905]
2. Total debt exceeds total equity [Option ID = 37906]
3. Total sales exceed total cash expense [Option ID = 37907]
4. Total assets exceed total liabilities [Option ID = 37908]

Topic:- Crop Sc 2\_PHD

**1) Given below are two statements**

**Statement I : Effector proteins are recognized by Pattern Recognition Receptors of host**

**Statement II : Effector proteins in bacteria are secreted through Type III secretion system**

**In the light of the above statements, choose the correct answer from the options given below:**

**[Question ID = 2601][Question Description = 101\_110\_BCS\_SEP22\_Q01]**

1. Both statements I and statement II are correct [Option ID = 10401]
2. Both statements I and statement II are incorrect [Option ID = 10402]
3. Statement I is correct and statement II is incorrect [Option ID = 10403]
4. Statement I is incorrect and statement II is correct [Option ID = 10404]

**2) Match list I with list II**

List I	List II
A. <i>Micrococcus amylovora</i>	I. Anton De Bary
B. <i>Phytophthora infestans</i>	II. M. W. Beijerinck
C. <i>Contagium vivum fluidum</i>	III. T.O. Diener
D. Viroid	IV. T. J. Burill

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

**[Question ID = 2602][Question Description = 102\_110\_BCS\_SEP22\_Q02]**

1. A - IV, B - I, C - II, D - III [Option ID = 10405]
2. A - III, B - I, C - IV, D - II [Option ID = 10406]
3. A - II, B - I, C - IV, D - III [Option ID = 10407]
4. A - I, B - II, C - IV, D - III [Option ID = 10408]

**3) Given below are two statements**

**Statement I : Many fungal pathogens produce toxins.**

**Statement II : Toxin does not act directly on protoplast components of the host.**

**In the light of the above statements, choose the correct answer from the options given below:**

**[Question ID = 2603][Question Description = 103\_110\_BCS\_SEP22\_Q03]**

1. Both statements I and statement II are correct [Option ID = 10409]
2. Both statements I and statement II are incorrect [Option ID = 10410]
3. Statement I is correct and statement II is incorrect [Option ID = 10411]
4. Statement I is incorrect and statement II is correct [Option ID = 10412]

**4) Which pathogen is able to produce indole acetic acid to cause clubroot disease in cabbage?**

**[Question ID = 2604][Question Description = 104\_110\_BCS\_SEP22\_Q04]**

1. *Alternaria brassicae* [Option ID = 10413]
2. *Peronospora parasitica* [Option ID = 10414]
3. *Plasmiodiophora brassicae* [Option ID = 10415]

4. *Albugo candida* [Option ID = 10416]

5) Which of the microbes are used as bioagents to control plant diseases?

- A. *Trichoderma harzianum*
- B. *Pseudomonas putida*
- C. *Talaromyces flavus*
- D. *Pantoea stewartii*

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

[Question ID = 2605][Question Description = 105\_110\_BCS\_SEP22\_Q05]

- 1. A and B only [Option ID = 10417]
- 2. A, B and C only [Option ID = 10418]
- 3. A, C and D only [Option ID = 10419]
- 4. C and D only [Option ID = 10420]

6) Which genus of the virus has a single-stranded positive RNA and rod-shaped particles?

[Question ID = 2606][Question Description = 106\_110\_BCS\_SEP22\_Q06]

- 1. *Tobamovirus* [Option ID = 10421]
- 2. *Comovirus* [Option ID = 10422]
- 3. *Caulimovirus* [Option ID = 10423]
- 4. *Tospovirus* [Option ID = 10424]

7) Given below are two statements

Statement I : Satellite viruses do not cause infection to the plant, in absence of helper viruses.

Statement II. Satellite viruses act like parasites of the associated helper virus.

In the light of the above statements, choose the correct answer from the options given below:

[Question ID = 2607][Question Description = 107\_110\_BCS\_SEP22\_Q07]

- 1. Both statements I and statement II are correct [Option ID = 10425]
- 2. Both statements I and statement II are incorrect [Option ID = 10426]
- 3. Statement I is correct and statement II is incorrect [Option ID = 10427]
- 4. Statement I is incorrect and statement II is correct [Option ID = 10428]

8) Match list I with list II

List I	List II
A. <i>Erwinia trachiefila</i>	I. <i>Xiphinema americanum</i>
B. Tomato ringspot virus	II. <i>Polymixa graminis</i>
C. Barley yellow dwarf virus	III. <i>Acalymma vittata</i>
D. Cucumber mosaic virus	IV. <i>Aphis gossypi</i>

Choose the correct answer from the options below:

[Question ID = 2608][Question Description = 108\_110\_BCS\_SEP22\_Q08]

- 1. A - IV, B - I, C - II, D - III  
[Option ID = 10429]
- 2. A - III, B - I, C - II, D - IV  
[Option ID = 10430]
- 3. A - II, B - III, C - IV, D - I  
[Option ID = 10431]
- 4. A - I, B - II, C - IV, D - III  
[Option ID = 10432]

9) In which crop, PRO- PLANT expert system has been developed for the management of diseases and insects?

- A. Tomato
- B. Potato

C. Mango

D. Sugar beet

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

[Question ID = 2609][Question Description = 109\_110\_BCS\_SEP22\_Q09]

1. A and B only [Option ID = 10433]
2. A, B and C only [Option ID = 10434]
3. A, C and D only [Option ID = 10435]
4. B and D only [Option ID = 10436]

10) Given below are two statements

Statement I : Biotroph scan live and multiply only on another living organism.

Statement II : Plant diseases caused by a biotrophic pathogen cause necrosis.

In the light of the above statements, choose the correct answer from the options given below:

[Question ID = 2610][Question Description = 110\_110\_BCS\_SEP22\_Q10]

1. Both statements I and statement II are correct  
[Option ID = 10437]
2. Both statements I and statement II are incorrect  
[Option ID = 10438]
3. Statement I is correct and statement II is incorrect  
[Option ID = 10439]
4. Statement I is incorrect and statement II is correct  
[Option ID = 10440]

11) Which disease is under the category of monocyclic?

- A. Wilt
- B. Blight
- C. Loose smut
- D. Rust

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

[Question ID = 2611][Question Description = 111\_110\_BCS\_SEP22\_Q11]

1. A and B only [Option ID = 10441]
2. A and C only [Option ID = 10442]
3. A, C and D only [Option ID = 10443]
4. B and D only [Option ID = 10444]

12) Which is not a component of a master mixture of PCR reaction?

[Question ID = 2612][Question Description = 112\_110\_BCS\_SEP22\_Q12]

1. Buffer [Option ID = 10445]
2. Sodium chloride [Option ID = 10446]
3. Taq polymerase [Option ID = 10447]
4. Magnesium chloride [Option ID = 10448]

13) Match list I with list II

List I	List II
A. Dichlone	I. Acylalanines
B. Metalaxyl	II. Morpholines
C. Tridemorph	III. Cyclohexamide
D. Actidione	IV. Quinone

Choose the correct answer from the options below:

[Question ID = 2613][Question Description = 113\_110\_BCS\_SEP22\_Q13]

1. A - IV, B - I, C - II, D - III [Option ID = 10449]

2. A - III, B - IV, C - I, D - II [Option ID = 10450]
3. A - III, B - IV, C - II, D - I [Option ID = 10451]
4. A - II, B - IV, C - I, D - IV [Option ID = 10452]

14) Which are the selective toxins produced by fungal pathogens?

- A. PM- toxin
- B. Marticin
- C. Tentoxin
- D. Victorin

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

[Question ID = 2614][Question Description = 114\_110\_BCS\_SEP22\_Q14]

1. A and B only [Option ID = 10453]
2. A, B and C only [Option ID = 10454]
3. A and D only [Option ID = 10455]
4. C and D only [Option ID = 10456]

15) What is the source of "Clandosan 618" a natural nematicide?[Question ID = 2615][Question Description = 115\_110\_BCS\_SEP22\_Q15]

1. Sesame freshly harvested seeds [Option ID = 10457]
2. Neem leaf water extract [Option ID = 10458]
3. Crabs and shrimp shells [Option ID = 10459]
4. Semi-decomposed wood biomass [Option ID = 10460]

16) In which year first report on *Heterodera avenae* was made in India?[Question ID = 2616][Question Description = 116\_110\_BCS\_SEP22\_Q16]

1. 1955 [Option ID = 10461]
2. 1958 [Option ID = 10462]
3. 1961 [Option ID = 10463]
4. 1962 [Option ID = 10464]

17) Which of the following nematodes, lack median bulb of oesophagus?

[Question ID = 2617][Question Description = 117\_110\_BCS\_SEP22\_Q17]

1. *Anguina* [Option ID = 10465]
2. *Subanguina* [Option ID = 10466]
3. *Nothanguina* [Option ID = 10467]
4. *Ditylenchus* [Option ID = 10468]

18) Given below are two statements

Statement I: 3<sup>rd</sup> and 4<sup>th</sup> stage juveniles of root-knot nematodes are non-feeding

Statement II: Only mature female of root-knot nematode is the feeding stage

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2618][Question Description = 118\_110\_BCS\_SEP22\_Q18]

1. Both Statement I and Statement II are true [Option ID = 10469]
2. Both Statement I and Statement II are false [Option ID = 10470]
3. Statement I is true but Statement II is false [Option ID = 10471]
4. Statement I is false but Statement II is true [Option ID = 10472]

19) Given below are two statements

Statement I: Bursal rays are present in *Aphelenchus avenae*

Statement II: Bursal rays are absent in *Aphelenchus avenae*

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2619][Question Description = 119\_110\_BCS\_SEP22\_Q19]

1. Both Statement I and Statement II are true [Option ID = 10473]
2. Both Statement I and Statement II are false [Option ID = 10474]
3. Statement I is true but Statement II is false [Option ID = 10475]
4. Statement I is false but Statement II is true [Option ID = 10476]

20) Match List I with List II

List I	List II
A. <i>Meloidogyne</i>	I. Potato
B. <i>Globodera</i>	II. Ring nematode
C. <i>Nacobbus</i>	III. Giant cells
D. <i>Criconeema</i>	IV. False root-knot nematode

Choose the correct answer from the options given below:

[Question ID = 2620][Question Description = 120\_110\_BCS\_SEP22\_Q20]

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

[Option ID = 10477]

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

[Option ID = 10478]

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

[Option ID = 10479]

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

[Option ID = 10480]

21) Match List I with List II

List I	List II
A. <i>Heterodera glycines</i>	I. Dry rot
B. <i>Ditylenchus angustus</i>	II. Yellow dwarf
C. <i>Bursaphelenchus xylophilus</i>	III. Pine wilt
D. <i>Scutellonema bradys</i>	IV. Ufra

Choose the correct answer from the options given below:

[Question ID = 2621][Question Description = 121\_110\_BCS\_SEP22\_Q21]

1. A-IV, B-III, C-I, D-II [Option ID = 10481]

2. A-I, B-IV, C-III, D-II [Option ID = 10482]

3. A-III, B-II, C-IV, D-I [Option ID = 10483]

4. A-II, B-IV, C-III, D-I [Option ID = 10484]

22) How long the second stage juvenile (J2) of *Anguina tritici* can survive in wheat galls?

[Question ID = 2622][Question Description = 122\_110\_BCS\_SEP22\_Q22]

1. 25 years

[Option ID = 10485]

2. 22 years

[Option ID = 10486]

3. 32 years

[Option ID = 10487]

4. 15 years

[Option ID = 10488]

23) Given below are two statements

Statement I: In *Pratylenchus* oesophageal glands overlap intestine ventrally

Statement II: In *Pratylenchus* oesophageal glands overlap intestine dorsally

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

[Question ID = 2623][Question Description = 123\_110\_BCS\_SEP22\_Q23]

1. Both Statement I and Statement II are true [Option ID = 10489]

2. Both Statement I and Statement II are false [Option ID = 10490]

3. Statement I is true but Statement II is false [Option ID = 10491]

4. Statement I is false but Statement II is true [Option ID = 10492]

24) Given below are two statements

Statement I: "Fenwick can" is used to extract large sized nematodes from soil

Statement II: "Fenwick can" is used to extract nematode eggs from soil



In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2624][Question Description = 124\_110\_BCS\_SEP22\_Q24]

1. Both Statement I and Statement II are true [Option ID = 10493]
2. Both Statement I and Statement II are false [Option ID = 10494]
3. Statement I is true but Statement II is false [Option ID = 10495]
4. Statement I is false but Statement II is true [Option ID = 10496]

25) Which of the following nematodes lack 'bursa'?

[Question ID = 2625][Question Description = 125\_110\_BCS\_SEP22\_Q25]

1. *Atylenchus* [Option ID = 10497]
2. *Tylenchus* [Option ID = 10498]
3. *Basiria* [Option ID = 10499]
4. *Malenchus* [Option ID = 10500]

26) Given below are two statements

Statement I: The term Gamergate is referred to the unmated workers of Ponerinae

Statement II: The term Gamergate is referred to the mated workers of Formicinae

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

[Question ID = 2626][Question Description = 126\_110\_BCS\_SEP22\_Q26]

1. Both Statement I and Statement II are correct [Option ID = 10501]
2. Both Statement I and Statement II are incorrect [Option ID = 10502]
3. Statement I is correct but Statement II is incorrect [Option ID = 10503]
4. Statement I is incorrect but Statement II is correct [Option ID = 10504]

27) The mass production of EPN's is widely undertaken on the larvae of:

A. *Ephestia*

B. *Corcyra*

C. *Galleria*

D. *Phthorimoea*

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

[Question ID = 2627][Question Description = 127\_110\_BCS\_SEP22\_Q27]

1. A and B only [Option ID = 10505]
2. B and D only [Option ID = 10506]
3. A and D only [Option ID = 10507]
4. C only [Option ID = 10508]

28) 28. Given below are two statements

Statement I: Indian Myna was shipped to Mauritius way back in 1762 from India, for the control of red locust

Statement II: Young baby of a house sparrow is fed by the great father sparrow

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2628][Question Description = 128\_110\_BCS\_SEP22\_Q28]

1. Both Statement I and Statement II are correct  
[Option ID = 10509]
2. Both Statement I and Statement II are incorrect  
[Option ID = 10510]
3. Statement I is correct but Statement II is incorrect  
[Option ID = 10511]
4. Statement I is incorrect but Statement II is correct  
[Option ID = 10512]

29) Given below are two statements

Statement I: The interval between the moulting at larval stage in insects is known as instar

Statement II: The skins casted by the insect larva are known as exuviae

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2629][Question Description = 129\_110\_BCS\_SEP22\_Q29]

- Both Statement I and Statement II are correct  
[Option ID = 10513]
- Both Statement I and Statement II are incorrect  
[Option ID = 10514]
- Statement I is correct but Statement II is incorrect  
[Option ID = 10515]
- Statement I is incorrect but Statement II is correct  
[Option ID = 10516]

**30) Match List I with List II**

List I	List II
A. Antixenosis	I. Utilization of non-vital parts
B. Antibiosis	II. Natural enemies
C. Tolerance	III. Adverse effect on progeny
D. Extrinsic resistance	IV. Reduced colonization

Choose the correct answer from the options given below:

[Question ID = 2630][Question Description = 130\_110\_BCS\_SEP22\_Q30]

- A-I, B-II, C-III, D-IV [Option ID = 10517]
- A-II, B-III, C-IV, D-I [Option ID = 10518]
- A-IV, B-III, C-I, D-II [Option ID = 10519]
- A-I, B-II, C-IV, D-III [Option ID = 10520]

**31) Match List I with List II**

List I	List II
A. Para-pheromone	I. Elicit dispersal away from crowded food sources
B. Pro-pheromone	II. Helps to prevent wrong mating
C. Anti-pheromone	III. Not found in insects (external source pheromone)
D. Spacing pheromone	IV. Photolabile adduct to protect pheromone

Choose the correct answer from the options given below:

[Question ID = 2631][Question Description = 131\_110\_BCS\_SEP22\_Q31]

- A-I, B-II, C-III, D-IV [Option ID = 10521]
- A-II, B-III, C-IV, D-I [Option ID = 10522]
- A-II, B-I, C-III, D-IV [Option ID = 10523]
- A-III, B-IV, C-II, D-I [Option ID = 10524]

**32) The flies associated in corpse, useful in criminal investigation are:**

[Question ID = 2632][Question Description = 132\_110\_BCS\_SEP22\_Q32]

- Fruit flies  
[Option ID = 10525]
- Blow flies  
[Option ID = 10526]
- Robber flies  
[Option ID = 10527]
- Hover flies  
[Option ID = 10528]

**33) Many of the necklace ornamentations are derived from which group of insects?**

[Question ID = 2633][Question Description = 133\_110\_BCS\_SEP22\_Q33]

- Springtails [Option ID = 10529]
- Bristletails [Option ID = 10530]
- Beetles [Option ID = 10531]
- Lacewings [Option ID = 10532]

**34) Given below are two statements**

Statement I: Eggs of *Chilo partellus* are laid in patches on the maize plants

Statement II: Eggs of *Sesamia inferens* are parasitized by Trichogrammatids

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2634][Question Description = 134\_110\_BCS\_SEP22\_Q34]

1. Both Statement I and Statement II are correct

[Option ID = 10533]

2. Both Statement I and Statement II are incorrect

[Option ID = 10534]

3. Statement I is correct but Statement II is incorrect

[Option ID = 10535]

4. Statement I is incorrect but Statement II is correct

[Option ID = 10536]

35) Match List I with List II

List I	List II
A. Shoot borer larva	I. with dark brown head and 5 dark violet strikes
B. Internode borer larva	II. smooth white or cream coloured with a red coloured mid-dorsal line
C. Top borer larva	III. yellowish brown with brown head
D. Maize borer larva	IV. with light brown head and 4 violet or pink stripes

Choose the correct answer from the options given below:

[Question ID = 2635][Question Description = 135\_110\_BCS\_SEP22\_Q35]

1. A-I, B-IV, C-II, D-III [Option ID = 10537]

2. A-II, B-III, C-IV, D-I [Option ID = 10538]

3. A-II, B-I, C-III, D-IV [Option ID = 10539]

4. A-I, B-II, C-IV, D-III [Option ID = 10540]

36) Match List I with List II

List I	List II
A. Brown soft scale	I. <i>Parasaissetia nigra</i>
B. Black scales	II. <i>Ceroplastes</i> spp.
C. Yellow white scale	III. <i>Saissetia coffeae</i>
D. Chocolate nymphs, adult females with white mealy substance	IV. <i>Nipaecoccus viridis</i>

Choose the correct answer from the options given below:

[Question ID = 2636][Question Description = 136\_110\_BCS\_SEP22\_Q36]

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

[Option ID = 10541]

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

[Option ID = 10542]

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

[Option ID = 10543]

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

[Option ID = 10544]

37) The wooly aphid, *Erisoma lanigerum* cause damage to apple trees like

A. death of young plants

B. galls on the roots

C. curling and yellowing of the tender shoots

D. cause white wooly patches on apple trunk

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

[Question ID = 2637][Question Description = 137\_110\_BCS\_SEP22\_Q37]

1. A, B and C only [Option ID = 10545]

2. A, B and D only [Option ID = 10546]

3. A, C and D only [Option ID = 10547]

4. B, C and D only [Option ID = 10548]

38) Match List I with List II

List I	List II
A. <i>Brevicoryne brassicae</i>	I. adults dark yellowish green and pear shaped
B. <i>Myzus persicae</i>	II. adults yellowish green to dark green on posterior side
C. <i>Aphis gossypii</i>	III. adults yellowish green with waxy filaments over the body
D. <i>Lipaphis erysimi</i>	IV. adults body egg shaped, posterior part rounded, dark patchy abdomen

Choose the correct answer from the options given below:

[Question ID = 2638][Question Description = 138\_110\_BCS\_SEP22\_Q38]

1. A-I, B-IV, C-II, D-III [Option ID = 10549]
2. A-II, B-III, C-IV, D-I [Option ID = 10550]
3. A-II, B-I, C-III, D-IV [Option ID = 10551]
4. A-III, B-IV, C-II, D-I [Option ID = 10552]

39) Given below are two statements

Statement I: "V-notching" of cotton leaf margin is due to feeding of white grub adults

Statement II: Eggs of *Sesamia inferens* are laid singly and not in patches on the substratum

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2639][Question Description = 139\_110\_BCS\_SEP22\_Q39]

1. Both Statement I and Statement II are correct  
[Option ID = 10553]
2. Both Statement I and Statement II are incorrect  
[Option ID = 10554]
3. Statement I is correct but Statement II is incorrect  
[Option ID = 10555]
4. Statement I is incorrect but Statement II is correct  
[Option ID = 10556]

40) The lady bird beetle that predominantly feeds on *Odium* spp is:

[Question ID = 2640][Question Description = 140\_110\_BCS\_SEP22\_Q40]

1. *Henosepilachna vigintioctopunctata*  
[Option ID = 10557]
2. *Propylea dissecta*  
[Option ID = 10558]
3. *Illeis cincta*  
[Option ID = 10559]
4. *Adonia variegata*  
[Option ID = 10560]

41) Given below are two statements

Statement I: CSRTI, Mysuru deals with various silkworm races of *Bombyx mori*

Statement II: CSRTI, Pampore deals with Bivoltine silkworm races of *Bombyx mori*

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2641][Question Description = 141\_110\_BCS\_SEP22\_Q41]

1. Both Statement I and Statement II are correct [Option ID = 10561]
2. Both Statement I and Statement II are incorrect [Option ID = 10562]
3. Statement I is correct but Statement II is incorrect [Option ID = 10563]
4. Statement I is incorrect but Statement II is correct [Option ID = 10564]

42) Given below are two statements

Statement I: Female larva of mulberry silk worm is identified by the presence of Ishiwata's glands

Statement II: *Bombyx mori* attains diapause at egg stage

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2642][Question Description = 142\_110\_BCS\_SEP22\_Q42]

- Both Statement I and Statement II are correct  
[Option ID = 10565]
- Both Statement I and Statement II are incorrect  
[Option ID = 10566]
- Statement I is correct but Statement II is incorrect  
[Option ID = 10567]
- Statement I is incorrect but Statement II is correct  
[Option ID = 10568]

43) Given below are two statements

Statement I: The term “Queen of Textiles” is referred to the superior quality & fineness of silkworm filaments

Statement II: “Queen of Textiles” is referred to the superior quality & fineness of artificial silk thread and fabric

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2643][Question Description = 143\_110\_BCS\_SEP22\_Q43]

- Both Statement I and Statement II are correct  
[Option ID = 10569]
- Both Statement I and Statement II are incorrect  
[Option ID = 10570]
- Statement I is correct but Statement II is incorrect  
[Option ID = 10571]
- Statement I is incorrect but Statement II is correct  
[Option ID = 10572]

44) Match List I with List II

List I	List II
A. CTRTI	I. Tamil Nadu
B. CMERTI	II. Jharkhand
C. CSRTI	III. Assam
D. CSGRC	IV. Karnataka

Choose the correct answer from the options given below:

[Question ID = 2644][Question Description = 144\_110\_BCS\_SEP22\_Q44]

- A-I, B-II, C-III, D-IV  
[Option ID = 10573]
- A-II, B-I, C-IV, D-III  
[Option ID = 10574]
- A-II, B-III, C-IV, D-I  
[Option ID = 10575]
- A-I, B-II, C-IV, D-III  
[Option ID = 10576]

45) Match List I with List II

List I	List II
A. Muga silk worm	I. Sal
B. Tasar silk worm	II. Castor
C. Chinese tasar silk worm	III. Som
D. Eri silk worm	IV. Oak

Choose the correct answer from the options given below:

[Question ID = 2645][Question Description = 145\_110\_BCS\_SEP22\_Q45]

- A-I, B-II, C-III, D-IV [Option ID = 10577]
- A-II, B-IV, C-I, D-III [Option ID = 10578]
- A-III, B-I, C-IV, D-II [Option ID = 10579]
- A-II, B-I, C-III, D-IV [Option ID = 10580]

46) Pebrine infected larvae of muga silk worm are due to:

[Question ID = 2646][Question Description = 146\_110\_BCS\_SEP22\_Q46]

1. Bacteria  
[Option ID = 10581]
2. Virus  
[Option ID = 10582]
3. Protozoa  
[Option ID = 10583]
4. Fungi  
[Option ID = 10584]

47) Match List I with List II

List I	List II
A. Calcified cocoon	I. Uzi fly, a parasitoid of silk worm larvae
B. Tachinid	II. Rough silk enveloping a silkworm's cocoon
C. Dinear	III. Fungus
D. Floss	IV. Thickness of the filament

Choose the correct answer from the options given below:

[Question ID = 2647][Question Description = 147\_110\_BCS\_SEP22\_Q47]

1. A-I, B-II, C-III, D-IV [Option ID = 10585]
2. A-II, B-IV, C-I, D-III [Option ID = 10586]
3. A-II, B-I, C-III, D-IV [Option ID = 10587]
4. A-III, B-I, C-IV, D-II [Option ID = 10588]

48) The oval shaped cocoon of silk worm is a characteristic feature of

[Question ID = 2648][Question Description = 148\_110\_BCS\_SEP22\_Q48]

1. Japanese breeds [Option ID = 10589]
2. European breeds [Option ID = 10590]
3. Indian breeds [Option ID = 10591]
4. Chinese breeds [Option ID = 10592]

49) Juvenile hormone is secreted by

[Question ID = 2649][Question Description = 149\_110\_BCS\_SEP22\_Q49]

1. Sub oesophageal ganglion [Option ID = 10593]
2. Corpora allata [Option ID = 10594]
3. Corpora cardiaca [Option ID = 10595]
4. Neurosecretory cells [Option ID = 10596]

50) Commercially exploited mulberry varieties in India belongs to

[Question ID = 2650][Question Description = 150\_110\_BCS\_SEP22\_Q50]

1. *Morus indica* [Option ID = 10597]
2. *Morus serrata* [Option ID = 10598]
3. *Morus alba* [Option ID = 10599]
4. *Morus lavigata* [Option ID = 10600]

Topic:- 5 Nematology\_PHD

1) Which year Butler had reported 'Ufra' disease of rice caused by *Ditylenchus angustus*?

[Question ID = 2701][Question Description = 101\_112\_NEM\_SEP22\_Q01]

1. 1929 [Option ID = 10801]
2. 1963 [Option ID = 10802]
3. 1921 [Option ID = 10803]
4. 1919 [Option ID = 10804]

2) Which year ICAR Scheme on potato cyst nematode was launched at Ootacamund (Nilgris)? [Question ID = 2702][Question Description = 102\_112\_NEM\_SEP22\_Q02]

1. 1960 [Option ID = 10805]
2. 1965 [Option ID = 10806]

3. 1959 [Option ID = 10807]
4. 1962 [Option ID = 10808]

3) Which of the following cyst nematode is not occurring in India?

[Question ID = 2703][Question Description = 103\_112\_NEM\_SEP22\_Q03]

1. *Heterodera zeae* [Option ID = 10809]
2. *Heterodera goettingiana* [Option ID = 10810]
3. *Heterodera sorghai* [Option ID = 10811]
4. *Heterodera oryzicola* [Option ID = 10812]

4) Which species have 'punctations' in perineal patterns?

[Question ID = 2704][Question Description = 104\_112\_NEM\_SEP22\_Q04]

1. *Meloidogyne incognita* [Option ID = 10813]
2. *Meloidogyne javanica* [Option ID = 10814]
3. *Meloidogyne arenaria* [Option ID = 10815]
4. *Meloidogyne hapla* [Option ID = 10816]

5) Given below are two statements

Statement I: In *Hirschmanniella oryzae* all life stages are infective

Statement II: In *Hirschmanniella oryzae* only 2<sup>nd</sup> stage juveniles are infective

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

[Question ID = 2705][Question Description = 105\_112\_NEM\_SEP22\_Q05]

1. Both Statement I and Statement II are true [Option ID = 10817]
2. Both Statement I and Statement II are false [Option ID = 10818]
3. Statement I is true but Statement II is false [Option ID = 10819]
4. Statement I is false but Statement II is true [Option ID = 10820]

6) In which of the following nematodes procorpus and metacorpus of oesophagus are fused together?

- A. *Hoplolaimus*
- B. *Criconema*
- C. *Pratylenchus*
- D. *Aphelenchus*

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

[Question ID = 2706][Question Description = 106\_112\_NEM\_SEP22\_Q06]

1. A only [Option ID = 10821]
2. B only [Option ID = 10822]
3. A and B only [Option ID = 10823]
4. C and D only [Option ID = 10824]

7) Which stage of *Steinernema* is called as 'free living'?

[Question ID = 2707][Question Description = 107\_112\_NEM\_SEP22\_Q07]

1. 2<sup>nd</sup> stage juveniles [Option ID = 10825]
2. 4<sup>th</sup> stage juveniles [Option ID = 10826]
3. 3<sup>rd</sup> stage juveniles [Option ID = 10827]
4. Pre-adult [Option ID = 10828]

8) Which of the following nematode is having terminal bursa?[Question ID = 2708][Question Description = 108\_112\_NEM\_SEP22\_Q08]

1. *Tylenchus* [Option ID = 10829]
2. *Filenchus* [Option ID = 10830]
3. *Hoplolaimus* [Option ID = 10831]
4. *Malenchus* [Option ID = 10832]

9) In females of *Tylenchulus semipenetrans* where is excretory pore is located?

[Question ID = 2709][Question Description = 109\_112\_NEM\_SEP22\_Q09]

1. Just above the vulva

[Option ID = 10833]

2. Base of oesophagus

[Option ID = 10834]

3. Behind spear base

[Option ID = 10835]

4. Behind median bulb of oesophagus

[Option ID = 10836]

10) Given below are two statements

Statement I: Optimum temperature for egg hatch of *Heterodera avenae* is 16-18 °C

Statement II: Optimum temperature for egg hatch of *Heterodera avenae* is 25-30 °C

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

[Question ID = 2710][Question Description = 110\_112\_NEM\_SEP22\_Q10]

1. Both Statement I and Statement II are true [Option ID = 10837]
2. Both Statement I and Statement II are false [Option ID = 10838]
3. Statement I is true but Statement II is false [Option ID = 10839]
4. Statement I is false but Statement II is true [Option ID = 10840]

11) Given below are two statements

Statement I: Muscle cells are responsible for the turgescence of nematode body

Statement II: Cuticle is responsible for the turgescence of nematode body

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2711][Question Description = 111\_112\_NEM\_SEP22\_Q11]

1. Both Statement I and Statement II are true  
[Option ID = 10841]
2. Both Statement I and Statement II are false  
[Option ID = 10842]
3. Statement I is true but Statement II is false  
[Option ID = 10843]
4. Statement I is false but Statement II is true  
[Option ID = 10844]

12) Given below are two statements

Statement I: Lumen of stylet is less than 50 µm in diameter

Statement II: Lumen of stylet serve as efficient bacterial filter

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2712][Question Description = 112\_112\_NEM\_SEP22\_Q12]

1. Both Statement I and Statement II are true [Option ID = 10845]
2. Both Statement I and Statement II are false [Option ID = 10846]
3. Statement I is true but Statement II is false [Option ID = 10847]
4. Statement I is false but Statement II is true [Option ID = 10848]

13) Given below are two statements

Statement I: White cysts become brown more rapidly after removal from host

Statement II: Living cyst nematode inhibits tanning process

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2713][Question Description = 113\_112\_NEM\_SEP22\_Q13]

1. Both Statement I and Statement II are true [Option ID = 10849]
2. Both Statement I and Statement II are false [Option ID = 10850]
3. Statement I is true but Statement II is false [Option ID = 10851]
4. Statement I is false but Statement II is true [Option ID = 10852]

14) Given below are two statements

Statement I: *Hemicriconemoides* have cuticular sheath and anteriorly directed stylet knobs



Statement II: *Hemicriconemoides* have cuticular sheath and posteriorly directed stylet knobs

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2714][Question Description = 114\_112\_NEM\_SEP22\_Q14]

1. Both Statement I and Statement II are true [Option ID = 10853]
2. Both Statement I and Statement II are false [Option ID = 10854]
3. Statement I is true but Statement II is false [Option ID = 10855]
4. Statement I is false but Statement II is true [Option ID = 10856]

15) Given below are two statements

Statement I: The golden nematode is a domestic quarantine pest in India

Statement II: The golden nematode is a foreign quarantine pest in India

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2715][Question Description = 115\_112\_NEM\_SEP22\_Q15]

1. Both Statement I and Statement II are true [Option ID = 10857]
2. Both Statement I and Statement II are false [Option ID = 10858]
3. Statement I is true but Statement II is false [Option ID = 10859]
4. Statement I is false but Statement II is true [Option ID = 10860]

16) Which of the following female nematode possess mono-prodelphic gonad?

[Question ID = 2716][Question Description = 116\_112\_NEM\_SEP22\_Q16]

1. *Tylenchorhynchus* [Option ID = 10861]
2. *Hirschmanniella* [Option ID = 10862]
3. *Anguina* [Option ID = 10863]
4. *Meloidogyne* [Option ID = 10864]

17) Who is the author of "Tylenchida Parasites of Plant and Insects" CABI, Willingford?[Question ID = 2717][Question Description = 117\_112\_NEM\_SEP22\_Q17]

1. Gopal Swarup [Option ID = 10865]
2. C.L. Sethi [Option ID = 10866]
3. R. K. Walia [Option ID = 10867]
4. M.R. Siddiqui [Option ID = 10868]

18) The source of a natural nematicide 'CropGuard' is?[Question ID = 2718][Question Description = 118\_112\_NEM\_SEP22\_Q18]

1. Crab and shrimp shells [Option ID = 10869]
2. Sesame seeds [Option ID = 10870]
3. Neem cake [Option ID = 10871]
4. Woody biomass [Option ID = 10872]

19) Given below are two statements

Statement I: *Aphelenchoides besseyi* completes its life cycle in 8 days at 23 °C

Statement II: No development occurs in *Aphelenchoides besseyi* below 13 °C

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2719][Question Description = 119\_112\_NEM\_SEP22\_Q19]

1. Both Statement I and Statement II are true [Option ID = 10873]
2. Both Statement I and Statement II are false [Option ID = 10874]
3. Statement I is true but Statement II is false [Option ID = 10875]
4. Statement I is false but Statement II is true [Option ID = 10876]

20) Given below are two statements

Statement I: 'Hisar Lalit' is resistant to *Rotylenchulus reniformis*

Statement II: 'Hisar Lalit' is resistant to *Meloidogyne incognita*

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2720][Question Description = 120\_112\_NEM\_SEP22\_Q20]

1. Both Statement I and Statement II are true [Option ID = 10877]
2. Both Statement I and Statement II are false [Option ID = 10878]
3. Statement I is true but Statement II is false [Option ID = 10879]

4. Statement I is false but Statement II is true [Option ID = 10880]

21) Which one is the type species of *Meloidogyne*?

[Question ID = 2721][Question Description = 121\_112\_NEM\_SEP22\_Q21]

1. *M. exigua* [Option ID = 10881]
2. *M. incognita* [Option ID = 10882]
3. *M. chitwoodi* [Option ID = 10883]
4. *M. arenaria* [Option ID = 10884]

22) Which of the following nematodes is/are quarantine pest in India?

- A. *Aphelenchoides ritzemabosi*
- B. *Anguina agrostis*
- C. *Heterodera zeae*
- D. *Pratylenchus zeae*

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

[Question ID = 2722][Question Description = 122\_112\_NEM\_SEP22\_Q22]

1. A only [Option ID = 10885]
2. B only [Option ID = 10886]
3. A and B [Option ID = 10887]
4. C and D [Option ID = 10888]

23) Given below are two statements

Statement I: Nematodes show triradial symmetry in the stylet

Statement II: Nematodes show triradial symmetry in oesophagus

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2723][Question Description = 123\_112\_NEM\_SEP22\_Q23]

1. Both Statement I and Statement II are true [Option ID = 10889]
2. Both Statement I and Statement II are false [Option ID = 10890]
3. Statement I is true but Statement II is false [Option ID = 10891]
4. Statement I is false but Statement II is true [Option ID = 10892]

24) Given below are two statements

Statement I: During moulting hypodermis secretes a substance that dissolves major part of the old cuticle and at the same time hypodermis lays down a new cuticle

Statement II: During moulting hypodermis don't dissolves the old cuticle but only lays down a new cuticle

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2724][Question Description = 124\_112\_NEM\_SEP22\_Q24]

1. Both Statement I and Statement II are true [Option ID = 10893]
2. Both Statement I and Statement II are false [Option ID = 10894]
3. Statement I is true but Statement II is false [Option ID = 10895]
4. Statement I is false but Statement II is true [Option ID = 10896]

25) Match List I with List II

List I	List II
A. <i>Xiphinema</i>	I. Spear guiding ring single
B. <i>Longidorus</i>	II. Odontophore flanged
C. <i>Hemicycliophora</i>	III. Stylet knobs anchor shaped
D. <i>Hoplolaimus</i>	IV. Body cuticle double

Choose the correct answer from the options given below:

[Question ID = 2725][Question Description = 125\_112\_NEM\_SEP22\_Q25]

1. A - I , B - II, C - III, D - IV [Option ID = 10897]
2. A -II, B -I, C-IV, D-III [Option ID = 10898]
3. A - III, B - IV, C -II, D -I [Option ID = 10899]
4. A -IV, B -III, C -I, D - II [Option ID = 10900]

26) Given below are two statements

Statement I: In tylenchids stylet aperture is located at ventral side

Statement II: In tylenchids stylet aperture is located at dorsal side

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2726][Question Description = 126\_112\_NEM\_SEP22\_Q26]

1. Both Statement I and Statement II are true [Option ID = 10901]
2. Both Statement I and Statement II are false [Option ID = 10902]
3. Statement I is true but Statement II is false [Option ID = 10903]
4. Statement I is false but Statement II is true [Option ID = 10904]

27) Given below are two statements

Statement I: Free living nematodes contribute directly to nutrient mineralization through their feeding interaction on soil microorganisms

Statement II: Decrease in the frequency and intensity in tillage promote the conservation of predatory soil nematodes

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2727][Question Description = 127\_112\_NEM\_SEP22\_Q27]

1. Both Statement I and Statement II are true [Option ID = 10905]
2. Both Statement I and Statement II are false [Option ID = 10906]
3. Statement I is true but Statement II is false [Option ID = 10907]
4. Statement I is false but Statement II is true [Option ID = 10908]

28) In which of the following nematodes 'males' have degenerated spear?

[Question ID = 2728][Question Description = 128\_112\_NEM\_SEP22\_Q28]

1. *Rotylenchus* [Option ID = 10909]
2. *Radopholus* [Option ID = 10910]
3. *Helicotylenchus* [Option ID = 10911]
4. *Ditylenchus* [Option ID = 10912]

29) Which one is type species of *Helicotylenchus*?

[Question ID = 2729][Question Description = 129\_112\_NEM\_SEP22\_Q29]

1. *H. digystera* [Option ID = 10913]
2. *H. nannus* [Option ID = 10914]
3. *H. crenatus* [Option ID = 10915]
4. *H. canalis* [Option ID = 10916]

30) Given below are two statements

Statement I: The antagonistic fungi suppress nematode population as well as recycled elements

Statement II: *Paecilomyces lilacinus* is a parasite of migratory stages of root-knot nematode

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2730][Question Description = 130\_112\_NEM\_SEP22\_Q30]

1. Both Statement I and Statement II are true  
[Option ID = 10917]
2. Both Statement I and Statement II are false  
[Option ID = 10918]
3. Statement I is true but Statement II is false  
[Option ID = 10919]
4. Statement I is false but Statement II is true  
[Option ID = 10920]

31) Musk melon 'S445' variety/accession is resistant to which of the following nematodes?

[Question ID = 2731][Question Description = 131\_112\_NEM\_SEP22\_Q31]

1. *Meloidogyne arenaria* [Option ID = 10921]
2. *Meloidogyne javanica* [Option ID = 10922]
3. *Meloidogyne hapla* [Option ID = 10923]
4. *Rotylenchulus reniformis* [Option ID = 10924]

32) According to De Grisse's formula for describing Criconetids 'R hem' stands for?

[Question ID = 2732][Question Description = 132\_112\_NEM\_SEP22\_Q32]

1. Number of annules from tail terminus to vulva [Option ID = 10925]
2. Number of annules from tail terminus to anus [Option ID = 10926]
3. Number of annules between anus and vulva [Option ID = 10927]
4. Number between labial disc and first annule after hemizonid [Option ID = 10928]

33) In which of the following nematodes, post-vulval uterine sac is absent?

[Question ID = 2733][Question Description = 133\_112\_NEM\_SEP22\_Q33]

1. *Criconema* [Option ID = 10929]
2. *Pratylenchus* [Option ID = 10930]
3. *Anguina* [Option ID = 10931]
4. *Filenchus* [Option ID = 10932]

34) Given below are two statements

Statement I: Nematode body made up of two tubes, joins each other at apical end and at tail end

Statement II: Nematode body made up of two tubes, joins each other at apical end and at rectum

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2734][Question Description = 134\_112\_NEM\_SEP22\_Q34]

1. Both Statement I and Statement II are true [Option ID = 10933]
2. Both Statement I and Statement II are false [Option ID = 10934]
3. Statement I is true but Statement II is false [Option ID = 10935]
4. Statement I is false but Statement II is true [Option ID = 10936]

35) *Meloidogyne enterolobii* was originally reported from?

[Question ID = 2735][Question Description = 135\_112\_NEM\_SEP22\_Q35]

1. India [Option ID = 10937]
2. China [Option ID = 10938]
3. USA [Option ID = 10939]
4. Vietnam [Option ID = 10940]

36) In which year, potato cyst nematode was intercepted during the quarantine detection in India, from a certified seeds consignment originated from Scotland?

[Question ID = 2736][Question Description = 136\_112\_NEM\_SEP22\_Q36]

1. 1975 [Option ID = 10941]
2. 1964 [Option ID = 10942]
3. 1969 [Option ID = 10943]
4. 1973 [Option ID = 10944]

37) Which plant parasitic nematode has the largest body length?

[Question ID = 2737][Question Description = 137\_112\_NEM\_SEP22\_Q37]

1. *Xiphinema americanus* [Option ID = 10945]
2. *Longidorus elongatus* [Option ID = 10946]
3. *Paralongidorus maximus* [Option ID = 10947]
4. *Xiphidorus amazonensis* [Option ID = 10948]

38) Which of the following methods is used for extraction of nematode eggs from soil?[Question ID = 2738][Question Description = 138\_112\_NEM\_SEP22\_Q38]

1. Centrifugal floatation method [Option ID = 10949]
2. Baermann-funnel technique [Option ID = 10950]
3. Fenwick can method [Option ID = 10951]
4. Oostenbrink elutriator methods [Option ID = 10952]

39) Given below are two statements

Statement I: *Meloidogyne javanica* completes its life cycle in 25-30 days at 30 °C

Statement II: Life cycle of *Meloidogyne javanica* may extend upto 90 days at 15-20 °C

In light of the above statements, choose the *correct* answer from the options given below:

[Question ID = 2739][Question Description = 139\_112\_NEM\_SEP22\_Q39]

1. Both Statement I and Statement II are true [Option ID = 10953]
2. Both Statement I and Statement II are false [Option ID = 10954]
3. Statement I is true but Statement II is false [Option ID = 10955]
4. Statement I is false but Statement II is true [Option ID = 10956]

40) Which of the following predatory nematodes is armed with both onchia and odontostyle?

[Question ID = 2740][Question Description = 140\_112\_NEM\_SEP22\_Q40]

1. *Mononchus* [Option ID = 10957]
2. *Dorylaimus* [Option ID = 10958]
3. *Seinura* [Option ID = 10959]
4. *Actinolaimus* [Option ID = 10960]

41) Match List I with List II

List I	List II
A. <i>Paratrichodorus minor</i>	I. Predatory fungus
B. <i>Arthrobotrys oligospora</i>	II. Egg parasite
C. <i>Verticillium chlamydosporium</i>	III. Predatory nematode
D. <i>Monochoides gauglari</i>	IV. Virus vector

Choose the correct answer from the options given below:

[Question ID = 2741][Question Description = 141\_112\_NEM\_SEP22\_Q41]

1. A - IV, B - I, C - II, D - III [Option ID = 10961]
2. A - II, B - IV, C - III, D - I [Option ID = 10962]
3. A - I, B - III, C - IV, D - II [Option ID = 10963]
4. A - III, B - II, C - I, D - IV [Option ID = 10964]

42) Match List I with List II

List I	List II
A. <i>Hirschmanniella oryzae</i>	I. Tea
B. <i>Pratylenchus loosi</i>	II. Wheat
C. <i>Pratylenchus thornei</i>	III. Migratory endoparasite
D. <i>Scutellonema bradys</i>	IV. Yam

Choose the correct answer from the options given below:

[Question ID = 2742][Question Description = 142\_112\_NEM\_SEP22\_Q42]

1. A - IV, B - II, C - I, D - III [Option ID = 10965]
2. A - II, B - III, C - IV, D - I [Option ID = 10966]
3. A - III, B - I, C - II, D - IV [Option ID = 10967]
4. A - I, B - IV, C - III, D - II [Option ID = 10968]

43) From which of the following nematodes hydrolytic enzyme 'β-Galactosidase' is reported?[Question ID = 2743][Question Description = 143\_112\_NEM\_SEP22\_Q43]

1. *Meloidogyne incognita* [Option ID = 10969]
2. *Globodera rostochiensis* [Option ID = 10970]
3. *Radopholus similis* [Option ID = 10971]
4. *Ditylenchus dipsaci* [Option ID = 10972]

44) Which type of soil is preferred by *Pratylenchus zaeae*?[Question ID = 2744][Question Description = 144\_112\_NEM\_SEP22\_Q44]

1. Loamy [Option ID = 10973]
2. Sandy [Option ID = 10974]
3. Clayey [Option ID = 10975]
4. Sandy loam [Option ID = 10976]

45) Given below are two statements

Statement I: The cyst wall of golden nematode, composed of tanned protein, is resistant to decay in soil

Statement II: The eggs of golden nematode remain viable in dry stored cysts for 5 years

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

[Question ID = 2745][Question Description = 145\_112\_NEM\_SEP22\_Q45]

1. Both Statement I and Statement II are correct

[Option ID = 10977]

2. Both Statement I and Statement II are incorrect

[Option ID = 10978]

3. Statement I is correct but Statement II is incorrect

[Option ID = 10979]

4. Statement I is incorrect but Statement II is correct

[Option ID = 10980]

46) Given below are two statements

Statement I: The percentage of males in *Meloidogyne* increased with the increasing adverse condition of nutrition

Statement II: Percentage of male in *Meloidogyne* is not influenced by nutritional deficiency

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

[Question ID = 2746][Question Description = 146\_112\_NEM\_SEP22\_Q46]

1. Both Statement I and Statement II are correct

[Option ID = 10981]

2. Both Statement I and Statement II are incorrect

[Option ID = 10982]

3. Statement I is correct but Statement II is incorrect

[Option ID = 10983]

4. Statement I is incorrect but Statement II is correct

[Option ID = 10984]

47) Match List I with List II

List I	List II
A. European Society of Nematologists	I. Journal of Nematology
B. Society of Nematologists	II. Nematology
C. Afro-Asian Society of Nematologists	III. Nematological Abstracts
D. CABI	IV. International Journal of Nematology

Choose the correct answer from the options given below:

[Question ID = 2747][Question Description = 147\_112\_NEM\_SEP22\_Q47]

1. A - IV, B - III, C - I, D - II [Option ID = 10985]

2. A - II, B - IV, C - III, D - I [Option ID = 10986]

3. A - III, B - II, C - I, D - IV [Option ID = 10987]

4. A - II, B - I, C - IV, D - III [Option ID = 10988]

48) Match List I with List II

List I	List II
A. <i>Dolichodorus heterocephalus</i>	I. Kalahasti
B. <i>Meloidogyne naasi</i>	II. Cereal root-knot disease
C. <i>Pratylenchus pratensis</i>	III. Red root disease
D. <i>Tylenchorhynchus brevilineatus</i>	IV. Brown root rot disease of tobacco

Choose the correct answer from the options given below:

[Question ID = 2748][Question Description = 148\_112\_NEM\_SEP22\_Q48]

1. A - IV, B - I, C - III, D - II [Option ID = 10989]

2. A - III, B - II, C - IV, D - I [Option ID = 10990]

3. A - I, B - IV, C - II, D - III [Option ID = 10991]

4. A - II, B - III, C - I, D - IV [Option ID = 10992]

49) Given below are two statements

Statement I: *Aphelenchus avenae* swarm when exposed to desiccation

Statement II: Congregation into masses of nematodes facilitate survival during anhydrobiosis

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

[Question ID = 2749][Question Description = 149\_112\_NEM\_SEP22\_Q49]

1. Both Statement I and Statement II are correct [Option ID = 10993]

2. Both Statement I and Statement II are incorrect [Option ID = 10994]
3. Statement I is correct but Statement II is incorrect [Option ID = 10995]
4. Statement I is incorrect but Statement II is correct [Option ID = 10996]

**50) Who made first ever report of plant parasitic nematodes in India?[Question ID = 2750][Question Description = 150\_112\_NEM\_SEP22\_Q50]**

1. Dastur [Option ID = 10997]
2. Ayyar [Option ID = 10998]
3. Barber [Option ID = 10999]
4. Das [Option ID = 11000]