

6 Entomology 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: 3rd and 4th 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:- 6 Entomology_PHD

1) Action potential is said to be 'All-or-none' process, that implies for a specific neuron, it is characterized with -

[Question ID = 2751][Question Description = 101_113_AGE_SEP22_Q01]

1. Constant amplitude, constant frequency
[Option ID = 11001]
2. Constant amplitude, variable frequency
[Option ID = 11002]
3. Variable amplitude, constant frequency
[Option ID = 11003]
4. Variable amplitude, variable frequency
[Option ID = 11004]

2) Biological control method is not being practiced to combat storage-insects in India. On this context, read the following two statements.

Statement I: The dead (cadavers) of insect pests left out from the attack by biocontrol agents (including themselves) add to the contamination in the foodstuff which is supposed to be neat and clean.

Statement II: Biocontrol agents are not at all available for storage insect pests.

[Question ID = 2752][Question Description = 102_113_AGE_SEP22_Q02]

1. Both Statement I and Statement II are true [Option ID = 11005]
2. Both Statement I and Statement II are false [Option ID = 11006]
3. Statement I is true but Statement II is false [Option ID = 11007]
4. Statement I is false but Statement II is true [Option ID = 11008]

3) Avermectins (eg. Emamectin benzoate) are pesticides with what type of IRAC classified actions?[Question ID = 2753]

[Question Description = 103_113_AGE_SEP22_Q03]

1. Glutamate-gated chloride channel (GluCl) allosteric modulators [Option ID = 11009]
2. Sodium channel modulators [Option ID = 11010]
3. Nicotinic acetylcholine receptor competitive modulators [Option ID = 11011]
4. Nicotinic acetylcholine receptor allosteric modulators - Site I [Option ID = 11012]

4) In Pesticide-Residue Analysis issue, read the two statements carefully.

Statement I: In India, Maximum residue limits (MRLs) for pesticides are fixed by CODEX.

Statement II: MRL is often mis-interpreted as safety limit instead of trading standard.

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

[Question ID = 2754][Question Description = 104_113_AGE_SEP22_Q04]

1. Both Statement I and Statement II are true [Option ID = 11013]
2. Both Statement I and Statement II are false [Option ID = 11014]
3. Statement I is true but Statement II is false [Option ID = 11015]
4. Statement I is false but Statement II is true [Option ID = 11016]

5) Fine spray droplet size produced from a hydraulic sprayer is in the range of -

[Question ID = 2755][Question Description = 105_113_AGE_SEP22_Q05]

1. 100-400 h
[Option ID = 11017]
2. 50-100 h
[Option ID = 11018]
3. 1-50 h
[Option ID = 11019]
4. 0.1-50 h
[Option ID = 11020]

6) Which of the following forms an effective mean of management for a typical termite problem in field practically?

[Question ID = 2756][Question Description = 106_113_AGE_SEP22_Q06]

1. Light trap [Option ID = 11021]
2. Pheromone trap [Option ID = 11022]
3. Baiting [Option ID = 11023]
4. Bio-pesticides [Option ID = 11024]

7) Match List I with List II

List I	List II
A. <i>Bracon brevicornis</i>	I. Pest
B. <i>Bacillus thuringiensis</i>	II. Parasitoid
C. <i>Beuveria bassiana</i>	III. Fungus
D. <i>Bandicoota benghalensis</i>	IV. Pathogen

Choose the correct answer from the options given below:

[Question ID = 2757][Question Description = 107_113_AGE_SEP22_Q07]

1. A - I , B - II , C - III , D - IV [Option ID = 11025]
2. A - II, B - IV, C - III, D - I [Option ID = 11026]

3. A - IV, B - III, C - I, D - II [Option ID = 11027]
4. A - III, B - IV, C - II, D - I [Option ID = 11028]

8) On the basis of LD₅₀ values, slightly toxic chemicals will have the LD₅₀ range of

[Question ID = 2758][Question Description = 108_113_AGE_SEP22_Q08]

1. 5000-15000
[Option ID = 11029]
2. 500-5000
[Option ID = 11030]
3. 50-500
[Option ID = 11031]
4. 5-50
[Option ID = 11032]

9) The Farmer Field Schools (FFS) for IPM is an agricultural school of farmers , that is, a research based learning through non formal education. This is conducted by the farmers on:

[Question ID = 2759][Question Description = 109_113_AGE_SEP22_Q09]

1. their own fields.
[Option ID = 11033]
2. nearby KVK fields
[Option ID = 11034]
3. their own field and nearby KVKs
[Option ID = 11035]
4. Land of village panchayat
[Option ID = 11036]

10) In the subject issue of Label claims, Label is considered as :

[Question ID = 2760][Question Description = 110_113_AGE_SEP22_Q10]

1. Law
[Option ID = 11037]
2. Suggestion
[Option ID = 11038]
3. Recommendation
[Option ID = 11039]
4. Trade standard
[Option ID = 11040]

11) Which is a typical part of a Nozzle?[Question ID = 2761][Question Description = 111_113_AGE_SEP22_Q11]

1. Spray boom [Option ID = 11041]
2. Lance [Option ID = 11042]
3. Piston [Option ID = 11043]
4. Swirl plate [Option ID = 11044]

12) Whilst discussing the pest management initiation of a spray, the decision tools such as ETL (economic threshold level) and EIL (economic injury level) are considered critically. Read the statements for a major insect pest of rice:

Statement I : ETL is above EIL.

Statement II : EIL is above ETL.

[Question ID = 2762][Question Description = 112_113_AGE_SEP22_Q12]

1. Both Statement I and Statement II are true [Option ID = 11045]
2. Both Statement I and Statement II are false [Option ID = 11046]
3. Statement I is true but Statement II is false [Option ID = 11047]
4. Statement I is false but Statement II is true [Option ID = 11048]

13) A crop variety developed exhibiting minor genes is said to be:

[Question ID = 2763][Question Description = 113_113_AGE_SEP22_Q13]

1. Qualitative and vertical resistance

[Option ID = 11049]

2. Quantitative and vertical resistance

[Option ID = 11050]

3. Qualitative and horizontal resistance

[Option ID = 11051]

4. Quantitative and horizontal resistance

[Option ID = 11052]

14) In an insect-bioassay, the data transformation is needed in the dose/concentration-mortality response curve, to obtain a straight line. Read carefully the two statements.

Statement I: Mortality data is converted to probit values in y-axis

Statement II: Dose/Concentration in x-axis is transformed to log-dose/concentration

[Question ID = 2764][Question Description = 114_113_AGE_SEP22_Q14]

1. Both statements I and statement II are correct

[Option ID = 11053]

2. Both Statement I and Statement II are false

[Option ID = 11054]

3. Statement I is true but Statement II is false

[Option ID = 11055]

4. Statement I is false but Statement II is true

[Option ID = 11056]

15) In cashew plantation of Kerala and Karnataka, which insecticide created hue and cry in public two decades back?

[Question ID = 2765][Question Description = 115_113_AGE_SEP22_Q15]

1. Monocrotophos [Option ID = 11057]

2. Endosulfan [Option ID = 11058]

3. Dimethoate [Option ID = 11059]

4. Chlorpyrifos [Option ID = 11060]

16) Phagostimulant as an adjuvant, is added in NPV (for *Helicoverpa armigera*) formulation to increase the bio-efficacy, in this context which of the following statement is correct/true:

[Question ID = 2766][Question Description = 116_113_AGE_SEP22_Q16]

1. Larval extracts (4%) of *Helicoverpa armigera*

[Option ID = 11061]

2. Larval extracts (4%) of *Spodoptera litura*

[Option ID = 11062]

3. Tinopal or Robin Blue

[Option ID = 11063]

4. Acacia gum

[Option ID = 11064]

17) Which of the following are invasive insect pests in India?

A. *Spodoptera frugiperda*

B. *Tuta absoluta*

C. *Helicoverpa armigera*

D. *Quadraspidiotus perniciosus*

E. *Corcyra cephalonica*

Choose the correct answer from the options given below:

[Question ID = 2767][Question Description = 117_113_AGE_SEP22_Q17]

1. A and B only [Option ID = 11065]

2. B and C only [Option ID = 11066]

3. C and D only [Option ID = 11067]

4. D and E only [Option ID = 11068]

18) Match List I with List II

List I	List II
A. Insecticides Act	I. 1914
B. Insecticides Rule	II. 1968
C. Destructive Insect Pest Act	III. 1972
D. Disaster Management Act	IV. 2005

Choose the correct answer from the options given below:

[Question ID = 2768][Question Description = 118_113_AGE_SEP22_Q18]

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

[Option ID = 11069]

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

[Option ID = 11070]

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

[Option ID = 11071]

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

[Option ID = 11072]

19) Two decades back or so, Kerala state experienced a serious invasive pest problem in coconut crop. That is caused by -

[Question ID = 2769][Question Description = 119_113_AGE_SEP22_Q19]

1. Insect [Option ID = 11073]

2. Mite [Option ID = 11074]

3. Rodent [Option ID = 11075]

4. Nematode [Option ID = 11076]

20) The warning colors furnished on a pesticide container implies -[Question ID = 2770][Question Description = 120_113_AGE_SEP22_Q20]

1. Safety towards mammalian animals [Option ID = 11077]

2. Safety or susceptibility of target insects of the crop [Option ID = 11078]

3. Safety or susceptibility of target crops to be treated [Option ID = 11079]

4. Safety level of treated consumable commodity with the pesticide [Option ID = 11080]

21) Given below are two statements

Statement I: Hawk moth, *Acherontia*, Hover fly, *Syrphus* spp., Flesh fly, *Sarcophaga*, are not pollinators.

Statement II: Agaontid wasp, *Blastopophaga psenes* and Incurvarid moth, *Tegeticula yuccasella* are obligate pollinators.

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

[Question ID = 2771][Question Description = 121_113_AGE_SEP22_Q21]

1. Both Statement I and Statement II are correct [Option ID = 11081]

2. Both Statement I and Statement II are incorrect [Option ID = 11082]

3. Statement I is correct but Statement II is incorrect [Option ID = 11083]

4. Statement I is incorrect but Statement II is correct [Option ID = 11084]

22) From which of the following insect orders more than 30% insect foods are prepared?[Question ID = 2772][Question Description = 122_113_AGE_SEP22_Q22]

1. Ephemeroptera [Option ID = 11085]

2. Hemiptera [Option ID = 11086]

3. Coleoptera [Option ID = 11087]

4. Odonata [Option ID = 11088]

23) Given below are two statements

Statement I: Chafer beetles and skin beetles are not scavengers

Statement II: Certain Jewel beetles and Hover flies serve as scavengers

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

[Question ID = 2773][Question Description = 123_113_AGE_SEP22_Q23]

1. Both Statement I and Statement II are correct [Option ID = 11089]

2. Both Statement I and Statement II are incorrect [Option ID = 11090]

3. Statement I is correct but Statement II is incorrect [Option ID = 11091]

4. Statement I is incorrect but Statement II is correct [Option ID = 11092]

24) Given below are two statements

Statement I: Certain bees and cutworms cannot be acting as soil builders

Statement II: Crickets and collembolans can act as soil builders

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

[Question ID = 2774][Question Description = 124_113_AGE_SEP22_Q24]

1. Both Statement I and Statement II are correct [Option ID = 11093]
2. Both Statement I and Statement II are incorrect [Option ID = 11094]
3. Statement I is correct but Statement II is incorrect [Option ID = 11095]
4. Statement I is incorrect but Statement II is correct [Option ID = 11096]

25) Which of the following insect is an efficient bio indicator of environment?[Question ID = 2775][Question Description = 125_113_AGE_SEP22_Q25]

1. Mayfly [Option ID = 11097]
2. Sand fly [Option ID = 11098]
3. Tsetse fly [Option ID = 11099]
4. Whitefly [Option ID = 11100]

26) Which of the following insect is not used in scientific investigation?[Question ID = 2776][Question Description = 126_113_AGE_SEP22_Q26]

1. Blue bottle [Option ID = 11101]
2. Spanish fly [Option ID = 11102]
3. Screw worm [Option ID = 11103]
4. Army worm [Option ID = 11104]

27) Match List I with List II

List I	List II
A. <i>Calacarus carinatus</i>	I. Fruit bat
B. <i>Corvus splendens</i>	II. Gerbil rat
C. <i>Tatera indica</i>	III. House crow
D. <i>Pteropus giganteus</i>	IV. Tea mite

Choose the correct answer from the options given below:

[Question ID = 2777][Question Description = 127_113_AGE_SEP22_Q27]

1. A-IV, B- III, C-I, D-II [Option ID = 11105]
2. A- III, B-I, C-IV, D-II [Option ID = 11106]
3. A-IV, B-I, C-II, D-III [Option ID = 11107]
4. A-IV, B-III, C-II, D-I [Option ID = 11108]

28) Which of the following is not a pest of mushroom?

[Question ID = 2778][Question Description = 128_113_AGE_SEP22_Q28]

1. Cecid fly [Option ID = 11109]
2. Phorid fly [Option ID = 11110]
3. Chironomid fly [Option ID = 11111]
4. Sciarid fly [Option ID = 11112]

29) The family of *Aphelinus mali*, the parasitoid of apple wooly aphid, *Eriosoma lanigerum* is:

[Question ID = 2779][Question Description = 129_113_AGE_SEP22_Q29]

1. Chalcididae
[Option ID = 11113]
2. Bethyidae
[Option ID = 11114]
3. Eulophidae
[Option ID = 11115]
4. Braconidae
[Option ID = 11116]

30) Given below are two statements

Statement I: Transgenic plants produce insecticidal or antifeedant proteins continuously in the plants under field condition

Statement II: The first transgenic plant developed was the transgenic tobacco using *Bacillus thuringiensis* (Bt) endotoxin gene against tobacco horn worm, *Manduca sexta*

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

[Question ID = 2780][Question Description = 130_113_AGE_SEP22_Q30]

1. Both Statement I and Statement II are correct [Option ID = 11117]
2. Both Statement I and Statement II are incorrect [Option ID = 11118]
3. Statement I is correct but Statement II is incorrect [Option ID = 11119]
4. Statement I is incorrect but Statement II is correct [Option ID = 11120]

31) Match List I with List II

List I	List II
A. Jasmine	I. <i>Cadmilos retarius</i>
B. Chrysanthemum	II. <i>Nausinoe geometralis</i>
C. Aswagandha	III. <i>Longitarsus ferrugineus</i>
D. Mentha	IV. <i>Henosepilachna vigintioctopunctata</i>

Choose the correct answer from the options given below:

[Question ID = 2781][Question Description = 131_113_AGE_SEP22_Q31]

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

[Option ID = 11121]

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

[Option ID = 11122]

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

[Option ID = 11123]

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

[Option ID = 11124]

32) Given below are two statements

Statement I: In honey bee colonies old queen which lacks queen substance is replaced by a new queen at swarming.

Statement II: A failing queen which lacks spermatozoa and unable to lay fertilized eggs is replaced by supersedure queen.

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

[Question ID = 2782][Question Description = 132_113_AGE_SEP22_Q32]

1. Both Statement I and Statement II are correct [Option ID = 11125]
2. Both Statement I and Statement II are incorrect [Option ID = 11126]
3. Statement I is correct but Statement II is incorrect [Option ID = 11127]
4. Statement I is incorrect but Statement II is correct [Option ID = 11128]

33) Which of the following is a byproduct of grainage operation in sericulture ?[Question ID = 2783][Question Description = 133_113_AGE_SEP22_Q33]

1. Pierced cocoons [Option ID = 11129]
2. Unused moths [Option ID = 11130]
3. Dead moths [Option ID = 11131]
4. Exuviae of the moulted larvae [Option ID = 11132]

34) Which of the following is not a host plant of lac insect?[Question ID = 2784][Question Description = 134_113_AGE_SEP22_Q34]

1. Red gram, *Cajanus cajan* [Option ID = 11133]
2. Som tree, *Persea bombycina* [Option ID = 11134]
3. Sal tree, *Shorea robusta* [Option ID = 11135]
4. Babul, *Vachellia nilotica* [Option ID = 11136]

35) Which of the following is the breeding host plant for fruit piercing moth, *Eudocima* spp.[Question ID = 2785][Question Description = 135_113_AGE_SEP22_Q35]

1. *Tinospora cordifolia* [Option ID = 11137]
2. *Datura* sp. [Option ID = 11138]
3. *Withania somnifera* [Option ID = 11139]

4. *Solanum nigrum* [Option ID = 11140]

36) Match the larval periods of the following insects

List I	List II
A. Mango stem borer, <i>Batocera rufomaculata</i>	I. 6 weeks
B. Pepper pollu beetle, <i>Longitarsus migripennis</i>	II. 6 months
C. Serpentine leaf miner, <i>Liriomyza trifolii</i>	III. 6 days
D. White grub beetle, <i>Holotrichia consanguinea</i>	IV. 60 days

Choose the correct answer from the options given below:

[Question ID = 2786][Question Description = 136_113_AGE_SEP22_Q36]

1. A-IV, B- III, C-I, D-II [Option ID = 11141]
2. A- II, B-I, C-IV, D-III [Option ID = 11142]
3. A-II, B-I, C-III, D-IV [Option ID = 11143]
4. A-I, B-II, C-IV, D-III [Option ID = 11144]

37) Match the pests with crops grown under protected cultivation

List I	List II
A. Strawberry	I. <i>Macrosiphoniella sanborni</i>
B. Chrysanthemum	II. <i>Stenotarsonemus fragariae</i>
C. Capsicum	III. <i>Thrips palmi</i>
D. Gerbera	IV. <i>Polyphagotarsonemus latus</i>

Choose the correct answer from the options given below:

[Question ID = 2787][Question Description = 137_113_AGE_SEP22_Q37]

1. A-IV, B- III, C-I, D-II [Option ID = 11145]
2. A- II, B-I, C-IV, D-III [Option ID = 11146]
3. A-II, B-I, C-III, D-IV [Option ID = 11147]
4. A-I, B-II, C-IV, D-III [Option ID = 11148]

38) Which of the following group of sugars are responsible for honey granulation?[Question ID = 2788][Question Description = 138_113_AGE_SEP22_Q38]

1. Maltose, Ribose [Option ID = 11149]
2. Mannose, fucose [Option ID = 11150]
3. Levulose, Dextrose [Option ID = 11151]
4. Arabinose, Galactose [Option ID = 11152]

39) The absence of pest infestation to the host plant because of transitory circumstances is:

[Question ID = 2789][Question Description = 139_113_AGE_SEP22_Q39]

1. an Escape
[Option ID = 11153]
2. an Induced Resistance
[Option ID = 11154]
3. a Host Evasion
[Option ID = 11155]
4. an Avoidance
[Option ID = 11156]

40) Given below are two statements

Statement I: In host plant resistance, minor gene resistance is a horizontal resistance.

Statement II: In host plant resistance, major gene resistance is a mature resistance.

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

[Question ID = 2790][Question Description = 140_113_AGE_SEP22_Q40]

1. Both Statement I and Statement II are correct [Option ID = 11157]
2. Both Statement I and Statement II are incorrect [Option ID = 11158]
3. Statement I is correct but Statement II is incorrect [Option ID = 11159]

4. Statement I is incorrect but Statement II is correct [Option ID = 11160]

41) The vitellogenesis production in insects is stimulated by[Question ID = 2791][Question Description = 141_113_AGE_SEP22_Q41]

1. Prothoracicotropic hormone [Option ID = 11161]
2. Juvenile hormone [Option ID = 11162]
3. Ecdysone [Option ID = 11163]
4. Allatoinhibins [Option ID = 11164]

42) Reproduction by polyembryony is evident in the following order:

- A. Hymenoptera
- B. Strepsiptera
- C. Odonata
- D. Lepidoptera

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

[Question ID = 2792][Question Description = 142_113_AGE_SEP22_Q42]

1. Only A
[Option ID = 11165]
2. Only B
[Option ID = 11166]
3. Both A&B
[Option ID = 11167]
4. Both C&D
[Option ID = 11168]

43) An apterygotan order in which the cerci are modified into hard pincers that are used to catch prey belongs to:

- A. Diplura
- B. Protura
- C. Collembola
- D. Thysanura

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

[Question ID = 2793][Question Description = 143_113_AGE_SEP22_Q43]

1. Both A&D
[Option ID = 11169]
2. Both B&C
[Option ID = 11170]
3. Only B
[Option ID = 11171]
4. Only A
[Option ID = 11172]

44) A facultative arrest of development or activity with different controlling mechanisms of induction and termination, e.g., through photoperiod and chilling, respectively is termed as[Question ID = 2794][Question Description = 144_113_AGE_SEP22_Q44]

1. Parapause [Option ID = 11173]
2. Oligopause [Option ID = 11174]
3. Eudiapause [Option ID = 11175]
4. Aestivation [Option ID = 11176]

45) The basitarsal comb and the tibial calcar found on the foreleg are together called as strigil and are a feature of:

[Question ID = 2795][Question Description = 145_113_AGE_SEP22_Q45]

1. Ditrysian Lepidoptera
[Option ID = 11177]
2. Apocritan Hymenoptera

[Option ID = 11178]

3. Polyphagan Coleoptera

[Option ID = 11179]

4. Nematoceran Diptera

[Option ID = 11180]

46) Given below are two statements

Statement I: Mullerian mimicry is characterized by a palatable species mimicking an unpalatable species

Statement II: Mullerian mimicry is characterized by an unpalatable species mimicking another unpalatable species

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

[Question ID = 2796][Question Description = 146_113_AGE_SEP22_Q46]

1. Both Statement I and Statement II are correct [Option ID = 11181]
2. Both Statement I and Statement II are incorrect [Option ID = 11182]
3. Statement I is correct but Statement II is incorrect [Option ID = 11183]
4. Statement I is incorrect and Statement II is correct [Option ID = 11184]

47) Match List I with List II

List I	List II
A. Mechanoreceptor	I. Ommatidia
B. Auditory receptor	II. Multiporous sensilla
C. Chemoreceptor	III. Chordotonal organ
D. Photoreceptor	IV. Tympanum

Choose the correct answer from the options given below:

[Question ID = 2797][Question Description = 147_113_AGE_SEP22_Q47]

1. A-III, B-IV, C-II, D-I [Option ID = 11185]
2. A-II, B-I, C-IV, D-III [Option ID = 11186]
3. A-IV, B-III, C-I, D-II [Option ID = 11187]
4. A-I, B-II, C-IV, D-III [Option ID = 11188]

48) Given below are two statements

Statement I: The nerve cells that transmit the stimuli from ganglia to effectors organs are called motor nerves

Statement II: The nerve cells that transmit the stimuli from ganglia to effectors organs are called sensory nerves

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

[Question ID = 2798][Question Description = 148_113_AGE_SEP22_Q48]

1. Both Statement I and Statement II are correct [Option ID = 11189]
2. Both Statement I and Statement II are incorrect [Option ID = 11190]
3. Statement I is correct but Statement II is incorrect [Option ID = 11191]
4. Statement I is incorrect and Statement II is correct [Option ID = 11192]

49) Lactic acid component of human sweat that attracts the mosquito, *Aedes aegypti* is an example of

A. Kairomones

B. Allomones

C. Sex pheromones

D. Aggregation pheromones

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

[Question ID = 2799][Question Description = 149_113_AGE_SEP22_Q49]

1. Only A
[Option ID = 11193]
2. Both B&C
[Option ID = 11194]
3. Both B&D
[Option ID = 11195]
4. Only D

[Option ID = 11196]

50) Match List I with List II

List I	List II
A. Amphitoky	I. Unfertilized eggs develop into males
B. Paedogenesis	II. Females are produced from unfertilized eggs
C. Thelytoky	III. Reproduction in the larval stages
D. Arrhenotoky	IV. The unfertilised egg may develop into a male or female

Choose the correct answer from the options given below:

[Question ID = 2800][Question Description = 150_113_AGE_SEP22_Q50]

1. A-III, B-IV, C-II, D-I [Option ID = 11197]
2. A-II, B-I, C-IV, D-III [Option ID = 11198]
3. A-IV, B-III, C-II, D-I [Option ID = 11199]
4. A-I, B-II, C-IV, D-III [Option ID = 11200]