ICAR AIEEA PG 2024 ENTOMOLOGY

Solved Paper

Key Answers are available at the bottom of this document



| ENTOMOLOGY AND NEMATOLOGY | |
|--|-------------|
| Question No. 1 / Question ID 40035 | Marks: 4.00 |
| In photosynthesis, OEC stands for | |
| 1. Oxygen evolving complex | |
| Oxygen emitting complex | |
| Oxygen ectoplasm complex | |
| Outer ectoplasm complex | |
| 1 (Chosen Option) | |
| <u> </u> | |
| \circ | |
| 0 | |
| Question No. 2 / Question ID 40057 | Marks: 4.00 |
| A double stranded DNA has 30% Thymine. The percentage of cytosine is | |
| 1. 30% | |
| 2.70% | |
| 3. 20% | |
| 4. 15% | |
| ∩ 1 2 (Chosen | |
| Option) 3 4 | |
| | |
| | |
| Question No. 3 / Question ID 40087 | Marks: 4.00 |
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| List-I | List-II | |
|----------------------------|--------------------------------|--|
| Locust | Scientific names | |
| (A). Bombay locust | (I). Cyrtocantharis succinata | |
| (B). Brown locust | (II). Chortoicetes terminifera | |
| (C). Australian locust | (III). Locusta pradalina | |
| (D). Rocky mountain locust | (IV). Melanoplus spretus | |

Choose the correct answer from the options given below:

- 1. A-(II), B-(III), C-(I), D-(IV)
- 2. A-(III), B-(I), C-(IV), D-(II)
- 3. A-(I), B-(II), C-(III), D-(IV)
- 4. A-(I), B-(III), C-(II), D-(IV)
 - 1 2 (Chosen)
 - Option) 3 4
 - 0

Question No. 4 / Question ID 40036

Given below are two statements:

Statement (I): Development of an organism from a cell in culture medium is known as Totipotency

Statement (II): Development of a fruit from flower in a culture medium is known as Totipotency

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

- 1. Both Statement (I) and Statement (II) are correct.
- 2. Both Statement (I) and Statement (II) are incorrect.
- 3. Statement (I) is correct but Statement (II) is incorrect.
- 4. Statement (I) is incorrect but Statement (II) is correct.
 - 1 2 3 (Chosen)
 - Option) 4
 - •

Question No. 5 / Question ID 40050

CollegeDekho

Marks: 4.00

| 1. Plantulae | |
|---|--|
| 2. Arolium | |
| 3. Trochanter | |
| 4. Tibia | |
| | |
| 1 (Chosen Option) | |
| O 234 | |
| 0 | |
| 0 | |
| Question No. 6 / Question ID 40104 | Marks: 4.00 |
| | |
| Tylenchulus semipenetrans can be managed by using trifoliate orange as a | |
| (A). Root-stock | |
| (B) Biofumigant | |
| (C). Donor parent in hybrid production | |
| (D). Trap crop | |
| Choose the correct answer from the options given below: | |
| 1. (A) and (B) only. | |
| 2. (B) and (D) only. | |
| 3. (B) and (C) only. | |
| 4. (A) and (C) only. | |
| | |
| ○ 1 2 3 4 (Chosen | |
| Option) | |
| 0 | |
| | |
| Question No. 7 / Question ID 40063 | Marks: 4.00 |
| | |
| The Japan has lifted its two decade old ban in 2006 on the import of Indian mangi | oes on the condition that the fruits are |
| subjected to | |

Small adhesive pads on the tarsomeres in cockroach are known as

- 1. Hot water treatment
- 2. Irradiation
- 3. Vapour heat treatment
- 4. Fumigation



| 0 | 1 | 2 | 3 | (Chosen |
|------------|---|------|------|---------|
| 0 | 0 | otio | n) 4 | Ļ |
| \bigcirc | | | | |

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Question No. 8 / Question ID 40008

Marks: 4.00

Match List-I with List-II

| List-I | List-II | |
|---|---------------------------------------|--|
| (Book/Theory proposed/Characteristic, etc.) | (Author/Thinker/Name of Theory, etc.) | |
| (A). Royal Commission on Agriculture | (I) ₋ 1943 | |
| (B). Bengal Femine | (II). 1928 | |
| (C). Grow more food enquiry committee | (III). 2006 | |
| (D), MGNREGA | (IV). 1952 | |

Choose the correct answer from the options given below:

- 1. (A) (II), (B) (I), (C) (III), (D) (IV)
- 2. (A) (II), (B) (I), (C) (IV), (D) (III)
- 3. (A) (I), (B) (II), (C) (IV), (D) (III)
- 4. (A) (III), (B) (IV), (C) (I), (D) (II)
 - 1 2 (Chosen)
 - Option) 3 4
 - 0
 - 0

Question No. 9 / Question ID 40022

Marks: 4.00

Insect glands responsible for lubrication of mouthparts are/is

- 1. Maxillary gland
- 2. Pharyngeal gland
- 3. Salivary gland
- 4. Mandibular gland
 - \bigcirc 1
 - **2**
 - **3**
 - **4**

Question No. 10 / Question ID 40017



| List-I | List-II | | |
|---|---------------------------------------|---|-------------|
| Listi | Listen | | |
| A. Cereals | I. Potato | | |
| B. Semi-perishables | II. Rice | | |
| C. Oilseeds | III. Maize | | |
| D. Coarse grains | IV. Safflower | | |
| Choose the correct ans | wer from the options given below: | - | |
| 1. A-I, B-II, C-III, D-IV 2. A-II, B-I, C-IV, D-III 3. A-IV, B-III, C-II, D-I | | | |
| 4. A-III, B-II, C-I, D-IV | | | |
| 1 2 (ChoseOption) 3 4 | en | | |
| Option) 3 4 | | | |
| 0 | | | |
| Question No. 11 / Quest | tion ID 40024 | | Marks: 4.00 |
| Grooves with a purely fu | unctional origin in insects is called | | |
| 1. Sulci | | | |
| 2. Membrane | | | |
| 3. Pit | | | |
| 4. Crack | | | |
| • 1 (Chosen Option | n) | | |
| 234 | | | |
| | | | |
| | | | |
| Question No. 12 / Quest | tion ID 40074 | | Marks: 4.00 |

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| Question No. 15 / Question ID 40088 | Marks: 4.00 | |
|--|-------------|--|
| _ 4 | | |
| ○ 2 ○ 3 | | |
| \bigcirc 1 \bigcirc 2 | | |
| | | |
| 4. Filament | | |
| 3. Lattice | | |
| 2. Acrosome | | |
| 1. Nebenkern | | |
| An outer limiting membrane and a central pool of mitochondrial components in the spermatid is known as | | |
| Question No. 14 / Question ID 40060 | Marks: 4.00 | |
| O 4 | | |
| ○ 3 | | |
| \bigcirc 2 | | |
| \cap 1 | | |
| 4. Mecoptera | | |
| 3. Zoraptera | | |
| 2. Pthiraptera | | |
| 1. Psocoptera | | |
| The connecting link between Orthopteroid and Hemipteroid insects is order | | |
| Question No. 13 / Question ID 40089 | Marks: 4.00 | |
| | | |
| ○ 1 2 (Chosen○ Option) 3 4 | | |
| | | |
| 4. Statement (I) is incorrect but Statement (II) is correct. | | |
| 3. Statement (I) is correct but Statement (II) is incorrect. | | |
| 2. Both Statement (I) and Statement (II) are incorrect. | | |
| Both Statement (I) and Statement (II) are correct. | | |
| In light of the above statements, choose the most appropriate answer from the options given below. | | |
| Statement (II): Pilose antennae are present in male mosquito | | |
| Statement (I): Plumose antennae are present in female mosquito | | |
| Given below are two statements: | | |
| | | |

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| List-II | | |
|--------------------|--|--|
| Family | Character | |
| (A). Tettigonidae | (I). Trapezoidal forewings | |
| (B). Membracidae | (II). Pronounced rostrum with geniculate antenna | |
| (C). Curculionidae | (III). Pronotum prominent, elevated hood like | |
| (D), Gelechiidae | (IV). Ovipositor longer than body | |

Choose the correct answer from the options given below:

- 2. A-(II), B-(II), C-(II), D-(II) 3. A-(I), B-(II), C-(III), D-(IV) 4. A-(III), B-(IV), C-(III)
- 4. A-(III), B-(IV), C-(I), D-(II)
 - 1 (Chosen Option)
 - 234

Question No. 16 / Question ID 40118



| List-I | List-II |
|---------------------------|------------------|
| (A). Telenemous remus | (I). Fish |
| (B). Gambusia affinis | (II). Toad |
| (C). Bufo rana | (III). Bird |
| (D). Acridotheres tristis | (IV). Parasitoid |

Choose the correct answer from the options given below:

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

Question No. 17 / Question ID 40080

If the acute dermal median lethal dose (LD₅₀) of an insect is 50mg/kg, then

- 1. 50 test insects can be killed with 50 mg of toxin
- 2. One test insect can be killed with 50 mg of the toxin
- 3. 50% of test insect can be killed with 50 mg of the toxin
- 4. 50% of test insect will be killed in 50 minutes by 50 mg of the toxin
 - 1 2 3 (Chosen)
 - Option) 4

U

Question No. 18 / Question ID 40004

Marks: 4.00



Given below are two statements:

Statement (I): National Research Centre for Medicinal and Aromatic Plants is situated at Anand

Statement (II): NRCMAP was upgraded as ICAR- Directorate of Medicinal and Aromatic Plants during the year 2010

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

- 1. Both Statement (I) and Statement (II) are correct.
- 2. Both Statement (I) and Statement (II) are incorrect.
- 3. Statement (I) is correct but Statement (II) is incorrect.
- 4. Statement (I) is incorrect but Statement (II) is correct,

| \bigcirc | 1 |
|------------|---|
| \cup | • |

Question No. 19 / Question ID 40007

Marks: 4.00

Match List-I with List-II

| List-I | List-II (Author/Thinker/Name of Theory, etc.) | |
|--|--|--|
| (Book/Theory proposed/Characteristic, etc.) | | |
| (A). Imperial Bacterial Laboratory | (I). Pusa, Bihar | |
| (B). Agricultural Research Institute | (II). Pune, Maharashtra | |
| (C). Central Food Technological Res. Instt | (III). Mysore, Karnataka | |
| (D). Indian Council of Agricultural Research | (IV). New Delhi | |

Choose the correct answer from the options given below:

○ 1 2 3 (Chosen

Option) 4



Question No. 20 / Question ID 40006

| Question No. 23 / Question ID 40105 | Marks: 4.00 | |
|---|-----------------------------|---|
| | | |
| Option) 4 | | |
| ○ 1 2 3 (Chosen | | |
| 4. Fourth-Tive tear Flatt | | |
| Third- Five Year Plan Fourth-Five Year Plan | | |
| 2. Second-Five Year Plan 3. Third Five Year Plan | | |
| 1. First- Five Year Plan | | |
| The concept of "Green Revolution" in India was formulated during | | |
| Question No. 22 / Question ID 40002 | Marks: 4.00 | |
| 0 | | |
| | | |
| ○ 1 2 (Chosen○ Option) 3 4 | | |
| | | |
| 4. DNA Recombination | | |
| 3. DNA Hybridisation | | |
| 2. DNA Transposon | | |
| 1. DNA Replication | | |
| chromosome to another is called | | |
| A short mechanism that usually involves a short segment of DNA with remarkable capacity to re- | move from one location in a | |
| Question No. 21 / Question ID 40055 | Marks: 4.00 | |
| ○ 4 | | _ |
| \bigcirc 3 \bigcirc 4 | | |
| ○ 2 | | |
| \cap 1 | | |
| | | |
| 4. Statement (I) is incorrect but Statement (II) is correct. | | |
| 3. Statement (I) is correct but Statement (II) is incorrect. 3. Statement (II) is incorrect. | | |
| Both Statement (I) and Statement (II) are correct. Both Statement (I) and Statement (II) are incorrect. | | |
| | olon. | |
| In light of the above statements, choose the most appropriate answer from the options given b | alow | |
| Statement (II): Mithun is a buffalo-like animal | | |
| Statement (I): ICAR-National Research Centre on Mithun is in Medziphema | | |
| Given below are two statements. | | |



| Molting Desiccation | |
|--|----------------------|
| 4. Desiceation | |
| ■ 1 (Chosen Option) | |
| 234 | |
| | |
| 0 | |
| Question No. 24 / Question ID 40111 | Marks: 4.00 |
| Given below are two statements: | |
| Statement (I): Voltinism in insects is number of generations produced in a year. | |
| Statement (II): Morus alba is a perinnial tree in northern India. | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| Both Statement (I) and Statement (II) are correct. | |
| 2. Both Statement (I) and Statement (II) are incorrect. | |
| Statement (I) is correct but Statement (II) is incorrect. | |
| Statement (I) is incorrect but Statement (II) is correct, | |
| | |
| 1 (Chosen Option) | |
| O 234 | |
| | |
| 0 | |
| Question No. 25 / Question ID 40058 | Marks: 4.00 |
| | |
| One of Mendel's pure strains of pea plants had green peas. How many different types of progeny could | such a plant produce |
| with regard to pea colour? | |
| 1. One | |
| 2. Two | |
| 3. Three | |
| 4. Four | |
| | |
| \cap 1 | |
| \bigcirc 2 | |
| ○ 3 | |
| O 4 | |
| Question No. 26 / Question ID 40001 | Marks: 4.00 |
| | |

Nematodes enter the stage of "lethargus" during

1. Quiescence

2. Killing and fixing



| 1. 1968 | |
|---|-------------|
| 2.1974 | |
| 3. 1996 | |
| 4. 1980 | |
| | |
| ○ 1 2 (Chosen○ Option) 3 4○ | |
| Question No. 27 / Question ID 40114 | Marks: 4.00 |
| Given below are two statements: | |
| Statement (I): Tukra disease in mulberry is caused by whitefly | |
| Statement (II): Shellac is a resin secreted by female lac insect on host plant | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. | |
| 1 2 3 4 (ChosenOption) | |
| Question No. 28 / Question ID 40047 | Marks: 4.00 |
| Formic acid is produced by | |
| 1. White ant | |
| 2. Cockroach | |
| 3. Red ant | |
| 4. House fly | |
| 4. House hy | |
| ○ 1 2 3 (Chosen | |
| Option) 4 | |
| | |
| | |
| Question No. 29 / Question ID 40075 | Marks: 4.00 |
| | |

The first KVK was established by ICAR at Puducherry in the year

| FAO guidelines on establishment of pest free areas for fruit flies are dealt under | | |
|--|-------------|--|
| 1. ISPM #8 | | |
| 2. ISPM #16 | | |
| 3. ISPM #26 | | |
| 4. ISPM #30 | | |
| | | |
| | | |
| \circ 1 | | |
| \bigcirc 2 | | |
| \bigcirc 3 | | |
| O 4 | | |
| Question No. 30 / Question ID 40061 | Marks: 4.00 | |
| Parasitoid, Allotropa phenacocca (Hymenoptera) on cotton mealybug, Phenacoccus solenopsis is | | |
| 1. Primary parasitoid | | |
| Hyperparasitoid | | |
| Gregarious parasitoid | | |
| 4. Adelpho parasitoid | | |
| | | |
| | | |
| ○ 1○ 2 | | |
| \bigcirc 3 | | |
| \bigcirc 4 | | |
| | | |
| Question No. 31 / Question ID 40102 | Marks: 4.00 | |
| The phenomenon of offspring nematodes developing from unfertilized eggs happens in | | |
| 1. Amphimixis | | |
| 2. Parthenogenesis | | |
| 3. Hermaphrodites | | |
| 4. Endotokia matricida | | |
| | | |
| ∩ 1 2 (Chosen | | |
| Option) 3 4 | | |
| | | |
| | | |
| | | |
| Question No. 32 / Question ID 40073 | Marks: 4.00 | |
| | | |
| | | |



Match list I with II

| List I | List II |
|------------------------|-------------------------------------|
| A. Pyriproxifen | Sodium Channel Blocker |
| B. Chlorantraniliprole | II. Acetyl cholinesterase inhibitor |
| C. Indoxacarb | III. JH mimic |
| D. Propoxur | IV. Calcium channel activator |
| | |

Choose the correct answer from the options below:

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

1 (Chosen Option)

- O 234
- 0

Question No. 33 / Question ID 40083

Given below are two statements:

Statement (I): Butterflies with erratic darting flights belong to family Hesperiidae

Statement (II): Larvae with tapering at both ends without dorsal setae

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

- 1. Both Statement (I) and Statement (II) are true.
- 2. Both Statement (I) and Statement (II) are false.
- 3. Statement (I) is true but Statement (II) is false.
- 4. Statement (I) is false but Statement (II) is true.
 - 1 (Chosen Option)
 - 234

Question No. 34 / Question ID 40096

Marks: 4.00



Given below are two statements: Statement (I): Bean yellow mosaic virus is transmitted by Aphis glycines. Statement (II): Chilli mosaic virus is trsnsmitted by Aphis craccivora. In light of the above statements, choose the most appropriate answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. ∩ 1 2 3 (Chosen) Option) 4 \bigcirc Marks: 4.00 Question No. 35 / Question ID 40120 Uzifly is a serious pest of 1. Mulberry inflorescence 2. Silk worm 3. Horse 4. Buffalo \bigcirc 1 2 (Chosen Option) 3 4 0 \bigcirc Marks: 4.00 Question No. 36 / Question ID 40052 Needle nematodes are important vectors of (A). Raspberry ringspot virus (B). Tomato black ring virus (C). Arabis mosaic (D). Broomgrass mosaic Choose the correct answer from the options given below 1. (A) and (D) only. 2. (B) and (D) only. 3. (A) and (C) only. 4. (A) and (B) only.



| ○ 1○ 2 | |
|---|-------------|
| 34 | |
| Question No. 37 / Question ID 40081 | Marks: 4.00 |
| | |
| Which of the following is the Orthopteroid-Neopteran insect order? | |
| 1. Neuroptera | |
| Mecoptera Coleoptera | |
| 4. Plecoptera | |
| | |
| | |
| ○ 2○ 3 | |
| O 4 | |
| Question No. 38 / Question ID 40070 | Marks: 4.00 |
| What is the family of the Mango mealybug? | |
| 1. Coccidae | |
| 2. Flatidae | |
| 3. Pseudococcidae | |
| 4. Margarodidae | |
| | |
| Option) 4 | |
| | |
| | |
| Question No. 39 / Question ID 40094 | Marks: 4.00 |
| Given below are two statements: | |
| Statement (I): Virus transmission by whitefly is persistent and circulative type | |
| Statement (II): Virus transmission by hoppers is circulative and usally propagative type | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| 1. Both Statement (I) and Statement (II) are true. | |
| Both Statement (I) and Statement (II) are false. Statement (I) is true but Statement (II) is false. | |
| Statement (I) is false but Statement (II) is true. | |
| | |
| • 1 (Chosen Option) | |
| O 2 | |



| ○ 3○ 4 | | |
|---|-------------|--|
| Question No. 40 / Question ID 40059 | Marks: 4.00 | |
| The Muller's organ in insects is associated with | | |
| Olfaction Chemoreception Hearing Respiration | | |
| 1 2 3 (ChosenOption) 4 | | |
| Question No. 41 / Question ID 40107 | Marks: 4.00 | |
| The caudal sensory organ showing sexual dimorphism are associated with | | |
| 1. Reproduction 2. Excretion 3. Secretion 4. Movement | | |
| 1 (Chosen Option) 234 | | |
| Question No. 42 / Question ID 40072 | Marks: 4.00 | |
| The apparatus used for the extraction of cysts from soil is | | |
| Cobb's sieve Fenwick can Oostenbrink elutriater Baermann's funnel | | |
| 1234 | | |
| Question No. 43 / Question ID 40068 | Marks: 4.00 | |

| DIPA was passed by the Government of India in the year | |
|--|-------------|
| 1.1946 | |
| 2.1954 | |
| 3. 1914 | |
| 4. 1910 | |
| 1 2 3 (ChosenOption) 4 | |
| Question No. 44 / Question ID 40064 | Marks: 4.00 |
| Given below are two statements: | |
| Statement (I): Bacillus thuringiensis is effective against the mosquito | |
| Statement (II): Bacillus sphaericus is effective against the mosquito | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| Both statements I and statement II are correct | |
| Both statements I and statement II are incorrect | |
| Statement I is correct and statement II is incorrect | |
| Statement I is incorrect and statement II is correct | |
| | |
| ○ 1 2 (Chosen | |
| Option) 3 4 | |
| 0 | |
| \circ | |
| Question No. 45 / Question ID 40005 | Marks: 4.00 |
| Given below are two statements: | |
| Statement (I): Central Agricultural University is in Jorhat | |
| Statement (II): Central Agricultural University is in Imphal | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| Both Statement (I) and Statement (II) are correct. | |
| Both Statement (I) and Statement (II) are incorrect. | |
| Statement (I) is correct but Statement (II) is incorrect. | |
| Statement (I) is incorrect but Statement (II) is correct, | |
| | |
| \bigcirc 1 | |
| ○ 2 | |
| ○ 3 | |
| | |



Question No. 46 / Question ID 40112

Marks: 4.00

Match List-I with List-II

| List-I | List-II |
|--|-----------------------------------|
| (A). Handbook of Agriculture | (I). Academic Press Inc |
| (B). Elements of Economic Entomology | (II). Brillion Publishing |
| (C). Theory and Practice of Biological Control | (III). Westville Publishing House |
| (D). Biological Pest Suppression | (IV). ICAR |
| | |

Choose the correct answer from the options given below:

- 1. (A) (I), (B) (II), (C) (III), (D) (IV)
- 2. (A) (I), (B) (III), (C) (II), (D) (IV)
- 3. (A) (IV), (B) (II), (C) (I), (D) (III)
- 4. (A) (III), (B) (IV), (C) (I), (D) (II)
 - ∩ 1 2 3 (Chosen)
 - Option) 4



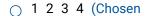
0

Question No. 47 / Question ID 40034

Marks: 4.00

In Calvin cycle, Rubisco incorporates CO2 into ribulose 1,5 bisphospahte which rapidly splits into

- 1. Glyceraldehyde 3-phosphate
- 2. 2,3 phosphoglyceric acid
- 3. 3 phosphoglycerate
- 4. 1,3 diphosphoglycerate



- Option)
- \bigcirc

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Question No. 48 / Question ID 40098



| (I). Thrips |
|-----------------|
| (II). Whitefly |
| (III). Aphids |
| (IV). Mealybugs |
| |

Choose the correct answer from the options given below:

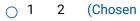
- 1. (A) (I), (B) (III), (C) (II), (D) (IV)
- 2. (A) (III), (B) (I), (C) (IV), (D) (II)
- 3. (A) (II), (B) (IV), (C) (III), (D) (I)
- 4. (A) (IV), (B) (III), (C) (I), (D) (II)
 - _ 1
 - **2**
 - **3**

Question No. 49 / Question ID 40015

| List-l | List-II |
|-------------------------|--------------------------|
| A. Abiotic resistance | I GM Maize (Corn borer) |
| B. Herbicide resistance | II Drought |
| C. Insect resistance | III GM Crop (Glyphosate) |
| D. Pathogen resistance | IV Cucumber Mosaic Virus |

Choose the correct answer from the options given below:

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



Option) 3 4

0

Question No. 50 / Question ID 40023

Carnivorous species which actively pursue their prey have

- 1. Prognathus mouthparts
- 2. Hypognathus mouthparts
- 3. Opisthonagus mouthparts
- 4. Opisthorhynchous mouthparts

 - Option) 3 4

Question No. 51 / Question ID 40025

Marks: 4.00



Given below are two statements:

Statement (I): Aedes aegyptii contains no anti-coagulant and the blood clots in the stomach within 15 mints of feeding.

Statement (II): Aedes aegyptii contains an anti-coagulant which prevents the blood clots in the stomach within 15 mints of feeding.

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

- 1. Both Statement (I) and Statement (II) are correct.
- 2. Both Statement (I) and Statement (II) are incorrect.
- 3. Statement (I) is correct but Statement (II) is incorrect.
- 4. Statement (I) is incorrect but Statement (II) is correct.

| \bigcirc 1 | 2 | 3 | 4 | (Choser |
|--------------|---|---|---|---------|
|--------------|---|---|---|---------|

Option)



Question No. 52 / Question ID 40113

Match List-I with List-II

| List-l | List-II |
|------------------------------|-------------------|
| (A). Oak tasar silk worm | (I). Jharkhand |
| (B). Muga silk worm | (II). Uttarakhand |
| (C). Mulberry silk worm | (III) Assam |
| (D). Tropical tasar silkworm | (IV). Karnataka |

Choose the correct answer from the options given below:



•

Question No. 53 / Question ID 40003

Marks: 4.00

| 1. 1940s | |
|--|---------------|
| 2. 1950s | |
| 3. 1960s | |
| 4. 1980s | |
| 4. 13003 | |
| | |
| ∩ 1 2 3 (Chosen | |
| Option) 4 | |
| | |
| | |
| | |
| Question No. 54 / Question ID 40049 | Marks: 4.00 |
| question its. 5-7 question is 100-15 | |
| | |
| Book lungs are the respiratory organs in | |
| book lange are the respiratory organis in | |
| 1. Mollusca | |
| 2. Earthworm | |
| 3. Silverfish | |
| 4. Arachnida | |
| 4. Arachinda | |
| | |
| ○ 1 2 3 4 (Chosen | |
| Option) | |
| | |
| | |
| | |
| Question No. 55 / Question ID 40048 | Marks: 4.00 |
| Question No. 337 Question in 40048 | WIGHNS: 4.00 |
| | |
| Given below are two statements: | |
| Olvert below are two statements. | |
| Statement (I): Linkage was given by G. Mendel | |
| The state of the s | |
| Statement (II): Linkage was given by T.H.Morgan | |
| | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| | |
| Both Statement (I) and Statement (II) are correct. | |
| 2. Both Statement (I) and Statement (II) are incorrect. | |
| 3. Statement (I) is correct but Statement (II) is incorrect. | |
| 4. Statement (I) is incorrect but Statement (II) is correct, | |
| | |
| | |
| ○ 1 2 3 4 (Chosen | |
| Option) | |
| | |
| | |
| | |
| Question No. 56 / Question ID 40054 | Marks: 4.00 |
| Question No. 50 / Question in 40004 | IVIGING. T.UU |
| | |

The "Begging Bowl" status in India with regards to chronic food shortage was referred during



| Fungicide is obtained from | |
|--|-------------|
| 1. Amla | |
| 2. Neem | |
| 3. Sunflower | |
| 4. Asparagus | |
| | |
| Option) 3 4 | |
| | |
| 0 | |
| Question No. 57 / Question ID 40099 | Marks: 4.00 |
| Peanut bud necrosis virus (PBND) is transmitted by | |
| (A). Aphis gossypii and Myzus persicae | |
| (B). Aphis maydis and Toxoptera graminum | |
| (C). Thrips palmi and Franklinella schultzei | |
| (D). Planococcoides njalensis and Pentalonia nigronervosa | |
| Choose the <i>correct</i> answer from the options given below: | |
| 1. (A) and (B) only. | |
| 2. (B) and (D) only. | |
| 3. (C) only. | |
| 4. (A) and (D) only. | |
| | |
| Option) 4 | |
| | |
| <u> </u> | |
| Question No. 58 / Question ID 40091 | Marks: 4.00 |
| After hatching, the hatchling of whitefly passes through | |
| 1. 2 nymphal instars | |
| 2. 3 nymphal instars | |
| 3. 4 nymphal instars | |
| 4. 5 nymphal instars | |
| | |
| ○ 1 | |
| O 2 | |
| 34 | |
| | |
| Question No. 59 / Question ID 40065 | Marks: 4.00 |

| List-l | List-II |
|---------------------------------|----------------------------|
| (A). Rugose spiralling whitefly | (I). Encarsia noyesi |
| (B). Spiralling whitefly | (II). Encarsia guadeloupae |
| (C). Silverleaf whitefly | (III). Encarsia inaron |
| (D). Coconut whitefly | (IV). Encarsia sophia |

Choose the correct answer from the options given below:

- 1. (A) (I), (B) (II), (C) (III), (D) (IV)
- 2. (A) (II), (B) (I), (C) (IV), (D) (III)
- 3. (A) (II), (B) (I), (C) (III), (D) (IV)
- 4. (A) (I), (B) (III), (C) (IV), (D) (II)
 - 1 2 3 4 (Chosen
 - Option)



Question No. 60 / Question ID 40020

Given below are two statements:

Statement (I): In Soyabean, generally, 75-80 kg/ha seed is recommended in kharif

Statement (II): For spring season soyabean crop, 100 kg/ha seed is recommended

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

- 1. Both Statement (I) and Statement (II) are true.
- 2. Both Statement (I) and Statement (II) are false.
- 3. Statement (I) is true but Statement (II) is false.
- 4. Statement (I) is false but Statement (II) is true.
 - \bigcirc 1
 - **2**
 - 3
 - \bigcirc 4

Question No. 61 / Question ID 40029

Marks: 4.00



Insect cells housing the symbionts are known as

- 1. Mycetocytes
- 2. Goblet cells
- 3. Rectal cells
- 4. Acinar cells

O 1

O 2

○ 3

O 4

Question No. 62 / Question ID 40069

Marks: 4.00

Match List-I with List-II

| List-l | List-II |
|---------------------|----------------------------|
| (A). Acorus spp. | (I). Colchicine |
| (B). Neophobia | (II). Multiple dose poison |
| (C). Chemosterilant | (III). Sweet flag |
| (D). Tomafarin | (IV). Single dose poison |

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

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

1

2

3

4

Question No. 63 / Question ID 40032



| Oxidative Carboxylation Substrate Level Phosphorylation Dark Respiration Reductive Carboxylation | |
|--|-------------|
| 1234 | |
| Question No. 64 / Question ID 40100 | Marks: 4.00 |
| The ETL for insect vectors in pest management is | |
| (A). 0% | |
| (B). 0 to 0.5 % | |
| (C). 1.0 to 1.5 % | |
| (D). 2.0 to 2.5 % | |
| Choose the <i>correct</i> answer from the options given below: | |
| 1. (A) and (B) only. 2. (A) and (C) only. 3. (B) and (C) only 4. (C) and (D) only. | |
| 1 (Chosen Option) 234 | |
| Question No. 65 / Question ID 40082 | Marks: 4.00 |
| Aquatic insect family Sisyridae belongs to order | |
| 1. Neuroptera 2. Hemiptera 3. Plecoptera 4. Strepsiptera | |
| 1 2 3 4 (ChosenOption)• | |
| Question No. 66 / Question ID 40044 | Marks: 4.00 |

Calvin cycle represents the phenomenon of

| Given below are two statements Statement (I): Stubby root nematode are also known as Longidorids Statement (II): Stubby root nematode are also known as Trichodorids In light of the above statements, choose the most appropriate answer from the options given below 1. Both Statement (I) and Statement (II) are correct 2. Both Statement (I) and Statement (II) are incorrect 3. Statement (I) is correct but Statement (II) is incorrect 4. Statement (I) is incorrect but Statement (II) is correct 7. 1. 2. 3. (Chosen 7. Option) 4 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1. (A). (B) and (D) only. 2. (A). (B) and (C) only. 3. (A). (B). (C) and (D) only. 1. (B). (C) and (D) only. 1. (C). and (D) only. 1. (C). and (D) only. 1. (C). and (D) only. | |
|---|---|
| Statement (II). Stubby root nematode are also known as Trichodorids In light of the above statements, choose the <i>most appropriate</i> answer from the options given below 1. Both Statement (I) and Statement (II) are incorrect 2. Both Statement (I) and Statement (II) are incorrect 3. Statement (I) is correct but Statement (II) is incorrect 4. Statement (I) is incorrect but Statement (II) is correct 1. 2. 3 (Chosen Option) 4 Option) 4 Option) 4 Option (II) Choose the correct analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below. 1. (A), (B) and (D) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. 1. (B), (C) and (D) only. | statements |
| In light of the above statements, choose the most appropriate answer from the options given below 1. Both Statement (I) and Statement (II) are correct 2. Both Statement (I) is correct but Statement (II) is incorrect 3. Statement (I) is incorrect but Statement (III) is correct 1 2 3 (Chosen Option) 4 Question No. 67 / Question ID 40106 Marks: 4.00 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1 (A), (B) and (D) only. 2 (A), (B) and (C) only. 3 (A), (B), (C) and (D) only. 1 (B), (C) and (D) only. | root nematode are also known as Longidorids |
| 1. Both Statement (f) and Statement (ii) are correct 2. Both Statement (i) is correct but Statement (iii) is incorrect 3. Statement (i) is incorrect but Statement (iii) is correct 4. Statement (i) is incorrect but Statement (iii) is correct 1. 2. 3. (Chosen Option) 4 Cuestion No. 67 / Question ID 40106 Marks: 4.00 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (D) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | by root nematode are also known as Trichodorids |
| 2. Both Statement (I) is correct but Statement (II) is incorrect 3. Statement (I) is correct but Statement (II) is incorrect 4. Statement (I) is incorrect but Statement (II) is correct 1 2 3 (Chosen Option) 4 Question No. 67 / Question ID 40106 Marks: 4.00 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 1. (B), (C) and (D) only. | statements, choose the most appropriate answer from the options given below |
| Option) 4 Question No. 67 / Question ID 40106 Marks: 4.00 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | and Statement (II) are incorrect rect but Statement (II) is incorrect correct but Statement (II) is correct |
| Question No. 67 / Question ID 40106 Marks: 4.00 The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the correct answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | osen |
| The molecular phylogenetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. 1. 2. 3. | |
| sub-classes - (A). Chromadoria (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 1. (B), (C) and (D) only. | Marks: 4.00 |
| (B). Dorylaimia (C). Rhabditia (D). Enoplia Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | genetic analysis of Phylum Nematoda (De Ley and Blaxter, 2002) reveals the presence of these major |
| (C). Rhabditia (D). Enoplia Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | |
| (D). Enoplia Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only 4. (B), (C) and (D) only. | |
| Choose the <i>correct</i> answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | |
| 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only 4. (B), (C) and (D) only. | |
| 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D) only. 4. (B), (C) and (D) only. | answer from the options given below: |
| ○ 2○ 3 | ly. i) only |
| | |
| Question No. 68 / Question ID 40066 Marks: 4.00 | uestion ID 40066 Marks: 4.00 |



Given below are two statements: Statement (I): Mosquito blight of tea is caused by Helopeltis antonii Statement (II): Mosquito blight of tea is caused by Heliothis zea In light of the above statements choose the most appropriate answer from the options given below 1. Both statements I and statement II are correct 2. Both statements I and statement II are incorrect Statement I is correct and statement II is incorrect 4. Statement I is incorrect and statement II is correct ∩ 1 2 3 (Chosen) Option) 4 \bigcirc Marks: 4.00 Question No. 69 / Question ID 40115 The size (mm) of a healthy adult Laccifer lacca ranges between 1.0.5-1.0 2.0.6-1.5 3.2.0-3.0 4.4.0-5.0 \bigcirc 1 **2** 3 **4** Question No. 70 / Question ID 40018 Marks: 4.00 Given below are two statements: Statement (I): Management of pesticide use is not an integral part of IPM Statement (II): IPM is not to refine the pesticide application recommendations? In light of the above statements choose the most appropriate answer from the options given below 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. Statement (I) is false but Statement (II) is true. \bigcirc 1 2 (Chosen Option)



| | Marks: 4.00 |
|---|-------------|
| Given below are two statements: | |
| Statement (I): Xiphinema spp of nematodes is also known as Dagger nematodes | |
| Statement (II): Xiphinema spp of nematodes is also known as Lesion nematodes | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. | |
| 1 2 3 (Chosen Option) 4 | |
| Question No. 72 / Question ID 40031 | Marks: 4.00 |
| When all the segments differentiate in the embryo, the development is | |
| 1. Pseudo 2. Anamorphic 3. Epimorphic 4. Complete | |
| ○ 1○ 2○ 3○ 4 | |
| O 2 O 3 | Marks: 4.00 |
| 2 3 4 Question No. 73 / Question ID 40095 | Marks: 4.00 |
| Question No. 73 / Question ID 40095 Given below are two statements: | Marks: 4.00 |
| Question No. 73 / Question ID 40095 Given below are two statements: Statement (I): Tomato spotted wilt virus is not transmitted by <i>Thrips tabaci</i> | Marks: 4.00 |
| O 2 O 3 O 4 | Marks: 4.00 |
| Question No. 73 / Question ID 40095 Given below are two statements: Statement (II): Tomato spotted wilt virus is not transmitted by <i>Thrips tabaci</i> Statement (III): Cucumber mosiac virus is transmitted by <i>Myzus persicae</i> | Marks: 4.00 |

| ○ 1○ 2 | | |
|--|-------------|--|
| O 3 | | |
| <u> </u> | | |
| Question No. 74 / Question ID 40038 | Marks: 4.00 | |
| Circa below are two statements | | |
| Given below are two statements: | | |
| Statement (I): Helminthosporium oryzae was the causative agent for Irish Famine in 1845 | | |
| Statement (II): Helminthosporium oryzae was the causative agent for Bengal Famine in 1943 | | |
| In light of the above statements, choose the most appropriate answer from the options given below. | | |
| Both Statement (I) and Statement (II) are correct. Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. | | |
| \cap 1 | | |
| ○ 2 | | |
| ○ 3○ 4 | | |
| Question No. 75 / Question ID 40051 | Marks: 4.00 | |
| The bulk fixation of carbon through photosynthesis takes place in | | |
| Crop plant and tropical rain forest | | |
| Tropical rain forest Crop plants | | |
| 4. Ocean | | |
| | | |
| ○ 1 2 (Chosen○ Option) 3 4 | | |
| O O | | |
| | | |
| Question No. 76 / Question ID 40079 | Marks: 4.00 | |
| Pareuchaetus pseudoinsulata is a biocontrol agent of | | |
| | | |
| Prickly pear Water fern | | |
| 3. Siam weed | | |
| 4. Crofton weed | | |
| \cap 1 | | |
| ○ 2 | | |
| | | |



| ○ 3○ 4 | | |
|--|-------------|--|
| Question No. 77 / Question ID 40011 | Marks: 4.00 | |
| Which one of the following is a micro element? | | |
| 1. Nitrogen | | |
| Magnesium Sulphur | | |
| 4. Manganese | | |
| 4. Manganese | | |
| ○ 1 2 2 4 (Change | | |
| 1 2 3 4 (ChosenOption) | | |
| | | |
| | | |
| Question No. 78 / Question ID 40101 | Marks: 4.00 | |
| The 3 rd and 4 th stage juveniles of root-knot nematodes are | | |
| 1. Feeding | | |
| 2. Non-feeding | | |
| 3. Quiescent | | |
| 4. Infective | | |
| | | |
| O 1 | | |
| O 2 | | |
| ○ 3 | | |
| \bigcirc 4 | | |
| Question No. 79 / Question ID 40093 | Marks: 4.00 | |
| Bemisia tabaci is commonly known as | | |
| 1. Stable fly | | |
| 2. Warble fly | | |
| 3. Sweet potato whitefly | | |
| 4. Cluster fly | | |
| | | |
| ○ 1 2 3 (Chosen | | |
| Option) 4 | | |
| | | |
| | | |
| Question No. 80 / Question ID 40062 | Marks: 4.00 | |
| | | |

| Among the entomopathogenic bio-agents which contribute the most in biopesticide market share in India ? | | |
|---|---------------|--|
| | | |
| 1. Bacteria | | |
| Fungi Protozoa | | |
| | | |
| 4. Virus | | |
| 1 (Chosen Option) | | |
| O 234 | | |
| | | |
| | | |
| Question No. 81 / Question ID 40026 | ırks: 4.00 | |
| | | |
| Predaceous insect which restrains its prey by sheer mechanical strength and then tears it to pieces with powerf | ful mandibles | |
| is | | |
| 1. Cockroach | | |
| 2. Grasshopper | | |
| 3. Mantis | | |
| 4. Predatory Mite | | |
| | | |
| | | |
| 0 1 2 3 (Chosen | | |
| Option) 4 | | |
| | | |
| 0 | | |
| Question No. 82 / Question ID 40046 | rks: 4.00 | |
| | | |
| Bacterial plasmid contains | | |
| 1. RNA | | |
| 2. DNA | | |
| 3. Proteins | | |
| Histone proteins | | |
| | | |
| \bigcirc 1 | | |
| <u> </u> | | |
| \bigcirc 3 | | |
| O 4 | | |
| Question No. 83 / Question ID 40009 | rks: 4.00 | |
| | | |
| | | |



Which of the followings belong to Poaceae family? (A). Pearl millet, Rice and Wheat (B) Fox-tail, Barley and Sorghum (C). Horsegram and Chia seeds (D). Cotton and Okra Choose the correct answer from the options given below: 1_ (A) and (B) only. 2. (B) and (C) only. 3. (C) and (D) only: 4. (B) and (D) only 1 (Chosen Option) O 234 \bigcirc \bigcirc Question No. 84 / Question ID 40067 Marks: 4.00 Match List-I with List-II List-I List-II (A). Cotton mirid (I). Creontiades biseratense (B). Sorghum earhead bug (II). Nezara virudula (C). Mung bean whitefly (III). Calocoris angustatus

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

(IV). Bemisia tabaci

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

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

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

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

Option) 3 4

(D). Pentatomid bug



| Question No. 85 / Question ID 40103 | Marks: 4.00 |
|--|---|
| Nematode-resistant germplasm PNR-7 is of | |
| 1. Tomato | |
| 2. Guava | |
| 3. Citrus | |
| 4. Barley | |
| | |
| 0.1 | |
| ○ 1○ 2 | |
| \bigcirc 3 | |
| O 4 | |
| Question No. 86 / Question ID 40033 | Marks: 4.00 |
| Chloroplasts are disrupted and the stroma seperated from the lamella. The isolated s | troma will fix CO ₂ , if it is supplied with |
| 1. ATP and NADPH | |
| 2. Oxygen | |
| 3. Light | |
| 4. Carotenoid | |
| 234 | |
| Question No. 87 / Question ID 40116 | Marks: 4.00 |
| Life stages of male Laccifer lacca are | |
| (A). Egg | |
| (B) Larva | |
| (C). Pupa | |
| (D). Adult | |
| Choose the <i>correct</i> answer from the options given below: | |
| 1. (A), (B) and (C) only. | |
| 2. (B), (C) and (D) only. | |
| 3. (A), (C) and (D) only. | |
| 4. A, (B), (C) and (D) only. | |
| | |
| \bigcirc 1 | |
| O 2 | |
| 34 | |
| | |



| Question No. 88 / Question ID 40030 | Marks: 4.00 |
|--|-------------|
| Pterostigmata is present on forewings of | |
| (A). Hymenoptera | |
| (B). Psocoptera | |
| (C). Megaloptera | |
| (D). Mecoptera | |
| Choose the <i>correct</i> answer from the options given below: | |
| 1. (A) and (D) only. 2. (A), (B) and (D) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. | |
| 1234 | |
| Question No. 89 / Question ID 40090 | Marks: 4.00 |
| Identify the correct sequence of chronology of establishment of following organizations | |
| (A). Entomological Society of India | |
| (B). Bombay Natural History Society | |
| (C). Indian Museum | |
| (D). Zoological Survey of India | |
| Choose the correct answer from the options given below: | |
| 1. (A), (B), (C), (D). 2. (D), (B), (C), (A). 3. (C), (B), (A), (D). 4. (B), (A), (D), (C). | |
| 1 2 (ChosenOption) 3 4 | |
| Question No. 90 / Question ID 40117 | Marks: 4.00 |

Which of the followings pertain to Classical Biological Control? 1. ISPM #2

2. ISMP #3

3. ISPM #4

4. ISPM #5

O 1

O 2

Question No. 91 / Question ID 40042

Marks: 4.00

Match List-I with List-II

| List-l | List-II |
|-------------------------|---------------------------|
| (A). Pisum sativum | (I). Incomplete Dominance |
| (B). Mirabilus jalapa | (II). Model Organism |
| (C). Neurospora | (III). Mendel's Laws |
| (D). Lathyryus odoratus | (IV). Complementary Genes |

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

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

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

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

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

○ 1 2 3 (Chosen)

Option) 4

Question No. 92 / Question ID 40012



Which one of the following animals come under the micro animals?

A. Squirrels

B. Beetles

C. Mice

D. Protozoa

Choose the correct answer from the options given below:

1. (A) only.

2. (B) only

3. (C) and (D).

4. (D) only.

○ 1 2 3 4 (Chosen

Option)



Question No. 93 / Question ID 40078

Match List-I with List-II

| List-l | List-II |
|--------------|------------------|
| (A), Pleuron | (I). Trochantin |
| (B). Tergum | (II). Eusternum |
| (C). Sternum | (III). Postnotum |
| (D). Legs | (IV). Episternum |

Choose the correct answer from the options given below:

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

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

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

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

Option)



| Question No. 94 / Question ID 40021 | Marks: 4.00 | |
|--|-------------|--|
| Arthropods have a characteristic feature of | | |
| Cuticular exoskeleton Aerial mode of life Presence of wing venation | | |
| 4. Bright colouration | | |
| 1 (Chosen Option) 234 | | |
| 0 | | |
| Question No. 95 / Question ID 40053 | Marks: 4.00 | |
| In gradual metamorphosis the young is known as | | |
| 1. Nymhp | | |
| 2. Naid | | |
| Stadium Crawler | | |
| | | |
| ☐ 1 (Chosen Option) | | |
| 234 | | |
| 0 | | |
| O | | |
| Question No. 96 / Question ID 40019 | Marks: 4.00 | |
| Given below are two statements: | | |
| Statement (I): Banana puree is used in dairy products and bakery | | |
| Statement (II): Banana flour and banana beverages are not becoming popular. | | |
| In light of the above statements, choose the most appropriate answer from the options given below. | | |
| Both Statement (I) and Statement (II) are true. | | |
| 2. Both Statement (I) and Statement (II) are false. | | |
| 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. | | |
| 4. Statement (i) is laise but statement (ii) is true. | | |
| | | |
| ○ 1 2 3 (Chosen○ Option) 4 | | |
| Option) 4 | | |
| | | |
| Question No. 97 / Question ID 40108 | Marks: 4.00 | |

| pathogenicity is called | | |
|---|-------------------------|--|
| 1. Biotype | | |
| 2. Pathotype | | |
| 3. Race | | |
| 4. Pathovar | | |
| 4. Fatiloval | | |
| | | |
| ○ 1 | | |
| ○ 2 | | |
| ○ 3 | | |
| O 4 | | |
| Question No. 98 / Question ID 40110 | Marks: 4.00 | |
| A stage-specific behavior in which an EPN IJ stands on its tail and waves its head in three | ee dimensions is called | |
| 1. Foraging | | |
| 2. Recovery | | |
| 3. Ambushing | | |
| 4. Nictation | | |
| T. History | | |
| ○ 1 2 3 (Chosen○ Option) 4○ | | |
| Question No. 99 / Question ID 40119 | Marks: 4.00 | |
| Which of the following countries is the largest producer of lac? | | |
| 1. China | | |
| 2. India | | |
| 3. Ethiopia | | |
| 4. Bhutan | | |
| | | |
| | | |
| 0 1 2 (Chosen | | |
| Option) 3 4 | | |
| | | |
| | | |
| Question No. 100 / Question ID 40041 | Marks: 4.00 | |
| Question no. 1007 Question is not in | Widi No. 4.00 | |
| | | |
| | | |
| | | |

A segment of nematode species differing from the rest of the species in some physiological characteristic such as



Match List-I with List-II

| List-l | List-II | |
|----------------|-------------|--|
| (A). Nullisomy | (I). 2n+2 | |
| (B). Trisomy | (II). 2n+1 | |
| (C). Monosomy | (III). 2n-1 | |
| (D). Tetrasomy | (IV). 2n-2 | |
| | | |

Choose the correct answer from the options given below:

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

1 (Chosen Option)

- O 234
- 0

Question No. 101 / Question ID 40010

Which of the followings pertain to Rice cultivars?

- (A). Sona -Masuri and Kasturi
- (B) Jaya and Kalinga
- (C). K-68 and Radhey
- (D). Swarna and Radhey

Choose the correct answer from the options given below:

- 1. (A) and (B) only.
- 2. (B) and (C) only.
- 3. (C) and (D) only:
- 4. (A) and (C) only.

| 1 (Chosen Option) | | |
|--|-------------|--|
| O 234 | | |
| | | |
| Question No. 102 / Question ID 40077 | Marks: 4.00 | |
| | | |
| Which of the following is Non - ester Pyrethroid? | | |
| 1. Etofenpros | | |
| 2. Allethrin | | |
| 3. Cypermethrin | | |
| 4. Deltamethrin | | |
| 1 (Chosen Option) | | |
| O 234 | | |
| 0 | | |
| 0 | | |
| Question No. 103 / Question ID 40013 | Marks: 4.00 | |
| The shallow black soil dominates in which of the following States? | | |
| A. Madhya Pradesh | | |
| B. Maharashtra | | |
| C. Odisha | | |
| D. Tamil Nadu | | |
| Choose the <i>correct</i> answer from the options given below: | | |
| 1. (A) only. | | |
| 2. (B) only. | | |
| 3. (A) and (B) only | | |
| 4. (C) and (D) only: | | |
| ○ 1 2 (Chosen | | |
| option) 3 4 | | |
| | | |
| | | |
| Question No. 104 / Question ID 40040 | Marks: 4.00 | |
| quodion no. 1017 quodion is noon | Marko. 4.00 | |
| | | |

| Question No. 106 / Question ID 40027 | Marks: 4.00 |
|--|----------------------|
| | |
| 234 | |
| 1 (Chosen Option) | |
| | |
| 4. (A) is not correct but (R) is correct. | |
| 3. (A) is correct but (R) is not correct. | |
| 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). | |
| Both (A) and (R) are correct and (R) is the correct explanation of (A). | |
| In light of the above statements, choose the most appropriate answer from the options given below | ow. |
| Reason (R): Biological species concept defines species as the group of interbreeding natural por reproductively isolated from other such species | ppulations which are |
| Assertion (A) : 'Biological species concept' was introduced by Mayr | |
| Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reas | son (R). |
| Question No. 105 / Question ID 40086 | Marks: 4.00 |
| Ö | |
| 0 | |
| 1 (Chosen Option) 234 | |
| 1 (Chapan Oution) | |
| 4. (A), (B), (C) and (D). | |
| 3. (B),(C) and (D) only. | |
| 2. (D) only. | |
| 1. (A) only. | |
| Choose the <i>correct</i> answer from the options given below: | |
| (D). Conglobate gland | |
| (C). Utricular gland | |
| (B) Phallic gland | |
| (A). Collateral gland | |
| Which of the given gland is not found in male cockroach? | |
| Table 1 - Fig. 1 - Fi | |



| Social Feeding Trophallaxis Preoral feeding Proctodaeal feeding | | |
|--|-------------|--|
| 1 2 (ChosenOption) 3 4O | | |
| Question No. 107 / Question ID 40056 | Marks: 4.00 | |
| In photorespiration, glcolate and glyoxylate are produced sequentially in the following organelles. 1. Chloroplasts and Mitochondria 2. Chloroplasts and Peroxisome 3. Peroxisome and Mitochodria 4. Peroxisome and Chloroplast | | |
| Question No. 108 / Question ID 40037 | Marks: 4.00 | |
| Example of Root knot Nematode is 1. Meloidogyne 2. Ascaris 3. Trichinella 4. Taenia 1 (Chosen Option) | | |
| 234 0 | | |
| Question No. 109 / Question ID 40084 | Marks: 4.00 | |

Mutual exchange of food in social insects is know as



| Given below are two statements: | |
|--|----------------|
| Statement (I): A taxonomic character is a feature which is present in all appropriate specimens at ap | propriate time |
| Statement (II): The taxonomic characters should not show wide variation among specimens | |
| In light of the above statements, choose the most appropriate answer from the options given below. | |
| 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. | |
| 1 (Chosen Option) 234 | |
| Question No. 110 / Question ID 40109 | Marks: 4.00 |
| Which of the following fits the classical definition of an entomopathogenic nematode? | |
| (A). Oscheius | |
| (B). Romanomermis | |
| (C). Heterorhabditis | |
| (D). Deladenus | |
| Choose the <i>correct</i> answer from the options given below: | |
| 1. (A), (C) and (D) only. 2. (B), (C) and (D) only. 3. (C) and (D) only. 4. (A) and (C) only. | |
| 1234 | |
| Question No. 111 / Question ID 40076 | Marks: 4.00 |
| | |

Webbing of leaves, buds and flowers, bores into the pods and feeds on seeds are the damage symptoms of

- Helicoverpa armigera
- 2. Maruca vitrata
- 3. Melanagromyza obtusa
- 4. Exelastis atomosa



| \circ | 1 | 2 | (Chose |
|------------|----|---------|--------|
| \bigcirc | Op | tion) (| 3 4 |
| \bigcirc | | | |
| \circ | | | |
| | | | |

Question No. 112 / Question ID 40014

Marks: 4.00

| Match L | ist-l | with | List-II |
|---------|-------|------|---------|
|---------|-------|------|---------|

| List-I | List-II | |
|---|------------------|--|
| A. The Indian Journal of Agricultural Sciences | I. India | |
| B. Biology and Fertility of Soils | II. Japan | |
| C. International Journal of Food Sciences and Nutrition | III. Netherlands | |
| D. Agriculture Ecosystems and Environment | IV USA | |
| | | |

Choose the correct answer from the options given below:

- 1. A-I, B-II, C-III, D-IV
- 2, A-II, B-I, C-IV, D-III
- 3. A-I, B-IV, C-II, D-III
- 4. A-III, B-II, C-I, D-IV
 - 1 2 3 (Chosen)
 - Option) 4

Question No. 113 / Question ID 40045



| The codons causing gene termination are | |
|---|-------------|
| (A). UAA | |
| (B). UAG | |
| (C). UUU | |
| (D). UGA | |
| Choose the <i>correct</i> answer from the options given below | |
| 1. (A), (B) and (D) only. 2. (B) and (D) only. 3. (A) and (D). 4. (B), (C) and (D) only. | |
| 1 (Chosen Option) 234 | |
| Question No. 114 / Question ID 40016 | Marks: 4.00 |
| Principles of experimental design were developed by 1. Wilcox 2. R.A. Fisher 3. Cox and Cochran 4. WG Cochran | |
| ○ 1 2 (Chosen○ Option) 3 4○○ | |
| Question No. 115 / Question ID 40043 | Marks: 4.00 |
| Chewing and biting type of mouthparts are also known as 1. Siphoning Type 2. Chewing and lapping type 3. Sponging type 4. Mandibulate Type. | |
| 1 2 3 4 (ChosenOption)• | |



Match List-I with List-II

| List-l | List-II | |
|------------------------------------|---------------------------|--|
| (A). Powdery mildew of mangifera | (I). Erwinia tracheiphila | |
| (B). Bacterial wilt of cucurbits | (II). Oidum mangifera | |
| (C). Bacterial wilt of corn | (III). Erwinia amylovora | |
| (D). Fire blight of pear and apple | (IV). Pantoea stewartii | |

Choose the correct answer from the options given below:

- 1. (A) (II), (B) (I), (C) (IV), (D) (III)
- 2. (A) (I), (B) (III), (C) (II), (D) (IV)
- 3. (A) (IV), (B) (I), (C) (III), (D) (II)
- 4. (A) (III), (B) (II), (C) (I), (D) (IV)
 - 1 (Chosen Option)
 - O 234
 - \bigcirc 0

Question No. 117 / Question ID 40071

Cantharidin is extracted from

- 1. Buprestid beetle
- 2. Blister Beetle
- 3. Chafer Beetle
- 4. Pulse Beetle
 - ∩ 1 2 (Chosen)
 - Option) 3 4
- Question No. 118 / Question ID 40092

Marks: 4.00



| Most of the non-persistent viruses are transmitted by | | | | | |
|---|--------------|--|--|--|--|
| 1. Weevils | | | | | |
| 2. Leaf beetles | | | | | |
| 3. Carrion Beetles | | | | | |
| 4. Aphids | | | | | |
| ○ 1 2 3 4 (Chosen | | | | | |
| Option) | | | | | |
| | | | | | |
| | | | | | |
| Question No. 119 / Question ID 40028 | Marks: 4.00 | | | | |
| The insect hindgut is usually more acidic than the midgut, partly due to | | | | | |
| 1. Gizzard | | | | | |
| 2. Crop | | | | | |
| 3. Midgut | | | | | |
| 4. Malpighian Tubules | | | | | |
| 1 2 3 4 (ChosenOption) | | | | | |
| Question No. 120 / Question ID 40085 | Marks: 4.00 | | | | |
| Assertion (A): Allopatric species are those species which occupy the same geographical areas | | | | | |
| Reason (R): Sympatric species are the ones which normally inhibit the completely different geogra | phical areas | | | | |
| 1. Both (A) and (R) are correct and (R) is the correct explanation of (A). | | | | | |
| 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). | | | | | |
| 3. (A) is correct but (R) is not correct. | | | | | |
| 4. (A) is not correct but (R) is correct. | | | | | |
| 1 (Chosen Option) | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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NATIONAL TESTING AGENCY

Indian Council of Agricultural Research (ICAR) - PG Final Answer Key

Exam Date: 29-06-2024 Exam Timing: 10:00 to 12:00

Subject: ENTOMOLOGY AND NEMATOLOGY

| Question ID | Subject: ENTOMOLOGY AND NEMATOLOGY Question ID Correct Option ID Question ID Correct Option ID Correct Option ID | | | | | | | |
|----------------|---|-------|---|-------|--------------|--|--|--|
| 40001 | 2 | 40041 | 1 | 40081 | 4 | | | |
| 40001 | 3 | 40041 | 3 | 40081 | 1 | | | |
| 40002 | 3 | 40043 | 4 | 40082 | 1 | | | |
| 40003 | 4 | 40044 | 4 | 40083 | 1 | | | |
| 40004 | 4 | 40044 | 1 | 40085 | Dropped | | | |
| 40003 | 1 | 40046 | 2 | 40086 | Бгорреа 1 | | | |
| 40007 | 3 | 40047 | 3 | 40087 | 4 | | | |
| 40007 | | 40047 | | 40087 | 4 | | | |
| | 2 | | 4 | | 2 | | | |
| 40009 | 1 | 40049 | 4 | 40089 | 3 | | | |
| 40010 | 1 | 40050 | 1 | 40090 | 3 | | | |
| 40011 | 4 | 40051 | 4 | 40091 | 2 | | | |
| 40012 | 4 | 40052 | 4 | 40092 | 4 | | | |
| 40013 | 2 | 40053 | 1 | 40093 | 3 | | | |
| 40014 | 3 | 40054 | 2 | 40094 | 1 | | | |
| 40015 | 2 | 40055 | 2 | 40095 | 4 | | | |
| 40016 | 2 | 40056 | 2 | 40096 | 3 | | | |
| 40017 | 2 | 40057 | 3 | 40097 | 1 | | | |
| 40018 | 2 | 40058 | 1 | 40098 | 2 | | | |
| 40019 | 3 | 40059 | 3 | 40099 | 3 | | | |
| 40020 | 1 | 40060 | 1 | 40100 | 1 | | | |
| 40021 | 1 | 40061 | 1 | 40101 | 2 | | | |
| 40022 | 1 | 40062 | 2 | 40102 | 2 | | | |
| 40023 | 1 | 40063 | 1 | 40103 | 1 | | | |
| 40024 | 1 | 40064 | 4 | 40104 | 4 | | | |
| 40025 | 4 | 40065 | 4 | 40105 | 3 | | | |
| 40026 | 3 | 40066 | 3 | 40106 | 1 | | | |
| 40027 | 2 | 40067 | 2 | 40107 | 1 | | | |
| 40028 | 4 | 40068 | 3 | 40108 | 1 | | | |
| 40029 | 1 | 40069 | 4 | 40109 | 4 | | | |
| 40030 | 3 | 40070 | 4 | 40110 | 4 | | | |
| 40031 | 3 | 40071 | 2 | 40111 | 1 | | | |
| 40032 | 4 | 40072 | 2 | 40112 | 3 | | | |
| 40033 | 1 | 40073 | 1 | 40113 | 3 | | | |
| 40034 | 3 | 40074 | 2 | 40114 | 4 | | | |
| 40035 | 1 | 40075 | 3 | 40115 | 2 | | | |
| 40036 | 3 | 40076 | 2 | 40116 | 4 | | | |
| 40037 | 1 | 40077 | 1 | 40117 | 2 | | | |
| 40038 | 4 | 40078 | 4 | 40118 | 1 | | | |
| 40039 | 3 | 40079 | 3 | 40119 | 2 | | | |
| 40040 | 1 | 40080 | 3 | 40120 | 2 | | | |
| · - | • | | - | | _ | | | |