

|                   |                                                       |
|-------------------|-------------------------------------------------------|
| <b>Subject:</b>   | Biology/Biological Studies/Biotechnology/Biochemistry |
| <b>Set Name:</b>  | V1_Set04                                              |
| <b>Code:</b>      | 304                                                   |
| <b>Exam Date:</b> | 17-04-2026                                            |
| <b>SLOT:</b>      | 2                                                     |

|                      |                                                                                                                                                                                                             |
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| <b>Question ID</b>   | 18820                                                                                                                                                                                                       |
| <b>Question Type</b> | MCQ                                                                                                                                                                                                         |
| <b>Question</b>      | <p>The innermost wall layer of microsporangium in plants is called _____</p> <ol style="list-style-type: none"><li>1. Tapetum</li><li>2. Epidermis</li><li>3. Endothecium</li><li>4. Middle layer</li></ol> |
| <b>Options</b>       |                                                                                                                                                                                                             |
| <b>A</b>             | 1                                                                                                                                                                                                           |
| <b>B</b>             | 2                                                                                                                                                                                                           |
| <b>C</b>             | 3                                                                                                                                                                                                           |
| <b>D</b>             | 4                                                                                                                                                                                                           |

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| <b>Question ID</b>   | 18821                                                                                                                                                                                                       |
| <b>Question Type</b> | MCQ                                                                                                                                                                                                         |
| <b>Question</b>      | <p>In plant embryo, how many cells are grouped together at the micropylar end and constitute egg apparatus?</p> <ol style="list-style-type: none"><li>1. 2</li><li>2. 4</li><li>3. 3</li><li>4. 6</li></ol> |
| <b>Options</b>       |                                                                                                                                                                                                             |
| <b>A</b>             | 1                                                                                                                                                                                                           |
| <b>B</b>             | 2                                                                                                                                                                                                           |
| <b>C</b>             | 3                                                                                                                                                                                                           |
| <b>D</b>             | 4                                                                                                                                                                                                           |

|                      |                                                                                                                                                                                |
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| <b>Question ID</b>   | 18822                                                                                                                                                                          |
| <b>Question Type</b> | MCQ                                                                                                                                                                            |
| <b>Question</b>      | <p>In the grass family the cotyledon is called as?</p> <ol style="list-style-type: none"><li>1. Plumule</li><li>2. Scutellum</li><li>3. Radicle</li><li>4. Hypocotyl</li></ol> |
| <b>Options</b>       |                                                                                                                                                                                |
| <b>A</b>             | 1                                                                                                                                                                              |
| <b>B</b>             | 2                                                                                                                                                                              |
| <b>C</b>             | 3                                                                                                                                                                              |
| <b>D</b>             | 4                                                                                                                                                                              |

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| <b>Question ID</b>   | 18823                                                                                                                                                                             |
| <b>Question Type</b> | MCQ                                                                                                                                                                               |
| <b>Question</b>      | <p>Name the hormone secreted by Leydig cells?</p> <ol style="list-style-type: none"><li>1. Androgen</li><li>2. Testosterone</li><li>3. Estrogen</li><li>4. Progesterone</li></ol> |

| Options |   |
|---------|---|
| A       | 1 |
| B       | 2 |
| C       | 3 |
| D       | 4 |

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question ID   | 18824                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Question Type | MCQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Question      | <p>Arrange the steps involved in fertilization and implantation in correct order of their occurrence.</p> <p>A. Sperms fuses with ovum to form zygote<br/>B. Blastocyst becomes embedded in endometria of uterus<br/>C. The sperm and ovum are transported to ampullary region<br/>D. Start of mitotic division in zygote</p> <p>Choose the <b>correct</b> answer from the options given below:</p> <p>1. C, A, D, B<br/>2. A, B, D, C<br/>3. D, C, B, A<br/>4. C, D, A, B</p> |
| Options       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| A             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| B             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| C             | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| D             | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question ID   | 18825                                                                                                                                                                                        |
| Question Type | MCQ                                                                                                                                                                                          |
| Question      | <p>Expand GIFT :-</p> <p>1. Gamete infertility fallopian treatment<br/>2. Gamete implant in fallopian tube<br/>3. Gamete inter fallopian transfer<br/>4. Gamete intra fallopian transfer</p> |
| Options       |                                                                                                                                                                                              |
| A             | 1                                                                                                                                                                                            |
| B             | 2                                                                                                                                                                                            |
| C             | 3                                                                                                                                                                                            |
| D             | 4                                                                                                                                                                                            |

Question ID

18826

Question Type

MCQ

Question

Match the **LIST-I** with **LIST-II**

| LIST-I<br>(Methods of contraception) |                        | LIST-II<br>(Example) |               |
|--------------------------------------|------------------------|----------------------|---------------|
| A.                                   | Oral contraceptive     | I.                   | Multiload 375 |
| B.                                   | Copper releasing IUDs  | II.                  | LNG - 20      |
| C.                                   | Physical Barrier       | III.                 | Saheli        |
| D.                                   | Hormone releasing IUDs | IV.                  | Condom        |

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-IV, B-III, C-II, D-I

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

Options

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

|               |                                                                                                                                                                                                                                                                                                                |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question ID   | 18827                                                                                                                                                                                                                                                                                                          |
| Question Type | MCQ                                                                                                                                                                                                                                                                                                            |
| Question      | <p>The diagram used to represents production of gametes by parents, formation of zygote, the F<sub>1</sub> and the F<sub>2</sub> generation plants is called :-</p> <ol style="list-style-type: none"> <li>1. Chi square</li> <li>2. Back square</li> <li>3. Test square</li> <li>4. Punnett square</li> </ol> |
| Options       |                                                                                                                                                                                                                                                                                                                |
| A             | 1                                                                                                                                                                                                                                                                                                              |
| B             | 2                                                                                                                                                                                                                                                                                                              |
| C             | 3                                                                                                                                                                                                                                                                                                              |
| D             | 4                                                                                                                                                                                                                                                                                                              |

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question ID   | 18828                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Question Type | MCQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Question      | <p>Which of the following statements are correct for law of dominance?</p> <ol style="list-style-type: none"> <li>A. Factors occur in pairs</li> <li>B. Characters are controlled by discrete units called factors</li> <li>C. Characters are independent of factors</li> <li>D. In a dissimilar pair of factors one member of pair dominates the other.</li> </ol> <p>Choose the <b>correct</b> answer from the options given below:</p> <ol style="list-style-type: none"> <li>1. A, B, C Only</li> <li>2. B, C, D Only</li> <li>3. A, B, D Only</li> <li>4. A, C, D Only</li> </ol> |
| Options       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| A             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| B             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| C             | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| D             | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|               |                                                                                                                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question ID   | 18829                                                                                                                                                                                                                             |
| Question Type | MCQ                                                                                                                                                                                                                               |
| Question      | <p>The histones are positively charged because of :-</p> <ol style="list-style-type: none"> <li>1. Lysine and Arginine</li> <li>2. Glycine and Lysine</li> <li>3. Glycine and Arginine</li> <li>4. Glycine and Cystine</li> </ol> |
| Options       |                                                                                                                                                                                                                                   |
| A             | 1                                                                                                                                                                                                                                 |
| B             | 2                                                                                                                                                                                                                                 |
| C             | 3                                                                                                                                                                                                                                 |
| D             | 4                                                                                                                                                                                                                                 |

|               |                                                                                                       |
|---------------|-------------------------------------------------------------------------------------------------------|
| Question ID   | 18830                                                                                                 |
| Question Type | MCQ                                                                                                   |
|               | <p>Arrange the following regions of Lac Operon in correct sequence starting from promotor region.</p> |

|                                                                |                                    |
|----------------------------------------------------------------|------------------------------------|
| Question                                                       | A. Lac a (transacetylase)          |
|                                                                | B. Lac Z ( $\beta$ -galactosidase) |
|                                                                | C. Lac Y (permease)                |
|                                                                | D. Operator region                 |
| Choose the <b>correct</b> answer from the options given below: |                                    |
| Options                                                        | 1. A, B, D, C                      |
|                                                                | 2. D, C, A, B                      |
|                                                                | 3. D, B, C, A                      |
|                                                                | 4. C, D, B, A                      |
| A                                                              | 1                                  |
| B                                                              | 2                                  |
| C                                                              | 3                                  |
| D                                                              | 4                                  |

|               |                                                            |
|---------------|------------------------------------------------------------|
| Question ID   | 18831                                                      |
| Question Type | MCQ                                                        |
| Question      | Where did Darwin go during his journey to study evolution? |
|               | 1. Galapagos Islands                                       |
|               | 2. Pacific Islands                                         |
|               | 3. Arctic Islands                                          |
|               | 4. Andaman Islands                                         |
| Options       |                                                            |
| A             | 1                                                          |
| B             | 2                                                          |
| C             | 3                                                          |
| D             | 4                                                          |

|               |                                                             |
|---------------|-------------------------------------------------------------|
| Question ID   | 18832                                                       |
| Question Type | MCQ                                                         |
| Question      | During the course of evolution, which appeared at the last? |
|               | 1. Cycads                                                   |
|               | 2. Angiosperms                                              |
|               | 3. Conifers                                                 |
|               | 4. Ginkgos                                                  |
| Options       |                                                             |
| A             | 1                                                           |
| B             | 2                                                           |
| C             | 3                                                           |
| D             | 4                                                           |

|               |                                   |
|---------------|-----------------------------------|
| Question ID   | 18833                             |
| Question Type | MCQ                               |
| Question      | Malaria is a disease caused by :- |
|               | 1. Bacteria                       |
|               | 2. Fungi                          |
|               | 3. Protozoa                       |
|               | 4. Virus                          |
| Options       |                                   |
| A             | 1                                 |
| B             | 2                                 |
| C             | 3                                 |

Question ID

18834

Question Type

MCQ

Question

Some symptoms are given below. Choose the option which covers the symptoms of amoebiasis.

A. Constipation  
B. Abdominal pain and cramps  
C. Fever  
D. Stool with excess mucous and blood clots.

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

1. A, B, C Only  
2. B, C, D Only  
3. A, C, D Only  
4. A, B, D Only

Options

A

1

B

2

C

3

D

4

Question ID

18835

Question Type

MCQ

Question

Which of the following microbe is defined as proteinaceous infectious agent?

1. Bacteria  
2. Fungi  
3. Prions  
4. Viroids

Options

A

1

B

2

C

3

D

4

Question ID

18836

Question Type

MCQ

Question

Match the **LIST-I** with **LIST-II**

| LIST-I<br>(Microbes) |                          | LIST-II<br>(Products) |                   |
|----------------------|--------------------------|-----------------------|-------------------|
| A.                   | <i>Nostoc</i>            | I.                    | Methane           |
| B.                   | <i>Methanobacterium</i>  | II.                   | Acetic acid       |
| C.                   | <i>Lactobacillus</i>     | III.                  | Nitrogen fixation |
| D.                   | <i>Acetobactor aceti</i> | IV.                   | Lactic acid       |

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

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

Options

A

1

B

2

C

3

D

4

|                      |                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Question ID</b>   | 18837                                                                                                                                                                                 |
| <b>Question Type</b> | MCQ                                                                                                                                                                                   |
| <b>Question</b>      | <p>The first restriction endonuclease isolated was _____</p> <ol style="list-style-type: none"> <li>1. Hind I</li> <li>2. Hind II</li> <li>3. Hind III</li> <li>4. Hind IV</li> </ol> |
| <b>Options</b>       |                                                                                                                                                                                       |
| <b>A</b>             | 1                                                                                                                                                                                     |
| <b>B</b>             | 2                                                                                                                                                                                     |
| <b>C</b>             | 3                                                                                                                                                                                     |
| <b>D</b>             | 4                                                                                                                                                                                     |

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|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Question ID</b>   | 18838                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Question Type</b> | MCQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Question</b>      | <p>Choose the option which shows the correct sequence of events in creating a recombinant DNA dividing cell.</p> <ol style="list-style-type: none"> <li>A. Joining of foreign DNA to vector DNA by ligase</li> <li>B. Division of genetically engineered cell</li> <li>C. Transformation of Host cell</li> <li>D. Restriction digestion of Foreign DNA and vector DNA</li> </ol> <p>Choose the <b>correct</b> answer from the options given below:</p> <ol style="list-style-type: none"> <li>1. A, D, B, C</li> <li>2. A, C, D, B</li> <li>3. D, A, C, B</li> <li>4. D, B, A, C</li> </ol> |
| <b>Options</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>A</b>             | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>B</b>             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>C</b>             | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>D</b>             | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Question ID</b>   | 18839                                                                                                                                                                                            |
| <b>Question Type</b> | MCQ                                                                                                                                                                                              |
| <b>Question</b>      | <p>Name the part of the plant which is always free from virus :-</p> <ol style="list-style-type: none"> <li>1. Petiole</li> <li>2. Flower</li> <li>3. First leaf</li> <li>4. Meristem</li> </ol> |
| <b>Options</b>       |                                                                                                                                                                                                  |
| <b>A</b>             | 1                                                                                                                                                                                                |
| <b>B</b>             | 2                                                                                                                                                                                                |
| <b>C</b>             | 3                                                                                                                                                                                                |
| <b>D</b>             | 4                                                                                                                                                                                                |

|                      |                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Question ID</b>   | 18840                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Question Type</b> | MCQ                                                                                                                                                                                                                                                                                                                                                                                |
|                      | <p>From the following, choose the correct combination of statements for Genetically Modified Organisms (GMO).</p> <ol style="list-style-type: none"> <li>A. GMOs are developed to tolerate abiotic stress</li> <li>B. GMOs with high nutritional value are developed</li> <li>C. GMOs with reduced harvest are developed</li> <li>D. GMOs uses more chemical pesticides</li> </ol> |

Question

Options

A

B

C

D

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

1. C, D Only
2. B, C Only
3. A, B, C Only
4. A, B Only

1

2

3

4

Question ID

Question Type

Question

Options

A

B

C

D

18841

MCQ

Match the **LIST-I** with **LIST-II**

| LIST-I<br>(Interaction) |                | LIST-II<br>(Example) |                            |
|-------------------------|----------------|----------------------|----------------------------|
| A.                      | Predation      | I.                   | <i>Plasmodium</i> in human |
| B.                      | Ectoparasitism | II.                  | Lichens                    |
| C.                      | Mutualism      | III.                 | Lion and deer              |
| D.                      | Endoparasitism | IV.                  | Ticks on dogs              |

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

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

1

2

3

4

Question ID

Question Type

Question

Options

A

B

C

D

18842

MCQ

The interaction confers harm to none but benefit to one of the interacting species is called as \_\_\_\_\_.

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

1

2

3

4

Question ID

Question Type

Question

18843

MCQ

The process by which bacteria and fungal enzymes degrade detritus into simpler inorganic substances is called :-

1. Fragmentation
2. Leaching
3. Catabolism

4. Humification

Options

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

Question ID 18844

Question Type MCQ

Which of the following organism belongs to fourth trophic level in terrestrial ecosystem?

- Question
1. Birds
  2. Wolf
  3. Cow
  4. Lion

Options

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

Question ID 18845

Question Type MCQ

Tropical environments promote niche specialization as they :-

- Question
1. have constant and predictable seasons
  2. have frequent heavy rains
  3. receive more sun light
  4. have greater productivity

Options

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

Question ID 18846

Question Type MCQ

\_\_\_\_\_ are called as the lungs of the planet.

- Question
1. Temperate rain forest
  2. Western ghats
  3. Amazon rain forest
  4. Aravali forest

Options

|   |   |
|---|---|
| A | 1 |
| B | 2 |
| C | 3 |
| D | 4 |

Question ID 18847

Question Type MCQ

How many wildlife sanctuaries are present in India?

- Question
1. 448
  2. 450
  3. 548
  4. 550

| Options |   |
|---------|---|
| A       | 1 |
| B       | 2 |
| C       | 3 |
| D       | 4 |