

KA**COMMON FIRST MID - TERM TEST - 2019****STANDARD - XII**

Reg.No.

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BIOLOGY

Marks: 35

Time : 1.15 hours

Note : Candidate should answer Part I - Bio Botany and Part - II - Bio - Zoology in separate answer sheets.

PART - I (BIO - BOTANY)

Marks: 18

SECTION - A

Note : i) Answer to all questions.

ii) Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer. $3 \times 1 = 3$

- Pollen tube was discovered by
a) J.G.Kolreuter b) G.B. Amici c) E. Strasburger d) E.Hanning
- "Gametes are never hybrid" This is a statement of
a) Law of dominance b) Law of independent assortment
c) Law of segregation d) Law of random fertilization
- Plasmids are
a) Circular Protein molecules b) required by bacteria
c) tiny bacteria d) Confer resistance to antibiotics

SECTION - B

Note: Answer any two questions.

 $2 \times 2 = 4$

- What is layering?
- Name the seven contrasting traits of Mendel.
- Write the advantages of herbicide tolerant crops.

SECTION - C

Note :- Answer any two Questions. Q.No. 8 is compulsory.

 $2 \times 3 = 6$

- What is polyembryony? How it can be commercially exploited?
- What is meant by cytoplasmic inheritance?
- Write any three significances of Ploidy.

SECTION - D

Note : Answer the following Question.

 $1 \times 5 = 5$

- What is Parthenocarpic fruit? Add a note on its significance?

(OR)

Describe dominant epistasis with an example.

SECTION - A

Note : i) Answer to all questions.

ii) Each question carries one mark.

5×1=5

1. Match the following:

- | | |
|-----------------------|----------------|
| 1. strobilation | - (a) Hydra |
| 2. Regeneration | - (b) Nockluca |
| 3. Conjugation | - (c) Bacteria |
| 4. Endogenous budding | - (d) Aereelia |

A) 1-b, 2-c, 3-a, 4-d

B) 1-d, 2-a, 3-c, 4-b

c) 1-d, 2-a, 3-b, 4-c

d) 1-a, 2-d, 3-c, 4-b

2. Colostrum is rich in

- | | | | |
|--------|--------|--------|--------|
| a) IgE | b) IgA | c) IgD | d) IgM |
|--------|--------|--------|--------|

3. Choose the Correct Pair:

- | | |
|-------------------|-------|
| a) Chlamydiasis | - HBV |
| b) Genital warts | - HPV |
| c) Syphilis | - HPV |
| d) Genital herpes | - HBV |

4. Identify the correct statements:

- Y linked genes are transmitted from Mother to son.
- People with I^AI^O geno type have O blood group.
- Human Y chromosome is shorter than X chromosome.
- Fertilized eggs develop into Drones:

- | | | | |
|----------|-------------------|--------------|-------------|
| a) i, iv | b) ii), iii), iv) | c) i and iii | d) iii only |
|----------|-------------------|--------------|-------------|

5. An Operon is a

- Protein that suppresses gene expression
- Protein that accelerates gene expression
- duster of structural genes with related function.
- Gene that switched other genes on or off.

SECTION - B

Note : i) Answer any two questions.

ii) Each questions carries two marks.

2×2=4

- What is merogamy?
- Define spermeogenesis?
- What is IUT?

SECTION - C

1×3=3

Note : Compulsory Question.

- What is amniocentesis? why a statutory ban is imposed on this technique?

SECTION - D

1×5=5

Note : Answer one question only.

- What is infertility and write its causes. (OR)
Explain male heterogamety.