

KALLAKURICHI.

**Class : 12**E. Ganesh  
PGT.Register  
Number**COMMON HALF YEARLY EXAMINATION - 2024 - 25**

Time Allowed : 3.00 Hours]

**BIOLOGY**

[Max. Marks : 70

Part - I (Bio-Botany) (Marks : 35)

Section - 1

Note. (i) Answer All the questions.

8×1=8

(ii) Choose the most appropriate answer from the given four alternatives and write the option code and corresponding answer.

- Chap 1. The coconut water from tender coconut represents  
 B.Q. a) Endocarp b) Fleshy Mesocarp  
 c) Free nuclear proembryo d) Free nuclear Endosperm
- Chap-2. Gene which suppresses other genes activity but does not lie on the same locus is called as  
 B. Back a) Epistatic b) Supplement only c) Hypostatic d) Codominant
- Chap 3. Changing the codon AGC to AGA represents  
 B. Back a) Missense Mutation b) Nonsense Mutation  
 c) Frameshift mutation d) Deletion Mutation
- Chapter 4. Ligase used for  
 I. B. Back a) Joining of two DNA fragments b) Separating DNA  
 c) DNA Polymerase reaction d) All of these
- Chapter 5. Solidifying agent used in plant tissue culture is  
 B. Back a) Nicotinic acid b) Cobaltous chloride c) EDTA d) Agar
- Chapter 6. Pedogenesis refers to  
 B. Back a) Fossils b) Water c) Population d) Soil
- Chapter 8. Depletion of which gas in the atmosphere can lead to an increased incidence of skin cancer?  
 B. Back a) Ammonia b) Methane c) Nitrous oxide d) Ozone
- Chapter 18. Phyllanthus amarus is coming under family?  
 B. Back a) Acanthaceae b) Oleaceae c) Euphorbiaceae d) Malvaceae

**SECTION - II**

4×2=8

II. Note : Answer any four questions.

- Chapter 2. In the cross of WWgg x wwGG what is the Phenotypic ratio and Fruit Colour in F<sub>2</sub>?  
 Interby
10. What are the Materials used to grow Microorganism like Spirulina? Chapter-4. B. Book
11. Write short notes on Cybrid? Chapter-5 Book Back
12. What is Seed Ball? Chapter-6 Book Back
13. Write short note on Heterosis? Chapter-9 - Book
14. Define the term Diplospory. Chapter-1 Book Back

**SECTION - III**

III. Note : Answer any three questions. Question No. 18 is compulsory.

3×3=9

15. What is Endothelium? Chapter-1 Book Back
16. What is Gene Mapping? Write its uses. Chapter-3 Book Back
17. Write any three name of Culture medium Plant tissue Culture? Chapter 4. Interby
18. What is Ten percent Law? Chapter 7. Interby
19. Write a note on Green, Manuring? Chapter-9 Interby

**SECTION - IV**

IV. Note : Answer all the questions.

2×5=10

20. (a) Explain Polygenic Inheritance with an example? Chapter-2 Book Back  
 (OR)  
 (b) Explain the basic concepts involved in Plant Tissue Culture? Chapter-5 Book Back
21. (a) Explain different types of Hydrophytes with examples? Chapter-6 - Book Back  
 (OR)  
 (b) Write the Objectives of Plant Breeding? Chapter-9 Interby.

KK/M/12/Bio/1

## PART - II ( BIO-ZOOLOGY) (Max. Marks: 35)

## SECTION - I

- I. Note: (i) Answer all the questions  
(ii) Choose the most appropriate answer from the given four Alternatives and write the option code and the corresponding answer 8x1=8

1. In which types of Parthenogenesis are only Females produced?  
a) Arrhenotoky      **b) Thelytoky**      c) Amphitoky      d) Both a and B
2. ----- is the smallest human cell.  
a) Nerve Cell      b) Nephron      c) Ovum      **d) Sperm**
3. Co - dominant blood group is  
a) A      **b) AB**      c) B      d) O
4. Who wrote the Book "Philosophie zoologique"  
a) Darwin      b) Hugo de vries      **c) Lamarck**      d) Spencer
5. Allergy involves.  
**a) IgE**      b) IgG      c) IgA      d) IgM
6. Transgenic animals are those who have  
a) Foreign DNA in some of their Cells      **b) Foreign DNA in all their cells**  
c) Foreign RNA in some of their cells      d) Foreign RNA in all their Cells
7. Which of the following is an r - Species  
a) Human      **b) Insects**      c) Rhinoceros      d) Whale
8. The Thickness of Stratospheris Ozone layer is Measured in /On  
a) Sieverts Units      **b) Dobson Unit**      c) Melson Unit      d) Beaufort Scale

## SECTION - II

- II. Note : Answer any four of the following questions. 4x2=8
9. What is Apolysis? - *Int 1st chapter*
  10. Write the Preventive measures of STDs. - *B.B 3rd*
  11. what is Criss - Cross inheritance? - *B.B 4th*
  12. Define Hardy-Weinberg principle - *B.B 6th*
  13. Which is called as "Queen of Drugs"? why? - *Int 8th*
  14. Differentiate Nataliy and Mortality? - *B.B 10th*

## SECTION - III

- III. Note : Answer any three of the following questions. Q.No: 19 is compulsory. 3x3=9
15. Draw a labeled Sketch of a Human Ovum? - *B.B 2nd*
  16. Why t RNA is called an adapter molecule?
  17. Write short note on Filariasis. - *B.B 7th* - *B.B 5th*
  18. How many hotspots are there in India? Name them. - *B.B 11th*
  19. How can you Prevent Global Warming? - *12th Int General*

## SECTION - IV

- IV. Note : Answer all the questions. 2x5=10
20. (a) Write any Five of the Assisted Reproductive technology in Detail? *Int 3rd*  
(OR)  
(b) Write down the Salient Features of Human Genome Project? *5th B.B*
  21. (a) Write down the types and Mechanisms of Innate immunity? *7th chap*  
(OR)  
(b) What is Radioactive Waste? how it can be Disposed? *12th chap*

KK/M/12/Bio/2

# Bio - Zoology

HALF YEARLY

+2 Question paper.

1. B. Thelytoky - Book Interior - 1 Unit
2. D. Sperm - Int. Do you know - 2 Unit
3. B. AB - Book Back - 4 Unit
4. C. Lamarck - Int - 6 Unit
5. A. IgE - Book Back 7 Unit
6. B. Foreign DNA all their cell - Book Back 9 Unit
7. B. Insect Book Back Unit 10
8. B. Dobson Unit Book Back Unit - 12

Jaisankar. T  
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