

PUDUKKOTTAI DIST

| | | | | | | |
|-----------------------------------|----------------------|--|--|--|--|-------------------|
| FIRST REVISION TEST - 2023 | Exam No. | | | | | |
| Time : 3-00 Hours | XII - ZOOLOGY | | | | | Marks : 70 |

PART - 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. (15x1=15)**

- In which mode of reproduction variations are seen
 - Asexual
 - Parthenogenesis
 - Sexual
 - Both A and B
- The foetal membrane that forms the basis of the umbilical cord is
 - Allantois
 - Amnion
 - Chorion
 - Yolk sac
- The Androgen Binding Protein (ABP) is produced by
 - Leydig cells
 - Hypothalamus
 - Sertoli cells
 - Pituitary gland
- Select the incorrect action of hormonal contraceptive pills from the following
 - Inhibition of spermatogenesis
 - Inhibition of ovulation
 - Changes in cervical mucus impairing its ability to allow passage and transport of sperms
 - Alteration in uterine endometrium to make it unsuitable for implantation
- Haemophilia is more common in males because it is a
 - Recessive character carried by Y-Chromosome
 - Dominant character carried by Y-Chromosome
 - Dominant trait carried by X-Chromosome
 - Recessive trait carried by X-Chromosome
- Who is the founder of Modern Eugenics movement?
 - Mendel
 - Darwin
 - Francis Galton
 - Karl Pearson
- Which of the following is the correct sequence of event with reference to the central dogma?
 - Transcription, Translation, Replication
 - Transcription, Replication, Translation
 - Duplication, Translation, Transcription
 - Replication, Transcription, Translation
- Darwin's finches are an excellent example of
 - Connecting links
 - Seasonal migration
 - Adaptive radiation
 - Parasitism
- Exo-erythrocytic schizogony of Plasmodium takes place in _____
 - RBC
 - Leucocytes
 - Stomach
 - Liver
- AIDS virus has
 - Single stranded RNA
 - Double stranded RNA
 - Single stranded DNA
 - Double stranded DNA
- Cyclosporin-A is an immunosuppressive drug produced from _____
 - Aspergillus niger
 - Manascus purpureus
 - Penicillium notatum
 - Trichoderma polysporum
- The first clinical gene therapy was done for the treatment of
 - AIDS
 - Cancer
 - Cystic fibrosis
 - SCID

13. Organisms which can survive a wide range of temperature are called
a) Ectotherms
b) Eurytherms
c) Endotherms
d) Stenotherms
14. The organization which published the red list of species is
a) WWF
b) IUCN
c) ZSI
d) UNEP
15. The 'thickness' of Stratospheric Ozone layer is measured in/on
a) Sieverts units
b) Dobson units
c) Melson units
d) Beaufort Scale

PART - II

Note: Answer any six of the following questions.

Question No.24 is compulsory.

(6x2=12)

16. Define Apolysis.
17. Mention the importance of the position of the tests in humans.
18. What is criss-cross inheritance?
19. Name the anticodon required to recognize the following codons:
AAU, CGA, UAU, and GCA
20. List out the major gases seems to be found in the primitive earth.
21. Why do you think it is not possible to produce vaccine against 'common cold'?
22. List out chemical alarm signals produced during inflammation.
23. Differentiate between Somatic cell gene therapy and germline gene therapy.
24. Give an account "Van't Hoff's rule".

PART - III

Note: Answer any six of the following questions.

Question No.33 is compulsory.

(6x3=18)

25. Expand the acronyms (i) FSH (ii) LH (iii) hCG.
26. Differentiate foeticide and infanticide.
27. What are the applications of Karyotyping?
28. Why tRNA is called an adapter molecule?
29. Who disproved Lamarck's Theory of acquired characters? How?
30. What is the "Diapedesis"?
31. Write short notes about "Zymology" & "Oenology"?
32. Differentiate Natality and Mortality.
33. "Amazon forest is considered to be the lungs of the planet"-Justify this statement.

PART - IV

Note. Answer all the questions.

(5x5=25)

34. (a) What is parthenogenesis and explain its types with example?

(OR)

(b) Describe the structure of the human Sperm with a neat labeled diagram.

35. (a) Explain the genetic basis of ABO blood grouping man.

(OR)

(b) List out the salient features of Genetic code.

36. (a) Describe the Urey and Miller experimental approach to the origin of life.

(OR)

(b) Explain the life cycle of Plasmodium.

37. (a) Explain the structure of immunoglobulin with suitable diagram.

(OR)

(b) Explain how recombinant Insulin can be produced.

38. (a) Give an account of the properties of soil.

(OR)

(b) State the (i) Eutrophication, (ii) Biomagnification.