

DATE:
STD: XII

Centum Special Questions Paper 2024
BIO-ZOOLOGY

TIME:1½ HRS
MARKS : 35

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 8x1=8

- Lower organisms, sometimes the entire mature organisms do not form gametes but they themselves behave as gametes and the fusion of such mature individuals is known as
a) Hologamy b) Exogamy c) Paedogamy d) Merogamy
- At the end of gametogenesis in females, each primary oocyte gives rise to ____ haploid ovum
a) one b) two c) three d) four
- _____ refers to a diagrammatic representation of chromosomes.
a) Idiogram b) Cladogram c) Family tree d) Pedigree analysis
- Which codon is not designated as termination (stop) codons
a) UAA b) UAG c) UGA d) UAC
- Modern man belongs to which period?
a) Quaternary b) Cretaceous c) Silurian d) Cambrian
- When the cells act as antigens in the same body, they are called
a) autoantigens b) antibodies c) immunogens d) tumour
- The potential of a cell to develop different cells, tissues, organs and finally an organism.
a) Totipotency b) Pluripotency c) Multipotency d) Oligopotency
- Red list has _____ categories of species.
a) eight b) ten c) six d) twelve

PART-II

Note: Answer any 4 of the questions

4x2=8

- Differentiate Arrhenotoky and Thelytoky?
- What is VNTR?
- Define tubectomy?
- What are called Petrification?
- What are two strategies involved in gene therapy.
- What is referred to as Eutrophication?

PART-III

Note: Answer any 3 of the questions. Question No.19 is compulsory

3x3=9

- Give a schematic representation of spermatogenesis and oogenesis in humans.
- Write any three Applications of Karyotyping.
- Differentiate between divergent evolution and convergent evolution with one example for each.
- Draw the structure of immunoglobulin?
- Define the following terms: a) Antibiotics b) Zymology?

PART-IV

Note: Answer all the questions.

2x5=10

- Write an essay about Infertility and its causes. (OR)
Explain Jacob and Monod proposed the classical model of *Lac* operon?
 - Classify the adaptive traits found in organisms. (OR)
Describe the Innate immunity- types and mechanisms?
- Prepared by Mr. R. Sivakumar