

B.Sc V Semester Degree Examination, Oct./Nov. - 2018 ZOOLOGY

Genetics

Paper - Z - 5.1

Time: 3 Hours

Maximum Marks: 80

Instructions to Candidates:

- 1. Answer should be specific to the questions.
- 2. Draw diagrams wherever necessary.
- I. Answer any **TEN** of the following.

 $(10 \times 2 = 20)$

- 1. Population Genetics.
- 2. Heterozygous Genotype.
- 3. Euchromatin.
- 4. Terminating codons.
- 5. Pyrimidines.
- 6. Epistatic Gene.
- 7. Pseudoalleles.
- 8. Crossing over.
- 9. Substitution point mutation.
- 10. Y-Linkage.
- 11. Palindrome sequence.
- 12. Tag DNA polymerase.

II. Answer any FOUR of the following.

 $(4 \times 5 = 20)$

- 13. Describe the structure of Lampbrush chromosome.
- 14. Illustrate inheritance of complementary factors.
- 15. Explain inheritance of ABO blood group in man.
- 16. Explain semi conservative method of DNA replication.
- 17. What are causes and Symptoms of Albinism.
- 18. Write a note on inheritance of hemophilia in man.

III. Answer any FOUR of the following.

 $(4 \times 10 = 40)$

- 19. Describe chemical composition and different types of RNA.
- 20. Describe mechanism of crossing over and write its significance.
- 21. Write a note on any four syndromes caused by chromosomal mutation.
- 22. Describe chromosomal basis of sex determination.
- 23. Explain role of Eugenics in improvement of human race.
- 24. Explain production of insulin by genetic engineering.



B.Sc. V Semester Degree Examination, Oct./Nov - 2018

ZOOLOGY

Animal Behaviour Evolution and Paleontology

Paper - 5.2

Maximum Marks: 80 Time: 3 Hours

Instructions to Candidates:

- Answer should be specific to questions. 1.
- Draw neat labelled diagram wherever necessary. 2.
- Answer any **TEN** of the following. I.

- **Viviparous** 1.
- Nasute 2.
- 3. Navigation
- Catadromous migration 4.
- Reflexes 5.
- Forager 6.
- Camouflage 7.
- 8. **Imprinting**
- Intraspecific struggle 9.
- Nocturnal 10.
- Mutation 11.
- Complementary caste.
- Answer any FOUR of the following. П.
 - 13. Courtship in Scorpion and Peacock.
 - Mimicry in Animals with examples.
 - Nest constructed by Amphibians.
 - 16. Allopatric speciation.
 - 17. Different types of Taxes with examples.
 - 18. Pre human phase.

 $(4 \times 5 = 20)$



11531

III. Answer any FOUR of the following.

 $(4 \times 10 = 40)$

- 19. Parental care in Fishes.
- 20. Social organisation in honeybees.
- 21. What is chronobiology? Explain various types of rhythms.
- 22. Nesting behaviour in birds.
- 23. Process of fossilization and types of fossils.
- 24. Describe Kohlar and Koffka experiment on Chimpanzee.