2022

M.Sc.

First Semester

CORE - 03

ZOOLOGY

Course Code: MZOC 1.31 (Biosystematics & Evolutionary Biology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Write short notes on the following:

 $7 \times 2 = 14$

- (a) Importance of biosystematics
- (b) Linkage
- 2. Explain the different types of satellite DNA.

14

UNIT-II

3. Discuss the principle of binomial nomenclature and principle of priority.

7+7=14

4. Write notes on the following:

 $7 \times 2 = 14$

- (a) Similarity and dissimilarity of species index
- (b) Shannon index and Simpson index

UNIT-III

5. Explain the different modes of speciation.

14

6. Describe the theory of Darwinism. Add a note on catastrophism.

10+4=14

UNIT-IV

7. Explain the various mode of speciation.

14

8.	Write notes on the following: (a) Post-mating isolating mechanism(b) Origin of reproductive isolation	7×2=14
	UNIT-V	
9.	Explain the different kinds of variation.	14
10.	Discuss the theory and genetic basis of random genetic drift.	7+7=14