Reg. No. : ....

Name : ....

I Semester M.Sc. Degree (C.B.C.S.S. – OBE – Regular) Examination, October 2023
(2023 Admission)
ZOOLOGY
MSZGY01C02 : Biophysics and Biostatistics

Time : 3 Hours   Max. Marks : 60

PART – A

Answer **any five** of the following. **Each** question carries **3** marks.

1. Explain the principle and applications of flow cytometry.

2. Comment on circular dichroism.

3. What is GM counter ? Briefly explain its working.

4. Explain any six applications of biostatistics.

5. Comment on Normal probability distribution.

6. Differentiate between the census method and sampling method.

PART – B

Answer **any three** of the following. **Each** question carries **6** marks.

7. Compare ECG and EEG and explain their applications.

8. Explain the mechanism of light perception in retina.

9. Describe the types of Skewness and Kurtosis.

10. Explain any two laws of probability with suitable examples.

P.T.O.

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11. Find out the coefficient of correlation of age and body length of fish. Write inference based on the result.

Age of a fish in days (X)	5	10	15	20	25	30	35
Body Length in cm (Y)	3	6	10	15	18	20	32

PART – C

Answer **any three** of the following. **Each** question carries **9** marks.

12. Give an account on polyacrylamide gel electrophoresis.

13. Discuss the physical aspects of sound transmission and hearing.

14. Briefly explain the principle, working and applications of HPLC.

15. Differentiate between correlation and regression analysis.

16. Theory predicts the proportion of beans in the 4 groups A, B, C and D be 9 : 3 : 3 : 1. In an experiment among 1600 beans, the numbers in the four groups obtained are 882, 313, 287 and 118 respectively. Does the experimental result support the theory ?

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